

GLOBAL
EDITION



Psychological Testing

History, Principles, and Applications

SEVENTH EDITION

Robert J. Gregory

ALWAYS LEARNING

PEARSON

PSYCHOLOGICAL TESTING

This page is intentionally left blank.

Seventh Edition

PSYCHOLOGICAL TESTING

HISTORY, PRINCIPLES, AND APPLICATIONS

Global Edition

Robert J. Gregory

Professor Emeritus

Wheaton College, Wheaton, Illinois

PEARSON

Boston Columbus Indianapolis New York San Francisco Upper Saddle River
Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montréal Toronto
Delhi Mexico City São Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

Editor in Chief: Ashley Dodge
Acquisitions Editor: Susan Hartman
Head of Learning Asset Acquisition, Global Editions: Laura Dent
Acquisitions Editor, Global Editions: Vrinda Malik
Assistant Project Editor, Global Editions: Paromita Banerjee
Editorial Assistant: Amandria Guadalupe
Senior Marketing Coordinator: Courtney Stewart
Managing Editor: Denise Forlow

Program Manager: Reena Dalal
Senior Operations Supervisor: Mary Fischer
Operations Specialist: Diane Peirano
Cover Image: © ADA_photo/Shutterstock
Digital Media Project Manager: Tina Gagliostro
Digital Media Editor: Learning Mate Solutions, Ltd.
Media Producer, Global Editions: Vikram Kumar
Full-Service Project Management and Composition: PreMediaGlobal USA Inc.
Cover Printer and Printer/Bindery: Courier Westford

Credits and acknowledgments borrowed from other sources and reproduced, with permission, in this textbook appear on appropriate page within text.

Pearson Education Limited

Edinburgh Gate
Harlow
Essex CM20 2JE
England

and Associated Companies throughout the world

Visit us on the World Wide Web at:
www.pearsonglobaleditions.com

© Pearson Education Limited 2015

The rights of Robert J. Gregory to be identified as the author of this work have been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

Authorized adaptation from the United States edition, entitled Psychological Testing: History, Principles, and Applications, 7th Edition, ISBN 978-0-205-95925-9 by Robert J. Gregory, published by Pearson Education © 2014.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without either the prior written permission of the publisher or a license permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

ISBN 10: 1-292-05880-3

ISBN 13: 978-1-292-05880-1 (Print)

ISBN 13: 978-1-292-06755-1 (PDF)

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

10 9 8 7 6 5 4 3 2 1

15 14 13 12 11

Typeset in 10/12 Minion Pro Regular by PreMedia Global USA Inc.

Printed and bound by Courier Westford in United States of America

BRIEF CONTENTS

CHAPTER 1	Implementation and Attributes of Psychological Testing	21
	TOPIC 1A	The Nature and Uses of Psychological Testing 21
	TOPIC 1B	Ethical and Social Implications of Testing 40
CHAPTER 2	Origins of Psychological Testing	56
	TOPIC 2A	The Origins of Psychological Testing 56
	TOPIC 2B	Testing from the Early 1900s to the Present 69
CHAPTER 3	Norms and Reliability	82
	TOPIC 3A	Norms and Test Standardization 82
	TOPIC 3B	Concepts of Reliability 99
CHAPTER 4	Validity and Test Construction	118
	TOPIC 4A	Basic Concepts of Validity 118
	TOPIC 4B	Test Construction 136
CHAPTER 5	Intelligence and Achievement: Theories and Tests	154
	TOPIC 5A	Theories of Intelligence and Factor Analysis 154
	TOPIC 5B	Individual Tests of Intelligence and Achievement 179
CHAPTER 6	Ability Testing: Group Tests and Controversies	210
	TOPIC 6A	Group Tests of Ability and Related Concepts 210
	TOPIC 6B	Test Bias and Other Controversies 238
CHAPTER 7	Assessing Special Populations	267
	TOPIC 7A	Infant and Preschool Assessment 267
	TOPIC 7B	Testing Persons with Disabilities 289
CHAPTER 8	Foundations of Personality Testing	306
	TOPIC 8A	Theories of Personality and Projective Techniques 306
	TOPIC 8B	Self-Report and Behavioral Assessment of Psychopathology 333
CHAPTER 9	Evaluation of Normality and Individual Strengths	360
	TOPIC 9A	Assessment Within the Normal Spectrum 360
	TOPIC 9B	Positive Psychological Assessment 384

