

empowerment series

9e

Research Methods FOR SOCIAL WORK

Allen Rubin Earl R. Babbie

Council on Social Work Education Educational Policy and Accreditation Standards by Chapter

The Council on Social Work Education's Educational Policy and Accreditation Standards requires all social work students to develop nine competencies and recommends teaching and assessing 31 related component behaviors, listed as Educational Policy (EP) Competencies 1–9 below. The multicolor icons (see figure at right) and end of chapter "Competency Notes" connect these important standards to class work in the chapters identified below with bold blue type.



The 9 Competencies and 31 Component Behaviors (EPAS, 2015)	Chapter(s) Where Referenced
Competency 1—Demonstrate Ethical and Professional Behavior:	1, 2, 5, 6, 7, 11
a. Make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, models for ethical decision-making, ethical conduct of research, and additional codes of ethics as appropriate to context	1, 2, 5, 6, 7, 11, 12
b. Use reflection and self-regulation to manage personal values and maintain professionalism in practice situations	
c. Demonstrate professional demeanor in behavior; appearance; and oral, written, and electronic communication	
d. Use technology ethically and appropriately to facilitate practice outcomes	5
e. Use supervision and consultation to guide professional judgment and behavior	
Competency 2—Engage Diversity and Difference in Practice:	2,6
a. Apply and communicate understanding of the importance of diversity and difference in shaping life experiences in practice at the micro, mezzo, and macro levels	2, 6
b. Present themselves as learners and engage clients and constituencies as experts of their own experiences	
c. Apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients and constituencies	
Competency 3—Advance Human Rights and Social, Economic, and Environmental Justice:	3, 18, 19
a. Apply their understanding of social, economic, and environmental justice to advocate for human rights at the individual and system levels	3, 18, 19
b. Engage in practices that advance social, economic, and environmental justice	3, 18, 19
Competency 4—Engage in Practice-informed Research and Research-informed Practice:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23
a. Use practice experience and theory to inform scientific inquiry and research	1, 2
b. Apply critical thinking to engage in analysis of quantitative and qualitative research methods and research findings	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23
c. Use and translate research evidence to inform and improve practice, policy, and service delivery	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23
Competency 5—Engage in Policy Practice:	2, 4, 11, 12, 14
a. Identify social policy at the local, state, and federal level that impacts well-being, service delivery, and access to social services	
b. Assess how social welfare and economic policies impact the delivery of and access to social services	
c. Apply critical thinking to analyze, formulate, and advocate for policies that advance human rights and social, economic, and environmental justice	

The 9 Competencies and 31 Component Behaviors (EPAS, 2015)	Chapter(s) Where Referenced
Competency 6—Engage with Individuals, Families, Groups, Organizations, and Communities:	
a. Apply knowledge of human behavior and the social environment, person-in- environment, and other multidisciplinary theoretical frameworks to engage with clients and constituencies	
b. Use empathy, reflection, and interpersonal skills to effectively engage diverse clients and constituencies	
Competency 7—Assess Individuals, Families, Groups, Organizations, and Communities:	2, 8, 9, 10, 19
a. Collect and organize data, and apply critical thinking to interpret information from clients and constituencies	2, 8, 9, 10, 19
b. Apply knowledge of human behavior and the social environment, person-in- environment, and other multidisciplinary theoretical frameworks in the analysis of assessment data from clients and constituencies	2, 21, 22
c. Develop mutually agreed-on intervention goals and objectives based on the critical assessment of strengths, needs, and challenges within clients and constituencies	2
d. Select appropriate intervention strategies based on the assessment, research knowledge, and values and preferences of clients and constituencies	2, 8, 9, 10, 19
Competency 8—Intervene with Individuals, Families, Groups, Organizations, and Communities:	2,4
a. Critically choose and implement interventions to achieve practice goals and enhance capacities of clients and constituencies	2,4
b. Apply knowledge of human behavior and the social environment, person-in- environment, and other multidisciplinary theoretical frameworks in interventions with clients and constituencies	
 Use inter-professional collaboration as appropriate to achieve beneficial practice outcomes 	
d. Negotiate, mediate, and advocate with and on behalf of diverse clients and constituencies	
e. Facilitate effective transitions and endings that advance mutually agreed-on goals	
Competency 9—Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23
a. Select and use appropriate methods for evaluation of outcomes	2, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23
b. Apply knowledge of human behavior and the social environment, person-in- environment, and other multidisciplinary theoretical frameworks in the evaluation of outcomes	2, 3, 6
c. Critically analyze, monitor, and evaluate intervention and program processes and outcomes	2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23
d. Apply evaluation findings to improve practice effectiveness at the micro, mezzo, and macro levels	1, 2, 23

Want to turn C's into A's? Obviously, right?

But the right way to go about it isn't always so obvious. Go digital to get the grades. MindTap's customizable study tools and eTextbook give you everything you need all in one place.

Engage with your course content, enjoy the flexibility of studying anytime and anywhere, stay connected to assignment due dates and instructor notifications with the MindTap Mobile app... and most of all...EARN BETTER GRADES.





MindTap[®]

Copyright 2017 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.



RESEARCH METHODS FOR SOCIAL WORK

Allen Rubin University of Houston

Earl R. Babbie

Chapman University



Australia • Brazil • Mexico • Singapore • United Kingdom • United States

Copyright 2017 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

This is an electronic version of the print textbook. Due to electronic rights restrictions, some third party content may be suppressed. Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. The publisher reserves the right to remove content from this title at any time if subsequent rights restrictions require it. For valuable information on pricing, previous editions, changes to current editions, and alternate formats, please visit <u>www.cengage.com/highered</u> to search by ISBN#, author, title, or keyword for materials in your areas of interest.

Important Notice: Media content referenced within the product description or the product text may not be available in the eBook version.

CENGAGE Learning

Research Methods for Social Work, Ninth Edition Allen Rubin and Farl R. Babbie

Product Director: Jon-David Hague Product Manager: Julie A. Martinez Content Developer: Theodore Knight Product Assistant: Stephen A Lagos Marketing Manager: Margaux Cameron Art and Cover Direction, Production Management, and Composition: MPS Limited Manufacturing Planner: Judy Inouye Photo Researcher: Lumina Datamatics Ltd Text Researcher: Lumina Datamatics Ltd Cover Image: mihailomilovanovic/ Getty images

© 2017, 2014 Cengage Learning

WCN: 02-200-203

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced, transmitted, stored, or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the publisher.

For product information and technology assistance, contact us at Cengage Learning Customer & Sales Support, 1-800-354-9706.

For permission to use material from this text or product, submit all requests online at www.cengage.com/permissions.

Further permissions questions can be e-mailed to permissionrequest@cengage.com.

Unless otherwise noted all items © Cengage Learning[®]

Library of Congress Control Number: 2015950165

Student Edition:

ISBN: 978-1-305-63382-7

Loose-leaf Edition: ISBN: 978-1-305-85961-6

Cengage Learning

20 Channel Center Street Boston, MA 02210 USA

Cengage Learning is a leading provider of customized learning solutions with employees residing in nearly 40 different countries and sales in more than 125 countries around the world. Find your local representative at **www.cengage.com**.

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

To learn more about Cengage Learning Solutions, visit **www.cengage.com**.

Purchase any of our products at your local college store or at our preferred online store **www.cengagebrain.com**.

Printed in the United States of America Print Number: 01 Print Year: 2015

To our wives CHRISTINA RUBIN SUZANNE BABBIE

CONTENTS IN BRIEF

PART 1

An Introduction to Scientific Inquiry in Social Work 1

Chapter 1	Why Study Research? 2
Chapter 2	Evidence-Based Practice 24
Chapter 3	Factors Influencing the Research Process 43
Chapter 4	Quantitative, Qualitative, and Mixed Methods of Inquiry 66

PART 2

The Ethical, Political, and Cultural Context of Social Work Research 81

Chapter 5	The Ethics and Politics of Social Worl	k
	Research 82	
Chapter 6	Culturally Competent Research 112	,

PART 3

Problem Formulation and Measurement 139

Chapter 7	Problem Formulation 140
Chapter 8	Conceptualization in Quantitative and Qualitative Inquiry 162
Chapter 9	Measurement 191
Chapter 10	Constructing Measurement Instruments 218

PART 4

Designs for Evaluating Programs and Practice 241

Chapter 11	Causal Inference and Experimental Designs 243
Chapter 12	Quasi-Experimental Designs 272
Chapter 13	Single-Case Evaluation Designs 292
Chapter 14	Program Evaluation 320

PART 5

Data Collection Methods with Large Sources of Data 347

Chapter 15	Sampling 349
Chapter 16	Survey Research 378
Chapter 17	Analyzing Existing Data: Quantitative and Qualitative Methods 403

