

# CONDUCTING RESEARCH LITERATURE REVIEWS

From the Internet to Paper

Fourth Edition

**Arlene Fink**

*University of California at Los Angeles*

*The Langley Research Institute*



Los Angeles | London | New Delhi  
Singapore | Washington DC

# BRIEF CONTENTS

<b>Preface</b>	<b>xiii</b>
<b>About the Author</b>	<b>xvii</b>
<b>1. Reviewing the Literature: Why? For Whom? How?</b>	<b>1</b>
<b>2. Searching and Screening: The Practical Screen and Methodological Quality (Part 1—Research Design and Sampling)</b>	<b>47</b>
<b>3. Searching and Screening: Methodological Quality (Part 2—Data Collection, Interventions, Analysis, Results, and Conclusions)</b>	<b>99</b>
<b>4. Doing the Review: A Reader's Guide Chapter</b>	<b>147</b>
<b>5. What Did You Find? Synthesizing Results</b>	<b>187</b>
<b>Author Index</b>	<b>243</b>
<b>Subject Index</b>	<b>249</b>

# DETAILED CONTENTS

<b>Preface</b>	<b>xiii</b>
<b>About the Author</b>	<b>xvii</b>
<b>1. Reviewing the Literature: Why? For Whom? How?</b>	<b>1</b>
A Reader's Guide	1
<b>PURPOSE OF THIS CHAPTER</b>	<b>2</b>
What Is a Research Literature Review? Why Do One?	3
<i>Write Proposals for Funding</i>	5
<i>Write Proposals for Academic Degrees</i>	6
<i>Describe and Explain Current Knowledge to</i> <i>Guide Professional Practice</i>	7
<i>Identify Effective Research and Development Methods</i>	8
<i>Identify Experts to Help Interpret Existing Literature</i> <i>and Identify Unpublished Sources of Information</i>	9
<i>Identify Funding Sources and Works in Progress</i>	9
<i>Satisfy Personal Curiosity</i>	10
Gaining Control: Experiments and Observations	12
<i>An Experimental Study</i>	13
<i>An Observational Study</i>	13
<i>Systematic, Explicit, Comprehensive, and Reproducible:</i> Four Key Words	14
Choosing an Online Bibliographic Database	15
<i>Online Bibliographic Databases</i>	15
<i>What Exactly Do You Need to Find?</i>	18
<i>How Do You Search for What You Want to Find?</i> <i>Key Words, Descriptors, Identifiers, and</i> <i>the Thesaurus</i>	20
How Do You Ask for Information? Searching With Boolean Operators	24
<i>Three Examples of Boolean Logic</i>	25

Pausing During the Search	25
Changing the Course of the Search	26
<i>Changing the Course of a Literature Review Search:</i>	
<i>Expanding the Scope</i>	26
Supplementing the Online Search	27
<i>Reasons to Supplement Electronic Searches</i>	27
<i>Reviewing References in High-Quality Studies</i>	28
<i>Is Everything Worthwhile Published?</i>	29
<i>Bring in the Experts</i>	30
<i>Cautiously Approach the Web</i>	32
Organizing the Research Literature:	
Building a Virtual Filing Cabinet	33
Summary of Key Points	36
Exercises	37
Answers	40
Online Literature Reviews	42
Suggested Readings	45
Notes	45

## **2. Searching and Screening: The Practical Screen and Methodological Quality (Part 1—Research Design and Sampling) 47**

A Reader's Guide	47
<b>PURPOSE OF THIS CHAPTER</b>	<b>48</b>
Search Screen 1: The Practical Screen	51
<i>Including and Excluding Studies: Typical Practical Screening Criteria for Literature Review Searches</i>	51
<i>Practical Screening Criteria: Using Inclusion and Exclusion Criteria</i>	52
Search Screen 2: Methodological Quality Screening Criteria, Part 1—Research Design and Sampling	54
<i>Criterion for Quality: Research Design</i>	55
<i>Random Selection and Random Assignment:</i>	
<i>Two Examples</i>	57
<i>Parallel Controls but No Random Assignment</i>	61
<i>Self-Controls</i>	63
<i>Historical Controls or Existing Data</i>	65
Observational Designs in Brief	66

