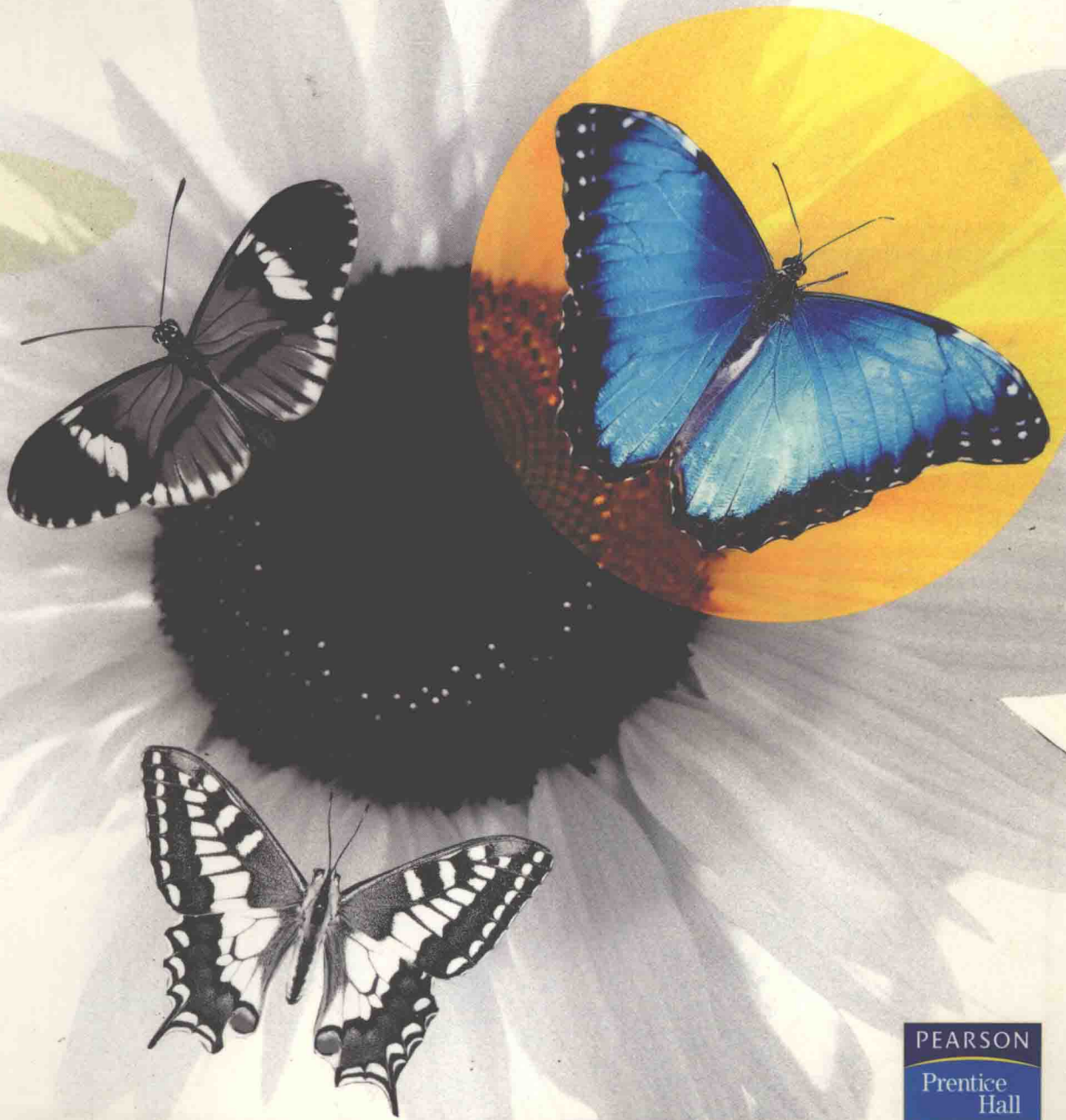


Introduction to Research Methods in Psychology

Dennis Howitt and Duncan Cramer



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Introduction to Research Methods in Psychology

Dennis Howitt

Duncan Cramer



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Preface

Introduction to Research Methods in Psychology is the final part of a trilogy which began with *Introduction to Statistics in Psychology* and *A Guide to Computing Statistics with SPSS for Windows*, now called *Introduction to SPSS12 in Psychology*. To mark the completion of the trilogy, new editions of the companion books have been produced. *Introduction to Statistics in Psychology* is now in its 3rd edition with extra features and coverage. These include new pedagogy and chapters on logistic regression. The text has thorough and extensive coverage, while remaining user friendly even when presenting the most advanced statistics. We are confident that it will continue to provide the best conceptual introduction to statistics in psychology for students at any stage. It is the only statistics text that most of us will need.

Introduction to SPSS12 in Psychology is not simply an updating to a new version of SPSS (Statistical Package for the Social Sciences). It has been revised throughout to present statistical analysis with SPSS in a step-by-step visual fashion, assuming minimal statistical knowledge. It tackles head-on the major problem with SPSS – the mass of irrelevant output. Using screenshots of data entry, data analysis and analysis output screens, the book highlights the key features of data input, analysis and output required to carry out a first rate statistical analysis on one's data. The new format continues the tradition of previous editions of providing detailed advice and examples on how to report one's findings. Each chapter provides an overview of the statistical and methodological basics that the user will need when planning their data analysis.