PART 6

Qualitative Research Methods 433

Chapter 18	Qualitative Research: General Principles 434
Chapter 19	Qualitative Research: Specific Methods 455
Chapter 20	Qualitative Data Analysis 478

PART 7

Analysis of Quantitative Data 503

Chapter 21	Descriptive Data Analysis	504
Chapter 22	Inferential Data Analysis	528

PART 8

Writing Research Proposals and Reports	551

- Chapter 23Writing Research Proposals
and ReportsAppendix AUsing the Library577
- Appendix BStatistics for Estimating Sampling
Error 584Appendix CCritically Appraising
Meta-Analyses 593Glossary596Bibliography617
 - Index 637

CONTENTS IN DETAIL

Preface xvi

PART 1 An Introduction to Scientific Inquiry in Social Work 1

Chapter 1 WHY STUDY RESEARCH? 2

Introduction 3 Agreement Reality 3 Experiential Reality 4 The Scientific Method 4 All Knowledge Is Tentative and Open to Question 4 Replication 5 Observation 5 Objectivity 6 Transparency 6 Other Ways of Knowing 6 Tradition 7 Authority 8 Common Sense 8 Popular Media 8 Recognizing Flaws in Unscientific Sources of Social Work Practice Knowledge 10 Overgeneralization 10 Selective Observation 10 Ex Post Facto Hypothesizing 12 Ego Involvement in Understanding 12 Other Forms of Illogical Reasoning 13 The Premature Closure of Inquiry 14 Pseudoscience 14 The Utility of Scientific Inquiry in Social Work 16 Will You Ever Do Research? 16

Reviews of Social Work Effectiveness 17 Early Reviews 17 Studies of Specific Interventions 17 The Need to Critique Research Quality 19 Publication Does Not Guarantee Quality 19 Distinguishing and Facilitating More Useful Studies 19 Compassion and Professional Ethics 19 Utility of Research in Applied Social Work Settings 20 Research Methods You May Someday Use in Your Practice 20 National Association of Social Workers Code of Ethics 21 Main Points 21 **Review Ouestions and Exercises** 22 Internet Exercises 22

Chapter 2

EVIDENCE-BASED PRACTICE 24

Introduction 25 Critical Thinking in EBP 2.5 EBP Implies Career-Long Learning 26 Steps in the EBP Process 27 Step 1. Formulate a Question to Answer Practice Needs 27 Step 2. Search for the Evidence 29 Step 3. Critically Appraise the Relevant Studies You Find - 33 Step 4. Determine Which Research-Supported Intervention or Policy Is Most Appropriate for Your Particular Client(s) 33 Step 5. Apply the Chosen Intervention 34 Step 6. Provide Evaluation and Feedback 35 Distinguishing the Evidence-Based Process from Evidence-Based Practices 35

Controversies and Misconceptions about EBP 37 EBP Is Based on Studies of Atypical Clients 37 EBP Is Overly Restrictive 37 EBP Is Just a Cost-Cutting Tool - 38 Evidence Is in Short Supply 38 The Therapeutic Alliance Will Be Hindered 38 Common Factors and the Dodo Bird 38 Real-World Obstacles to Implementing EBP in Everyday Practice 39 Alleviating Feasibility Obstacles to EBP 40 Main Points 40 **Review Ouestions and Exercises** 41 Internet Exercises 41

Chapter 3 FACTORS INFLUENCING THE RESEARCH PROCESS 43

Introduction 44 The Phases of the Research Process 44 Theory and Values 47 Utility of Theory in Social Work Practice and Research 47 Social Work Practice Models 48 Atheoretical Research Studies 49 Prediction and Explanation 49 The Components of Theory 50 The Relationship between Attributes and Variables 51 Two Logical Systems: Comparing Deduction and Induction 53 Probabilistic Knowledge 56 Two Causal Models of Explanation 57 Use of Nomothetic and Idiographic Research in Social Work Practice - 58 Ideologies and Paradigms 59 Contemporary Positivism 61 Interpretivism 62 Empowerment Paradigm 63 Paradigmatic Flexibility in Research 63 Main Points 64 **Review Questions and Exercises** 65 Internet Exercises 65

Chapter 4 QUANTITATIVE, QUALITATIVE, AND MIXED METHODS OF INQUIRY 66

Introduction 67

- Objectivity and Subjectivity in Scientific Inquiry 67
- A Comparison of Qualitative and Quantitative Methods of Inquiry 68
- Mixed Methods of Inquiry 70 Types of Mixed-Methods Designs 71 Three Basic Mixed-Methods Designs 74 Three Advanced Mixed-Methods Designs 77 Reasons for Using Mixed Methods 77 Main Points 78 Practice-Related Exercises 79 Internet Exercises 79

PART 2

The Ethical, Political, and Cultural Context of Social Work Research 81

Chapter 5 THE ETHICS AND POLITICS OF SOCIAL WORK RESEARCH 82

Introduction 83 Institutional Review Boards 84 Voluntary Participation and Informed Consent 85 No Harm to the Participants 86 Anonymity and Confidentiality 87 Deceiving Participants 90 Analysis and Reporting 90 Weighing Benefits and Costs 91 Right to Receive Services versus Responsibility to Evaluate Service Effectiveness 92 National Association of Social Workers Code of Ethics 93 IRB Procedures and Forms 94 Training Requirement 94 Expedited Reviews 94 Overzealous Reviewers 97

Four Ethical Controversies 98 Observing Human Obedience 98 Trouble in the Tearoom 100 "Welfare Study Withholds Benefits from 800 Texans" 101 Social Worker Submits Bogus Article to Test Journal Bias 102 Bias and Insensitivity Regarding Sex, Gender Identity, and Culture 105 The Politics of Social Work Research 106 Social Research and Race 107 Main Points 109 **Review Questions and Exercises** 110 Internet Exercises 111

Chapter 6 CULTURALLY COMPETENT RESEARCH 112

Introduction 113 Research Participants 113 Measurement 113 Data Analysis and Interpretation 114 Acculturation 115 Impact of Cultural Insensitivity on Research Climate 116 Developing Cultural Competence 116 Recruiting and Retaining the Participation of Minority and Oppressed Populations in Research Studies 119 Obtain Endorsement from Community Leaders 119 Use Culturally Sensitive Approaches Regarding Confidentiality 120 Employ Local Community Members as Research Staff 120 Provide Adequate Compensation 120 Alleviate Transportation and Child-Care Barriers 121 Choose a Sensitive and Accessible Setting 121 Use and Train Culturally Competent Interviewers 121 Use Bilingual Staff 122 Understand Cultural Factors Influencing Participation 122

Use Anonymous Enrollment with Stigmatized Populations 122 Utilize Special Sampling Techniques 123 Learn Where to Look 123 Connect with and Nurture Referral Sources 124 Use Frequent and Individualized Contacts and Personal Touches 124 Use Anchor Points 125 Use Tracking Methods 125 Culturally Competent Measurement 126 Culturally Competent Interviewing 126 Language Problems 127 Cultural Bias 128 Measurement Equivalence 130 Linguistic Equivalence 130 Conceptual Equivalence 131 Metric Equivalence 131 Assessing Measurement Equivalence 132 Methods for Improving Measurement Equivalence 133 The Value of Qualitative Interviews 133 Problematic Issues in Making Research More Culturally Competent 133 Main Points 135 **Review Questions and Exercises** 137 Internet Exercises 137

PART 3

Problem Formulation and Measurement 139

Chapter 7 PROBLEM FORMULATION 140

Introduction 141 Purposes of Social Work Research 141 Exploration 141 Description 141 Explanation 142 Evaluation 142 Constructing Measurement Instruments 143 Multiple Purposes 143 Selecting Topics and Research Questions 143 Narrowing Research Topics into Research Ouestions 145 Attributes of Good Research Questions 146 Feasibility 147 Involving Others in Problem Formulation 149 Literature Review 1.50 Why and When to Review the Literature 150 How to Review the Literature 151 Searching the Web 152 Be Thorough 152 The Time Dimension 156 Cross-Sectional Studies 156 Longitudinal Studies 156 Units of Analysis 1.58 Main Points 160 **Review Questions and Exercises** 161 Internet Exercises 161

Chapter 8 CONCEPTUALIZATION IN QUANTITATIVE AND QUALITATIVE INQUIRY 162

Introduction 163 Contrasting Quantitative and Qualitative Conceptualization 163 Conceptual Explication in Quantitative Inquiry 164 Developing a Proper Hypothesis 165 Differences between Hypotheses and Research Questions 166 Types of Relationships between Variables 166 Extraneous Variables 167 Moderating Variables 168 Constants 169 Mediating Variables 169 The Same Concept Can Be a Different Type of Variable in Different Studies 170 Operational Definitions 172 Operationally Defining Anything That Exists 173 Conceptualization 174 Indicators and Dimensions 175

