# PRINCIPLES OF BEHAVIOR THERAPY

G.Terence Wilson K. Daniel O'Leary



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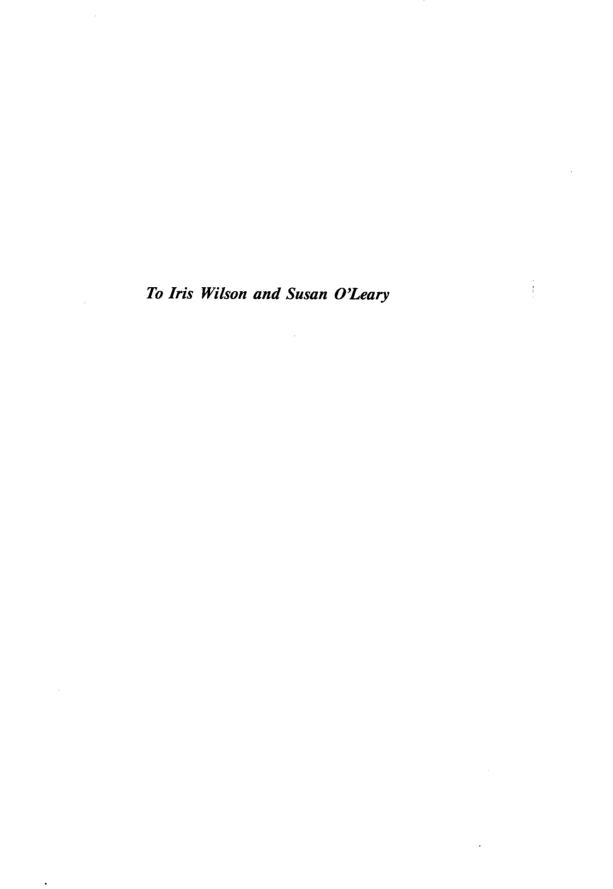
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G. Terence Wilson, Ph.D., State University of New York at Stony Brook, is Professor of Psychology at the Graduate School of Applied and Professional Psychology, Rutgers University. He is President-Elect of the Association for Advancement of Behavior Therapy and was a Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, California (1976-1977). He is Editor (with Cyril Franks) of the Annual Review of Behavior Therapy: Theory and Practice and has coauthored several books, including Behavior Therapy: Application and Outcome (with K. D. O'Leary). Evaluation of Behavior Therapy: Issues, Evidence, and Research Strategies (with Alan Kazdin), Behavior Therapy: Toward an Applied Clinical Science (with Stewart Agras and Alan Kazdin), and Effects of Psychotherapy (with Stanley Rachman). He is Associate Editor of Journal of Applied Behavior Analysis and Cognitive Therapy and Research and a member of the editorial board of several journals, including Journal of Consulting and Clinical Psychology and Contemporary Psychology. He is also a practicing therapist and a consultant to industry on behavioral health programs.



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# **Preface**

There are several reasons why reading this book is of direct relevance to you. In teaching psychology to college undergraduates we have consistently heard the complaint that there was too much emphasis on experimental psychology in the laboratory setting, on methodology and statistics, and too little attention given to real life human behavior. Often neglected has been an analysis of the different psychological problems most of us have experienced in one form or another. Almost always absent has been a presentation of practical and effective methods for helping those of our fellow human beings who are in distress. This book also concentrates on scientific research and experimental psychology. But there is a difference. The content of the research studies concerns treatment of problems you have heard about or witnessed, such as a mentally retarded child, the juvenile delinquent, unrealistic fears or phobias, sexual inadequacy, and the inability to diet, drink less, or stop smoking. More importantly, this is a book about how psychologists and psychiatrists have made use of the findings of experimental research in attempting to cope with these human difficulties. We think that this will show the relevance of at least that part of experimental psychology that previously might have seemed to have only a remote or abstract connection to life in the real world. We hope that our enthusiasm for the potential that scientific psychology has for improving our human condition will similarly inspire students who read this text.

Behavior therapy is the application of the principles of scientific psychology to human problems. In just under 20 years of existence it has shown phenomenal growth and currently ranks as one of the major approaches in the treatment of psychological problems. Psychiatrists, clinical and school psychologists, social workers, and nursing personnel have all increasingly adopted the principles of behavior therapy. The American Psychiatric Association has endorsed behavior therapy, declaring that it has "much to offer informed clinicians in the service of modern clinical and social psychiatry." In addition to the U.S.A. and Canada, Western Europe, Australia, New Zealand, and parts of Latin America such as Brazil and Mexico are active centers of behavior research and therapy. Behavior therapy now accounts for a significant part

of the psychological and psychiatric literature. Aside from the ever burgeoning publication of new books, no fewer than eight major English-speaking journals are devoted exclusively to behavior therapy. So diverse and large is the behavioral literature that there is a need for a special series—the *Annual Review of Behavior Therapy: Theory and Practice*<sup>1</sup>—that summarizes and reviews the field on a yearly basis.

