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Kenneth S. Bordens • Bruce B. Abbott



Research Design and Methods

A Process Approach Eighth Edition

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Research Design and Methods

A Process Approach

EIGHTH EDITION

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RESEARCH DESIGN AND METHODS: A PROCESS APPROACH, EIGHTH EDITION

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We dedicate this book to our parents, who provided us with the opportunity and inspiration to excel personally and professionally.

*Lila Bordens and Walter Bordens
Irene Abbott and Raymond Abbott*

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PREFACE

This, the eighth edition of *Research Design and Methods: A Process Approach*, retains the general theme that characterized prior editions. As before, we take students through the research process, from getting and developing a research idea, to designing and conducting a study, through analyzing and reporting data. Our goals continue to be to present students with information on the research process in a lively and engaging way and to highlight the numerous decisions they must make when designing and conducting research. We also continue to stress how their early decisions in the process affect how data are collected, analyzed, and interpreted later in the research process. Additionally, we have continued the emphasis on the importance of ethical conduct, both in the treatment of research subjects and in the conduct of research and reporting research results.

In this edition we have retained the organization of topics, retaining the basic process approach. We have updated material in a number of chapters and updated many of the examples of research presented throughout the book. One change in the organization of the chapters is eliminating the list of questions that appeared at the end of each chapter in previous editions and salting them throughout each chapter. Students will find Questions to Ponder at various points in each chapter. These Questions to Ponder have students reflect on the material they read in the preceding section and allow students to prepare themselves for the material to follow. We believe that redistributing the questions in this way will help students better understand the material they read.

CHANGES IN THE EIGHTH EDITION

We have revised each chapter by updating examples and revising material where appropriate, as described below.

CHAPTER 1: EXPLAINING BEHAVIOR

A new introductory vignette focusing on the timely issue of texting while driving opens the chapter and is carried through the chapter where appropriate. We have rewritten the section on explaining behavior. This section now opens with an example (EMDR therapy) to get students thinking about how science is applied to explain behavior. The EMDR example is then used to illustrate the differences between real science and pseudoscience and how scientific explanations are developed.

CHAPTER 2: DEVELOPING AND EVALUATING THEORIES OF BEHAVIOR

A more recent example of a proposed scientific law (Herrnstein's "matching law") has been substituted for Thorndike's "law of effect," and recent applications of the matching law in basketball and football are described. In the section describing the characteristics of a good theory, the example of the ability of a theory to predict novel events has been changed from Einstein's theory of relativity to the Rescorla-Wagner model of classical conditioning, in which the model's counterintuitive prediction of "overexpectation" was confirmed.

CHAPTER 3: GETTING IDEAS FOR RESEARCH

This chapter remains largely unchanged from the previous edition. We have updated the section on using PsycINFO. In this section we eliminated the example of a PsycINFO entry in order to tighten the chapter. We have also updated the section on the peer review process by including a reference to a 2009 paper by Suls and Martin on the problems of the traditional peer review process.

CHAPTER 4: CHOOSING A RESEARCH DESIGN

The topic of the dangers of cell-phone use while driving is carried over from the opening vignette of Chapter 1 with a pair of new examples: The correlational approach is illustrated by research on the incidence of motor vehicle accidents resulting in substantial damage (Redelmeier & Tibshirani, 1997) or hospital attendance (McEvoy, Stevenson, McCartt, et al., 2005) at or near the time that the driver's cell phone was in use as indicated by phone-company records. The experimental approach is illustrated research using a highly realistic driving simulator to test driver reactions while conversing with a friend either via cell phone or with the friend as passenger (Strayer & Drews, 2007).

CHAPTER 5: MAKING SYSTEMATIC OBSERVATIONS

This chapter is unchanged from the seventh edition except for minor improvements in wording.

CHAPTER 6: CHOOSING AND USING RESEARCH SUBJECTS

Chapter 6 continues to focus on issues relating to using subjects/participants in the research process (e.g., sampling, volunteer bias, research deception, and using animals in research). We have updated the section on volunteer bias by including references to recent research on the impact of volunteerism in various types of research. Similarly, the section on using deception in research has been updated to include new references on the problem of deception and how to reduce the impact of deception. The section on the animal rights issue has also been updated.