Clarifying Concepts 176 The Influence of Operational Definitions 178 Sex and Cultural Bias in Operational Definitions 178 **Operationalization Choices** 179 Range of Variation 179 Variations between the Extremes 180 A Note on Dimensions 180 Examples of Operationalization in Social Work 180 Existing Scales 182 Operationalization Goes On and On 186 Levels of Measurement 186 Conceptualization in Qualitative Inquiry 187 Main Points 189 **Review Questions and Exercises** 190 Internet Exercises 190

Chapter 9 MEASUREMENT 191

Introduction 192 Common Sources of Measurement Error 192 Systematic Error 192 Random Error 195 Errors in Alternate Forms of Measurement 195 Avoiding Measurement Error 197 Reliability 199 Types of Reliability 200 Interobserver and Interrater Reliability 200 Test-Retest Reliability 201 Internal Consistency Reliability 201 Validity 202 Face Validity 203 Content Validity 203 Criterion-Related Validity 204 Construct Validity 206 Factorial Validity 207 An Illustration of Reliable and Valid Measurement in Social Work: The Clinical Measurement

Package

208

Relationship between Reliability and Validity 211
Reliability and Validity in Qualitative Research 214
Main Points 216
Review Questions and Exercises 217
Internet Exercises 217

Chapter 10 CONSTRUCTING MEASUREMENT INSTRUMENTS 218

Introduction 219 Guidelines for Asking Questions 219 Questions and Statements 220 Open-Ended and Closed-Ended Questions 220 Make Items Clear 221 Avoid Double-Barreled Questions 221 Respondents Must Be Competent to Answer 221 Respondents Must Be Willing to Answer 222 Questions Should Be Relevant 222 Short Items Are Best 222 Avoid Words Like No or Not 222 Avoid Biased Items and Terms 223 Questions Should Be Culturally Sensitive 223 Questionnaire Construction 223 General Questionnaire Format 223 Formats for Respondents 225 Contingency Questions 225 Matrix Questions 227 Ordering Questions in a Questionnaire 227 Questionnaire Instructions 228 Pretesting the Questionnaire 229 Constructing Scales 229 Levels of Measurement 230 Some Prominent Scaling Procedures 231 Item Generation and Selection 232 Handling Missing Data 234 Constructing Qualitative Measures 235 Main Points 237 **Review Questions and Exercises** 238 Internet Exercises 238

PART 4 Designs for Evaluating Programs and Practice 241

Chapter 11 CAUSAL INFERENCE AND EXPERIMENTAL DESIGNS 243

Introduction 244 Criteria for Inferring Causality 244 Time Sequence 245 Correlation 246 Ruling Out Alternative Explanations 246 Strength of Correlation 246 Plausibility and Coherence 246 Consistency in Replication 248 Internal Validity 248 Preexperimental Pilot Studies 2.52 One-Shot Case Study 252 One-Group Pretest-Posttest Design 252 Posttest-Only Design with Nonequivalent Groups (Static-Group Comparison Design) 253 Experimental Designs 254 Randomization 259 Matching 259 Providing Services to Control Groups 261 Additional Threats to the Validity of Experimental Findings 262 Measurement Bias 262 Research Reactivity 262 Diffusion or Imitation of Treatments 264 Compensatory Equalization, Compensatory Rivalry, or Resentful Demoralization 266 Attrition (Experimental Mortality) 266 External Validity 268 Main Points 270 Review Questions and Exercises 271 Internet Exercises 271

Chapter 12 OUASI-EXPERIMENTAL DESIGNS 272 Introduction 273

Nonequivalent Comparison Groups Design 273

Ways to Strengthen the Internal Validity of the Nonequivalent Comparison Groups Design 274 Multiple Pretests 275 Switching Replication 276 Simple Time-Series Designs 276 Multiple Time-Series Designs 279 Cross-Sectional Studies 280 Case Control Studies 283 Practical Pitfalls in Carrying Out Experiments and Quasi Experiments in Social Work Agencies 284 Fidelity of the Intervention 285 Contamination of the Control Condition 286 Resistance to the Case Assignment Protocol 286 Client Recruitment and Retention 286 Mechanisms for Avoiding or Alleviating Practical Pitfalls 287 Qualitative Techniques for Avoiding or Alleviating **Practical Pitfalls** 288 Main Points 290 **Review Questions and Exercises** 290 Internet Exercises 291

Chapter 13 SINGLE-CASE EVALUATION DESIGNS 292

Introduction 293 Overview of the Logic of Single-Case Designs 293 Single-Case Designs in Social Work 295 Use of Single-Case Designs as Part of Evidence-Based Practice 2.96 Measurement Issues 298 **Operationally Defining Target Problems** and Goals 298 What to Measure 299 Triangulation 299 Data Gathering 300 Who Should Measure? 300 Sources of Data 301 Reliability and Validity 301 Direct Behavioral Observation 301 Unobtrusive versus Obtrusive Observation 302

Data Ouantification Procedures 303 The Baseline Phase 303 Alternative Single-Case Designs 306 AB: The Basic Single-Case Design 306 ABAB: Withdrawal/Reversal Design 307 Multiple-Baseline Designs 309 Multiple-Component Designs 312 Data Analysis 313 Interpreting Ambiguous Results 314 Aggregating the Results of Single-Case Research Studies 315 B and B+ Designs 316 The Role of Qualitative Research Methods in Single-Case Evaluation 317 Main Points 318 Review Questions and Exercises 319 Internet Exercises 319

Chapter 14 PROGRAM EVALUATION 320

Introduction 321 Historical Overview 321 The Impact of Managed Care 322 Evidence-Based Practice 323 Planning an Evaluation and Fostering Its Utilization 323 Logic Models 324 Purposes and Types of Program Evaluation 327 Summative and Formative Evaluations 327 Evaluating Outcome and Efficiency 328 Cost-Effectiveness and Cost-Benefit Analyses 329 Problems and Issues in Evaluating Goal Attainment 330 Monitoring Program Implementation 331 Process Evaluation 332 Evaluation for Program Planning: Needs Assessment 333 Focus Groups 336 An Illustration of a Qualitative Approach to Evaluation Research 337 The Politics of Program Evaluation 339 In-House versus External Evaluators 340

Utilization of Program Evaluation Findings 342 Logistical and Administrative Problems 343 Main Points 344 Review Questions and Exercises 345 Internet Exercises 346

PART 5

Data Collection Methods with Large Sources of Data 347

Chapter 15 SAMPLING 349

Introduction 350 President Alf Landon 351 President Thomas E. Dewey 351 President John Kerry 352 Nonprobability Sampling 352 Reliance on Available Subjects 353 Purposive or Judgmental Sampling 355 Quota Sampling 356 Snowball Sampling 356 Selecting Informants in Qualitative Research 357 The Logic of Probability Sampling 357 Conscious and Unconscious Sampling Bias 357 Representativeness and Probability of Selection 358 Random Selection 359 Can Some Randomly Selected Samples Be Biased? 360 Sampling Frames and Populations 360 Nonresponse Bias 362 Review of Populations and Sampling Frames 363 Sample Size and Sampling Error 363 Estimating the Margin of Sampling Error 363 Other Considerations in Determining Sample Size 365 Types of Probability Sampling Designs 366 Simple Random Sampling 366 Systematic Sampling 366 Stratified Sampling 368

Implicit Stratification in Systematic Sampling 369 Proportionate and Disproportionate Stratified Samples 369 Multistage Cluster Sampling 371 Multistage Designs and Sampling Error 372 Stratification in Multistage Cluster Sampling 373 Illustration: Sampling Social Work Students 374 Selecting the Programs 374 Selecting the Students 374 Probability Sampling in Review 375 Avoiding Sex Bias in Sampling 375 Main Points 376 **Review Questions and Exercises** 376 Internet Exercises 377

Chapter 16 SURVEY RESEARCH 378

Introduction 379 Topics Appropriate to Survey Research 380 Self-Administered Questionnaires 381 Mail Distribution and Return 381 Cover Letter 382 Monitoring Returns 384 Follow-Up Mailings 384 Response Rates 385 Increasing Response Rates 386 A Case Study 386 Interview Surveys 387 The Role of the Survey Interviewer 387 General Guidelines for Survey Interviewing 388 Coordination and Control 390 Telephone Surveys 392 The Influence of Technological Advances 393 Online Surveys 394 Online Devices 394 Instrument Design 395 Improving Response Rates 395 Mixed-Mode Surveys 396 Comparison of Different Survey Methods 397

xii Contents in Detail

Introduction 404

Strengths and Weaknesses of Survey Research 398 Main Points 400 Review Questions and Exercises 401 Internet Exercises 401

