

CHAPTER 2

Foundations of Recruitment and Selection I: Reliability and Validity

If Nothing Else, My Students Should Learn...

- Personnel recruitment and selection strategies based on information obtained through scientific methods are more likely to benefit an organization than decisions based on impressions or intuition.
- The basic concepts of reliability and validity underlie contemporary recruitment and selection practices.
- Different research methods and psychological measurement tools assist HR professionals in personnel selection.

Learning Outcomes (Including Bloom's Taxonomy)

- Understand the basic components that make up a traditional personnel selection model. [Understand]
- Have a good understanding of the concepts of reliability and validity. [Understand]
- Recognize the importance and necessity of establishing the reliability and validity of measures used in personnel selection. [Apply]
- Identify common strategies that are used to provide evidence on the reliability and validity of measures used in personnel selection. [Remember, Understand]
- Appreciate the requirement for measures used in personnel selection to evaluate applicants fairly and in an unbiased fashion. [Apply]

Key Concepts: Why Is This Chapter Important to Students of Human Resources?

- The accuracy of scientific statements is examined empirically through methods that can be observed, critiqued, and used by others.

- Scientific information is dynamic and constantly evolving.
- Scientifically derived information aids HR professionals in predicting which applicants will do well on the job.
- Being familiar with measurement, reliability, and validity issues and using only procedures that will withstand legal scrutiny help HR professionals ensure that their selection procedures meet acceptable professional standards.
- Scientific procedures allow for the measurement of important human characteristics that may be related to job performance. Such procedures are more likely than others to produce results that meet legal requirements.
- The reliability and validity of the information used as part of personnel selection procedures must be established empirically, as noted in the *Meiorin* decision.

Student Motivation: Why Should Students Care?

- Students need to realize the importance of hiring the best people based on the validity and reliability of the interview process.
- Students need to be aware that recruiters ensure that applicants are judged in a fair and unbiased manner.

Engagement Strategies: What Can I Do in Class?

Classroom Discussion

- Ask the following questions: What is your perception of fairness? Does an organization have an obligation to make an enterprise as profitable as possible on behalf of its owners, or should it meet the objectives of society by providing equal employment opportunities for members of different population groups?
- Ask the class to discuss the following ethical issue: Do individuals making staffing decisions have an ethical responsibility to know about measurement issues? Why or why not? (Responses will vary.)
- See **Recruitment and Selection Today 2.2** (p. 57) for the five definitions of *fairness* provided by *The Standards for Educational and Psychological Testing*. Discuss.

Group Discussion

- Case Study: Ask students to review “The Meiorin Case” (pp. 32–33). Break the class into groups of three or four and have them identify the issues in the case that relate to personnel selection. Each group should choose a leader to communicate the responses that were discussed in the small groups.
- In pairs, have students discuss a time when they experienced bias. Ask them to think of the first week of class and their first impressions of their teachers and/or peers. What biases were operating at that time? You can also discuss your first impressions of your students.
- Ask students to discuss in groups of three or four an ethical situation they have encountered at work. Have them describe the situation and how the situation was handled. This will lead to interesting discussions when students share their experiences in a large group discussion.

Text Review

- Review *Figure 2.3, Scatterplot of Cognitive Ability and Job Performance*, on page 55 in the text, and discuss how it illustrates differential prediction.

Student Activities

- Direct students to *Figure 2.1, Job Analysis, Selection, and Criterion Measures of Performance: A Systems Approach*, on page 34 in the text, to review the steps involved in hiring a police constable. Ask the following questions: What are some of the major elements of the process? What questions do students have? Also ask students to review each of the steps in the selection process for the Winnipeg police in **Recruitment and Selection Today 2.1** (p. 37).

Individual Research

- Assign students in pairs to HR professionals who are actively involved in recruitment. Ask students to review with practitioners what challenges are encountered in measuring validity and reliability in the recruitment process.

Assessment Tools: What Other Resources Are Available?

Other assessment tools include a Test Bank of approximately 40 multiple choice questions, 15 true/false questions, 10 short answer questions, 15 Web quizzes, and 30–35 PowerPoint slides.

