

CONTENTS

1. A Place for Research Strategies in Clinical Psychology 1
Jonathan S. Comer and Philip C. Kendall

Part One • Design Strategies for Clinical Psychology

2. Laboratory Methods in Experimental Psychopathology 7
Michael J. Zvolensky, John P. Forsyth, and Kirsten Johnson
3. Single-Case Experimental Designs and Small Pilot Trial Designs 24
Kaitlin P. Gallo, Jonathan S. Comer, and David H. Barlow
4. The Randomized Controlled Trial: Basics and Beyond 40
Philip C. Kendall, Jonathan S. Comer, and Candice Chow
5. Dissemination and Implementation Science:
Research Models and Methods 62
Rinad S. Beidas, Tara Mehta, Marc Atkins, Bonnie Solomon, and Jenna Merz
6. Virtual Environments in Clinical Psychology Research 87
Nina Wong and Deborah C. Beidel

Part Two • Measurement Strategies for Clinical Psychology

7. Assessment and Measurement of Change Considerations in Psychotherapy Research 103
Randall T. Salekin, Matthew A. Jarrett, and Elizabeth W. Adams
8. Observational Coding Strategies 120
David J. Hawes, Mark R. Dadds, and Dave S. Pasalich
9. Designing, Conducting, and Evaluating Therapy Process Research 142
Bryce D. McLeod, Nadia Islam, and Emily Wheat
10. Structural and Functional Brain Imaging in Clinical Psychology 165
Andrew J. Gerber and Marlen Z. Gonzalez
11. Experience Sampling Methods in Clinical Psychology 188
Philip S. Santangelo, Ulrich W. Ebner-Priemer, and Timothy J. Trull

Part Three • Analytic Strategies for Clinical Psychology

12. Statistical Power: Issues and Proper Applications 213
Helena Chmura Kraemer
13. Multiple Regression: The Basics and Beyond for Clinical Scientists 227
Stephen G. West, Leona S. Aiken, Heining Cham, and Yu Liu

14. Statistical Methods for Use in the Analysis of Randomized Clinical Trials Utilizing a Pretreatment, Posttreatment, Follow-up (PPF) Paradigm 253
Kendra L. Read, Philip C. Kendall, Mathew M. Carper, and Joseph R. Rausch
15. Evaluating Treatment Mediators and Moderators 262
David P. MacKinnon, Ginger Lockhart, Amanda N. Baraldi, and Lois A. Gelfand
16. Structural Equation Modeling: Applications in the Study of Psychopathology 287
Erika J. Wolf and Timothy A. Brown
17. Meta-analysis in Clinical Psychology Research 317
Andy P. Field
18. Item Response Theory 336
Lynne Steinberg and David Thissen
19. Missing Data in Psychological Science 374
Patrick E. McKnight and Katherine M. McKnight

Part Four • Matters of Responsible Research Conduct in Clinical Psychology

20. Ethical Considerations in Clinical Psychology Research 395
Gerald P. Koocher
21. Clinical Research with Culturally Diverse Populations 413
Frederick T. L. Leong and Zornitsa Kalibatseva

Part Five • Conclusion

22. Decades Not Days: The Research Enterprise in Clinical Psychology 437
Philip C. Kendall and Jonathan S. Comer

Index 443