Chapter 17 ANALYZING EXISTING DATA: QUANTITATIVE AND QUALITATIVE METHODS 403

A Comment on Unobtrusive Measures 404 Secondary Analysis 405 The Growth of Secondary Analysis 405 Types and Sources of Data Archives 406 Sources of Existing Statistics 407 Advantages of Secondary Analysis 407 Limitations of Secondary Analysis 410 Illustrations of the Secondary Analysis of Existing Statistics in Research on Social Welfare Policy 413 Distinguishing Secondary Analysis from Other Forms of Analyzing Available Records 415 Content Analysis 415 Sampling in Content Analysis 417 Sampling Techniques 418 Coding in Content Analysis 418 Manifest and Latent Content 418 Conceptualization and the Creation of Code Categories 419 Counting and Record Keeping 420 Qualitative Data Analysis 421 Quantitative and Qualitative Examples of Content Analysis 422 Strengths and Weaknesses of Content Analysis 424 Historical and Comparative Analysis 424 Sources of Historical and Comparative Data 425 Analytic Techniques 428 Unobtrusive Online Research 428 Main Points 429 Review Questions and Exercises 430 Internet Exercises 430

PART 6 Qualitative Research Methods 433

Chapter 18 QUALITATIVE RESEARCH: GENERAL PRINCIPLES 434

Introduction 435 Topics Appropriate for Qualitative Research 435 Prominent Qualitative Research Paradigms 436 Naturalism 436 Grounded Theory 436 Participatory Action Research 440 Case Studies 441 Oualitative Sampling Methods 443 Strengths and Weaknesses of Qualitative Research 446 Depth of Understanding 446 Flexibility 447 Cost 448 Subjectivity and Generalizability 448 Standards for Evaluating Qualitative Studies 449 Contemporary Positivist Standards 450 Social Constructivist Standards 451 Empowerment Standards 452 Research Ethics in Qualitative Research 4.52 Main Points 453 **Review Ouestions and Exercises** 454 Internet Exercises 454

Chapter 19 OUALITATIVE RESEARCH: SPECIFIC METHODS 455 Introduction 456

Preparing for the Field 456 Search the Literature 456 Use Key Informants 456 Establish Initial Contact 456 Establish Rapport 457 Explain Your Purpose 457 The Various Roles of the Observer 457 Complete Participant 457 Participant as Observer 459

Observer as Participant 460 Complete Observer 460 Relations to Participants: Etic and Emic Perspectives 460 Etic Perspective 461 Emic Perspective 461 Adopting Both Perspectives 461 Reflexivity 461 Qualitative Interviewing 462 Informal Conversational Interviews 463 Interview Guide Approach 465 Standardized Open-Ended Interviews 467 Life History 467 Feminist Methods 468 Focus Groups 468 Sampling 468 Types and Sequence of Questions 469 Advantages 469 Disadvantages 471 **Recording Observations** 471 Voice Recording 473 Notes 473 Advance Preparation 473 Record Soon 473 Take Notes in Stages 475 Details Can Be Important 475 Practice 475 Main Points 475 Review Questions and Exercises 476 Internet Exercises 477

Chapter 20 QUALITATIVE DATA ANALYSIS 478

Introduction 479 Linking Theory and Analysis 479 Discovering Patterns 479 Grounded Theory Method 480 Semiotics 481 Conversation Analysis 483 Qualitative Data Processing 483 Coding 483 Memoing 487 Concept Mapping 488 Computer Programs for Qualitative Data 489 Qualitative Data Analysis Programs 489 Leviticus as Seen through Qualrus 491 N-Vivo 493 Main Points 501 Review Questions and Exercises 501 Internet Exercises 502

PART 7 Analysis of Quantitative Data 503

Chapter 21 **DESCRIPTIVE DATA ANALYSIS** 504 Introduction 505 Coding 505 Developing Code Categories 505 Data Entry 507 Data Cleaning 507 Univariate Analysis 508 Distributions 508 Implications of Levels of Measurement 509 Central Tendency 510 Dispersion 512 Bivariate Analysis 514 Interpreting Bivariate Tables 514 Interpreting Multivariate Tables 515 Constructing Tables 516 Table Titles and Labels 516 Detail versus Manageability 517 Handling Missing Data 518 Percentaging Bivariate and Multivariate Tables 518 Measuring the Strength of Relationships 519 Correlation 519 Effect Size 520 Cohen's d 521 Descriptive Statistics and Qualitative Research 52.2

Main Points 525 Review Questions and Exercises 526 Internet Exercises 527

Chapter 22 INFERENTIAL DATA ANALYSIS 528

Introduction 529 Chance as a Rival Hypothesis 529 Refuting Chance 531 Statistical Significance 531 Theoretical Sampling Distributions 531 Significance Levels 533 One-Tailed and Two-Tailed Tests 534 The Null Hypothesis 537 Type I and Type II Errors 538 The Influence of Sample Size 540 Interpreting Relationship Strength 540 Strong, Medium, and Weak Effect Sizes 541 Substantive Significance 542 Statistical Power Analysis 543 Selecting and Calculating Tests of Statistical Significance 546 Meta-Analysis 547 Main Points 548 **Review Ouestions and Exercises** 549 Internet Exercises 549

PART 8 Writing Research Proposals and Reports 551

Chapter 23 WRITING RESEARCH PROPOSALS AND REPORTS 552

Introduction 553 Writing Research Proposals 553 Finding a Funding Source and RFPs 553 Large-Scale and Small-Scale RFPs and Proposals 554 Grants and Contracts 554

Before You Start Writing the Proposal 556 Research Proposal Components 557 Cover Materials 557 Problem and Objectives 557 Literature Review 558 Conceptual Framework 559 Measurement 559 Study Participants (Sampling) 560 Design and Data Collection Methods 560 Data Analysis 563 Schedule 564 Budget 564 Additional Components 564 Writing Social Work Research Reports 565 Some Basic Considerations 565 Organization of the Report 570 Title 570 Abstract 570 Introduction and Literature Review 570 Methods 571 Results 571 Discussion and Conclusions 572 References and Appendices 573 Additional Considerations When Writing Qualitative Reports 573 Main Points 574 Review Questions and Exercises 575 Internet Exercises 575

Appendix A USING THE LIBRARY 577

Introduction 577 Accessing and Examining Library Materials Online 577 Getting Help 577 Reference Sources 577 Using the Stacks 578 Abstracts 578 Professional Journals 580

Appendix B

STATISTICS FOR ESTIMATING SAMPLING ERROR 584

The Sampling Distribution of 10 Cases 584
Sampling Distribution and Estimates of Sampling Error 585
Confidence Levels and Confidence Intervals 591

Appendix C

CRITICALLY APPRAISING META-ANALYSES 593

Potential Flaws in Meta-Analyses 593 Conflicts of Interest 593

Lumping Together Strong and Weak Studies 593 Problems in Ratings of Methodological Quality 594 File Drawer Effect 594 What to Look for When Appraising Meta-Analyses 595 Transparency 595 Methodologies of Included Studies 595 Unpublished Studies 595 Comprehensiveness 595 Conclusion 595

Glossary 596 Bibliography 617 Index 637

PREFACE

As with previous editions of this text, this ninth edition contains significant improvements to keep up with advances in the field and respond to the excellent suggestions from colleagues. One of the things that hasn't changed is our presentation of boxes to illustrate concepts that bring research content to life and illustrate its relevance to social work and its utility in informing social work practice. In that connection, we have added some new boxes in this edition. Here are some of our other most noteworthy changes to this edition.

CSWE EPAS Core Competencies. As we were writing this new edition, the Council on Social Work Education was in the process of revising its Educational Policy and Accreditation Standards (EPAS) Core Competencies. Accordingly, we have changed the way we show how the contents of our book pertain to those core competencies.

Book Length. In response to reviewer concerns about the length and cost of the book, we strived to shorten this edition in ways that will not sacrifice one of its chief virtues: its comprehensiveness and use of many social work practice examples and illustrations. Although the shortening revisions occurred in many chapters, they are most noteworthy in the content on inferential statistics, in which two chapters were shortened and combined into one (Chapter 22).

Significant Additions. At the same time, we made many additions throughout the book. The most significant additions are as follows:

- Expanded coverage of mixed-methods
- New content on LGBTQ populations in several chapters
- Expanded content on scale development
- New content on criteria for inferring causality in epidemiological research
- More emphasis on how to conduct successful program evaluations

- New, updated content on how advances in technology are affecting surveys and qualitative research
- New content on how to conduct focus group interviewing
- A new Appendix on critically appraising metaanalyses

Below is a chapter-by-chapter description of our most noteworthy changes.