CHAPTER 10	Neuropsychological Testing	401
TOPIC 10A	Neurobiological Concepts and Behavioral Assessment	401
TOPIC 10B	Neuropsychological Tests, Batteries, and Screening Tools	424
CHAPTER 11	Industrial, Occupational, and Career Assessment	452
TOPIC 11A	Industrial and Organizational Assessment	452
TOPIC 11B	Assessment for Career Development in a Global Economy	477

CONTENTS

Preface 15

Chapter 1 IMPLEMENTATION AND ATTRIBUTES OF PSYCHOLOGICAL TESTING 21

TOPIC 1A The Nature and Uses of Psychological Testing 21

The Consequences of Testing 22

Case Exhibit 1.1 • True-Life Vignettes of Testing 22

Definition of a Test 23

Further Distinctions in Testing 25

Types of Tests 26

Uses of Testing 29

Factors Influencing the Soundness of Testing 31

Standardized Procedures in Test Administration 31

Desirable Procedures of Test Administration 32

Influence of the Examiner 37

Background and Motivation of the Examinee 38

TOPIC 1B Ethical and Social Implications of Testing 40

The Rationale for Professional Testing Standards 40

Case Exhibit 1.2 • Ethical and Professional Quandaries in Testing 41

Responsibilities of Test Publishers 42

Responsibilities of Test Users 43

Case Exhibit 1.3 • Overzealous Interpretation of the MMPI 45

Testing of Cultural and Linguistic Minorities 49

Unintended Effects of High-Stakes Testing 52

Reprise: Responsible Test Use 54

Chapter 2 ORIGINS OF PSYCHOLOGICAL TESTING 56

TOPIC 2A The Origins of Psychological Testing 56

Rudimentary Forms of Testing in China in 2200 B.C. 57

Physiognomy, Phrenology, and the Psychograph 57

The Brass Instruments Era of Testing 59

Rating Scales and Their Origins 62

Changing Conceptions of Mental Retardation in the 1800s 63

Influence of Binet's Early Research on His Test 64

Binet and Testing for Higher Mental Processes 65

The Revised Scales and the Advent of IQ 66

TOPIC 2B Testing from the Early 1900s to the Present 69

Early Uses and Abuses of Tests in the United States 69

Group Tests and the Classification of WWI Army Recruits 72

Early Educational Testing 73

The Development of Aptitude Tests 76

Personality and Vocational Testing after WWI 77

The Origins of Projective Testing 77

The Development of Interest Inventories 79

The Emergence of Structured Personality Tests 79

The Expansion and Proliferation of Testing 80

Evidence-Based Practice and Outcomes Assessment 81

Chapter 3 NORMS AND RELIABILITY 82

TOPIC 3A Norms and Test Standardization 82

Raw Scores 83

Essential Statistical Concepts 83

Raw Score Transformations 87

Selecting a Norm Group 94

Criterion-Referenced Tests 96

TOPIC 3B Concepts of Reliability 99

Classical Test Theory and the Sources of Measurement Error 99

Sources of Measurement Error 100

Measurement Error and Reliability 102

The Reliability Coefficient 103

The Correlation Coefficient 103

The Correlation Coefficient as a Reliability Coefficient 104

Reliability as Temporal Stability 105

Reliability as Internal Consistency 106

Item Response Theory 110

The New Rules of Measurement 113

Special Circumstances in the Estimation of Reliability 113

The Interpretation of Reliability Coefficients 114

Reliability and the Standard Error of Measurement 115

Chapter 4 VALIDITY AND TEST CONSTRUCTION 118**TOPIC 4A Basic Concepts of Validity 118***Validity: A Definition 119**Content Validity 120**Criterion-Related Validity 122**Construct Validity 127**Approaches to Construct Validity 128**Extravalidity Concerns and the Widening Scope of Test Validity 133***TOPIC 4B Test Construction 136***Defining the Test 136**Selecting a Scaling Method 137**Representative Scaling Methods 138**Constructing the Items 143**Testing the Items 145**Revising the Test 150**Publishing the Test 152***Chapter 5 INTELLIGENCE AND ACHIEVEMENT:
THEORIES AND TESTS 154****TOPIC 5A Theories of Intelligence and Factor Analysis 154***Definitions of Intelligence 155**Case Exhibit 5.1 • Learning and Adaptation as Core Functions of Intelligence 156**A Primer of Factor Analysis 158**Galton and Sensory Keeness 166**Spearman and the g Factor 166**Thurstone and the Primary Mental Abilities 168**Cattell-Horn-Carroll (CHC) Theory 169**Guilford and the Structure-of-Intellect Model 171**Planning, Attention, Simultaneous, and Successive (Pass) Theory 172**Information Processing Theories of Intelligence 174**Gardner and the Theory of Multiple Intelligences 174**Sternberg and the Triarchic Theory of Successful Intelligence 176*

