

---

# Brief Contents

---

## PART 1 AN OVERVIEW

- 1 The Psychological Testing Enterprise 3
- 2 Historical, Legal, and Ethical Considerations 24

## PART 2 THE SCIENCE OF PSYCHOLOGICAL MEASUREMENT

- 3 A Statistics Refresher 49
- 4 Norms, Correlation, and Regression 75
- 5 Reliability 99
- 6 Validity 123
- 7 Test Development 156

## PART 3 THE ASSESSMENT OF INTELLIGENCE

- 8 Intelligence and Its Measurement: An Overview 191
- 9 Other Tests of Intelligence 217
- 10 Issues in the Measurement of Intelligence 265

## PART 4 PERSONALITY ASSESSMENT

- 11 Personality Assessment: An Overview 285
- 12 Projective Methods 319
- 13 Other Tools in Personality Assessment 357

## PART 5 TESTING AND ASSESSMENT IN ACTION

- 14 Clinical and Counseling Assessment 383
- 15 Neuropsychological Assessment 425
- 16 Educational Assessment 461
- 17 The Assessment of People with Handicapping Conditions 499
- 18 Industrial/Organizational Assessment 521
- 19 Consumer Assessment 563
- 20 Epilogue 593

Appendix A A Sample Report of Psychological Testing 615

Appendix B Factor Analysis: What It Is, How It's Done, and What to Do  
with It 621

Appendix C Listing of Selected Suppliers of Psychological and Educational Tests  
and Measurement-Related Services 629

References 635

Name Index 679

Subject Index 685

Credits 705

---

# Contents

---

— PART 1 —  
AN OVERVIEW

---

## **Chapter 1** **The Psychological Testing Enterprise**

The Uses of Psychological Test Data	4
Educational Settings	4
Counseling Settings	5
Clinical Settings	5
Business Settings	6
Other Settings	7
The Process of Assessment	7
Tools in the Assessment Process	8
The Parties to the Assessment Process	13
<i>Close-up: The Standards for Educational and Psychological Testing</i>	14
What Is a "Good Test"?	20
Reliability	20
Validity	20
Norms	21
Reference Sources for Test Information	21
Test Catalogues	21
Test Manuals	22
Test Reviews	22

## **Chapter 2** **Historical, Legal, and Ethical Considerations**

A Historical Perspective	25
Antiquity Through the Nineteenth Century	25
The Nineteenth Century	29
The Twentieth Century	33
Legal and Ethical Considerations	35
The Concerns of the Public	37

— PART 2 —

THE SCIENCE OF PSYCHOLOGICAL MEASUREMENT

---

**Chapter 3**

**A Statistics Refresher**

49

Scales of Measurement 50

*Close-up: Error of Measurement and the True Score Model* 51

Nominal Scales 52

Ordinal Scales 53

Interval Scales 53

Ratio Scales 54

Describing Data 54

Frequency Distributions 55

Measures of Central Tendency 57

Variability 63

Skewness 67

Kurtosis 68

The Normal Curve 69

Area Under the Normal Curve 69

Standard Scores 70

*z* Scores 71

*T* Scores 71

Other Standard Scores 72

**Chapter 4**

**Norms, Correlation, and Regression**

75

Norms 75

The Normative or Standardization Sample 76

Types of Norms 78

Fixed Reference Group Scoring Systems 83

Norm-Referenced Versus Criterion-Referenced Interpretation 84

Correlation 86

The Concept of Correlation 86

The Pearson *r* 87

*Close-up: Pearson, Galton, Correlation, and Regression* 88

Other Correlation Coefficients 90

Graphic Representations of Correlation 92

Regression 96

## Chapter 5

### Reliability

The Concept of Reliability	100
Sources of Error Variance	100
Types of Reliability Estimates	103
Test-Retest Reliability Estimates	103
Parallel-Forms and Alternate-Forms Reliability Estimates	105
Split-Half Reliability	106
Other Methods of Estimating Internal Consistency	108
Measures of Inter-Scorer Reliability	111
Using and Interpreting a Coefficient of Reliability	112
The Purpose of the Reliability Coefficient	113
The Nature of the Test	113
An Alternative to the True Score Model	116
Reliability and Individual Scores	117
The Standard Error of Measurement	117
<i>Close-up: Cronbach's Generalizability Theory</i>	118
The Standard Error of the Difference Between Two Scores	121

## Chapter 6

### Validity

Face Validity	125
Content Validity	126
The Quantification of Content Validity	127
Criterion-Related Validity	128
What Is a Criterion?	129
Concurrent Validity	130
Predictive Validity	130
Construct Validity	139
Evidence of Construct Validity	140
<i>Close-up: The Multitrait-Multimethod Matrix</i>	144
Validity and Test Bias	150
The Definition of "Test Bias"	150
The Definition of "Fairness" as Applied to Tests	153

## Chapter 7

### Test Development

Test Conceptualization	157
Test Construction	158
Scaling	158
Writing Items	164
Test Tryout	167
What Is a "Good" Item?	168