- Chapter 1. Several reviewers offered useful recommendations regarding the need to shorten this lengthy chapter. We agreed with and followed their advice. At the same time, however, we managed to add a humorous photo and a new box listing some interventions with strong research support.
- Chapter 2. Throughout our discussion of evidence-based practice (EBP), we have increased content showing how EBP applies to the macro and policy levels of social work practice. Also throughout we have replaced wording about EBP *guiding* practice with wording about EBP *informing* practice decisions. We replaced the model of EBP in Figure 2-1 with an updated version of the model. We elaborated our discussion of systematic reviews and meta-analyses and added Figure 2-2 on criteria for critically appraising them. We also updated our box on Google Scholar results.

Chapter 3. In response to suggestions from our reviewers and other colleagues, extensive changes were made to this chapter in an effort to make it less overwhelming and more relevant to social work students. In particular, we have shortened the coverage of philosophical issues, made it less esoteric, and modified it so that instead of dwelling on paradigm wars it puts more emphasis on the flexible use of each paradigm, depending on the research question and study purpose.

In keeping with this new emphasis, we have renamed the chapter, replacing philosophy and theory in the title with "Factors Influencing the Research Process." The philosophical content no longer appears at the beginning of the chapter. Instead, the chapter starts by covering the phases of the research process, moving coverage of philosophical issues from the end of Chapter 4 in the previous edition to the start of Chapter 3 in this one. The previous figure diagraming the research process has been replaced with one that is less cluttered and complex-one that we think students will find more relevant and easier to follow. One of the suggestions we have received from colleagues is to add more LGBTQ content to various parts of the book. In that connection, we have altered the way we cover sex and gender variables in this chapter.

- Chapter 4. We have received enthusiastic praise for this chapter from various colleagues, who have added that they'd like to see the content on mixed-methods expanded a bit. So, we have expanded our discussion of mixed-methods, including coverage of additional types of mixed methods designs and a new box providing a case example of a published mixed-methods study of clients and practitioners in a child welfare agency.
- Chapter 5. We added content on getting informed consent to videorecord, elaborated on IRB debriefing requirements when deception is involved in the research, added content on federal regulations regarding vulnerable populations, and modified our section on bias and insensitivity to better distinguish the concepts of sex and gender identity and thus make the section more appropriate regarding LGBTQ people. Also bolstering the chapter's attention to research ethics concerning LGBTQ populations, we added a box titled "IRB Imperfections Regarding Research with Lesbian, Gay, and Bisexual Populations." In addition to illustrating mistakes that IRB board members can make, that box shows how best to respond to such mistakes to enhance chances for eventual IRB approval. In response to requests from reviewers, we shortened somewhat the very lengthy section on politics, reducing the amount of attention given to objectivity and ideology. We think that now students will be better able

to comprehend and appreciate the relevance of that section.

- Chapter 6. We have added substantial content regarding cultural competence with regard to LGBTQ individuals.
- Chapter 7. In response to a reviewer's request for more content on research question development we've added a new box illustrating the process of formulating a good research question. In keeping with our overall effort to shorten this book without losing is essential comprehensiveness, we also have implemented reviewer suggestions to make the coverage of units of analysis less extensive and less detailed. In so doing, we think students will find coverage of that topic more relevant and easier to comprehend.
- Chapter 8. We clarified what is meant by truisms. We added a box providing more examples of spurious relationships. We simplified somewhat our discussion of conceptions and reality and clarified that the consequences of abstract constructs are real. In response to suggestions from colleagues, we have moved up the section on levels of measurement from Chapter 21 to this chapter. Content on the implications of levels of measurement for statistical analysis remains in Chapter 21.
- Chapter 9. We added a brief explanation of the term *correlation* to the section on interrater reliability and a new box to further illustrate the difference between reliability and validity.
- Chapter 10. We significantly expanded our discussion of scale development, including a large new section on generating an initial pool of items and how to select items from that pool. We also expanded somewhat our discussion of double-barreled items, partly to enhance reader understanding of some of the nuances involved and partly to compensate for the removal of the outdated box on the subject. In response to reviewer suggestions, and also to try to reduce the length and cost of this edition, we replaced one 3-page long and somewhat outdated figure of a composite illustration with a much shorter (one-half page) figure and replaced the 4.5 page figure displaying excerpts from a lengthy standardized open-ended interview schedule with a brief summary of that schedule and a reproduction of just one item from it.

- Chapter 11. We significantly expanded our discussion of criteria for inferring causality, especially in regard to additional criteria used in epidemiological research, such as strength of correlation, plausibility and coherence, and consistency in replication. We also added some comments about ethics and IRB approval in regard to control groups.
- Chapter 12. Our colleagues expressed praise for this chapter and had only a few minor suggestions for tweaking it. One found the brief box near the beginning of the chapter to be unnecessary. We agreed and deleted it in keeping with our effort to reduce the length and cost of the book.
- Chapter 13. With each new edition of this book we receive consistently positive feedback about this chapter. We found little need to update or otherwise modify this chapter, with one exception. One of our reviewers pointed out the need to address the implications of disagreements among triangulated data gatherers. So we added that for this edition.
- Chapter 14. This was one of our more extensively revised chapters. The revisions were primarily in the organization and tone of the chapter, although some new content was added, as well. While keeping most of the previous content on the politics of program evaluation and the difficulties that can pose for evaluators, we wanted to improve the chapter's emphasis on how to conduct successful evaluations. In that connection, we moved most of the politics content toward the back of the chapter, clarified that it pertains mainly to outcome evaluations, and moved other sections closer to the front. Logic models, for example, previously appeared in the penultimate section of the chapter and now appear early in it, right after a movedup section on planning an evaluation. We also updated and shortened our coverage of the impact of managed care. A section on evidencebased practice was added to our historical overview. It introduces readers to the utility of meta-analyses and effect-size statistics-concepts covered more comprehensively in later chapters. We also expanded our discussion of summative and formative evaluations.

- **Chapter 15.** Our colleagues appear to be relatively pleased with this chapter. We implemented several minor tweaks that they suggested as well as a request by some for a more substantial revision: a shortened and less complex discussion of multistage cluster sampling.
- Chapter 16. This chapter received extensive revisions to try to keep pace with new technological advances affecting telephone and online surveys. We also refer readers to sources for keeping abreast of these developments. Four new sections were added regarding: (1) the implications of these advances for telephone surveys; (2) instrument design for online surveys; (3) improving response rates in online surveys; and (4) mixed-mode surveys combining online, telephone, and postal mail methods.
- **Chapter 17.** This is another chapter with new content regarding the ways in which our online world is affecting research. The main change is the addition of a section on online unobtrusive research, which includes examples of studies that monitor social media posts to identify words and phrases that are predictive of actual suicide attempts and other self-harm behaviors.
- Chapter 18. Various tweaks were made in this chapter, as suggested by reviewers; however, there were no major additions to it.
- Chapter 19. The main revisions to this chapter were as follows: (1) the addition of a section on the types and sequencing of focus group questions, and (2) a new box summarizing a focus group study—published in the *Journal of Gerontological Social Work*—that assessed the psychosocial needs of lesbian and gay elders in long-term care.
- Chapter 20. The main revision in this chapter was an expansion of content on open coding.
- Chapter 21. We made many significant changes to our chapters on quantitative data analysis in an effort to shorten and simplify this content in ways that better fit how most instructors handle it in their courses. In this chapter, for example, we removed most of the content on levels of measurement in line with requests to move

that content up to Chapter 8 (see above). What's left is the content on the implications of those levels for the kinds of descriptive statistics that are appropriate to calculate. As part of our effort to collapse our two inferential data analyses chapters into one chapter and reduce the overall length and complexity of the inferential content, we moved the coverage of measures of association from Chapter 22 into this chapter. We also expanded our coverage of table construction and replaced several tables with ones focusing on illustrations of more direct relevance to social work.

- Chapter 22. In keeping with our effort to improve the fit between our coverage of inferential data analysis and how that content is covered in most research methods courses, we removed the content that is much more likely to be covered in statistics courses. In so doing, we were able to collapse and combine our previous two chapters on this content into one chapter. As mentioned above, we moved most of the coverage of measures of association up into Chapter 21, retaining in this chapter only the part dealing with the interpretation of relationship strength. We moved the coverage of statistical power analysis up from Chapter 23 into this chapter. We cut most of the content on tests of significance and moved it up into this chapter, as well, although we added a box that identifies the purpose of some significance tests commonly used in outcome studies relevant to evidence-based practice. Also moved up is our coverage of meta-analyses. We took the content on how to critically appraise metaanalyses out of this chapter and put an expanded version of that content in a new Appendix.
- Chapter 23. In this chapter (which used to be Chapter 24), we have added a section comparing large-scale and small-scale RFPs and proposals, including a new box illustrating a smallscale RFP aimed at students who want to conduct research on LGBT family issues.
- Appendix A. We've updated the appendix on using the library to make it more consistent with today's online world.

