

Handbook of
Research in Pediatric
and Clinical Child
Psychology
Practical Strategies and Methods

Issues in Clinical Child Psychology

*Series Editors: Michael C. Roberts, University of Kansas—Lawrence, Kansas
Lizette Peterson, University of Missouri—Columbia, Missouri*

BEHAVIORAL ASPECTS OF PEDIATRIC BURNS

Edited by Kenneth J. Tarnowski

CHILDREN AND DISASTERS

Edited by Conway F. Saylor

CONSULTING WITH PEDIATRICIANS: Psychological Perspectives

Dennis Drotar

HANDBOOK OF ADOLESCENT HEALTH RISK BEHAVIOR

Edited by Ralph J. DiClemente, William B. Hansen, and Lynn E. Ponton

HANDBOOK OF CHILD ABUSE RESEARCH AND TREATMENT

Edited by John R. Lutzker

HANDBOOK OF CHILD BEHAVIOR THERAPY

Edited by T. Steuart Watson and Frank M. Gresham

HANDBOOK OF CHILDREN'S COPING: Linking Theory and Intervention

Edited by Sharlene A. Wolchik and Irwin N. Sandler

HANDBOOK OF DEPRESSION IN CHILDREN AND ADOLESCENTS

Edited by William M. Reynolds and Hugh F. Johnston

HANDBOOK OF PSYCHOTHERAPIES WITH CHILDREN AND FAMILIES

Edited by Sandra W. Russ and Thomas H. Ollendick

HANDBOOK OF RESEARCH IN PEDIATRIC AND CLINICAL CHILD PSYCHOLOGY

Edited by Dennis Drotar

INTERNATIONAL HANDBOOK OF PHOBIC AND ANXIETY DISORDERS IN CHILDREN AND ADOLESCENTS

Edited by Thomas H. Ollendick, Neville J. King, and William Yule

MENTAL HEALTH INTERVENTIONS WITH PRESCHOOL CHILDREN

Robert D. Lyman and Toni L. Hembree-Kigin

SCHOOL CONSULTATION: Conceptual and Empirical Bases of Practice

William P. Erchul and Brian K. Martens

SUCCESSFUL PREVENTION PROGRAMS FOR CHILDREN AND ADOLESCENTS

Joseph A. Durlak

A Continuation Order Plan is available for this series. A continuation order will bring delivery of each new volume immediately upon publication. Volumes are billed only upon actual shipment. For further information please contact the publisher.

Handbook of
Research in Pediatric
and Clinical Child
Psychology
Practical Strategies and Methods

Edited by

Dennis Drotar

*Rainbow Babies and Children's Hospital and
Case Western Reserve University
Cleveland, Ohio*

Springer Science+Business Media, LLC

Library of Congress Cataloging-in-Publication Data

Handbook of research in pediatric and clinical child psychology: practical strategies and methods/edited by Dennis Drotar.

p. ; cm. — (Issues in clinical child psychology)

Includes bibliographical references and index.

ISBN 978-1-4613-6869-4 ISBN 978-1-4615-4165-3 (eBook)

DOI 10.1007/978-1-4615-4165-3

I. Child psychiatry—Research—Handbooks, manuals, etc. 2. Sick children—Psychology—Research—Handbooks, manuals, etc. I. Drotar, Dennis. II. Series. [DNLN: I. Child Psychology. 2. Psychology, Clinical—Child. 3. Research—methods.

WS 105 H2367 1999]

RJ499.3 .H367 1999

618.92'89—dc21

99-048699

ISBN 978-1-4613-6869-4

© 2000 Springer Science+Business Media New York

Originally published by Kluwer Academic / Plenum Publishers in 2000

Softcover reprint of the hardcover 1st edition 2000

All rights reserved

No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission from the Publisher

Contributors

F. Daniel Armstrong, Department of Pediatrics, University of Miami, School of Medicine, Miami, Florida 33101

Leonard Bickman, Center for Mental Health Policy, Vanderbilt University, Nashville, Tennessee 37212

Ronald L. Blount, Department of Psychology, University of Georgia, Athens, Georgia 30602