An important emphasis of this book is on the scientific evaluation of behavior change methods. Are they effective? Do they help people? Of course, these questions apply not only to behavior therapy but to all forms of therapy from psychoanalysis to encounter groups. This is the age of public and professional accountability, of greater consumer awareness than ever before. As a prospective client requiring therapy, as a heavily burdened taxpayer supporting massive federal funding of diverse treatment facilities, or simply as a concerned citizen, you will want to know the answer to these questions. But how do you evaluate such a complex matter as therapeutic outcome? In this book we try to do more than help you evaluate behavior therapy; we describe evaluation strategies that can—and should, we feel—be applied to various treatment programs that purport to deal with psychological disturbances and abnormal behavior.

Related to the issue of accountability is that of ethics. Mental health services in general and behavior modification in particular have sometimes been attacked as unethical and even illegal. Who decides what behavior should be changed and in whom? Although abuses have undoubtedly occurred, behavior therapy has addressed the ethical issue more directly perhaps than any other therapeutic approach. Procedures have been identified that can be followed to enhance personal freedom and growth and to minimize the risk of future abuses of psychiatric patients. Again, while we discuss these procedures in the specific context of behavior therapy, they have broad applicability to all other treatment approaches.

Last but not least, this book might help you to understand better your own behavior and the influences that regulate it. Self-control is a key focus of behavior therapy. Many behavioral methods have been delineated well enough that simply reading about them occasionally enables you to help yourself—and others—change. Although this is not a practical manual on behavior change, the principles described are those on which many popular self-help methods are based. Two examples of how a book of this nature might promote behavior change and personal understanding can be drawn from reactions to our previous text, Behavior Therapy: Application and Outcome.<sup>2</sup>

One of the editors of the book learned how to toilet train her child successfully after reading our description of the relevant behavioral procedure.

Franks, C. M., and Wilson, G.T. Annual review of behavior therapy: Theory and practice, Vols. 1-7. New York: Brunner/Mazel, 1973-1979.

<sup>&</sup>lt;sup>2</sup>O'Leary, K.D., and Wilson, G.T. *Behavior therapy: Application and outcome.* Englewood Cliffs, N.J.: Prentice-Hall, 1975.

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Then there was the college junior who had confided to his parents that he was homosexual and came under severe pressure to enter into therapy designed to change him into a heterosexual. On reading our book he discovered that homosexuality is not a form of mental illness, that homosexuals can lead happy, fulfilling lives, and that most behavior therapists assist clients to choose their preferred life style rather than arbitrarily coercing adoption of the therapist's personal prejudices. A couple of sessions with such a therapist resolved the family crisis, alleviated the student's severe guilt, and helped the parents accept the mature decision that it was their son's prerogative to decide his sexual orientation.

# Acknowledgments

Many individuals contributed to this book. Hillary Turkewitz extensively edited many of the chapters and participated in substantive conversations regarding principles and issues. Etienne Perold and Carol Treanor read several chapters and made helpful suggestions about style and presentation. Bea Porter and Susan Geiss (both State University at Stony Brook) and the following reviewers—Peter D. Balsam (Barnard College), C. Peter Bankart (Wabash College), James Couch (James Madison University), D. Balfour Jeffrey (University of Montana), Jeffrey C. Levy (Seton Hall University), Richard J. Morris (University of Arizona), Grover C. Richards (Georgia Southern College), Gary A. Szakmary (Case Western Reserve University), and Sherman Yan (Essex Community College)-provided useful comments on the entire manuscript. Ruth Shepard and Barbara Honig provided invaluable assistance in editing and typing the manuscript and in soliciting permissions to reprint material. Dr. Raymond C. Rosen of the Department of Psychiatry, Rutgers Medical School, was the co-therapist in the case of Mr. B, the exhibitionist, whose treatment is described in Chapter 1, and we thank him for permission to use this clinical illustration. We are particularly indebted to Albert Bandura, the general editor of the Prentice-Hall series on social learning theory who provided critical, detailed substantive feedback on each chapter.