- Appendix B. We updated the discussion of selecting random numbers in regard to generating random numbers online.
- Appendix C. This new appendix contains expanded coverage on critically appraising meta-analyses.

>> ANCILLARY PACKAGE

MindTap

Research Methods for Social Work comes with MindTap, an online learning solution created to harness the power of technology to drive student success. This cloud-based platform integrates a number of learning applications ("apps") into an easy-to-use and easy to access tool that supports a personalized learning experience. MindTap combines student learning tools-readings, multimedia, activities and assessments into a singular Learning Path that guides students through the course. This MindTap includes:

- Entire electronic text
- Additional readings to further explore chapter topics
- Case Studies
- Video Examples
- Quizzing
- Flashcards

Online Instructor's Manual

The Instructor's Manual (IM) contains a variety of resources to aid instructors in preparing and presenting text material in a manner that meets their personal preferences and course needs. It presents chapter-by-chapter suggestions and resources to enhance and facilitate learning.

Cengage Learning Testing Powered by Cognero

Cognero is a flexible, online system that allows you to author, edit, and manage test bank content as well as create multiple test versions in an instant.

xx Preface

You can deliver tests from your school's learning management system, your classroom, or wherever you want.

Online PowerPoint

These vibrant Microsoft[®] PowerPoint[®] lecture slides for each chapter assist you with your lecture by providing concept coverage using images, figures, and tables directly from the textbook.

Social Work CourseMate Website for Research Methods for Social Work

Accessible at http://www.cengagebrain.com, the text-specific CourseMate website offers chapterby-chapter online quizzes, chapter outlines, crossword puzzles, flash cards (from the text's glossary), review questions, and exercises (from the ends of chapters in the text) that provide students with an opportunity to apply concepts presented in the text. Students can go to the Companion Site to access a primer for SPSS 17.0.

>> ACKNOWLEDGMENTS

We owe special thanks to the following colleagues who made valuable suggestions for improving this edition:

Nikola Alenkin, California State University, Los Angeles

Juan Araque, University of California

Kathleen Bolland, University of Alabama

Annalease Gibson, Albany State University

Susan Grossman, Loyola University

Richard Harris. University of Texas, San Antonio

Mary Jane Taylor, University of Utah

Daniel Weisman, Rhode Island College

Molly Wolf, State University of New York, Buffalo

Allen Rubin Earl R. Babbie

An Introduction to Scientific Inquiry in Social Work

- Why Study Research?
- Evidence-Based Practice
- Factors Influencing the Research Process
- 4 Quantitative, Qualitative, and Mixed Methods of Inquiry

Science is a word everyone uses. Yet people's images of science vary greatly. For some, science is mathematics; for others, science is white coats and laboratories. The word is often confused with *technology* or equated with challenging high school or college courses.

part

If you tell strangers that you are taking a course dealing with scientific inquiry and ask them to guess what department it's in, they are a lot more likely to guess something like biology or physics than social work. In fact, many social workers themselves often underestimate the important role that scientific inquiry can play in social work practice. But this is changing. More and more, social workers are learning how taking a scientific approach can enhance their practice effectiveness.

Although scholars can debate philosophical issues in science, for the purposes of this book we will look at it as a method of inquiry—that is, a way of learning and knowing things that can guide the decisions made in social work practice. When contrasted with other ways that social work practitioners can learn and know things, scientific inquiry has some special characteristics—most notably, a search for evidence. In this opening set of chapters, we'll examine the nature of scientific inquiry and its relevance for social work. We'll explore the fundamental characteristics and issues that make scientific inquiry different from other ways of knowing things in social work.

In Chapter 1, we'll examine the value of scientific inquiry in social work practice and how it helps safeguard against some of the risks inherent in alternative sources of practice knowledge.

Chapter 2 will delve into evidence-based practice—a model of social work practice that emphasizes the use of the scientific method and scientific evidence in making practice decisions.

Chapter 3 will examine the research process in social work and various factors that can influence the way that process is carried out. Chapter 4 will provide an overview of and compare the three contrasting yet complementary overarching models of social work research: one that uses quantitative methods to produce precise and generalizable statistical findings; one that uses more flexible, qualitative methods to delve into deeper understandings of phenomena not easily reduced to numbers; and one that integrates quantitative and qualitative approaches within the same study.

1

Why Study Research?

- >> INTRODUCTION
- >> THE SCIENTIFIC METHOD
- >> OTHER WAYS OF KNOWING
- » RECOGNIZING FLAWS IN UNSCIENTIFIC SOURCES OF SOCIAL WORK PRACTICE KNOWLEDGE
- THE UTILITY OF SCIENTIFIC INQUIRY IN SOCIAL WORK
- >> REVIEWS OF SOCIAL WORK EFFECTIVENESS
- >> THE NEED TO CRITIQUE RESEARCH QUALITY
- >> COMPASSION AND PROFESSIONAL ETHICS
- >> UTILITY OF RESEARCH IN APPLIED SOCIAL WORK SETTINGS
- >> MAIN POINTS
- >> REVIEW QUESTIONS AND EXERCISES
- >> INTERNET EXERCISES

EPAS Competencies for This Chapter

Competency 1 Demonstrate Ethical and **Professional Behavior:** You will learn why studying research is part of preparing to be ethical and professional in your social work practice.

Competency 4 Engage in Practice-Informed Research and Research-Informed Practice: As a research text that emphasizes practice applications, all of its chapters address aspects of this competency.

Competency 9 Evaluate Practice with Individuals Families, Groups, Organizations, and Communities: You will learn why studying research is an essential part of evaluating practice.

What You'll Learn in This Chapter

You may be wondering why social work students are required to take a research course. We'll begin to answer that question in this chapter. We'll examine the way social workers learn things and the mistakes they make along the way. We'll also examine what makes scientific inquiry different from other ways of knowing things and its utility in social work practice. We will preface this and the remaining chapters of this book by listing the competencies relevant to each chapter that students are expected to develop according to the Council on Social Work Education Educational Policy and Accreditation Standards (EPAS). Each competency will be accompanied by a brief statement on its relevance to the chapter.

>> INTRODUCTION

Social workers—like doctors, lawyers, nurses, or any other type of professional—need to know things that will make their professional practice effective. Although it seems reasonable to suppose that all social workers would agree with that statement, they would not all agree about the *best* ways to go about learning the things they need to know. Some might favor learning things by relying on what most of their teachers, supervisors, and more experienced social workers in general agree to be true. Others might assert that learning things through what they observe and experience in their professional practice is at least as valuable as is learning about what other respected sources agree to be true.

Both of these two ways of knowing things have value not only in guiding social work practice but also in guiding decisions throughout our personal lives. As we grow up, we must rely on what the people we respect tell us to keep us safe and healthy. We shouldn't and don't have to experience the harmful or painful effects of doing unsafe or unhealthy things before we learn not to do them. At the same time, we learn other things through our direct experience and observation.

The two ways of knowing things that we've been discussing are termed *agreement reality* and *experiential reality*. Although each is invaluable in guiding our personal and professional behavior, let's now look at how relying on them exclusively can be risky.

Agreement Reality

Most of what we know is a matter of agreement and belief. Little of it is based on personal experience and discovery. A big part of growing up in any society, in fact, is the process of learning to accept what everybody around you "knows" is so.

You know that it's cold on the planet Mars. How do you know? Unless you've been to Mars lately, you know it's cold there because somebody told you and you believed what you were told. Perhaps your physics or astronomy instructor told you it was cold on Mars, or maybe you read about it somewhere.

However, relying exclusively on agreement reality can be risky because some of the things that everyone agrees on are wrong. For example, at one time everyone "knew" that the world is flat. Throughout the history of the social work profession, there have been things that most social workers and other mental health professionals agreed on that were not only wrong but also harmful.

In the mid-20th century, for example, there was widespread agreement that the main cause of schizophrenia was faulty parenting or other dysfunctional family dynamics. Having what was called a schizophrenigenic mother was widely seen as a main reason why a child—perhaps later as an adult—eventually came to have schizophrenia. Such mothers were portraved as cold, domineering, and overprotective in ways that did not permit their children to develop individual identities. No compelling research evidence supported these concepts, but they were nonetheless widely accepted by mental health practitioners. As a result, social workers and other mental health professionals often dealt with the family as a cause of the problem rather than develop a treatment alliance with the family. Many parents consequently reported feelings of self-recrimination for the illnesses of their offspring. As you can imagine, this was painful for many parents.

Scientific research studies during the 1970s and 1980s debunked the notion that schizophrenia is caused by schizophrenigenic mothers or other dysfunctional family dynamics. Some studies uncovered the biological basis of schizophrenia. Other studies showed how practitioners who were guided by the notion of faulty parenting (or other dysfunctional family dynamics) when treating people with schizophrenia and their families were actually increasing the risk of relapse and unnecessarily exacerbating the burden that such families had to bear when caring for their sick relative (Rubin & Bowker, 1986).

