

JOHN W. CRESWELL

RESEARCH DESIGN

FOURTH
EDITION

QUALITATIVE,
QUANTITATIVE, &
MIXED METHODS
APPROACHES



INTERNATIONAL STUDENT EDITION

NOT FOR SALE IN THE USA OR CANADA



FOURTH EDITION

RESEARCH DESIGN

INTERNATIONAL STUDENT EDITION

Qualitative, Quantitative, and
Mixed Methods Approaches



JOHN W. GRESWELL

University of Nebraska—Lincoln



Los Angeles | London | New Delhi
Singapore | Washington DC



Los Angeles | London | New Delhi
Singapore | Washington DC

FOR INFORMATION:

SAGE Publications, Inc.
2455 Teller Road
Thousand Oaks, California 91320
E-mail: order@sagepub.com

SAGE Publications Ltd.
1 Oliver's Yard
55 City Road
London EC1Y 1SP
United Kingdom

SAGE Publications India Pvt. Ltd.
B 1/1 1 Mohan Cooperative Industrial Area
Mathura Road, New Delhi 110 044
India

SAGE Publications Asia-Pacific Pte. Ltd.
3 Church Street
#10-04 Samsung Hub
Singapore 049483

Acquisitions Editor: Vicki Knight
Editorial Assistant: Jessica Young
Assistant Editor: Kalie Koscielak
Production Editor: Brittany Bauhaus
Copy Editor: Megan Markanich
Typesetter: C&M Digitals (P) Ltd.
Proofreader: Rae-Ann Goodwin
Indexer: Gloria Tierney
Cover Designer: Michael Dubowe
Marketing Manager: Nicole Elliott
Permissions Editor: Adele Hutchinson

Copyright © 2014 by SAGE Publications, Inc.

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

Printed and bound by CPI Group (UK) Ltd,
Croydon, CR0 4YY

Library of Congress Cataloging-in-Publication Data

Creswell, John W.

Research design : qualitative, quantitative, and
mixed methods approaches / John W. Creswell. —
4th ed.

p. cm.

Includes bibliographical references and index.

ISBN 978-1-4522-2609-5 (cloth) —
ISBN 978-1-4522-2610-1 (pbk.)

1. Social sciences—Research—Methodology.
2. Social sciences—Statistical methods. I. Title.

H62.C6963 2014
300.72'1—dc23 2012043521

This book is printed on acid-free paper.

13 14 15 16 17 10 9 8 7 6 5 4 3 2 1

FOURTH EDITION

RESEARCH DESIGN


INTERNATIONAL STUDENT EDITION

I dedicate this book to Karen Drumm Creswell. She is the inspiration for my writing and my life. Because of her—as wife, supporter, and detailed and careful editor—I am able to work long hours, keep the home fires burning, and be a productive researcher and book writer. Thank you, Karen, from the bottom of my heart for being there for me through all of the editions of this book.

Detailed Contents

Analytic Contents of Research Techniques	xv
Preface	xix
Purpose	xix
Audience	xix
Format	xx
Outline of Chapters	xxii
Acknowledgments	xxvii
About the Author	xxix
Part I. Preliminary Considerations	1
1. The Selection of a Research Approach	3
The Three Approaches to Research	3
Three Components Involved in an Approach	5
Philosophical Worldviews	5
<i>The Postpositivist Worldview</i>	7
<i>The Constructivist Worldview</i>	8
<i>The Transformative Worldview</i>	9
<i>The Pragmatic Worldview</i>	10
Research Designs	11
<i>Quantitative Designs</i>	12
<i>Qualitative Designs</i>	13
<i>Mixed Methods Designs</i>	14
Research Methods	16
Research Approaches as Worldviews, Designs, and Methods	17
Criteria for Selecting a Research Approach	19
The Research Problem and Questions	20
Personal Experiences	20
Audience	21
Summary	21
Writing Exercises	22
Additional Readings	22