Item Analysis	169
Item-Difficulty Index	169
Item-Validity Index	170
Item-Reliability Index	171
Item-Discrimination Index	172
Item-Characteristic Curves	175
Other Considerations in Item Analysis	177
Test Revision	179
<i>Close-up: Anatomy of the Development of a Test: the Personality Research Form</i>	180
Custom-Made Tests	184
General Considerations	184
The Oral Test	185

— PART 3 —

THE ASSESSMENT OF INTELLIGENCE

---

<b>Chapter 8</b>	
<b>Intelligence and Its Measurement: An Overview</b>	<b>191</b>
What Is Intelligence?	192
The 1921 Symposium	193
Francis Galton	194
Alfred Binet	194
David Wechsler	196
Jean Piaget	196
The Factor Analysts	197
Measuring Intelligence	201
Measuring Intelligence in Infancy	201
Measuring Intelligence in Children	202
Measuring the Intelligence of Adults	202
Measuring the Intelligence of Special Populations	203
The Legacy of Binet	204
Binet's Test in France	204
Binet's Test in America	205
<i>Close-up: The Concept of Mental Age</i>	206
The Stanford-Binet Today	210
<b>Chapter 9</b>	
<b>Other Tests of Intelligence</b>	<b>217</b>
The Wechsler Tests	218
The Wechsler Tests in General	218
The Wechsler Adult Intelligence Scale-Revised (WAIS-R)	220
The Wechsler Intelligence Scale for Children-Revised (WISC-R)	223

The Wechsler Preschool and Primary Scale of Intelligence (WPPSI) and the WPPSI-R	230
The Wechsler Tests in Perspective	232
More Tests of Intelligence	235
Piagetian Scales	235
The Slosson Intelligence Test (SIT)	237
The Differential Ability Scales (DAS)	239
Sternberg Multidimensional Abilities Test	239
Intelligence Tests in Other Countries	240
Assessing the Intellectual Ability of Infants	243
Bayley Scales of Infant Development	244
Gesell Developmental Schedules	245
The McCarthy Scales of Children's Abilities (MSCA)	246
<i>Close-up: Mensa</i>	248
Group Intelligence Tests	249
Group Intelligence Tests in the Schools	253
Group Intelligence Tests in the Military	255
Measures of Specific Intellectual Abilities	261
Measures of Creativity	261
Other Measures	262

## Chapter 10

### Issues in the Measurement of Intelligence

265

The Heritability Issue	265
Preformationists and Predeterminists	265
Is Intelligence Genetically Encoded?	267
<i>Close-up: Dr. Jensen and Mr. Hyde?</i>	268
How Stable Is Intelligence Over Time?	271
The Rise and Fall of IQ	272
What Factors Influence Measured Intelligence?	273
The Process of Measurement as a Factor	273
Genetic and Environmental Factors	273
A Perspective on "Intelligence" and Tests of Intelligence	280

## — PART 4 —

### PERSONALITY ASSESSMENT

---

## Chapter 11

### Personality Assessment: an Overview

28

Defining and Measuring "Personality"	286
Personality Traits	287
Personality Types	288
Personality States	289

Logical or Content Test Construction	292
Factor-Analytic Test Construction	293
The 16 PF	294
Test Construction by Empirical Criterion Keying	300
The MMPI	300
California Personality Inventory	306
The Theoretical Approach to Test Construction	307
The Edwards Personal Preference Schedule (EPPS)	307
<i>Close-up: Clinical Versus Actuarial Prediction</i>	309
Some Problems and Issues in Assessing Personality	313
Limitations of Self-Report Techniques	313
Problems Attendant on Rating Scales	314

## Chapter 12

### Projective Methods

319

Inkblots as Projective Stimuli	321
The Rorschach	321
The Holtzman Inkblot Technique (HIT)	330
Pictures as Projective Stimuli	333
The Thematic Apperception Test (TAT)	334
Other Picture-Story Tests	340
<i>Close-up: Of Historical Interest . . .</i>	341
Words as Projective Stimuli	344
Word Association Tests	344
Sentence Completion Tests	345
Figure Drawing as a Projective Technique	346
Machover's Draw-A-Person Test	348
Other Figure-Drawing Tests	349
Other Projective and Semiprojective Techniques	351
The Hand Test	351
The Rosenzweig Picture Frustration Study	352
Projective Techniques in Perspective	354
Assumptions	354
Situational Variables	355
Psychometric Considerations	356

## Chapter 13

### Other Tools in Personality Assessment

357

Measures of Self-Concept	358
Q-Sort Techniques	358
Other Measures of Self-Concept	359
Measures of Cognitive Style	361
Field Dependence and Independence	361
Reflective Versus Impulsive Cognitive Styles	363
Other Cognitive Styles	365

Situational Performance Measures	366
The Character Education Inquiry	367
Leaderless-Group Situations	367
Situational Stress Tests	369
Psychophysiological Methods	369
Biofeedback	370
The Polygraph	370
Plethysmography	371
Pupillary Responses	372
Other Measures of Personality	372
Personality Tests for Use with Children	373
<i>Close-up: Truth or Falsehood?</i>	375

