Preface

The central goal of this book is very ambitious: to help the reader understand how measurement issues affect clinicians who must cope with daily concerns regarding provision of psychological care. To do so, it is necessary to explore in some detail how the fields of psychology, psychological testing, and psychological treatment arrived at their current condition. Such an exploration lays the groundwork for describing (1) important measurement, testing, and assessment concepts, and (2) contemporary progress and problems in both measurement and psychotherapy domains.

Although a seemingly straightforward scholarly task, describing problems related to psychological testing and assessment can quickly turn controversial and heated. Debates about the usefulness of criticism of psychological testing are long-standing: Even early psychologists such as Cattell and Jastrow disagreed about the merits of debating testing's strengths and weaknesses (Cronbach, 1992). Let me make clear that I do not believe that use of educational and psychological tests should cease or that such a cessation is desirable or even possible. On the contrary, I share the view that "psychological tests often provide the fairest and most accurate method of making important decisions" (Murphy & Davidshofer, 1988, p. xii). And despite occasional suggestions to the contrary (cf. Paul, 2004), the domain of psychological testing is clearly a science. The typical psychological test is based on psychometric evaluations and has a theoretical perspective; a distinct body of literature exists that focuses on concepts related to educational and psychological measurement and assessment. I think it is important, however, that both clinicians and testing experts continue a respectful

discussion about research and theory that contributes to scientific progress in both measurement and psychotherapy domains.

The inadequacies of our approach to measurement may in part be due to how complex constructing and performing valid testing really is. Another goal of this book, therefore, is to present this material parsimoniously. I have emphasized the conceptual, not the statistical; I use simple frequency distributions and visual displays rather than more complex data sets and tables of numbers. Cronbach (1991a) stated that

> one need not be a skilled mathematician to advance methodology; you call upon an expert once you know what to call for. The crucial contribution—which mathematicians cannot be expected to make—is an adequate formal description of an interesting set of social or psychological events. (p. 398)

My approach has been to describe the problems of measurement and assessment from the perspective of psychological theory. The hope is to reconnect measurement with substantive theory.

When data are based on sound clinical measurements, this enhances clinicians' ability to be compassionate in day-to-day decisions about clients/patients. A goal of this book is to help readers draw that connection between sound data collection and compassionate clinical choices. This goal dovetails with requirements by the American Psychological Association and other professional organizations that students learn about methods of assessment employed for evaluating the efficacy and effectiveness of interventions.

Organization of the Book

In Chapter 1, I begin with an introduction and further rationale for this book. The next four chapters provide an in-depth examination of how measurement and assessment concepts and controversies have evolved, or in some instances, failed to progress, over roughly the past 100 years; portions of these chapters are based on Meier (1994). Chapter 2 covers the history of the concept of "traits"—psychological traits—and the ascendancy of traits as the object of what we are trying to measure with psychological testing. Knowledge of measurement's historical issues is important because lack of such knowledge is a reason some domains have not progressed much in the subtlety of their approach to measurement. Chapter 3 describes the effects that method variance, self-reports, and ratings by others have on test validity. Psychological states have been shown to be probably as influential as traits in human behavior; consequently, they have significant impact on test

validity. That point is the subject of Chapter 4. Chapter 5 concludes the first group of chapters, emphasizing that problems with the testing *context* give rise to the problems described in Chapters 2, 3, and 4.

With this foundation, I then turn to cutting-edge work in the area of measuring change in counseling and psychotherapy. Most texts on this topic marginalize or ignore clinical measurement and assessment, but recent developments in assessing change have great potential to improve psycho-therapeutic practices and outcomes. In Chapter 6, I describe the state of the art in nomothetic measurement of therapeutic change; these advances include change-sensitive tests and the use of feedback to improve outcomes. Chapter 7 describes current work with idiographic methods. One such method is deriving measures from single case conceptualizations. Narrative- and language-based approaches fall into the idiographic category as well. Chapter 8 summarizes both sections of the book.

Pedagogical Features

Graduate students often reference reading material in terms of "the book" rather than "the author," as in "The book says. . . ." This is telling. Matarazzo (1987) observed that the textbooks employed in psychology courses are more responsible than other sources for transmitting psychological knowl-edge to the next generation of students. Therefore, I think it is important to expand the scope of topics typically presented in a text on psychological measurement and assessment. Students who undertake a standard measure-ment and assessment course are likely to learn the basics of psychometrics, followed by an overview of and practice with a few well-known instru-ments such as the Weschler Adult Intelligence Scale (WAIS) and the Min-nesota Multiphasic Personality Inventory (MMPI). In contrast, the aim of this book is to provide readers with a set of concepts and activities needed to evaluate their intended testing purposes, current and future, against avail-able and potential tests and other operations.

For example, the book includes a series of writing assignments to help students learn how to identify, evaluate, and report on tests' psychometric information. These assignments are designed to help students learn, with the help of their instructor, where to locate information about tests, how to do a basic literature review related to test information, and how to apply what they have learned about tests to actual test use. Instead of defaulting to standard practice in the field (which often lags behind current research and theory), students should learn how to think critically and flexibly about

tests. To do so, they need to be able to conduct a time-limited, but reasonably thorough, review of the available literature on tests of interest. Thus, students need to know:

1. Where to find information about tests from such diverse sources as publishers' websites, *PsycINFO*, *Tests in Print*, *Mental Measurements Yearbooks*, and *Test Critiques*.
2. How to locate tests to measure particular constructs.
3. Theory and theoretical definitions related to constructs they wish to measure.
4. The purposes for which tests were designed and have been employed.
5. How different samples (normative and intended) might affect test scores.
6. How to locate and evaluate reliability and validity information for specific tests.
7. How to construct tables and graphs in order to synthesize and evaluate the collected information.

These writing assignments begin at the end of Chapter 2 and are intended to be done weekly, culminating in a draft of a term paper about a measurement-related topic. Two types of writing assignments are listed: One is suitable for a general measurement or assessment course, and the second focuses on measurement of change topics.

Also at the end of each chapter is a section of discussion questions, test questions, and clinically oriented exercises designed to encourage more active learning. Testing students' knowledge solidifies their understanding of the issues and problems of testing and measurement in general (Roediger & Karpicke, 2006). I have employed many of these exercises in my graduate testing class and found them to be an effective means of engaging students and helping them to learn the material through application.

I have taught this material in a beginning graduate-level course in educational and psychological measurement that typically enrolls 25–45 master's- and doctoral-level students. In a class of this size, the students' baseline grasp of the issues of psychological testing varies considerably. For that reason, I spend the first 3 weeks of the course reviewing a basic vocabulary of concepts that provides the students with a foundation for discussing the history, theory, and applications that follow. The review encompasses three major areas: basic measurement concepts (including reliability and validity), types of psychological measurements (e.g., self-reports, observational strategies, qualitative assessments), and test components (test construction, administration, scoring, and interpretation). As an adjunct to this book, I

have put that vocabulary review into a Glossary that may be found at my website, *www.acsu.buffalo.edu/~stmeier.*