2. Review of the Literature	25
The Research Topic	25
The Literature Review	27
The Use of the Literature	28
Design Techniques	31
<i>Steps in Conducting a Literature Review</i>	31
<i>Searching Computerized Databases</i>	32
<i>A Priority for Selecting Literature Material</i>	35
<i>A Literature Map of the Research</i>	36
<i>Abstracting Studies</i>	38
■ Example 2.1. Literature Review Abstract in a Quantitative Study	40
■ Example 2.2. Literature Review Abstract in a Study Advancing a Typology	41
<i>Style Manuals</i>	41
The Definition of Terms	42
■ Example 2.3. Terms Defined in an Independent Variables Section	45
■ Example 2.4. Terms Defined in a Mixed Methods Dissertation	46
A Quantitative or Mixed Methods Literature Review	46
Summary	48
Writing Exercises	49
Additional Readings	49
3. The Use of Theory	51
Quantitative Theory Use	52
Variables in Quantitative Research	52
Definition of a Theory in Quantitative Research	53
Forms of Theories in Quantitative Research	55
Placement of Quantitative Theories	59
Writing a Quantitative Theoretical Perspective	60
■ Example 3.1. A Quantitative Theory Section	61
Qualitative Theory Use	64
Variation in Theory Use in Qualitative Research	64
Locating the Theory in Qualitative Research	67
■ Example 3.2. A Theory Early in a Qualitative Study	67
■ Example 3.3. A Theory at the End of a Qualitative Study	68
Mixed Methods Theory Use	68
Social Science Theory Use	69
Transformative Paradigm Theory Use	70
■ Example 3.4. Theory in a Transformative Mixed Methods Study	74

Summary	74
Writing Exercises	75
Additional Readings	76
4. Writing Strategies and Ethical Considerations	77
Writing the Proposal	77
Arguments Presented in a Proposal	77
Format for a Qualitative Proposal	78
■ Example 4.1. A Qualitative Constructivist/ Interpretivist Format	78
■ Example 4.2. A Qualitative Transformative Format	79
Format for a Quantitative Proposal	80
■ Example 4.3. A Quantitative Format	80
Format for a Mixed Methods Proposal	81
■ Example 4.4. A Mixed Methods Format	81
Designing the Sections of a Proposal	82
Writing Ideas	83
Writing as Thinking	84
The Habit of Writing	85
Readability of the Manuscript	86
■ Example 4.5. An Illustration of the Hook-and-Eye Technique	89
Voice, Tense, and "Fat"	90
Ethical Issues to Anticipate	92
Prior to Beginning the Study	95
Beginning the Study	97
Collecting the Data	97
Analyzing the Data	99
Reporting, Sharing, and Storing Data	99
Summary	101
Writing Exercises	102
Additional Readings	102
 Part II. Designing Research	105
5. The Introduction	107
The Importance of Introductions	107
An Abstract for a Study	108
Qualitative, Quantitative, and Mixed Methods Introductions	110
A Model for an Introduction	111
An Illustration	112
The Research Problem	114
Studies Addressing the Problem	116
Deficiencies in Past Literature	117

■ Example 5.1. Deficiencies in the Literature—Needed Studies	118
■ Example 5.2. Deficiencies in the Literature—Few Studies	118
Significance of a Study for Audiences	119
■ Example 5.3. Significance of the Study Stated in an Introduction to a Quantitative Study	119
Summary	120
Writing Exercises	120
Additional Readings	121
6. The Purpose Statement	123
Significance and Meaning of a Purpose Statement	123
A Qualitative Purpose Statement	124
■ Example 6.1. A Purpose Statement in a Qualitative Phenomenology Study	126
■ Example 6.2. A Purpose Statement in a Case Study	127
■ Example 6.3. A Purpose Statement in an Ethnography	127
■ Example 6.4. A Purpose Statement in a Grounded Theory Study	128
A Quantitative Purpose Statement	128
■ Example 6.5. A Purpose Statement in a Published Survey Study	130
■ Example 6.6. A Purpose Statement in a Dissertation Survey Study	131
■ Example 6.7. A Purpose Statement in an Experimental Study	132
A Mixed Methods Purpose Statement	132
■ Example 6.8. A Convergent Mixed Methods Purpose Statement	135
■ Example 6.9. An Explanatory Sequential Mixed Methods Purpose Statement	135
■ Example 6.10. An Exploratory Sequential Mixed Methods Purpose Statement	136
Summary	137
Writing Exercises	137
Additional Readings	138
7. Research Questions and Hypotheses	139
Qualitative Research Questions	139
■ Example 7.1. A Qualitative Central Question From an Ethnography	142