Another example of ineffective or harmful professional practices that were guided by agreement reality includes "Scared Straight" programs. These programs were once popular as an effective way to prevent future violations of the law by juveniles. It was thought that by visiting prisons and interacting with adult inmates, juveniles would be so frightened that their fear would deter them from future criminal behavior. But various scientific research studies found that Scared Straight programs not only were ineffective but actually increased the risk of delinquency (Petrosino, Turpin-Petrosino, & Buehler, 2002).

Experiential Reality

In contrast to knowing things through agreement, we can also know things through direct experience and observation. However, just as relying exclusively on agreement reality can be risky, so can relying exclusively on experiential reality. That's because some of the things that we experience are influenced by our predilections that are based on agreements that may or may not be accurate.

Let's take an example. Imagine you're at a party. It's a high-class affair, and the drinks and food are excellent. You are particularly taken by one type of appetizer the host brings around on a tray. It's breaded, deep-fried, and especially tasty. You have a couple, and they are delicious! You have more. Soon you are subtly moving around the room to be wherever the host arrives with a tray of these nibbles.

Finally, you can't contain yourself any more. "What are they?" you ask. "How can I get the recipe?" The host lets you in on the secret: "You've been eating breaded, deep-fried worms!" Your response is dramatic: Your stomach rebels, and you promptly throw up all over the living room rug. Awful! What a terrible thing to serve guests!

The point of the story is that both feelings about the appetizer would be real. Your initial liking for them, based on your own direct experience, was certainly real, but so was the feeling of disgust you had when you found out that you'd been eating worms. It should be evident, however, that the feeling of disgust was strictly a product of the agreements you have with those around you that worms aren't fit to eat. That's an agreement you began the first time your parents found you sitting in a pile of dirt with half a wriggling worm dangling from your lips. When they pried your mouth open and reached down your throat to find the other half of the worm, you learned that worms are not acceptable food in our society.

Aside from the agreements we have, what's wrong with worms? They're probably high in protein and low in calories. Bite sized and easily packaged, they're a distributor's dream. They are also a delicacy for some people who live in societies that lack our agreement that worms are disgusting. Other people might love the worms but be turned off by the deep-fried bread-crumb crust.

Analogies to this worm example have abounded in the history social work practice (as well as in the practice of other helping professions). Decades ago, for example, practitioners who believed in the schizophrenigenic mother concept were likely to be predisposed to look for, perceive, and interpret maternal behaviors in ways that fit their agreement reality. We have known clinical practitioners who will look for and perceive even fairly inconsequential client behaviors as evidence that their favored treatment approach is being effective while overlooking other behaviors that might raise doubt about their effectiveness. Later in this chapter, we'll discuss this phenomenon in terms of the concept of selective observation, which is one common way in which our agreement reality influences our experiential reality.

Reality, then, is a tricky business. Although when we start out in life or in our professional careers, we must inescapably rely heavily on agreement reality and experiential reality as starting points for "knowing" things, some of the things you "know" may not be true. But how can you really know what's real? People have grappled with that question for thousands of years. Science is one of the strategies that have arisen from that grappling.

>> THE SCIENTIFIC METHOD

Science offers an approach to both agreement reality and experiential reality. That approach is called the scientific method*. When social workers question things and search for evidence as the basis for making practice decisions, they are applying the scientific method. Let's now examine the key features of the scientific method, beginning with a principle that requires keeping an open mind.

All Knowledge Is Tentative and Open to Question

In our quest to understand things, we should strive to keep an *open mind* about everything that we think we know or that we want to believe. In other words, we should consider the things we call "knowledge" to be *tentative* and *subject to refutation*. This feature has no exceptions. No matter how long a particular tradition has been practiced, no

^{*}Words in boldface are defined in the glossary at the end of the book.



We learn some things by experience, others by agreement. This young man seems to be into personal experience.

matter how much power or esteem a particular authority figure may have, no matter how noble a cause may be, no matter how cherished it may be, we can question any belief.

Keeping an open mind is not always easy. Few of us enjoy facts that get in the way of our cherished beliefs. When we think about allowing everything to be open to question, we may think of old-fashioned notions that we ourselves have disputed and thus pat ourselves on the back for being so openminded. If we have a liberal bent, for example, we may fancy ourselves as scientific for questioning stereotypes of gender roles, laws banning gay marriage, or papal decrees about abortion. But are we also prepared to have an open mind about our own cherished beliefs-to allow them to be questioned and refuted? Only when a belief you cherish is guestioned do you face the tougher test of your commitment to scientific notions of the provisional nature of knowledge and keeping everything open to question and refutation.

Replication

However, it is not only our beliefs that are open to question; also tentative and open to question are the findings of scientific studies. Because there are no foolproof ways to guarantee that evidence produced by scientific studies is purely objective, accurate, and generalizable, the scientific method also calls for the replication of studies. *Replication* means duplicating a study to see if the same evidence and conclusions are produced. It also refers to modified replications in which the procedures are changed in certain ways that improve on previous studies or determine if findings hold up with different target populations or under different circumstances.

Observation

Another key feature of the scientific method is the search for *evidence based on observation* as the basis for knowledge. The term *empirical* refers to this valuing of observation-based evidence. As we

will see later, one can be empirical in different ways, depending on the nature of the evidence and the way we search for and observe it. For now, remember that the scientific method seeks truth through observed evidence—not through authority, tradition, or ideology—no matter how much social pressure may be connected to particular beliefs and no matter how many people cherish those beliefs or how long they've been proclaimed to be true. It took courage long ago to question fiercely held beliefs that the Earth is flat. Scientifically minded social workers today should find the same courage to inquire as to the observation-based evidence that supports interventions or policies that they are told or taught to believe in.

Social workers should also examine the nature of that evidence. To be truly scientific, the observations that accumulated the evidence should have been *systematic* and *comprehensive*. To avoid overgeneralization and selective observation (errors we will be discussing shortly), the *sample* of observations should have been *large* and *diverse*.

Objectivity

The specified procedures also should be scrutinized for potential bias. The scientific method recognizes that we all have predilections and biases that can distort how we look for or perceive evidence. It therefore emphasizes the *pursuit* of objectivity in the way we seek and observe evidence. None of us may ever be purely objective, no matter how strongly committed we are to the scientific method. No matter how scientifically pristine their research may be, researchers want to discover something important-that is, to have findings that will make a significant contribution to improving human wellbeing or (less nobly) enhancing their professional stature. The scientific method does not require that researchers deceive themselves into thinking they lack these biases. Instead, recognizing that they may have these biases, they must find ways to gather observations that are not influenced by their own biases.

Suppose, for example, you devise a new intervention for improving the self-esteem of traumatized children. Naturally, you will be biased in wanting to observe improvements in the selfesteem of the children receiving your intervention. It's okay to have that bias and still scientifically inquire whether your intervention really does

improve self-esteem. You would not want to base your inquiry solely on your own subjective clinical impressions. That approach would engender a great deal of skepticism about the objectivity of your judgments that the children's self-esteem improved. Thus, instead of relying exclusively on your clinical impressions, you would devise an observation procedure that was not influenced by your own biases. Perhaps you would ask colleagues who didn't know about your intervention or the nature of your inquiry to interview the children and rate their self-esteem. Or perhaps you would administer an existing paper-and-pencil test of self-esteem that social scientists regard as valid. Although neither alternative can guarantee complete objectivity, each would be more scientific in reflecting your effort to pursue objectivity.

Transparency

Finally, the scientific method requires transparency by researchers in reporting the details of how their studies have been conducted. All *procedural details should be specified* so that others can see the basis for the conclusions that were reached, assess whether overgeneralization and selective observation were truly avoided, and judge whether the conclusions are indeed warranted in light of the evidence and the ways in which it was observed.

The box "Key Features of the Scientific Method" summarizes these features and provides a handy mnemonic for remembering them.

>> OTHER WAYS OF KNOWING

The scientific method is not the only way to learn about the world. As we mentioned earlier, for example, we all discover things through our personal experiences from birth on and from the agreed-on knowledge that others give us. Sometimes this knowledge can profoundly influence our lives, such as when we learn that getting an education will affect how much money we earn later in life or how much job satisfaction we'll eventually experience. As students, we learn that studying hard will result in better examination grades.

We also learn that such patterns of cause and effect are probabilistic in nature: The effects occur more often when the causes occur than when they are absent—but not always. Thus, students learn

KEY FEATURES OF THE SCIENTIFIC METHOD

A mnemonic for remembering some of the key features of the scientific method is the word *trout*. Think of catching or eating a delicious trout,¹ and it will help you remember the following key features:

т	Tentative:	Everything we think we know today is open to question and subject to reassessment, modification, or refutation.
R	Replication:	Even the best studies are open to question and need to be replicated.
0	Observation:	Knowledge is grounded in orderly and comprehensive observations.
U	Unbiased:	Observations should be unbiased.
т	Transparency:	All procedural details are openly specified for review and evaluation and to show the basis of conclusions that were reached.