TOPIC 5B Individual Tests of Intelligence and Achievement 179

Orientation to Individual Intelligence Tests 179

The Wechsler Scales of Intelligence 180

The Wechsler Subtests: Description and Analysis 183

Wechsler Adult Intelligence Scale-IV 189

Wechsler Intelligence Scale for Children-IV 192

Stanford-Binet Intelligence Scales: Fifth Edition 194

Detroit Tests of Learning Aptitude-4 197

The Cognitive Assessment System-II 198

Kaufman Brief Intelligence Test-2 (KBIT-2) 201

Individual Tests of Achievement 202

Nature and Assessment of Learning Disabilities 204

Chapter 6 ABILITY TESTING: GROUP TESTS AND CONTROVERSIES 210

TOPIC 6A Group Tests of Ability and Related Concepts 210

Nature, Promise, and Pitfalls of Group Tests 210

Group Tests of Ability 211

Multiple Aptitude Test Batteries 220

Predicting College Performance 227

Postgraduate Selection Tests 230

Educational Achievement Tests 234

TOPIC 6B Test Bias and Other Controversies 238

The Question of Test Bias 238

Case Exhibit 6.1 • The Impact of Culture on Testing Bias 247

Social Values and Test Fairness 248

Genetic and Environmental Determinants of Intelligence 250

Origins and Trends in Racial IQ Differences 257

Age Changes in Intelligence 260

Generational Changes in IQ Scores 264

Chapter 7 ASSESSING SPECIAL POPULATIONS 267

TOPIC 7A Infant and Preschool Assessment 267

Assessment of Infant Capacities 268

Assessment of Preschool Intelligence 272

Practical Utility of Infant and Preschool Assessment 277

Screening for School Readiness 280

Dial-4 283

TOPIC 7B Testing Persons with Disabilities 289*Origins of Tests for Special Populations 289**Nonlanguage Tests 289**Nonreading and Motor-Reduced Tests 294***Case Exhibit 7.1 • The Challenge of Assessment in Cerebral Palsy 294***Testing Persons with Visual Impairments 296**Testing Individuals Who Are Deaf or Hard of Hearing 298**Assessment of Adaptive Behavior in Intellectual Disability 298**Assessment of Autism Spectrum Disorders 304***Chapter 8 FOUNDATIONS OF PERSONALITY TESTING 306****TOPIC 8A Theories of Personality and Projective Techniques 306***Personality: An Overview 307**Psychoanalytic Theories of Personality 307**Type Theories of Personality 311**Phenomenological Theories of Personality 312**Behavioral and Social Learning Theories 314**Trait Conceptions of Personality 316**The Projective Hypothesis 318**Association Techniques 319**Completion Techniques 324**Construction Techniques 326**Expression Techniques 330***Case Exhibit 8.1 • Projective Tests as Ancillary to the Interview 332****TOPIC 8B Self-Report and Behavioral Assessment of Psychopathology 333***Theory-Guided Inventories 334**Factor-Analytically Derived Inventories 336**Criterion-Keyed Inventories 339**Behavioral Assessment 347**Behavior Therapy and Behavioral Assessment 348**Structured Interview Schedules 354**Assessment by Systematic Direct Observation 355**Analogue Behavioral Assessment 358**Ecological Momentary Assessment 358*

Chapter 9 EVALUATION OF NORMALITY AND INDIVIDUAL STRENGTHS 360

TOPIC 9A Assessment Within the Normal Spectrum 360

Broad Band Tests of Normal Personality 361