■ Example 7.2. Qualitative Central Questions From a Case Study	142
Quantitative Research Questions and Hypotheses	143
■ Example 7.3. A Null Hypothesis	144
■ Example 7.4. Directional Hypotheses	145
■ Example 7.5. Nondirectional and Directional Hypotheses	146
■ Example 7.6. Standard Use of Language in Hypotheses	146
A Model for Descriptive Questions and Hypotheses	147
■ Example 7.7. Descriptive and Inferential Questions	147
Mixed Methods Research Questions and Hypotheses	148
■ Example 7.8. Hypotheses and Research Questions in a Mixed Methods Study	150
■ Example 7.9. A Mixed Methods Question Written Using Methods and Content Language	151
Summary	151
Writing Exercises	152
Additional Readings	153
8. Quantitative Methods	155
Defining Surveys and Experiments	155
Components of a Survey Method Plan	156
The Survey Design	157
The Population and Sample	158
Instrumentation	159
Variables in the Study	161
Data Analysis and Interpretation	162
■ Example 8.1. A Survey Method Section	165
Components of an Experimental Method Plan	167
Participants	168
Variables	169
Instrumentation and Materials	170
Experimental Procedures	170
■ Example 8.2. Pre-Experimental Designs	171
■ Example 8.3. Quasi-experimental Designs	172
■ Example 8.4. True Experimental Designs	173
■ Example 8.5. Single-Subject Designs	174
Threats to Validity	174
<i>The Procedure</i>	177
<i>Data Analysis</i>	178
<i>Interpreting Results</i>	178
■ Example 8.6. An Experimental Method Section	179

Summary	180
Writing Exercises	181
Additional Readings	181
9. Qualitative Methods	183
The Components of Qualitative Methods	184
The Characteristics of Qualitative Research	185
Qualitative Designs	187
The Researcher's Role	187
Data Collection Procedures	189
Data Recording Procedures	193
Data Analysis and Interpretation	194
Validity and Reliability	201
Writing the Qualitative Report	204
■ Example 9.1. Qualitative Procedures	205
Summary	211
Writing Exercises	212
Additional Readings	213
10. Mixed Methods Procedures	215
Components of Mixed Methods Procedures	216
Describe Mixed Methods Research	217
Types of Mixed Methods Designs	219
Convergent Parallel Mixed Methods Design	219
Explanatory Sequential Mixed Methods Design	224
Exploratory Sequential Mixed Methods Design	225
Several Advanced Mixed Methods Designs	227
Mixed Methods Notation in the Figures	228
Factors Important in Choosing a Mixed Methods Design	230
<i>Choice Based on Outcomes Expected</i>	230
<i>Choice Based on How the Data Will Be Used</i>	
<i>Together (or Integrated)</i>	230
<i>Choice Based on the Timing of the</i>	
<i>Data Collection</i>	231
<i>Choice Based on the Emphasis Placed on</i>	
<i>Each Database</i>	232
<i>Choice Based on Type of Design Most</i>	
<i>Suited for a Field</i>	232
<i>Choice Based on a Single Researcher or Team</i>	232
Examples of Mixed Methods Procedures	233
■ Example 10.1. A Convergent Parallel Mixed	
Methods Design	233
■ Example 10.2. An Explanatory Sequential	
Mixed Methods Design	234

■ Example 10.3. An Exploratory Sequential Mixed Methods Design	235
■ Example 10.4. A Transformative Design	237
Summary	238
Writing Exercises	239
Additional Readings	239

Glossary	241
-----------------	------------

References	251
-------------------	------------

Author Index	261
---------------------	------------

Subject Index	265
----------------------	------------

Analytic Contents of Research Techniques

Chapter 1. The Selection of a Research Approach

- Determining your research approach
- Identifying a worldview with which you are most comfortable
- Defining the three types of research approaches
- Using quantitative, qualitative, and mixed methods designs and methods

Chapter 2. Review of the Literature

- Assessing whether your topic is researchable
- Using steps in conducting a literature review
- Using computerized databases available for reviewing the literature
- Developing a priority for types of literature to review
- Designing a literature map
- Writing a good abstract of a research study
- Using important elements of a style manual
- Defining terms
- Employing a model for writing a literature review

