INTRODUCING PSYCHOLOGICAL RESEARCH

Also by Philip Banyard

PSYCHOLOGY: THEORY AND APPLICATION (*with Nicky Hayes*)

APPLYING PSYCHOLOGY TO HEALTH

INTRODUCING PSYCHOLOGICAL RESEARCH

Sixty Studies that Shape Psychology

Philip Banyard and Andrew Grayson

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First published 1996 by
MACMILLAN PRESS LTD
Houndmills, Basingstoke, Hampshire RG21 6XS
and London
Companies and representatives
throughout the world

ISBN 978-0-333-62005-2 ISBN 978-1-349-24483-6 (eBook)
DOI 10.1007/978-1-349-24483-6

A catalogue record for this book is available
from the British Library

10	9	8	7	6	5	4	3	2	1
05	04	03	02	01	00	99	98	97	96

Typeset in Great Britain by
Aarontype Limited
Easton, Bristol

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PREFACE

Psychology is based on evidence from research studies. The main conclusions from these studies are often gathered together and put into a text book of psychology, but the details of the studies are usually left out. In this book we are presenting the details of sixty-four research studies that we think reflect the discipline of psychology. Our aim is to provide clear and accurate summaries of these important pieces of work in psychology so that you can weigh up the evidence for yourself and come to your own conclusions about what it means.

Students often do not have the opportunity to read original research articles. There are a number of reasons for this including the major problem that many of the important articles are not readily available. Even if you have access to a good library, then it takes a long time to search out the material you are looking for, and when you find the original research study it is often written in an impenetrable style.

We have tried to address these problems in this book. We are presenting the studies in a clear style (we hope), with enough details for you to be able to get a good idea of the research, and all in one volume so you do not have to trail round the local university library. The summaries are written with a brief introduction to provide some background for the research. Then we describe how the work was carried out and what was found, and we add some comments at the end to suggest one or two possible criticisms or further developments. Questions are included after each summary (with suggested answers at the back of the book) to help consolidate and develop what you have learnt.

Having read the summaries you should find the original papers relatively easy to follow, and we would encourage you to track down any that you find particularly interesting. Our feeling is that reading journal articles is a skill that needs to be developed, rather than something we can all just (magically) do. Indeed, one intention of this book is to provide an intermediate stage between standard textbooks and

the original articles upon which those textbooks (and the entire discipline of psychology) are based.

In the limited space of one book we can only present a small number of studies. We have been incredibly selective, especially when you consider that thousands of pieces of research are published every year. We have chosen our studies to illustrate how psychology has developed over the years, and we have tried to present a range of studies that illustrate the breadth of psychological research covering the areas of biological psychology, comparative psychology, social psychology, human diversity, developmental psychology, cognitive psychology and health psychology. We have also taken care to include studies that reflect the wide range of methods used by psychologists in their research, from hard-nosed experimentation to in-depth interviewing and literature searches.

Psychological evidence is still mainly presented in the form of research papers, and the studies we have chosen reflect the way that psychology is being conducted and reported. The summaries are presented in parts that are based on the traditional research areas of the subject. It is worth noting, however, that the divisions between the different areas are sometimes quite arbitrary and most of the studies have relevance in more than one area.

We hope that this book encourages you to read further in the subject and to dig out some of the original papers if you can. We also hope that you enjoy reading the material and find it as provocative and interesting as we do. Most importantly, though, we hope that you develop your own opinions about psychology drawing on the evidence presented in this text.

We would like to acknowledge the support of our colleagues in the Psychology Division at The Nottingham Trent University who provide a positive and friendly working environment.

Phil Banyard
Andy Grayson

ACKNOWLEDGEMENTS

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Academic Press, Inc. for material from E.F. Loftus & J.C. Palmer, 'Reconstruction of auto-mobile destruction', *Journal of Verbal Learning and Verbal Behavior*, 13, 1974, Tables 1, 2 (pp. 306, 307). American Association for the Advancement of Science for material from W.S. Condon & L.W. Sander, 'Neonate movement is synchronized with adult speech: Interactional participation and language acquisition', *Science*, 183, 1974, Tables 1, 2, adapted, pp.99–100, Figure 1, p.100 (pp. 279–81). Copyright © 1974 American Association for the Advancement of Science; and D. L. Rosenhan, 'On being sane in insane places', *Science*, 179, 1973, Table 1. Copyright © 1973 American Association for the Advancement of Science (pp.192, 194). American Medical Association for material from M. Friedman & R.H. Rosenman, 'Association of specific overt behaviour pattern with blood cardiovascular findings', *Journal of American Medical Association*, 169, 1959, Tables 1, 2. Copyright © 1959 American Medical Association (p. 377). American Psychological Association for material from P.J. Lang & A.D. Lazovik, 'Experimental desensitisation of a phobia', *Journal of Abnormal and Social Psychology*, 66, 1963, Tables 1, 2, 3, pp. 522, 523 (pp. 211–12); E.J. Langer & J. Rodin, 'The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting', *Journal of Personality and Social Psychology*, 34, 1976, Table 1, p. 195 (p. 384); J. Hraba & G. Grant, 'Black is beautiful: A re-examination of racial preference and identification', *Journal of Personality and Social Psychology*, 16, 1970, Table 1, adapted, p. 399 (p. 180); an illustration from I. Piliavin, J. Rodin & J. Piliavin, 'Good samaritanism: An underground phenomenon?' *Journal of Personality and Social Psychology*, 13, 1969 (p. 12); Tables 2.1, 2.2, 2.3 from R.E. Nisbett, C. Caputo, P. Legant & J. Marecek, 'Behaviour as seen by the actor and as seen by

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Dec. 1952, pp. 24, 25 (pp. 124, 125); by Carol Woike Donner from J.B. Derogowski, 'Pictorial perception and culture', *Scientific American*, 227, Nov. 1972, pp. 83, 86 (pp. 325, 326, 327); by Sarah Love from Robert F. Bales, 'How people interact in conferences', *Scientific American*, 192, March 1955, p. 35 (p. 54) and Muzafer Sherif, 'Experiments in group conflict', *Scientific American*, 195, Nov. 1956, p. 57 (p. 62); and by Bunji Tagawa from John B. Calhoun, 'Population density and social pathology', *Scientific American*, 206, Feb. 1962, pp. 140–1 (p. 130). Camera Press London for the photograph on p. 333; Popperfoto for the photograph on p. 422; and Philip Zimbardo for the photograph on p. 47.

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