Victoria L. Bunke, Department of Educational Psychology, University of Georgia, Athens, Georgia 30602

Colleen D. Carlson, Department of Psychology, University of Houston, Houston, Texas 77204-531

Sean D. Cleary, Department of Epidemiology and Social Medicine, Albert Einstein College of Medicine, Bronx, New York 10461

Julia M. Difilippo, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44006-7123

Susan Douglas Kelley, Center for Mental Health Policy, Vanderbilt University, Nashville, Tennessee 37212

Dennis Drotar, Department of Pediatrics, Rainbow Babies and Children's Hospital, Cleveland, Ohio 44106-6038

Joseph A. Durlak, Department of Psychology, Loyola University—Chicago, Chicago, Illinois 60626

Debra Eisert, Oregon Health Sciences University, Child Development and Rehabilitation Center, Portland, Oregon 97207-0574

David J. Francis, Department of Psychology, University of Houston, Houston, Texas 77204-5341

Scott W. Henggeler, Family Services Research Center, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, South Carolina 29425

Nicholas S. Ialongo, Department of Mental Hygiene, Johns Hopkins University, Baltimore, Maryland 21205-1901

Anne E. Kazak, Division of Oncology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania 19104-4939

Sheppard G. Kellam, Department of Mental Hygiene, Baltimore, Maryland 21205-1901

Gloria L. Krahn, Oregon Health Sciences University, Child Development and Rehabilitation Center, Portland, Oregon 97207-0574

Rachel Levi, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44106-7123

Thomas R. Linscheid, Department of Psychology, Children's Hospital, Columbus, Ohio 43205

Anna T. Meadows, Division of Oncology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania 19104-4939

Carol T. Nixon, Center for Mental Health Policy, Vanderbilt University, Nashville, Tennessee 37212

James C. Overholser, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44106-7123

Tonya M. Palermo, Department of Pediatrics, Rainbow Babies and Children's Hospital, Cleveland, Ohio 44106-6038

Jeanne Poduska, Department of Mental Hygiene, Johns Hopkins University, Baltimore, Maryland 21205-1901

Alexandra L. Quittner, Department of Clinical and Health Psychology, University of Florida, Gainesville, Florida 32610-0165

Jeff Randall, Family Services Research Center, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, South Carolina 29425

Kristin A. Riekert, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44106-7123

Jane R. Robinson, Department of Pediatrics, Rainbow Babies and Children's Hospital, Cleveland, Ohio 44106-6038

Christopher Schatschneider, Department of Psychology, University of Houston, Houston, Texas 77204-5341

Anthony Spirito, Child and Family Psychiatry, Providence, Rhode Island 02903

Jane Timmons-Mitchell, Department of Psychiatry, University Hospitals, Cleveland, Ohio 44106

Natalie Walders, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44106-7123

Laura L. Williams, Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, South Carolina 29425

Kathleen Wells, Mandel School of Applied Social Sciences, Case Western Reserve University, Cleveland, Ohio 44106-7123

Thomas A. Wills, Department of Epidemiology and Social Medicine, Albert Einstein College of Medicine, Bronx, New York 10461

Jonathan F. Zaff, Department of Psychology, University of Georgia, Athens, Georgia 30602

Preface

The professional development of researchers is critical for the future development of the fields of pediatric and clinical child psychology. In order to conduct research in pediatric and clinical child psychology, researchers need to work with a wide range of populations and master an increasingly wide range of skills, many of which are either not formally taught or considered in sufficient depth in clinical training. Such skills include the development of resources for research by writing grants to government agencies and foundations; skills in preparing research for publications concerning original research, review articles, or case reports; scientific presentation skills; the ability to review and edit scientific manuscripts; and to implement and manage research in applied settings. Moreover, the increasing complexity of research in pediatric and clinical child psychology requires successful researchers in these fields to develop their expertise with a wide range of new specialized methodologies, data analytic methods, models of data analysis, and methods of assessment. Finally, to enhance the relevance of their research to practice, researchers in pediatric and clinical child psychology need to integrate their work with clinical service delivery programs that are based on empirical research.

