CONTENTS

Preface	vii
l Historical Background	1
Uses of Psychological Tests	1
The Nineteenth Century	2
Interest in the Mentally Deficie	nt 4
Francis Galton's Contributions	5
Binet's Contributions	7
Developments in the United S	states 9
Personality Tests	15
The Present Situation	19
References	21
2 Elementary Statistical Concepts	24
Two Kinds of Statistics	24
Descriptive Statistics	25
Correlation	34
Sampling Statistics	38
References	44
3 Basic Principles	46
Definition of Psychological Test	46
Objectivity	47
A Representative Population San	mple 48
Sampling of Traits and Function	on ₅ 51
Resemblance of Test Items to A	ctual Behavior or Experience 59
References	62
4 Test Standardization: Procedures as	nd Reliability 63
Content	63
P opulation	65
Reliability	66

	Factors Affecting Reliability Estimates	13
	References	86
5	Test Standardization: Validity	88
	Definition	88
	Types of Validity	89
	Validating Criteria	97
	Methods of Calculating Validity	100
	Item Analysis	112
	Validating Information	116
	References	117
5	Interpretation of Test Scores: Quantitative and	
	Qualitative	120
	An Index of Relative Rank	120
	Norms	121
	Percentile and Decile Ranks	124
	The Standard Score and Variants	128
	Mental Age and Intelligence Quotier t	130
	Qualitative Aspects	134
	Indexes Used with Educational Achievement Tests	135
	Clinical Aspects	137
	Difference between Norms and Standards	141
	Psychological Measurement Contrasted with Physical	
	Measurement	142
	Essential Considerations in Selecting a Test	145
	References	147
?	Definitions and Analyses of Intelligence	149
	Definitions	149
	Implications for Test Design and Content	156
	Three "Kinds" of Intelligence	157
	Analyses of Mental Ability	159
	Factor Analysis	168
	Illustrations of Factors	174
	Implications	179
	Creative Ability	180
	References	182
18	The Binet Scales	153
	Binet's Early Work	184
	The Scales	186
	Summary	194
	References	196

CONTENTS	xi

9 Early Re	evisions of the Binet-Simon Scale	197
-	ur Early Revisions	197
	ne Stanford Revision of 1916	198
	ferences	210
10 The Star	nford-Binet Scales: 1937 and 1960 Revisions	211
Tì	ne 1937 Scale	211
Tì	ne 1960 Revision	229
Ev	aluations and Criticisms	232
	ferences	238
11 The We	chsler Scales	241
Fo	rm I (19 3 9)	24 2
Tì	ne Adult Intelligence Scale (1955)	245
Sco	oring and IQ Calculation	263
De	terioration and Scatter	26 5
Cr	iticism and Evaluation	26 6
TI	ne Intelligence Scale for Children (1949)	26 9
Re	ferences	275
12 Individu	al Performance Scales	280
De	finition and Need	280
Re	presentative Scales	28 2
O	ther Types	287
Fu	inctions Tested by Performance Scales	291
Ev	aluation of Performance Tests	293
Ac	lvantages and Disadvantages	296
Re	eferences	298
13 Scales fo	or Infants and Preschool Children	301
T	ne Gesell Scales	301
Ca	attell Developmental and Intelligence Scale	307
	innesota Preschool Scale	311
T	he Merrill-Palmer Scale of Mental Tests	313
O	ther Scales	314
E	valuation of the Scales	315
R	eferences	518
14 Intellige	ence Tests as Clinical Instruments	320
Fa	octors Affecting Test Performance	321
	he Stanford-Binet Scale	325
т	he Wecheler Scales	330

xii	CONTENTS
X11	CONTENTS

A Report Outline	338
Tests of Mental Impairment	340
References	352
15 Nonverbal Group Scales of Mental Ability	356
Beginnings	356
Characteristics of Group Tests of Mental Ability	357
Tests for Kindergarten and Primary Levels	3 59
"Culture-Fair" Tests	3 65
Evaluation of Nonverbal Group Scales	376
References	379
16 Group Scales of Intelligence: Elementary, Secondary,	
and Higher Levels	382
Elementary and Secondary School Levels	383
Group Scales for College Freshmen and Adults	392
Representative Scales for Adults	402
Evaluation of Group Scales	404
Uses of Group Scales	406
References	408
17 Multifactor Test Batteries	411
Characteristics	411
Representative Batteries	412
Evaluation	427
References	429
18 Aptitude Tests	431
Definition	431
Tests of Vision and Hearing	432
Motor and Manual Tests	436
Tests of Mechanical Aptitude	444
Tests of Clerical Aptitude	4 51
References	455
19 Aptitude Tests: Fine Arts and Professions	458
Aptitude in Music	458
Aptitude in the Graphic Arts	461
Aptitude in Medicine	469
Aptitude in Law	475
Aptitude for Teaching	478
Aptitudes in Science and Engineering	480

CONTENTS		xiii
	Evaluation of Aptitude Tests References	484 486
20 Tests	of Educational Achievement	490
	Nature and Scope	490
	Uses	492
	Derived Indexes	494
	Types of Items	496
	Representative Batteries	499
	Reading Tests	502
	Arithmetic Tests	506
	Tests at High School and College Levels	508
	Tests of Complex Educational Objectives	510 511
	Prognosis Tests in Specific Academic Subjects Evaluation of Achievement Tests	513
	Tests of Proficiency	514
	References	516
	Action Control of the	310
21 Perso	nality Rating Methods	519
	Definition of Personality	519
	Rating Scales	521
	References	536
22 Situat	tional Tests	538
	Sociometric Methods	538
	Psychodrama	544
	Office of Strategic Services: Assessment Tests	546
	Evaluation of Situational Tests	551
	References	553
23 Perso	nality Inventories	555
	Purposes and Types	555
	Representative Inventories	559
	Evaluation of Personality Inventories	570
	References	578
24 Inter	ests, Attitudes, and Values	581
	Interest Inventories	581
	Attitudes and Values	596
	Opinion Polling	605
	References	608

xiv CONTENTS

25	Projective Methods: The Rorschach and the Thematic	
	Apperception Tests	612
	Definition and Explanation	612
	The Rorschach Test	614
	Thematic Apperception Test	638
	References	64 9
26	Projective Methods: Various	658
	Word-Association Tests	658
	Picture Tests	66 0
	Verbal Completion Tests	669
	Drawing and Painting	673
	Other Noteworthy Projective Tests	675
	Play	677
	Evaluation of Projective Tests	679
	References	681
	Index of Names	687
	Index of Subjects	691