Myers-Briggs Type Indicator (MBTI) 361

California Psychological Inventory (CPI) 364

Neo Personality Inventory-Revised (NEO PI-R) 367

Stability and Change in Personality 369

The Assessment of Moral Judgment 373

The Assessment of Spiritual and Religious Concepts 376

TOPIC 9B Positive Psychological Assessment 384

Assessment of Creativity 385

Measures of Emotional Intelligence 392

Assessment of Optimism 396

Assessment of Gratitude 397

Sense of Humor: Self-Report Measures 399

Chapter 10 NEUROPSYCHOLOGICAL TESTING 401

TOPIC 10A Neurobiological Concepts and Behavioral Assessment 401

The Human Brain: An Overview 402

Structures and Systems of the Brain 403

Survival Systems: The Hindbrain and Midbrain 406

Attentional Systems 407

Motor/Coordination Systems 408

Memory Systems 409

Limbic System 410

Language Functions and Cerebral Lateralization 411

Visual System 413

Executive Functions 414

Neuropathology of Adulthood and Aging 416

Behavioral Assessment of Neuropathology 420

TOPIC 10B Neuropsychological Tests, Batteries, and Screening Tools 424*A Conceptual Model of Brain–Behavior Relationships 425**Assessment of Sensory Input 425**Measures of Attention and Concentration 427**Tests of Learning and Memory 428**Assessment of Language Functions 434**Tests of Spatial and Manipulatory Ability 435**Assessment of Executive Functions 437**Assessment of Motor Output 440**Test Batteries in Neuropsychological Assessment 441**Screening for Alcohol use Disorders 448***Chapter 11 INDUSTRIAL, OCCUPATIONAL, AND CAREER ASSESSMENT 452****TOPIC 11A Industrial and Organizational Assessment 452***The Role of Testing in Personnel Selection 453**Autobiographical Data 454**The Employment Interview 456**Cognitive Ability Tests 459**Personality Tests 462**Paper-and-Pencil Integrity Tests 464**Work Sample and Situational Exercises 466**Appraisal of Work Performance 469**Approaches to Performance Appraisal 470**Sources of Error in Performance Appraisal 474***TOPIC 11B Assessment for Career Development in a Global Economy 477***Career Development and the Functions of Work 478**Origins of Career Development Theories 479**Theory of Person-Environment Fit 480**Theory of Person-Environment Correspondence 482**Stage Theories of Career Development 483**Social Cognitive Approaches 484**O*NET in Career Development 485**Inventories for Career Assessment 486**Inventories for Interest Assessment 487*

APPENDIX A *Major Landmarks in the History of Psychological Testing* 497

APPENDIX B *Standard and Standardized-Score Equivalents of Percentile Ranks in a Normal Distribution* 500

Glossary 502

References 514

Name Index 570

Subject Index 586

PREFACE

Psychological testing began as a timid enterprise in the scholarly laboratories of nineteenth-century European psychologists. From this inauspicious birth, the practice of testing proliferated throughout the industrialized world at an ever accelerating pace. As the reader will discover within the pages of this book, psychological testing now impacts virtually every corner of modern life, from education to vocation to remediation.