The necessity to train researchers in pediatric and clinical child psychology in such multifaceted knowledge and skills places extraordinary burdens on professional training programs. Professional researchers in pediatric and clinical child psychology also are challenged to develop new knowledge and skills through continuing education and faculty development programs.

I have been involved in the professional training of scientist practitioners in pediatric and clinical psychology for the past 25 years. In trying to meet extraordinary challenges that are involved in training the next generation of researchers in pediatric and clinical psychology, I have become increasingly concerned about the need to provide information concerning the core skills and knowledge that will be needed to conduct research in these fields.

The present volume was developed from my experiences as a researcher and as a research mentor. These experiences consistently underscored the need to develop a handbook that would carefully consider the important, practical considerations in funding research, designing and implementing research, disseminating research, and integrating research and practice. Although these topics are important to the development of practicing researchers, they are not considered in available texts. In the course of implementing a research training program that has been

funded for the past 15 years by the National Institute of Mental Health and in which students in pediatric and clinical child psychology have participated, I often have found myself in the position of developing lectures and teaching materials to help students learn what I regarded core skills and knowledge as a researcher. This volume is partly a synthesis as well as extension of this work.

In organizing and developing this volume, I was guided by several questions: What had I learned about conducting research over the course of my career? What would I like and need to know about becoming a researcher if I were just starting my career? What skills are especially critical for researchers to develop the knowledge base in the field? The volume is organized around the following topic areas, each of which reflect critical areas of knowledge base and skills. These include: (1) using theoretical models and frameworks in data analysis, (2) designing research, (3) securing resources for research, (4) managing and implementing research in clinical settings, (5) disseminating research findings, (6) developing strategies to integrate research and practice, and (7) integrating research and policy.

In developing this volume, I chose a strategy that used a combination of chapters that were authored by myself and my students and that of expert researchers in clinical child and pediatric psychology whose work reflected key content areas as well as what I regarded as cutting-edge research. Each of the contributors to the volume was encouraged to prepare their chapter to emphasize a practical skill-based perspective; that is, to consider the problems that are faced by researchers in executing various tasks, to use illustrations from their work, and wherever possible to make specific recommendations for training researchers.

Readers should recognize that this volume is not intended as an exhaustive treatment of research methods in fields of clinical child and pediatric psychology but rather as a selective summary of key skill and knowledge areas. Given the breadth of the fields of pediatric and clinical child psychology, I faced a significant problem in choosing the sections to be covered and chapters to be considered in each of the sections. In making these decisions, I selected to focus on skill development and methodological issues that in my view were necessary to the professional development of researchers or represented new developments in methods or analytic approaches. I anticipate that subsequent revisions of this handbook will incorporate even greater richness of methods.

The inspiration for this book came from my experiences as a student and mentor. As a student I have been very fortunate to have worked with outstanding research mentors, Dick Lanyon, Ira Semler, and most especially, Don Routh. Now as a mentor, I have had the privilege to work with many talented students, among them, Laura Basili, Karen Berkoff, Beth Anne Bull, Barbara Boat, Erika Burgess, Marcy Bush, Carin Cunningham, Steve Evans, Yonit Hoffman, Carol Fitzpatrick, Carolyn Ievers, Carol Kucia, Rachel Levi, Amy Ludwig, Tonya Mizell-Palermo, Jack Nassau, Chantelle Nobile, Nancy Peterson, Charisse Peoples, Sean Phipps, Suzanne Powell, Kristin Riekert, Jane Robinson, Astrida Kaugars, Ron Saletsky, Lynn Singer, Lynne Sturm, and Natalie Walders.

ACKNOWLEDGMENTS. The hard work and dedication of Joyce Olson, who completed the word processing for much of this book, is gratefully acknowledged. My students, Erika Burgess, Rachel Levi, Kristin Riekert, Jane Robinson, Astrida Kaugars, and Natalie Walders, who reviewed various chapters, provided valuable feedback from the perspective of potential consumers of this book.