<i>Cohort Designs</i>	66
<i>Case Control Designs</i>	70
A Note on Other Designs and Studies:	
Cross-Sectional Surveys and Consensus Statements	73
<i>Cross-Sectional Surveys</i>	73
<i>Consensus Statements</i>	76
<i>Books</i>	77
<i>Internal and External Validity</i>	77
Criterion for Quality: Sampling	81
<i>What Is a Sample?</i>	81
<i>Inclusion and Exclusion Criteria or Eligibility of Participants</i>	82
<i>Methods of Sampling</i>	83
<i>Simple Random Sampling</i>	84
<i>Systematic Sampling</i>	84
<i>Stratified Sampling</i>	85
<i>Cluster Sampling</i>	85
<i>Convenience Sampling</i>	86
The Sampling Unit	86
The Size of the Sample	87
Response Rate	87
<i>Nonresponse: Subjects and Items</i>	88
Summary of Key Points	90
Exercises	95
Answers	97
Suggested Readings	98

<b>3. Searching and Screening: Methodological Quality (Part 2—Data Collection, Interventions, Analysis, Results, and Conclusions)</b>	<b>99</b>
A Reader's Guide	99
<b>PURPOSE OF THIS CHAPTER</b>	<b>100</b>
Data Collection and Data Sources: Methods and Measures	100
<i>Reliability</i>	104
<i>Validity</i>	106
Interventions and Programs: Reviewing the Research	
Literature to Find Out What Works	109
<i>Two Versions of a Program Description</i>	110
Data Analysis: Statistical Methods in the Research Literature	112
<i>Statistical Methods and What to Look For: An Overview</i>	112

<i>Independent and Dependent Variables</i>	113
<i>Measurement Scales and Their Data</i>	115
<i>Statistical and Practical Significance</i>	117
<i>Confidence Intervals</i>	120
<i>Which Analytic Method Is Best?</i>	122
<i>The Results</i>	127
<i>Conclusions</i>	128
<i>Reviewing Qualitative Research: A Special Note</i>	131
<i>Reviewing Mixed Methods Research</i>	136
Summary of Key Points	138
Exercises	141
Answers	143
Suggested Readings	144
<b>4. Doing the Review: A Reader's Guide Chapter</b>	<b>147</b>
A Reader's Guide	147
<b>PURPOSE OF THIS CHAPTER</b>	<b>148</b>
Types of Information: Methods and Content	148
Eligibility and Actuality	151
Reporting Standards: Checklists for Research Writing and Reviewing	158
How TREND Was Used in a Literature Review	162
Reliable and Valid Reviews	166
<i>Measuring Reliability: The Kappa Statistic</i>	166
Uniform Data Collection: The Literature Review Survey Questionnaire	168
Uniform Data Collection: Definitions and More <i>Training Reviewers</i>	176
Pilot Testing the Review Process	178
Establishing Validity	179
Monitoring Quality	180
<i>Collecting Data From the Literature: A Checklist</i>	180
Summary of Key Points	181
Exercises	182
Answers	183
<b>5. What Did You Find? Synthesizing Results</b>	<b>187</b>
A Reader's Guide	187
<b>PURPOSE OF THIS CHAPTER</b>	<b>188</b>
Now That You Have Done It, What Do You Do With It?	188

<i>Reviews Describe Current Knowledge</i>	190
<i>Reviews Support the Need for and Significance of New Research</i>	191
<i>Reviews Explain Research Findings</i>	193
<i>Reviews Describe the Quality of Current Research</i>	194
Descriptive Syntheses or Reviews	199
<i>Examples of Descriptive Literature Reviews</i>	199
Meta-Analysis	203
<i>What to Look for in a Meta-Analysis: The Seven Steps</i>	204
<i>Fixed Versus Random Effects</i>	215
<i>Cumulative Meta-Analysis</i>	217
<i>Large Studies Versus Meta-Analysis of Smaller Trials: Comparing Results</i>	217
<i>Supporters and Critics</i>	218
<i>Displaying Meta-Analysis Results</i>	218
Meta-Analyses in Practice: Examples	219
<i>Statistical Interlude</i>	224
Descriptive Review Versus Meta-Analysis	227
Reviewing the Review	228
Summary of Key Points	233
Exercises	236
Answers	238
Suggested Readings	239
Notes	241
<b>Author Index</b>	<b>243</b>
<b>Subject Index</b>	<b>249</b>