Reflections on Teaching: How Can I Assess My Own “Performance”?

Checklist for Instructor Self-Assessment

- ☐ What worked? What didn't?
- ☐ Were students engaged? Were they focused, or did they go off on tangents?
- ☐ Did my assessments suggest that they understood the key concepts?
- ☐ What should I do differently next time?
- ☐ How can I gather student feedback?

Additional Resources: Suggested Resources for Instructors

End-of-Chapter Exercises: Discussion Questions

- 1. We presented a summary of the *Meiorin* case at the outset of this chapter. Can you think of procedures that the consultants could have followed or changes they could have made that would have allowed the test to meet the objections of the Supreme Court?**

As demonstrated by the *Meiorin* decision, courts and tribunals will review the methods used to develop selection procedures. The procedures used to select employees must meet acceptable professional standards. The best way of ensuring procedures are up to par is to be familiar with measurement, reliability, and validity issues and to use only those procedures that will withstand legal scrutiny; that is, the selection procedures used validly predict work performance in a nondiscriminatory manner. The reliability and validity of the information used as part of personnel selection procedures must be established empirically. Scientific procedures allow for the measurement of important human characteristics that may be related to job performance and are more likely than other procedures to produce results that meet legal requirements.

- 2. Discuss why it is better to base a selection system on science than on a “gut feeling.”**

Science produces information that is based on accepting as true only objective information that can withstand continued attempts to cast doubt on its accuracy. The accuracy of scientific

statements is examined empirically through methods that can be observed, critiqued, and used by others. Scientific information is dynamic and constantly evolving.

3. Can an invalid selection test be reliable? Can an unreliable selection test be valid?

We expect a test to provide approximately the same information each time it is given to an individual person. Errors may be made in a consistent or predictable fashion. Systematic errors do not affect the accuracy of the measurements but rather the meaning or interpretation of a selection test's measurements. These errors can lead to wrong conclusions about results derived from the selection process itself. Factors affecting reliability of results include temporary individual characteristics, a lack of standardization, and chance.

4. Does an organization have an obligation to make the enterprise as profitable as possible on behalf of its owners, or does it have an obligation to meet the objectives of society by providing equal employment opportunities for members of different population groups?

There are no easy answers to this question. One resolution is to compare the fairness of the test in question with the fairness of an alternative that might be used in place of the test.

Recruitment and Selection Today 2.2, on page 57, presents some differing views on fairness.

Key Terms

Bias Systematic errors in measurement, or inferences made from those measurements, that are related to different identifiable group membership characteristics such as age, sex, or race. (p. 54)

Construct An idea or concept constructed or invoked to explain relationships between observations. For example, the construct “extroversion” has been invoked to explain the relationship between “social forthrightness” and sales; “learning” is a construct used to explain the change in behaviour that results from experience. Constructs are abstractions that we infer from observations and that we cannot directly observe. In the natural sciences, “gravity” is perhaps the most famous construct. (p. 39)

Employment equity A term coined in the 1986 federal Employment Equity Act referring to policies and initiatives to promote employment opportunities for members of designated minority groups. (p. 40)

Error score (or measurement error) The hypothetical difference between an observed score and a true score. (p. 41)

Fairness The principle that every test taker should be assessed in an equitable manner. (p. 56)

Reliability The degree to which observed scores are free from random measurement errors. Reliability is an indication of the stability or dependability of a set of measurements over repeated applications of the measurement procedure. (p. 40)

True score The average score that an individual would earn on an infinite number of administrations of the same test or parallel versions of the same test. (p. 41)

Validity The degree to which accumulated evidence and theory support specific interpretations of test scores in the context of the test’s proposed use. (p. 45)

Validity generalization The application of validity evidence, obtained through meta-analysis of data obtained from many situations, to other situations that are similar to those on which the meta-analysis is based. (p. 51)

See the **Exercises** listed at the end of the chapter on pages 60–63 for further discussion. (Student answers will vary.)