Chapter 3. The Use of Theory

- Identifying variables in a quantitative study
- Defining the nature of a quantitative theory
- Using a script to write a theoretical perspective into a quantitative study
- Considering the types of theories used in qualitative research

- Placing theories in a qualitative study
- Placing a theoretical lens into a mixed methods study

Chapter 4. Writing Strategies and Ethical Considerations

- Assessing the structure of a proposal for qualitative, quantitative, and mixed methods studies
- Using writing strategies for drafting a proposal
- Developing a habit of writing
- Constructing umbrella thoughts, big thoughts, little thoughts, and attention thoughts in writing
- Developing writing consistency through the hook-and-eye technique
- Using principles of writing good prose
- Anticipating ethical issues in many phases of the research process

Chapter 5. The Introduction

- Writing an abstract for a study
- Exploring differences among quantitative, qualitative, and mixed methods introductions
- Using the deficiency model for writing an introduction
- Designing a good narrative hook
- Writing about the research problem
- Summarizing the literature about a research problem
- Pointing out deficiencies in past literature
- Considering audiences that may profit from your study

Chapter 6. The Purpose Statement

- Using a script for writing a qualitative purpose statement
- Considering how the script would change depending on your qualitative design
- Using a script for writing a quantitative purpose statement
- Considering how the script would change depending on your quantitative design

- Using a script for writing a mixed methods purpose statement
- Considering how the script would change depending on your mixed methods design

Chapter 7. Research Questions and Hypotheses

- Writing a script for a qualitative central question
- Considering how this script would change depending on the qualitative design
- Writing a script for quantitative research questions and hypotheses
- Considering how this script would change depending on the quantitative design and the different types of hypotheses
- Using a model for descriptive and inferential quantitative questions and hypotheses
- Writing scripts for different forms of research questions for a mixed methods study

Chapter 8. Quantitative Methods

- Using a checklist for survey research to form topic sections of a survey procedure
- Employing steps in analyzing data for a survey procedure
- Writing a complete survey methods discussion
- Using a checklist for experimental research to form sections for an experimental procedure
- Identifying the type of experimental procedure that best fits your proposed study
- Drawing a diagram of experimental procedures
- Identifying the potential internal validity and external validity threats to your proposed study

Chapter 9. Qualitative Methods

- Using a checklist for qualitative research to form topic sections of a procedure
- Stating the basic characteristics of qualitative research
- Determining how reflexivity will be included in a proposed study

- Weighing the different types of data collected in qualitative research
- Employing steps in the qualitative data analysis process
- Establishing validity in qualitative research

Chapter 10. Mixed Methods Procedures

- Stating a definition and the characteristics of mixed methods research
- Using a convergent parallel mixed methods design
- Using an explanatory sequential mixed methods design
- Employing an exploratory sequential mixed methods design
- Using one of the advanced mixed methods designs
- Choosing which design is best for a mixed methods study

Preface

PURPOSE

This book advances a framework, a process, and compositional approaches for designing a proposal for qualitative, quantitative, and mixed methods research in the human and social sciences. The ascendancy of qualitative research, the emergence of mixed methods approaches, and the continuing use of the traditional forms of quantitative designs have created a need for this book's unique comparison of the three approaches to inquiry. This comparison begins with preliminary consideration of philosophical assumptions for all three approaches, a review of the literature, an assessment of the use of theory in research approaches, and reflections about the importance of writing and ethics in scholarly inquiry. The book then addresses the key elements of the process of research: writing an introduction, stating a purpose for the study, identifying research questions and hypotheses, and advancing methods and procedures for data collection and analysis. At each step in this process, the reader is taken through qualitative, quantitative, and mixed methods approaches.

AUDIENCE

This book is intended for students and faculty who seek assistance in preparing a plan or proposal for a scholarly journal article, dissertation, or thesis. At a broader level, the book may be useful as both a reference book and a textbook for courses in research methods. To best take advantage of the design features in this book, the reader needs a basic familiarity with qualitative and quantitative research; however, terms will be explained and defined and recommended strategies advanced for those needing introductory assistance in the design process. Highlighted terms in the text and a glossary of the terms at the back of the book provide a working language for understanding research. This book also is intended for a broad audience in the social and health sciences. Readers' comments since the first edition indicate that individuals using the book come from many disciplines and fields. I hope that researchers in