Contents

Part I. Applying and Testing Conceptual Frameworks and Theories in Data Analysis	1
Chapter 1. A Developmental Epidemiological Framework for Clinical Child and Pediatric Psychology Research	3
<i>Nicholas S. Ialongo, Sheppard G. Kellam, and Jeanne Poduska</i>	
Chapter 2. Testing Theoretical Models and Frameworks in Child Health Research	21
<i>Thomas A. Wills and Sean D. Cleary</i>	
Chapter 3. Introduction to Individual Growth Curve Analysis	51
<i>David J. Francis, Christopher Schatschneider, and Colleen D. Carlson</i>	
Part II. Designing Research and Applying Measures and Methods	75
Chapter 4. Understanding and Managing Sampling Issues in Research with Children	77
<i>Dennis Drotar and Kristin A. Riekert</i>	
Chapter 5. Strategies for Measurement and Psychological Assessment	97
<i>James C. Overholser, Anthony Spirito, and Julia M. DiFilippo</i>	
Chapter 6. Improving Assessment in Child Clinical and Pediatric Psychology: Establishing Links to Process and Functional Outcomes	119
<i>Alexandra L. Quittner</i>	
Chapter 7. Qualitative Methods in Clinical Psychology	145
<i>Gloria L. Krahn and Debra Eisert</i>	
Chapter 8. Understanding Cultural and Ethnic Influences in Research with Child Clinical and Pediatric Psychology Populations	165
<i>Natalie Walders and Dennis Drotar</i>	

Part III. Securing Resources for Research 189

Chapter 9. Writing Research Proposals for Foundations 191
Dennis Drotar

Chapter 10. Preparing Grants to Secure Research Funding from
Government Agencies 211
Dennis Drotar

**Part IV. Managing and Implementing Research with Pediatric and Child
Clinical Populations** 243

Chapter 11. Managing Research in Pediatric and Child Clinical
Psychology 245
Dennis Drotar

Chapter 12. Conducting Research with Children and Adolescents in
Clinical and Applied Settings: Practical Lessons from the Field 261
*Dennis Drotar, Jane Timmons-Mitchell, Laura L. Williams,
Tonya M. Palermo, Rachel Levi, Jane R. Robinson, Kristin A. Riekert,
and Natalie Walders*

Chapter 13. Multi-Institutional and Multidisciplinary Research
Collaboration: Strategies and Lessons from Cooperative Trials 281
F. Daniel Armstrong and Dennis Drotar

Chapter 14. Ethical Issues in Conducting Research with Pediatric and
Clinical Child Populations in Applied Settings 305
*Dennis Drotar, James C. Overholser, Rachel Levi, Natalie Walders,
Jane R. Robinson, Tonya M. Palermo, and Kristin A. Riekert*

Part V. Disseminating Research Findings 327

Chapter 15. Presenting Scientific Data 329
Dennis Drotar

Chapter 16. Writing Research Articles for Publication 347
Dennis Drotar

Chapter 17. Writing Research Reviews 375
Dennis Drotar

Chapter 18. How to Evaluate a Meta-Analysis 395
Joseph A. Durlak

CONTENTS	xiii
Chapter 19. Reviewing and Editing Manuscripts for Scientific Journals ... <i>Dennis Drotar</i>	409
Part VI. Developing Strategies to Integrate Research and Practice	425
Chapter 20. Case Studies and Case Series	429
<i>Thomas R. Linscheid</i>	
Chapter 21. Conducting Randomized Treatment Studies in Real-World Settings	447
<i>Scott W. Henggeler and Jeff Randall</i>	
Chapter 22. Evaluating Mental Health Services for Children and Adolescents	463
<i>Susan M. Douglas Kelley, Carol T. Nixon, and Leonard Bickman</i>	
Chapter 23. The Integration of Basic Research, Treatment Research, and Clinical Practice in Pediatric Psychology	491
<i>Ronald L. Blount, Victoria L. Bunke, and Jonathan F. Zaff</i>	
Chapter 24. Integrating Psychosocial Research and Practice in a Pediatric Hospital	511
<i>Anne E. Kazak and Anna T. Meadows</i>	
Part VII. Integrating Research and Policy	529
Chapter 25. Use of Research in Mental Health Practice and Policy	531
<i>Kathleen Wells</i>	
Index	545

Handbook of
Research in Pediatric
and Clinical Child
Psychology
Practical Strategies and Methods