

Behavior Therapy

Toward an Applied Clinical Science

Agras
Kazdin
Wilson

Behavior Therapy

Toward an Applied Clinical Science

W. Stewart Agras

Stanford University Medical School

Alan E. Kazdin

Pennsylvania State University

G. Terence Wilson

Rutgers University



W. H. Freeman and Company
San Francisco

Sponsoring Editor: W. Hayward Rogers; Project Editor: Betsy Dilemnia; Copyeditor: Paul Monsour; Designer: Gary A. Head; Production Coordinator: Fran Mitchell; Compositor: Typesetting Services of California; Printer and Binder: Book Press.

Library of Congress Cataloging in Publication Data

Agras, W Stewart.
Behavior therapy.

(A Series of books in psychology)

Bibliography: p.

Includes index.

1. Behavior therapy—Research. I. Kazdin, Alan E., joint author. II. Wilson, G. Terence, 1944— joint author. III. Title.

RC489.B4A36 616.8'914 78-32069

ISBN 0-7167-1086-2

ISBN 0-7167-1087-0 pbk.

Copyright © 1979 by W. H. Freeman and Company

No part of this book may be reproduced by any mechanical, photographic, or electronic process, or in the form of a phonographic recording, nor may it be stored in a retrieval system, transmitted, or otherwise copied for public or private use, without written permission from the publisher.

Printed in the United States of America

1 2 3 4 5 6 7 8 9

Behavior Therapy

A Series of Books in Psychology

Editors: Richard C. Atkinson (1971-1975)
Jonathan Freedman
Gardner Lindzey
Richard F. Thompson

Agras, Kazdin, and Wilson, *Behavior Therapy*
Aronson, *The Social Animal*
Aronson (ed.), *Readings About the Social Animal*
Bower, *Development in Infancy*
Bower, *A Primer of Infant Development*
Bower, *Human Development*
Cairns, *Social Development*
Cofer (ed.), *The Structure of Human Memory*
Edwards, *An Introduction to Linear Regression and Correlation*
Fantino and Logan, *The Experimental Analysis of Behavior*
Fantino and Reynolds, *Contemporary Psychology*
Freedman, *Crowding and Behavior*
Hassett, *A Primer of Psychophysiology*
Hintzman, *The Psychology of Learning and Memory*
Julien, *A Primer of Drug Action*
Kandel, *Cellular Basis of Behavior*
Kandel, *Behavioral Biology of Aplysia*
Klatzky, *Human Memory*
Kleinke, *Self-Perception*
Krantz, Atkinson, Luce, and Suppes (eds.), *Contemporary Developments in Mathematical Psychology: Learning, Memory, and Thinking*
Krantz, Atkinson, Luce, and Suppes (eds.), *Contemporary Developments in Mathematical Psychology: Measurement, Psychophysics, and Neural Information Processing*
Lee, *Experimental Design and Analysis*
Loehlin, Lindzey, and Spuhler, *Race Differences in Intelligence*
Lomax, Kagan, and Rosenkrantz, *Science and Patterns of Child Care*
Ludel, *Introduction to Sensory Processes*
Maser and Seligman (eds.), *Psychopathology: Experimental Models*
McClearn and DeFries, *Introduction to Behavioral Genetics*
Meyers and Grossen, *Behavioral Research*
Mussen and Eisenberg-Berg, *Roots of Caring, Sharing, and Helping*
Neisser, *Cognition and Reality*
Nordby and Hall, *A Guide to Psychologists and Their Concepts*
Norman and Rumelhart, *Explorations in Cognition*
Ornstein, *Psychology of Consciousness*
Ornstein (ed.), *The Nature of Human Consciousness*
Phillips, D. L., *Basic Statistics for Health Science Students*
Phillips, J. S., *Statistical Thinking*
Rachlin, *Behavior and Learning*
Rachman, *Fear and Courage*
Raphael, *The Thinking Computer*
Schank and Colby (eds.), *Computer Methods of Thought and Language*
Seligman, *Helplessness*
Teyler, *A Primer of Psychobiology*
Vasta, *Studying Children*
Vernon, *Intelligence*
Walters and Grusec, *Punishment*
Wickelgren, *How to Solve Problems*
Willemsen, *Understanding Statistical Reasoning*
Willemsen, *Understanding Infancy*
Willerman, *The Psychology of Individual and Group Differences*
Willerman and Turner (eds.), *Readings About Individual and Group Differences*