PURPOSE OF THE BOOK

The seventh edition of this book is based on the same assumptions as earlier versions. Its ambitious purpose is to provide the reader with knowledge about the characteristics, objectives, and wide-ranging effects of the consequential enterprise, psychological testing. In pursuit of this goal, I have incorporated certain well-worn traditions but proceeded into some new directions as well. For example, in the category of customary traditions, the book embraces the usual topics of norms, standardization, reliability, validity, and test construction. Furthermore, in the standard manner, I have assembled and critiqued a diverse compendium of tests and measures in such traditional areas as intellectual, achievement, industrial-organizational, vocational, and personality testing.

Special Features

In addition to the traditional topics previously listed, I have emphasized certain issues, themes, and concepts that are, in my opinion, essential for an in-depth understanding of psychological testing. For example, the second chapter of the book examines *Origins of Psychological Testing*. The placement of this chapter underscores my view that *Origins of Psychological Testing* is of substantial relevance to present-day practices. Put simply, a mature comprehension of modern testing can be obtained only by delving into its heritage. Of course, students of psychology typically shun historical matters because these topics are often presented in a dull, dry, and pedantic manner, devoid of relevance to the present.

However, I hope the skeptical reader will approach my history chapter with an open mind—I have worked hard to make it interesting and relevant.

Psychological testing represents a contract between two persons. One person—the examiner—usually occupies a position of power over the other person—the examinee. For this reason, the examiner needs to approach testing with utmost sensitivity to the needs and rights of the examinee. To emphasize this crucial point, I have devoted the first topic to the subtleties of the testing process, including such issues as establishing rapport and watching for untoward environmental influences upon test results. The second topic in the book also emphasizes the contractual nature of assessment by reviewing professional issues and ethical standards in testing.

Another topic emphasized in this book is neuropsychological assessment, a burgeoning subfield of clinical psychology that is now a well-established specialty in its own right. Neuropsychological assessment is definitely a growth area and now constitutes one of the major contemporary applications of psychological testing. I have devoted an entire chapter to this important subject. So that the reader can better appreciate the scope and purpose of neuropsychological assessment, I begin the chapter with a succinct review of neurological principles before discussing specific instruments. Tangentially, this review introduces important concepts in neuropsychological assessment such as the relationship between localized brain dysfunction and specific behavioral symptoms. Nonetheless, readers who need to skip the section on neurological underpinnings of behavior may do so with minimal loss—the section on neuropsychological tests and procedures is comprehensible in its own right.

This edition continues to feature a chapter on *Evaluation of Normality and Individual Strengths*. This includes a lengthy topic on positive psychological assessment, such as the testing of creativity, emotional intelligence, optimism, gratitude, and humor. I hope this concentration on life-affirming concepts

will provide some balance to the field of assessment which, for too long, has emphasized pathology.

New to this edition is an extended topic on assessment for career development in a global economy. This topic surveys major theories that guide career-based assessment and also provides an introduction to valuable assessment tools. I felt that increased coverage of career issues was desirable, in light of the increasing fluidity of the modern global economy. Further, even though the Great Recession of 2007–2009 is technically over, uncertainty in the world of work remains for many, especially for those newly entering the job market. An understanding of the potential role of career assessment in helping individuals traverse the new terrain of work and vocation is now more vital than ever before.

This is more than a book about tests and their reliabilities and validities. I also explore numerous value-laden issues bearing on the wisdom of testing. Psychological tests are controversial precisely because the consequences of testing can be harmful, certainly to individuals and perhaps to the entire social fabric as well. I have not ducked the controversies surrounding the use of psychological tests. Separate topics explore genetic and environmental contributions to intelligence, origins of race differences in IQ, test bias and extravalidity concerns, cheating on group achievement tests, courtroom testimony, and ethical issues in psychological testing.

