

# Chapter 3

## Public Accountability for Occupational Performance

This chapter addresses testing issues pertaining to licensure and certification. With over 800 occupations now being regulated by state or federal legislation, testing standards and procedures for licensure and certification are highly visible.

### Licensing and Certification

Although the terms *licensure* and *certification* are often used interchangeably, they are differentiated by their purposes.

Traditionally, licensing has been required by law in order for trained individuals to enter certain professions. It is the most restrictive form of occupational regulation; activities covered by the occupational scope of practice may not be legally performed without prior authorization, which can only be granted by the appropriate government agency.

Certification has typically been a voluntary program that recognizes individuals who have acquired skills beyond the basic level of competency necessary to practice in a profession. Lack of certification does not usually exclude a person from practice, as is the case with licensing (Schmitt 1995, p. 18).

### Licensing Requirements

The power to license occupations is granted under the U. S. Constitution and the constitutions of various states as well as jurisdictions on a global basis. The purpose of licensing, according to the *Standards for Educational and Psychological Testing* (American Educational Research Association 1999), is to protect the public. This text, comprised of testing guidelines prepared by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education, states:

Licensing requirements are imposed by state and local governments to ensure that those licensed possess knowledge and skills in sufficient degree to perform important occupational activities safely and effectively (p. 156).

The legal requirements that an applicant must meet to be granted a license are usually established at the state level. As a general rule, only those applicants who satisfy the state prerequisites are allowed to take the state licensing examination.

Criteria set by state regulatory agencies may include training and experience, minimum age, years of formal education or academic degrees, and a satisfactory background evaluation.

To fulfill the purpose of protecting the public, states enact licensure laws. This protection is accomplished through several processes including extensive testing for licensure and the state licensing authorities' disciplining of practitioners who fail to meet recognized standards.

## National Testing Organizations

To facilitate the states' responsibilities regarding licensure and discipline, organizations such as the National Board of Chiropractic Examiners have been developed. Such occupational testing organizations provide expertise in the area of testing and allow the agencies that govern licensing to address other important issues. Within the United States, a state may use scores from examinations produced by national organizations, but the state remains the final authority for granting a license. To our knowledge, the NBCE exams are the only national exams accepted by individual states.

## The Inspector General Report

A 1989 report on "State Licensure and Discipline of Chiropractors" prepared by the Office of the Inspector General, U.S. Department of Health and Human Services, recommends that state chiropractic licensing authorities be provided sufficient funds, a full range of disciplinary options, and enforcement authority to carry out their responsibilities (Kusserow 1989).

The Inspector General's report also endorses the use of high-quality national licensure examinations and stresses the desirability of uniform definitions of scope of practice and licensure requirements within the United States.

## Standards of Testing

With the increased usage of examinations in all aspects of society, particularly in reference to licensure and certification, the federal government and the private sector have prepared guidelines for examination construction. Standards set by the government's Equal Employment Opportunity Commission and the Departments of Labor and Justice are referred to as the *Uniform Guidelines on Employee Selection Procedures*. Standards prepared by the private sector are the Standards for Educational and Psychological Testing, referred to previously in this chapter.

Guidelines pertaining to all forms of testing address the importance of test reliability and test validity. Both elements are necessary to ensure that the results of a test are consistent and accurate measures of what is purportedly being assessed.

## Definition of Terms

### Reliability

*Reliability* refers to the extent to which test scores, survey results, or the data obtained from various other measurements are consistent. Specifically, “reliability refers to the consistency of scores obtained by the same test on different occasions” (Anastasi and Urbina 1997, p. 84).

The score a person attains on an examination or the response a person gives to survey stimuli may or may not be an accurate representation of that individual’s knowledge or typical behavior. To determine the accuracy of the results, it is important to administer the test, survey, or other measurement device on more than one occasion. The more similar the outcomes obtained from repeated measurements, the higher the reliability of the measuring instrument or procedure. Any examination procedure whose results are consistent after repeated measurements is considered to have high reliability.

To assess the reliability of the National Board’s job analysis survey instruments, two different procedures were employed. For the 1991 survey, a select group of respondents completed a second survey that consisted of the same questions but in a different order. Compared to the responses in the initial surveys, the secondary surveys were virtually identical. In 1998 and 2004, a group of survey recipients who did not initially respond were contacted and were requested to complete and return the survey. This subgroup’s demographic characteristics and responses were (except for gender percentages which differed by 10% in 1998) consistent with the overall population of survey respondents.

### Validity

*Validity*, as it pertains to examinations, survey instruments, or other measurement tools, refers to the appropriateness, meaningfulness, and usefulness of inferences about results (American Educational Research Association 1999, p. 9).

Two separate and distinct validity issues are important in this job analysis. The first issue pertains to the validity of the survey data; the second issue concerns the use of survey data to establish the **content validity** of national examinations.

Evidence that survey data are an accurate reflection of chiropractors, chiropractic patients, and the practice of chiropractic in the United States is based on the procedures followed in the development of the survey form detailed in Chapter 4. Additional evidence of the validity of survey data is the similarity between various survey findings and other published reports that address the same information.

Licensure and certification examinations rely on job analyses to provide evidence that the examinations contain appropriate content. Content-related validity in a licensure examination is evidence that the tasks addressed in the examination appropriately reflect the tasks required for safe and effective job performance. The *Standards for Educational and Psychological Testing* and the *Uniform Guidelines on Employee*

*Selection Procedures* are in agreement that, in order for licensure examinations to be valid, they must be based on a job analysis.

The *Standards for Educational and Psychological Testing* state:

Some form of job or practice analyses provides the primary basis for defining the content domain. If the same examination is used in the licensure or certification of people employed in a variety of settings and specialties, a number of different job settings may need to be analyzed. Although the job analysis techniques may be similar to those used in employment testing, the emphasis for licensure and certification is limited appropriately to knowledge and skills necessary for effective practice (American Educational Research Association 1999, p. 161).

The *Uniform Guidelines on Employee Selection Procedures* state:

Any validity study should be based upon a review of information about the job for which the selection procedure is to be used.... Any method of job analysis may be used if it provides the information required for the specific validation strategy used (Equal Employment Opportunity Commission 1978, p. 38290-38315).

Thus, the analysis of chiropractic practice satisfies testing guidelines as stated above.