

# Contents

## Volume 1: Foundations, Planning, Measures, and Psychometrics

Editorial Board . . . . .	ix
About the Editor-in-Chief . . . . .	xi
Contributors . . . . .	xiii
Series Preface . . . . .	xxi
Introduction: Objectives of Psychological Research and Their Relations to Research Methods . . . . .	xxiii
<i>Harris Cooper</i>	
<b>Part I. Philosophical, Ethical, and Societal Underpinnings of Psychological Research . . .</b>	<b>1</b>
<b>Section 1: Philosophical Issues for Research in Psychology . . . . .</b>	<b>3</b>
Chapter 1. Perspectives on the Epistemological Bases for Qualitative Research . . . . .	5
<i>Carla Willig</i>	
Chapter 2. Theories of Causation in Psychological Science . . . . .	23
<i>William R. Shadish and Kristynn J. Sullivan</i>	
<b>Section 2: Ethical and Professional Considerations in Conducting Psychological Research . . . . .</b>	<b>53</b>
Chapter 3. Ethics in Psychological Research: Guidelines and Regulations . . . . .	55
<i>Adam L. Fried</i>	
Chapter 4. Ethics and Regulation of Research With Nonhuman Animals . . . . .	75
<i>Chana K. Akins and Sangeeta Panicker</i>	
<b>Section 3: Cultural and Societal Issues in Conducting Psychological Research . . . . .</b>	<b>83</b>
Chapter 5. Cross-Cultural Research Methods . . . . .	85
<i>David Matsumoto and Fons J. R. van de Vijver</i>	
Chapter 6. Research With Underresearched Populations . . . . .	101
<i>Mark W. Roosa, George P. Knight, and Adriana J. Umaña-Taylor</i>	

<b>Part II. Planning Research</b> .....	117
Chapter 7. Developing Testable and Important Research Questions. ....	119
<i>Frederick T. L. Leong, Neal Schmitt, and Brent J. Lyons</i>	
Chapter 8. Accessing Relevant Literature .....	133
<i>Hannah R. Rothstein</i>	
Chapter 9. Obtaining and Evaluating Research Resources .....	145
<i>Louis A. Penner, Terrance L. Albrecht, and John F. Dovidio</i>	
Chapter 10. Psychological Measurement: Scaling and Analysis. ....	163
<i>Heather Hayes and Susan E. Embretson</i>	
Chapter 11. Sample Size Planning .....	181
<i>Ken Kelley and Scott E. Maxwell</i>	
<b>Part III. Measurement Methods</b> .....	203
<b>Section 1: Behavior Observation</b> .....	205
Chapter 12. Behavioral Observation .....	207
<i>Roger Bakeman and Vicenç Quera</i>	
<b>Section 2: Self-Reports</b> .....	227
Chapter 13. Question Order Effects. ....	229
<i>Kenneth A. Rasinski, Lisa Lee, and Parvati Krishnamurty</i>	
Chapter 14. Interviews and Interviewing Techniques .....	249
<i>Anna Madill</i>	
Chapter 15. Using Diary Methods in Psychological Research .....	277
<i>Masumi Iida, Patrick E. Shrout, Jean-Philippe Laurenceau, and Niall Bolger</i>	
Chapter 16. Automated Analysis of Essays and Open-Ended Verbal Responses. ....	307
<i>Arthur C. Graesser and Danielle S. McNamara</i>	
<b>Section 3: Psychological Tests</b> .....	327
Chapter 17. The Current Status of “Projective” “Tests” .....	329
<i>Robert E. McGrath and Elizabeth J. Carroll</i>	
Chapter 18. Objective Tests as Instruments of Psychological Theory and Research. ....	349
<i>David Watson</i>	
Chapter 19. Norm- and Criterion-Referenced Testing. ....	371
<i>Kurt F. Geisinger</i>	
Chapter 20. Brief Instruments and Short Forms .....	395
<i>Gregory T. Smith, Jessica L. Combs, and Carolyn M. Pearson</i>	
<b>Section 4: Chronometric and Psychophysical Measures</b> .....	411
Chapter 21. Eye Movements and Cognitive Processes. ....	413
<i>Keith Rayner and Reinhold Kliegl</i>	
Chapter 22. Response Time Distributions .....	429
<i>Roger Ratcliff</i>	
Chapter 23. Psychophysics .....	445
<i>Paul T. Sowden</i>	

Section 5: Measures in Psychophysiology . . . . .	459
Chapter 24. Peripheral Physiological Measures of Psychological Constructs . . . . .	461
<i>Louis G. Tassinary, Ursula Hess, and Luis M. Carcoba</i>	
Chapter 25. Hormone Assays . . . . .	489
<i>Oliver C. Schultheiss, Anja Schiepe-Tiska, and Maika Rawolle</i>	
Section 6: Measures in Neuroscience . . . . .	501
Chapter 26. Electroencephalographic Methods in Psychology . . . . .	503
<i>Eddie Harmon-Jones and David M. Amodio</i>	
Chapter 27. Event-Related Potentials. . . . .	523
<i>Steven J. Luck</i>	
Chapter 28. Functional Magnetic Resonance Imaging. . . . .	547
<i>Bianca C. Wittmann and Mark D'Esposito</i>	
Chapter 29. Beyond ERP and fMRI: Other Imaging Techniques for Studying Human Brain Function . . . . .	567
<i>Gabriele Gratton and Monica Fabiani</i>	
Chapter 30. Combined Neuroimaging Methods . . . . .	581
<i>Christian C. Ruff</i>	
Chapter 31. Noninvasive Stimulation of the Cerebral Cortex in Social Neuroscience . . . .	601
<i>Dennis J. L. G. Schutter</i>	
Part IV. Psychometrics . . . . .	619
Chapter 32. Construct Validity . . . . .	621
<i>Kevin J. Grimm and Keith F. Widaman</i>	
Chapter 33. Reliability . . . . .	643
<i>Patrick E. Shrout and Sean P. Lane</i>	
Chapter 34. Generalizability Theory . . . . .	661
<i>Xiaohong Gao and Deborah J. Harris</i>	
Chapter 35. Item-Level Factor Analysis. . . . .	683
<i>Brian D. Stucky, Nisha C. Gottfredson, and A. T. Panter</i>	
Chapter 36. An Introduction to Item Response Theory Models and Their Application in the Assessment of Noncognitive Traits. . . . .	699
<i>Steven P. Reise and Tyler M. Moore</i>	
Chapter 37. Measuring Test Performance With Signal Detection Theory Techniques . . . .	723
<i>Teresa A. Treat and Richard J. Viken</i>	