Note on Case Exhibits

This edition continues the use of case histories and brief vignettes that feature testing concepts and illustrate the occasionally abusive application of psychological tests. These examples are “boxed” and referred to as Case Exhibits. Most are based on my personal experience rather than scholarly undertakings. All of these case histories are real. The episodes in question really happened—I know because I have direct knowledge of the veracity of each anecdote. These points bear emphasis because the reader will likely find some of the vignettes to be utterly fantastical and almost beyond belief. Of course, to guarantee the privacy of persons and institutions, I have altered certain unessential details while maintaining the basic thrust of the original events.

CHANGES FROM THE SIXTH EDITION

In this revision, my goals were threefold. First, I wanted to add the latest findings about established tests. For this purpose, I have made use of about 300 new scholarly references, and “retired” an almost equal number of outdated citations. Second, I wanted to incorporate worthwhile topics overlooked in previous editions. A prominent example in this category is assessment for career development, which receives extended coverage in the book. And, third, I sought to include coverage of innovations and advances in testing. One example of this is inclusion of the Rorschach Performance Assessment System, a new and promising approach to this established test. I was also aware that several tests have been revised since the last edition went to press, including the CAS-II, WMS-IV, WIAT-III, to name just a few. For these instruments, I have described the newest editions and included relevant research.

More specifically, the improvement and enhancements in the current edition include the following:

1. In Chapter 1 on Implementation and Attributes of Psychological Testing, new empirical research on the role of examiner errors in producing distorted test scores is included. New evidence of widespread cheating in high stakes testing (school system achievement testing, national certification exams) also is presented.
2. Recent developments in evidence-based practice and outcomes assessment have been added to Chapter 2, Origins of Psychological Testing. New material on the history of personality testing is also included.
3. In Chapter 5, coverage of the PASS theory (Planning, Attention, Simultaneous, Successive) has been expanded in Topic 5A: Theories of Intelligence and Factor Analysis. In Topic 5B: Individual Tests of Intelligence and Achievement, a major test featuring PASS theory, the Cognitive Assessment System-II (Naglieri, Das, & Goldstein, 2012) is highlighted.
4. A number of new and fascinating findings have been added to Topic 6B: Test bias and Other

- Controversies. The question of whether statistical tests of bias are themselves biased is first raised.
5. New research on the impact of Head Start, the fate of children with Fetal Alcohol Spectrum Disorders, and the nature of cognitive decline in advance age, has been added to Topic 6B.
 6. Also in Topic 6B, a new Case Exhibit demonstrating the impact of cultural background on the test results has been added.
 7. In the Chapter 7, *Assessing Special Populations*, new material includes coverage of the Devereaux Early Childhood Assessment—Clinical Form (DECA-C), and a review of scales for the screening of Autism Spectrum Disorders. The complex issue of screening for school readiness also is included.
 8. In Chapter 8, *Foundations of Personality Testing*, the Rorschach Performance Assessment System (R-PAS), a new scoring system for the inkblot test, is reviewed. The well-known State-Trait Anxiety Inventory (STAI) is incorporated as well. New material on the value of ecological momentary assessment also is included.
 9. A new topic on stability and change in personality has been added to Chapter 9, *Evaluation of Normality and Individual Strengths*. A new instrument featured in longitudinal research, the Big Five Inventory (BFI), is featured in this topic.
 10. The coverage of spiritual and religious assessment also has been significantly increased in Chapter 9, including a review of the ASPIRES scale (Assessment of Spirituality and Religious Sentiments scale, Piedmont, 2010), a recent and promising measure of spiritual and religious variables. Likewise, the review of creativity assessment has been expanded in this chapter.
 11. In Chapter 10, *Neuropsychological Testing*, the last research on mild Traumatic Brain Injury (mTBI) is presented, and the controversies surrounding baseline testing of neurocognitive functioning in soldiers and athletes are reviewed. The recently revised Wechsler Memory Scale-IV (WMS-IV) is presented as well.