Preface

This volume is the outgrowth of a project initiated by Gardner Lindzey in his capacity as Director of the Center for Advanced Study in the Behavioral Sciences, with financial support derived largely from the Foundations Fund for Research in Psychiatry. Under these auspices, a group of behavioral scientists actively involved in the development of behavior therapy and modification were assembled at the Center for the 1976 – 1977 academic year. These fellows consisted of W. Stewart Agras, Nathan H. Azrin, Alan E. Kazdin, Walter Mischel, Stanley Rachman, and G. Terence Wilson. The seventh member of the group was Alexander L. George, a political scientist from Stanford University who was a fellow at the Center for a second time. (Interestingly, Alex's first fellowship year was 1956 – 1957, and one of the other Center fellows that year was Joseph Wolpe.) Specifically, what became known as the "behavioral group" was charged with preparing a report that evaluated the current status of outcome research bearing on behavior therapy, considered the methodological problems and solutions in this area of research, and made recommendations for future research directions.

The group met weekly throughout the year in discussions that covered a broad range of issues, only some of which were directly related to the immediate task of preparing the report. A special conference with a group of distinguished research psychiatrists—Peter Dews (Harvard University), Daniel X. Freedman (University of Chicago), Frederick C. Redlich (Yale University), Melvin Sabshin (American Psychiatric Association), and Robert S. Wallerstein (University of California Medical School, San Francisco—and Gardner Lindzey provided further direction and stimulus. The net result was the completion of a joint report (Agras et al., 1977) on the status of behavioral outcome research that was submitted to the Center in July 1977. Much of this report was based on a book on the evaluation of behavior therapy that Alan Kazdin and Terry Wilson (1978) completed during their stay at the Center.

As the report neared completion, a decision was taken to explore the possibility of preparing a less technical document that might be more appropriate for wider dissemination to other professionals and to funding and policy-making agencies. To this end a planning and writing committee was formed consisting of Stewart Agras, Alan Kazdin, and Terry Wilson. A draft version of the present volume was put together and circulated to the other members of the group following their return to their home institutions. Armed with this feedback, the three of us reassembled at the Center in March 1978 to make final revisions. The product that emerged goes beyond the boundaries of behavior therapy and is addressed to the more general issues of future directions for research on the development, application, and evaluation of psychological treatment methods. Inevitably, in this process the present volume came to reflect

the particular interests and conceptual commitments of its three authors—Agras, Kazdin, and Wilson. It must be emphasized that this volume would never have been conceived let alone completed without the invaluable assistance, support, and substantive contributions of all group members. Some of the content is drawn directly from the group's final report to the Center (Agras et al., 1977), and much of the thinking expressed herein derives from our group meetings and numerous joint and separate discussions of these and related issues. We wish to express our appreciation to our fellow group members—good friends and respected colleagues one and all. Nonetheless, we must assume full and final responsibility for the views expressed here. The responsibility is shared equally among us; the order of authorship is alphabetical.

The opportunity to complete this book was made possible by our fellowships at the Center for Advanced Study in the Behavioral Sciences. W. Stewart Agras received financial support from the National Institute of Mental Health (1 T 32 — MH14581) and the Foundations Fund for Research in Psychiatry; Nathan H. Azrin from the Spender Foundation, the National Institute for Mental Health (1 T 32 — MH14581), and the Foundations Fund for Research in Psychiatry; Alexander L. George from the Foundations Fund for Research in Psychiatry, the National Science Foundation (Stanford grant), and Stanford University; Alan E. Kazdin from the Foundations Fund for Research in Psychiatry, the Spencer Foundation, the National Institute of Mental Health (1 T 32 — MH14581), and Pennsylvania State University; Walter Mischel from the Foundations Fund for Research in Psychiatry, the National Institute for Mental Health (MH-06830); Stanley Rachman from the Foun-

dations Fund for Research in Psychiatry; and G. Terence Wilson from the Foundations Fund for Research in Psychiatry, the National Institute of Mental Health (1 T 32 —MH14581), and Rutgers—The State University of New Jersey.

Finally, it is with special pleasure that we express our gratitude to the Center, its staff, and its Director, Gardner Lindzey. Their kindness and congeniality are fundamental to making this lovely place the idyllic social and intellectual haven it has proven to be. Other friends deserving special mention are Margaret Amara and Christine Hoth, who provided us with incomparable library services and daily cheer, and Kay Jenks, who helped type earlier versions of this manuscript, smoothed all our arrangements, and provided invaluable moral support throughout.