— PART 5 —

TESTING AND ASSESSMENT IN ACTION

---

<b>Chapter 14</b>	
<b>Clinical and Counseling Assessment</b>	<b>383</b>
The Tools of Clinical and Counseling Assessment	384
The Interview	384
Psychological Tests	390
The Case History	391
Behavioral Assessment	392
Assessment in Counseling	398
Measures of Values	400
Testing in Clinical Settings	403
<i>Close-up: Excerpts from a Sample MMPI Report</i>	404
Forensic Psychological Assessment	405
Custody Evaluations	415
The Psychological Report	418
Writing the Clinical Report	418
The Barnum Effect	420
<b>Chapter 15</b>	
<b>Neuropsychological Assessment</b>	<b>425</b>
The Nervous System and Behavior	426
Neurological Damage and the Concept of "Organicity"	430
The Neuropsychological Examination	433
The History	435
The Neuropsychological Mental Status Examination	437
The Physical Examination	437
<i>Close-up: Medical Diagnostic Aids in Neuropsychological Examinations</i>	438

Neuropsychological Tests	441
Intellectual Ability Tests in Neuropsychology	442
Memory Tests	443
Tests of Cognitive Functioning	445
Tests of Verbal Functioning	446
Perceptual, Motor, and Perceptual-Motor Tests	447
The Bender Visual Motor Gestalt Test	449
Neuropsychological Test Batteries	455
The "Flexible" Battery	455
The Prepackaged Battery	456

## **Chapter 16**

### **Educational Assessment**

461

Achievement Tests	461
Measures of General Achievement	462
Measures of Achievement in Specific Subject Areas	464
Tests of Aptitude	470
The Elementary School Level	472
The Secondary School Level	475
The College Level and Beyond	480
Diagnostic Tests	481
Reading Tests	482
Math Tests	483
Other Diagnostic Tests	483
Other Tests and Measures in Educational Settings	484
Intelligence Tests	484
Learning Disabilities Assessment	491
Peer Appraisal Techniques	493
Study Habits, Interests, and Attitudes	495
<i>Close-up: Tests of Minimum Competency</i>	496

## **Chapter 17**

### **The Assessment of People with Handicapping Conditions**

499

The Visually-Impaired and the Blind	500
Issues in Test Administration and Interpretation	500
Available Instruments	502
The Hearing Impaired and the Deaf	503
Issues in Test Administration and Interpretation	504
Available Instruments	504
The Deaf-Blind	505
Motor Handicaps	506
Issues in Test Administration and Interpretation	507
Available Instruments	507

Cognitive Handicaps	508
The Mentally Retarded	508
Assessing Adaptive Behavior	509
A Perspective	515
<i>Close-up: The Gifted</i>	516

## **Chapter 18**

### **Industrial/Organizational Assessment**

521

Preemployment Counseling	522
Measures of Interest	522
Measures of Aptitude	527
<i>Close-up: Validity Generalization and the GATB</i>	530
Personality Measures	535
Job Previews	538
Personnel Psychology	538
Screening, Selection, Classification, and Placement	538
Issues in Personnel Selection	549
Productivity, Motivation, and Job Satisfaction	553
Engineering Psychology	558
Designing Instrumentation and Equipment	559
Designing Environments	561

## **Chapter 19**

### **Consumer Assessment**

563

An Overview of Testing in Consumer Psychology	564
The Measurement of Attitudes	564
The Tools of the Consumer Psychologist	566
Measurement with Surveys and Polls	571
Survey Techniques	571
Designing Survey Research Questionnaires	573
Qualitative Assessment	579
One-on-One Interviews	580
Focus Groups	580
Projective Techniques	582
Other Techniques	583
Psychophysiological Measures	584
Pupillary Response	584
Electrodermal Response	585
Brain Wave Measurement	585
Other Measures	585
Psychophysiological Methods in Perspective	587
<i>Close-up: Psychographics</i>	587

## Epilogue

593

Computer-Based Assessment	593
The Process	594
The Advantages	594
The Disadvantages and Issues	598
Test User Qualifications	602
Testing Members of Cultural and Linguistic Minorities	604
Testing People with Handicapping Conditions	605
The Rights of Test Takers	606
The Right of Informed Consent to Testing	606
The Right to Be Informed of Test Findings	607
The Right Not to Have Privacy Invaded	607
<i>Close-up: What Constitutes Malpractice?</i>	608
The Right to the Least Stigmatizing Label	613
The Right to Have Findings Held Confidential	614

## Appendix A

A Sample Report of Psychological Testing	615
--	-----

## Appendix B

Factor Analysis: What It Is, How It's Done, and What to Do with It	621
--	-----

## Appendix C

Selected Suppliers of Psychological and Educational Tests and Measurement-Related Services	629
--	-----

References	635
------------	-----

Name Index	679
------------	-----

Subject Index	685
---------------	-----

Credits	705
---------	-----