12. Chapter 11, *Industrial, Occupational, and Career Assessment*, has undergone the most substantial revisions in the book, especially in the new Topic 11B: *Assessment for Career Development in the Global Economy*. In this section, I review theories of career development, and present assessment approaches often useful in the new global economy.

Of course, minor but essential changes have been made throughout the entire book to capture the latest developments in testing. For example, I have searched the literature to include the most recent studies bearing on the validity of well-established instruments.

OUTLINE OF THE BOOK

Topical Organization

To accommodate the widest possible audience, I have incorporated an outline that partitions the gargantuan field of psychological testing—its history, principles, and applications—into 22 small, manageable, modular topics. I worked hard to organize the 22 topics into natural pairings. Thus, the reader will notice that the book is also organized as an ordered series of 11 chapters of 2 topics each. The chapter format helps identify pairs of topics that are more or less contiguous and also reduces the need for redundant preambles to each topic.

The most fundamental and indivisible unit of the book is the topic. Each topic stands on its own. In each topic, the reader encounters a manageable number of concepts and reviews a modest number of tests. To the student, the advantage of topical organization is that the individual topics are small enough to read at a single sitting. To the instructor, the advantage of topical organization is that subjects deemed of lesser importance can be easily excised from the reading list. Naturally, I would prefer that every student read every topic, but I am a realist too. Often, a foreshortened textbook is necessary for practical reasons such as the length of the school term. In those instances, the instructor will find it easy to fashion a subset of topics to meet the curricular needs of almost any course in psychological testing.

The 11 chapters break down into five broad areas, as follows:

Nature, History, and Consequences of Testing

Chapter 1: Implementation and Attributes of Psychological Testing

Topic 1A: The Nature and Uses of Psychological Testing

Topic 1B: Ethical and Social Implications of Testing

Chapter 2: Origins of Psychological Testing

Topic 2A: The Origins of Psychological Testing

Topic 2B: Testing from the Early 1900s to Present

Foundations of Testing

Chapter 3: Norms and Reliability

Topic 3A: Norms and Test Standardization

Topic 3B: Concepts of Reliability

Chapter 4: Validity and Test Construction

Topic 4A: Basic Concepts of Validity

Topic 4B: Test Construction

Ability Testing and Controversies

Chapter 5: Intelligence and Achievement: Theories and Tests

Topic 5A: Theories of Intelligence and Factor Analysis

Topic 5B: Individual Tests of Intelligence and Achievement

Chapter 6: Ability Testing: Group Tests and Controversies

Topic 6A: Group Tests of Ability and Related Concepts

Topic 6B: Test Bias and Other Controversies

Chapter 7: Assessing Special Populations

Topic 7A: Infant and Preschool Assessment

Topic 7B: Testing Persons with Disabilities

Assessment of Personality and Related Constructs

Chapter 8: Foundations of Personality Testing

Topic 8A: Theories of Personality and Projective Techniques

Topic 8B: Self-Report and Behavioral Assessment of Psychopathology

Chapter 9: Evaluation of Normality and Individual Strengths

Topic 9A: Assessment within the Normal Spectrum

Topic 9B: Positive Psychological Assessment

Specialized Applications

Chapter 10: Neuropsychological Testing

Topic 10A: Neurobiological Concepts and Behavioral Assessment

Topic 10B: Neuropsychological Tests, Batteries, and Screening Tools

Chapter 11: Industrial, Occupational, and Career Assessment

Topic 11A: Industrial and Organizational Assessment

Topic 11B: Assessment for Career Development in a Global Economy

The book also features an extensive glossary and a table for converting percentile ranks to standard and standardized-score equivalents. In addition, an important feature is Appendix A, Major Landmarks in the History of Psychological Testing. To meet personal needs, readers and course instructors will pick and choose from these topics as they please.