January 1979

W. Stewart Agras
Alan E. Kazdin
G. Terence Wilson

Center for Advanced Study
in the Behavioral Sciences,
Stanford, California

Behavior Therapy

Contents

Preface	vii
1 <i>Behavior Therapy: Concepts and Characteristics</i>	1
2 <i>The Efficacy of Behavior Therapy</i>	28
3 <i>Conventional Clinical Outcome Research</i>	47
4 <i>Alternative Strategies for Therapy Research</i>	67
5 <i>Additional Therapy Research Strategies</i>	84
6 <i>The Progression of Therapy Research</i>	105
7 <i>Implications and Recommendations for Service Delivery, Training, and Research</i>	124
8 <i>Summary and Overview</i>	148
Index	169

1

Behavior Therapy: Concepts and Characteristics

Behavior therapy is a relatively new approach to the assessment and treatment of clinical disorders.¹ It was only two decades ago that Wolpe (1958) completed his landmark text on a psychological approach to the treatment of clinical disorders, which has since come to be called behavior therapy. Although still controversial in some quarters, the doctrinaire attitudes and professional hostility that behavior therapy once faced have largely given way to acceptance. Behavior therapy has had a profound effect on psychology and education. It is well represented in doctoral training programs in clinical psychology in this country, some of the most respected programs being primarily if not exclusively behavioral in orientation. A lesser but nonetheless noticeable impact on psychiatry and social work is also evident. In 1973 a special task force of the American Psychiatric Association resolved that behavior therapy has

¹The term *behavior therapy* is used synonymously with *behavior modification* throughout this volume. Although some writers have distinguished between these terms, usage has not been consistent and little has been achieved in the process.

"much to offer informed clinicians in the service of modern clinical and social psychiatry." Practitioners of behavior therapy are everywhere in demand, and psychiatrists, psychologists, and social workers have adopted many of its methods. In addition to advances in the United States, Canada, western Europe, Australia, and New Zealand, active centers of behavioral research and therapy are found in Latin American countries, such as Brazil and Mexico. Behavior therapy accounts for a significant part of the psychological and psychiatric literature. According to the *Psychological Abstracts Annual Index*, a widely accepted source of publication activity in psychology, the number of publications on behavior therapy had surpassed that for psychoanalysis by 1972. Numerous scientific journals are devoted exclusively to behavior therapy. The literature is so large and diverse that an *Annual Review* series on the theory and practice of behavior therapy was begun in 1973 (Franks and Wilson, 1973 — 1978), and a specialized journal of abstracts of the contemporary literature recently established. And there are no signs of any slowing of this literature explosion.

Of singular importance is the fact that the nature and scope of behavior therapy are showing relatively rapid change. Clinical practice reflects the development of new techniques and the modification of existing methods; the range of procedures and problems that are being researched shows exponential growth, and theoretical views, often sharply conflicting, are the subject of lively debate. To obtain perspective on the development of behavior therapy and to understand current trends, it is necessary to review briefly the major themes in the emergence of behavior therapy as a therapeutic alternative to more traditional psychotherapeutic approaches (see Kazdin, 1978, for a detailed discussion of the history of

behavior therapy). In attempting to distill the essence of contemporary behavior therapy from the developments of the past 20 years, we are not unmindful of Boring's (1950) injunction in *A History of Experimental Psychology*—that he spoke “with confidence” of developments occurring up to 20 years before his book, with “less assurance of the next decade,” and with “gratuitous courage” for the most recent decade! Nonetheless, identifying some of the major accomplishments and trends that have emerged in this burgeoning field does seem possible. This volume is designed to give a brief overview of the field. In this chapter the different emphases and theoretical positions within behavior therapy are briefly reviewed and the characteristics that presently define the field described. The following chapter samples some of the evidence on the applicability and outcome efficacy of behavior therapy. Chapter 3 highlights the conceptual and methodological inadequacies of much of conventional therapy outcome research. Chapters 4, 5, and 6 provide different methodological prescriptions for innovative and improved research on treatment evaluation, together with an analysis of the interrelationships among different methodological strategies and the overall progression of treatment outcome research. The implications of this developing science of psychological treatment for service delivery, training, and research policy are discussed in Chapter 7. Chapter 8 summarizes the major issues, conclusions, and recommendations that are presented throughout this volume.

