## **CONTENTS**

			Preface	ix
			Acknowledgments	xiii
			Credits	xv
PART I	BAS	IC 1	TOOLS IN MEASUREMENT AND EVALUATION	1
Cha	apter	1	Introduction to Tests and Measurements	2
	-		The Nature of Measurement and Evaluation	4
			Purposes of Measurement, Testing, and Evaluation	7
		١	Domains of Human Performance	9
Ch	apter	2	Using Technology in Measurement and Evaluation	14
			Becoming Computer Literate	17
			Using Microcomputers to Analyze Data	18 22
			Using SPSS for Windows	27
		l	Creating Data Matrices	
Ch	apter	3	Descriptive Statistics and the Normal Distribution	<b>30</b> 32
		1	Scales of Measurement	33
			Summation Notation	33
			Reporting Data	35
			Central Tendency Distribution Shapes	36
			Variability	38
			Standard Scores	42
		ı	Normal-Curve Areas (The z Table)	43
Ch	antor		Correlation and Prediction	50
CII	iaptei	7	The Correlation Coefficient	52
		1	Calculating r	54
			Prediction	58
			Multiple Correlation	62
Ch	nanter	5	Inferential Statistics	64
	.up.c.	1	Hypothesis Testing	66
		ı	Independent and Dependent Variables	68
			Selected Statistical Tests	69
PART II	l REI	LIA	BILITY, VALIDITY, AND GRADING	81
				82
Cł	napter	6	Norm-Referenced Measurement	85
			Reliability	96
			Validity Applied Reliability and Validity Measures	102
_	-	1	Applied Reliability did valuely interest	106
Cl	haptei	r 7	Criterion-Referenced Measurement	109
			Developing Criterion-Referenced Standards	109
		ı	Historical Background	

1	Development of Criterion-Referenced Testing	112
	Statistical Analysis of CRTs	113
	Statistical Techniques to Use With CRTs	115
Chapter 8	Grading: A Summative Evaluation	126
- 1	Evaluations and Standards	129
	The Process of Grading	130
	Determining Instructional Objectives	130
	Consistency in Grading	135
	Grading Mechanics	135
Chapter 9	Alternative Assessment	150
1	Recent Trends in Educational Assessment	154
	Alternative Assessment of Psychomotor Skills	155
	Establishing Criteria for Judging Alternative Assessments	160
	Alternative Assessment Techniques	165
	Guidelines for Developing Alternative Assessments	170
,	Improving Alternative Assessment	172
RT III APP	LICATIONS OF MEASUREMENT AND EVALUATION	175
Chapter 10	Measuring Cognitive Objectives With Written Tests	176
chapte. R	Planning the Test	179
	Constructing and Scoring the Test	187
	Administering the Test	205
	Analyzing the Test	208
	Item Analysis	210
•	Sources of Written Tests	215
	Questionnaires	216
Chapter 1	1 Physical Fitness and Activity Assessment in Adults	222
•	Health-Related Physical Fitness	225
	Apparently Healthy People	226
	Measuring Aerobic Capacity	227
	Measuring Body Composition	235
	Measuring Muscular Strength and Endurance	243
	Measuring Flexibility	252
	Health-Related Fitness Batteries	254
	Physical Fitness Assessment in Older Adults	255
	The Older Adult Fitness Battery	257
	Special Populations	266
	Measuring Physical Activity	267
	Certification Programs	270
	A Practical Health-Related Fitness Battery	271
Chapter 1	•	272
	Health-Related Fitness and Motor Fitness	276
	Norms Versus Criterion-Referenced Standards	277
	Normative Data	278
	Youth Fitness Test Batteries	280
	FITNESSGRAM	282

1	Variable Standards in Youth Fitness Tests	288
	Enhancing Reliable and Valid Fitness Test Results With Children	290
	Special Children	290
	Measuring Physical Activity in Youth	292
Chapter 13	Assessment of Sport Skills and Motor Abilities	298
	Guidelines for Sport Skills and Motor Performance Tests	300
	Effective Testing Procedures	301
	Developing Psychomotor Tests	303
	Issues in Skills Testing	305
	Skills Test Classification	307
	Testing Motor Abilities	319
	Purposes of Human Performance Analysis	323
Chapter 14	Psychological Measurements in Sport and Exercise	330
	Sport Psychology: Performance Enhancement and Mental Health	332
	Trait Versus State Measures	333
	General Versus Sport-Specific Measures	334
	Cautions in Using Psychological Tests	335
	Quantitative Versus Qualitative Measurement	337
	Scales Used in Sport and Exercise Psychology	34
	General Psychological Scales Used in Sport and Exercise	354
Glossary		36
References		36!
Index		37
About the Authors		382

Contents