¹If you are a vegetarian, you might want to just picture how beautiful these fish are and imagine how many of their lives you are saving.

that studying hard produces good grades in most instances but not every time. Social workers learn that being abused as children makes people more likely to become abusive parents later on, but not all parents who were abused as children become abusive themselves. They also learn that severe mental illness makes one vulnerable to becoming homeless, but not all adults with severe mental illnesses become homeless.

We will return to these concepts of causality and probability throughout the book. As we'll see, scientific inquiry makes them more explicit and provides techniques for dealing with them more rigorously than do other ways of learning about the world.

Tradition

One important secondhand way to attempt to learn things is through tradition. We may test a few of these "truths" on our own, but we simply accept the great majority of them. These are the things that "everybody knows." Tradition, in this sense of the term, has clear advantages for human inquiry. By accepting what everybody knows, you are spared the overwhelming task of starting from scratch in your search for regularities and understanding. Knowledge is cumulative, and an inherited body of information and understanding is the jumping-off point for the development of more knowledge. We often speak of "standing on the shoulders of giants"—that is, on the shoulders of previous generations. At the same time, tradition may be detrimental to human inquiry. If you seek a fresh and different understanding of something that everybody already understands and has always understood, you may be seen as a fool. More to the point, it will probably never occur to you to seek a different understanding of something that is already understood and obvious.

When you enter your first job as a professional social worker, you may learn about your agency's preferred intervention approaches. (If you have begun the field placement component of your professional education, you may have already experienced this phenomenon.) Chances are you will feel good about receiving instructions about "how we do things in this agency." You might be anxious about beginning to work with real cases and might be relieved that you won't have to choose between competing theories to guide what you do with clients. In conforming to agency traditions, you might feel that you have a head start, benefiting from the accumulated practice wisdom of previous generations of practitioners in your new work setting. Indeed you do. After all, how many recently graduated social workers are in a better position than experienced agency staff to determine the best intervention approaches in their agency?

But the downside of conforming to traditional practice wisdom is that you can become too comfortable doing it. You may never think to look for evidence that the traditional approaches are or are not as effective as everyone believes or for evidence concerning whether alternative approaches are more effective. And if you do seek and find such evidence, you may find that agency traditions make your colleagues unreceptive to the new information.

Authority

Despite the power of tradition, new knowledge appears every day. Aside from your personal inquiries, throughout your life you will benefit from others' new discoveries and understandings. Often, acceptance of these new acquisitions will depend on the status of the discoverer. For example, you're more likely to believe the epidemiologist who declares that the common cold can be transmitted through kissing than to believe a layperson who says the same thing.

Like tradition, authority can both assist and hinder human inquiry. Inquiry is hindered when we depend on the authority of experts speaking outside their realm of expertise. The advertising industry plays heavily on this misuse of authority by having popular athletes discuss the nutritional value of breakfast cereals or movie actors evaluate the performance of automobiles, among similar tactics. It is better to trust the judgment of the person who has special training, expertise, and credentials in the matter, especially in the face of contradictory positions on a given question. At the same time, inquiry can be greatly hindered by the legitimate authority who errs within his or her own special province. Biologists, after all, can and do make mistakes in the field of biology. Biological knowledge changes over time. So does social work knowledge, as discussed earlier regarding debunked notions about the cause and treatment of schizophrenia.

Our point is that knowledge accepted on the authority of legitimate and highly regarded experts can be incorrect and perhaps harmful. It is therefore important that social work practitioners be open to new discoveries that might challenge the cherished beliefs of their respected supervisors or favorite theorists.

Also keep an open mind about the new knowledge that displaces the old. It, too, may be flawed, no matter how prestigious its founders. Who knows? Perhaps someday we'll even find evidence that currently out-of-favor ideas about parental causation of schizophrenia had merit after all. That prospect might seem highly unlikely now given current evidence, but in taking a scientific approach to knowledge, we try to remain objective and open to new discoveries, no matter how much they may conflict with the traditional wisdom or current authorities. Although complete objectivity may be an impossible ideal to attain, we try not to close our minds to new ideas that might conflict with tradition and authority.

Both tradition and authority, then, are twoedged swords in the search for knowledge about the world. They provide us with a starting point for our own inquiry. But they may also lead us to start at the wrong point or push us in the wrong direction.

Common Sense

The notion of *common sense* is often cited as another way to know about the world. Common sense can imply logical reasoning, such as when we reason that it makes no sense to think that rainbows cause rainfall since rainbows appear only after the rain starts falling and only when the sun shines during the storm. Common sense can also imply widely shared beliefs based on tradition and authority. The problem with this sort of common sense is that what "everyone knows" can be wrong. Long ago, everyone "knew" that the Earth was flat. It was just plain common sense since you could see no curvature to the Earth's surface and since hell was below the surface. At one point in our history, a great many people thought that slavery made common sense. Many people think that laws against gays and lesbians marrying or adopting children make common sense. Most social workers think such laws make no common sense whatsoever. Although common sense might seem rational and accurate, it is an insufficient and highly risky alternative to science as a source of knowledge.

Popular Media

Much of what we know about the world is learned from the news media. We first learned about the September 11, 2001, attack on the twin towers of the World Trade Center from watching coverage of that tragic event on television and reading about it in newspapers and magazines and on the Internet. The same sources informed us of the victims and heroes in New York City, Pennsylvania, and Washington, D.C. They provided information on the perpetrators of the attack and a great many related issues and events. We did not have to conduct a scientific study to know about the attack or have strong feelings about it. Neither did we need tradition or authority. We did not have to experience the attack firsthand (although we really did experience it—and probably were at least somewhat traumatized—by what we saw and heard on our television sets).

Although we can learn a lot from the popular media, we can also be misled by them. Witness, for example, disagreements between some cable news networks as to which network is really more trustworthy, fair, and balanced. Although most journalists might strive for accuracy and objectivity, they are still influenced by their own political biases—some more than others. Some also might seek out the most sensational aspects of events and then report them in a biased manner to garner reader interest or appeal to their prejudices (ratings affect profits!).

Even when journalists strive for accuracy in their reportage, the nature of their business can impede their efforts. For example, they have deadlines to meet and word limits as to how much they can write. Thus, when covering testimony at city hall by neighborhood residents, some of whom support a proposed new economic development plan in their neighborhood and some of whom oppose it, their coverage might be dominated not by folks like the majority of residents, who may not be outspoken. Instead, they might unintentionally rely on the least representative but most outspoken and demonstrative supporters or opponents of the proposed development.

Then there are journalists whose jobs are to deliver editorials and opinion pieces, not to report stories factually. What we learn from them is colored by their predilections. The intent of such writing is not to provide a balanced approach but to persuade readers to share their position on the issues.

The popular media also include fictional movies and television shows that can influence what we think we know about the world. Some fictional accounts of history are indeed educational, perhaps informing us about African Americans who fought for the Union during the Civil War or sensitizing us to the horrors of the Holocaust or of slavery. Others, however, can be misleading, such as when most mentally ill people are portrayed as violent or when most welfare recipients are portrayed as African Americans.

More and more these days, many folks get much of their information from the Internet. Despite the wonders of the Internet and the immediate availability of a tremendous array of useful information therein, information available on unscientific sites is not risk free. Perhaps most noteworthy in this regard is the Wikipedia website. Wikipedia is a free online encyclopedia that anyone can edit. A humorous illustration of the risks inherent in allowing anyone to edit the information available at that site was reported by Eve Fairbanks (2008, p. 5). In February 2008, during the heat of the battle between Hillary Clinton and Barack Obama for the Democratic Party's presidential nomination, somebody accessed Clinton's Wikipedia page and replaced her photo with a picture of a walrus. Perhaps in retaliation, the next month, a Clinton supporter altered Obama's bio so that it called him "a Kenyan-American politician." Also that month, somebody replaced Clinton's whole page with "It has been reported that Hillary Rodham Clinton has contracted genital herpes due to sexual intercourse with an orangutan."

Obviously, the above Wikipedia example is extreme, and unless its readers despised Clinton or were imbibing something peculiar when accessing the above website, they would not believe that the walrus was really Clinton or that she had intercourse with an orangutan. But it does illustrate that despite the tremendous value of the Internet and the fact that we can learn many valuable things from popular media, they do not provide an adequate alternative to scientific sources of knowledge.



"Don't believe everything you read on the Internet just because there's a picture with a quote next to it."

–Abraham Lincoln

lbrary of Congress Prints and Photographs Division LC-DIG-ppmsca-19305]