A Brief History

Despite numerous historical influences and antecedents, the origins of contemporary behavior therapy

can be traced directly to separate but related developments in the 1950s. A major impetus was the growth of operant conditioning in the United States and the extension of these principles and procedures to personal and social problems. This development was spurred by Skinner's (1953) book *Science and Human Behavior*, in which he criticized the prevailing psychodynamic approach and reconceptualized psychotherapy in behavioral terms. Psychotherapy was recast as an educational rather than a medical endeavor, and behavior was recognized as important in its own right instead of being indicative of a more basic underlying problem.

In 1959, Eysenck, working at the Institute of Psychiatry in London, defined behavior therapy as the application of "modern learning theory" to the treatment of psychiatric disorders. The phrase "modern learning theory" referred to the behavioristic formulations of learning theorists such as Pavlov, Hull, Mowrer, and to a much lesser extent, Skinner. Eysenck conceptualized *behavior* therapy as a more scientifically acceptable and more therapeutically effective alternative to *psychotherapy*, which was criticized as unscientific and lacking in proof of its efficacy. Finally Wolpe (1958), in his text *Psychotherapy by Reciprocal Inhibition*, introduced several important treatment techniques based on neo-Hullian conditioning principles and his own research on the elimination of experimentally induced neurotic reactions in cats.

These early developments in behavior therapy represented an accommodation of interests rather than an identity of views. The psychoanalytic establishment was the common foe; the quasi-disease model of the etiology and treatment of clinical disorders was uniformly rejected; and the lack of evidence supporting the efficacy of traditional

psychotherapeutic methods was emphasized. Despite their differences, however, the early behavioral approaches (neo-Hullian and operant) did share some fundamental assumptions aside from the natural bond that derives from concerted opposition to a common opponent. They both sought to ground their principles and procedures in scientifically established learning principles. Both expressed a commitment to experimental method and stressed the importance of critically evaluating the therapeutic outcome of their methods. Importantly, and in contrast to previous approaches, they both rejected the psychoanalytic model and proposed explicitly formulated alternative views of the development, maintenance, and modification of clinical disorders.

Behavior therapy is not a monolithic structure. During the 1960s the differences among behavioral approaches became more apparent as they were increasingly accepted and as the field became more self-critical. Unlike Eysenck and Wolpe, who defined behavior therapy primarily in terms of the application of conditioning principles to clinical disorders, Ullmann and Krasner (1969) offered a more encompassing definition of behavior therapy as "treatment deducible from the sociopsychological model that aims to alter a person's behavior *directly* through the application of general psychological principles." As such, behavior therapy was contrasted with traditional treatment that was "deducible from a medical or psychoanalytic model that aims to alter a person's behavior *indirectly* by first altering intrapsychic organizations." In this conception, the defining characteristic was the *model* of abnormal behavior rather than the specific principles or procedures that constituted therapeutic intervention.

Lazarus (1971, 1976), who studied under Wolpe, later developed what he termed *broad-spectrum be-*

havior therapy, emphasizing the need for a multifaceted clinical approach that went beyond the limits of early behavior therapy. The resulting controversy created a rift between the proponents of this approach and proponents of Wolpe's. Lastly, Bandura (1969) detailed the most comprehensive and sophisticated analysis of behavior therapy to date within the framework of social learning theory. In contrast to previous approaches, Bandura's influential book emphasized the importance of vicarious learning, cognitive mediating processes, and self-regulatory function in human behavior.

Now, in the 1970s, behavior therapy is more mature and considerably more complex and varied than in any of its earlier stages. Gone is the unbridled enthusiasm of the late 1950s and early 1960s, replaced by a more cautious optimism. Outdated are simplistic definitions of behavior therapy as the application of learning theory to clinical disorders. As Kazdin and Wilson (1978, p. 1) put it:

Contemporary behavior therapy is marked by a diversity of views, a broad range of heterogeneous procedures with different theoretical rationales, and open debate about conceptual bases, methodological requirements, and evidence of efficacy. In short, there is no clearly agreed upon or commonly accepted definition of behavior therapy.

Broadly conceived of, the different approaches in contemporary behavior therapy include applied behavior analysis, a neobehavioristic mediational model, social learning theory, and cognitive behavior modification.² The purpose in delineating these different approaches is to identify the scope of the field.

²Not addressed here is Lazarus's (1976) multimodal behavior theory, which is often identified as one of the various treatment approaches within behavior therapy. Despite a major overlap in the therapeutic techniques that are employed, multimodal therapy can be differentiated from