Supplements

Pearson Education is pleased to offer the following supplements to qualified adopters.

Instructor's Manual and Test Bank The instructor's manual is a wonderful tool for classroom preparation and management. Corresponding to the topics from the text, each of the manual's 22 topics contains classroom discussion questions, extramural assignments, classroom demonstrations, and essay questions. In addition, the test bank portion provides instructors with more than 1,000 readymade multiple choice questions.

PowerPoint Presentation The PowerPoint Presentation is an exciting interactive tool for use in the classroom. Each chapter pairs key concepts with images from the textbook to reinforce student learning.

This text is available in a digital format as well. To learn more about our programs, pricing options, and customization, visit www.pearsonglobaleditions.com/Gregory.

ACKNOWLEDGMENTS

I want to express my gratitude to several persons for helping the seventh edition become a reality. The following individuals reviewed one or more previous editions and provided numerous valuable suggestions:

Wendy Folger, Central Michigan University
 Philip Moberg, Northern Kentucky University
 Herman Huber, College of St. Elizabeth
 Zandra Gratz, Kean University
 Ken Linfield, Spalding University
 Darrell Rudmann, Shawnee State University
 William Rogers, Grand Valley State University
 Mark Runco, University of Georgia, Athens
 William Struthers, Wheaton College

A number of people at Pearson Education played pivotal roles along the way, providing encouragement and tactical advice in the various phases of

revision. These individuals include Susan Hartman, who provided overall editorial guidance and arranged for excellent reviews; Lindsay Bethoney, who managed the many details of manuscript submission and preparation. In addition, I want to thank Somdotta Mukherjee (Copy Editor), Rajshri Walia (Art Coordinator), Jogender Taneja (Project Manager), and the team involved in the final phase of development of this book.

Dozens of psychologists and educators permitted me to reproduce tables, figures, and artwork from their research and scholarship. Rather than gathering these names in an obscure appendix that few readers would view, I have cited the contributors in the context of their tables and figures.

In addition, these individuals helped with earlier editions and their guidance has carried forward to the current version:

George M. Alliger, University of Albany
 Linda J. Allred, East Carolina University
 Kay Bathurst, California State University, Fullerton
 Fred Brown, Iowa State University
 Michael L. Chase, Quincy University
 Milton J. Dehn, University of Wisconsin-La Crosse
 Timothy S. Hartshorne, Central Michigan University
 Herbert W. Helm, Jr., Andrews University
 Ted Jaeger, Westminster College
 Richard Kimball, Worcester State College
 Haig J. Kojian
 Phyllis M. Ladrigan, Nazareth College
 Terry G. Newell, California State University, Fresno
 Walter L. Porter, Harding University
 Linda Krug Porzelius, SUNY, Brockport
 Robert W. Read, Northeastern University
 Robert A. Reeves, Augusta State University

James R. Sorensen, Northeastern University

Billy Van Jones, Abilene Christian University

Thanks are due to the many publishers who granted permission for reproduction of materials. Administrators and colleagues at Wheaton College (Illinois) helped with the book by providing excellent resources and a supportive atmosphere for previous editions.

Finally, as always, special thanks to Mary, Sara, and Anne, who continue to support my preoccupation with textbook writing. For at least a few years, I promise not to mention “the book” when my loved ones ask me how things are going.

Users of the text:

Melissa Blank of Moffitt Cancer Center at University of South Florida

Michael Eltz of University of Rhode Island

John Hall of Arkansas State University

Jeanne Jenkins of John Carroll University

Kathleen Torsney of William Paterson University

Jason McGlothlin of Kent State University

Non-users of the text:

Bradley Brummel of The University of Tulsa

Peter Spiegel of CSUSB

Zinta Byrne of Colorado State University

Mikle South of Brigham Young University

Pearson would like to thank and acknowledge Shweta Sharma Sehgal, for her work on the Global Edition.