Turning to this volume, *Introduction to Research Methods in Psychology* is designed to complement the other two books. We do not believe that research methods and data analysis can be covered satisfactorily in a single volume, though you will find examples of successful textbooks based on this formula in almost any bookshop. The reason for this is that modern psychology is extremely varied in the styles of research employed and enjoys a level of statistical sophistication undreamed of even just a few years ago. So it does students a disservice to provide them with the basics, which once would have been sufficient but now are hopelessly inadequate. To our minds, the incredible progress of modern psychology means that teaching resources must struggle to keep up to date and to cope with the variety of different educational experiences provided by universities. At their heart, all volumes in our trilogy are modularly constructed. That is, we do not expect that all of their contents will be covered by lecturers and other instructors. Instead, there is a menu of largely self-contained chapters which can be chosen from.

This is illustrated by the coverage of *Introduction to Research Methods in Psychology*. At the broadest level it covers both quantitative and qualitative research. These are easily but wrongly seen as alternative and incompatible approaches. For some researchers, there may be an intellectual incompatibility between the two, but it is important that students

understand the intellectual roots of the two traditions, how research is carried out in these traditions, and what each is capable of. We believe that the student who is so informed will be in a better position to make intelligent appropriate choices about the style of research appropriate for the research questions they wish to address. On its own, the qualitative material in this book would effectively support any qualitative research done by modern students. There is as much detailed practical advice and theory as is available anywhere. But this is on top of quantitative coverage, which easily outstrips any competition in terms of variety, depth and authority. We have tried to provide students with resources to help them in ways largely ignored by most other texts. For example, the chapter on literature searches is extremely comprehensive and practical. Similarly, the chapter on ethics meets the most recent standards and deals with them in depth. The chapter on writing research reports places report writing at the centre of the research process rather than as an add-on at the end. We would argue that a student requires an understanding of the nature of research in psychology to be able to write a satisfactory report.

As far as is possible, we have tried to provide students with practical skills as well as the necessary conceptual overview of research methods in modern psychology. Nevertheless, there is a limit to this. The bottom line is that anyone wishing to understand research needs to read research. Hence, almost from the first page we emphasise that reading is not merely unavoidable but crucial. Without reading, the point of the book is missed. It is not intended as a jumble of technical stuff too boring to be part of any module other than one on research methods. The material in the book is intended to fill out one's understanding of psychology by explaining just how researchers go about creating psychology. At times this can be quite exciting.

This is the fifth book the authors have written together. It is also the one that came close to spoiling a long friendship. What became very clear while writing this book is how emotive the topic of research methods can be. We found out probably for the first time how different two people's thinking can be, even when dealing with seemingly dry topics. As a consequence, rather than smooth over the cracks – make joins when none are possible – you will find that we have incorporated the differences of opinion. This is no different from the disparity of positions to be found within the discipline itself.

The main features of this book are:

- In-depth coverage of both quantitative and qualitative methods.
- A range of pedagogic features including summaries, exercises, boxes and step-by-step instructions where appropriate.
- Analysis strategies provided for the research designs discussed.
- Detailed information about the structure, purpose and contents of research reports.
- The use of databases and other resources.
- Suggestions about how to develop research ideas for projects and similar studies.
- Ethics as an integral feature of the work of all psychologists.

Education is a cooperative effort. So should you find errors then please let us know. These can be difficult to spot but easy to correct. Ideas and comments of any sort would be most welcome.

We wish to thank Morten Fugelvand of Pearson Education for encouraging us to write this book, and Emma Travis for making sure that we did and did so on time (well just about).

Dennis Howitt
Duncan Cramer
August 2004

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PART 1

The basics of research

1

The role of research in psychology

Overview

- Research is central to all the activities of psychologists as it is to modern life in general. A key assumption of psychology is that the considered and careful collection of research data is an essential part of the development of the discipline.
- The vast majority of psychology involves the integration of theoretical notions with the outcomes of research. Psychology characteristically emphasises causal explanations. Many psychologists adhere to the belief that a prime purpose of research is to test causal propositions.
- A good psychologist – researcher or practitioner – needs to be familiar with the way in which good research is carried out. This enables them to determine the adequacy and value of the findings claimed from a particular study.
- All psychologists need the resources to be able to read research reports in detail – for example, studies reported in journals of psychological research. This requires an understanding of the purposes, advantages and disadvantages of the different research methods used to investigate issues.
- Research reports become much clearer and easy to understand once the basics of psychological research methods are known. Very often research reports are concisely written and so assume a degree of knowledge of the topic and research methods. The study of research methods will help prepare students for this.
- Psychologists have traditionally distinguished between true experiments and non-experiments. True experiments are typical of laboratory studies in psychology whereas non-experiments are more typical of more naturalistic studies in the field (community or other real-life settings).
- Many psychologists believe that true experiments (laboratory studies) in general provide a more convincing test of causal propositions. Others would dispute this on the grounds that such true experiments often achieve precision at the expense of realism.
- Conducting one's own research is a fast method to understanding research methods. Increasingly, research is seen as an integral part of the training and work of all psychologists irrespective of whether they are practitioners or academics.