One of us (GTW) completed several chapters while a Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, California, an opportunity made possible through the financial support of the Foundations Fund for Research in Psychiatry, the National Institute for Mental Health (Grant Number 1T32 NH14581), and Rutgers University. Special thanks are due the staff and director of the Center, Gardner Lindzey, for providing a congenial social and intellectual environment in which to work. Numerous discussions with members of the "behavior therapy group" at the Center (Stewart Agras, Nate Azrin, Alex George, Alan Kazdin, Walter Mischel, and Jack Rachman) contributed directly and indirectly to this volume, although the ultimate responsibility for the views expressed here is ours.

Last, but hardly least, we express our gratitude to our wives, Elaine and Susan, for their constant support and encouragement in the writing of this book.

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# Behavior Therapy: Description and Definition

The Case of Mr. B
The Case of Diane T
The Case of Johnny K
A Brief History of Behavior Therapy
Joseph Wolpe in South Africa
Hans Eysenck in England
B.F. Skinner in the U.S.A.

Behavior Therapy: A Scientific Revolution Current Conceptual Approaches Within Behavior Therapy

Applied Behavior Analysis

The Neobehavioristic Stimulus-Response Approach
Cognitive Behavior Modification
Social Learning Theory
Multimodal Behavior Therapy

Common Characteristics of the Different Approaches Within Behavior Therapy

A Model of Abnormal Behavior An Applied Science

Some Commonly Asked Questions About Behavior Therapy Summary

### The Case of Mr. B

Mr. B was a thirty-five-year-old man, married, with two sons aged eight and five years, from a successful, middle-class family. He was a persistent exhibitionist whose pattern over the past twenty years had been to expose his genitals to unsuspecting adult women as often as five or six times a week. Fifteen years of intermittent psychoanalytic treatment, several hospitalizations at psychiatric institutions in the U.S.A., and a six-year prison sentence for his deviant sexual behavior had failed to help Mr. B change his unwanted, but apparently uncontrollable, behavior. He was currently under grand jury indictment for exposing himself to an adult woman in the presence of a group of young children. There was every prospect that he would receive a life sentence in view of his repeated offenses and his numerous failures to show improvement as a result of lengthy and costly psychiatric treatment. At least one psychiatrist had diagnosed him as untreatable and had advocated his removal from free society. Shortly before coming to trial, Mr. B's psychoanalyst referred him to one of the current authors as a last resort to see if behavior therapy might succeed where traditional forms of treatment had failed.

Mr. B was hospitalized and treated on a daily basis for six weeks, a total of about 50 hours of direct therapist contact. After spending some time to develop a trusting personal relationship so that Mr. B would feel comfortable in disclosing intimate details about his problems, the therapist conducted a series of intensive interviews to ferret out the specific environmental circumstances and psychological factors that were currently maintaining Mr. B's deviant behavior. With his permission, his parents and wife were also interviewed to obtain more information and to corroborate aspects of his own description of the development and present status of the problem. In order to obtain a sample of his actual exhibitionist behavior, a situation was arranged in a hospital office that closely resembled the conditions under which Mr. B would normally expose himself in real life. Two attractive female professional colleagues of the therapist were seated in a simulated doctor's waiting room, reading magazines, and Mr. B was instructed to enter, sit across from them, and expose himself. Despite the artificial setting, Mr. B proceeded to expose himself, became highly aroused, and nearly masturbated to orgasm. This entire sequence was videotaped, and objective measures of Mr. B's response to this scene as well as to various other adult sexual stimuli were obtained by recording the degree of penile erection he showed while observing the videotape and selected other erotic filmed material.

On the basis of this behavioral assessment, a detailed picture was developed of the chain, or sequence, of internal and external stimuli and responses that preceded his acts of exposure. For example, a woman standing alone at a bus-stop as he drove past in his car often triggered a pattern of thoughts and images that caused him to circle the block and eventually expose himself.

Alternatively, the anger he experienced after a heated argument with his father, which he could not handle, could also elicit the urge to expose himself. The more Mr. B thought about exposing himself, the more obsessed he became with a particular woman and her anticipated reactions. Since he tuned out everything except his immediate feelings and intentions, he became oblivious to the consequences of his actions. His behavior was out of control. Mr. B hoped that his victim would express some form of approval, either by smiling or making some sexually toned comment. Although this did happen periodically, most women ignored him, and some called the police.

Not atypically, Mr. B's idea about behavior therapy was that he would be passively "conditioned" so that his problem would disappear. The therapist systematically disabused him of this notion by explaining that success could be achieved only with his active cooperation in all phases of the treatment program. He was told that there was no automatic "cure" for his problem, but he could learn new behavioral self-control strategies, which, if practiced conscientiously and applied at the right time, would enable him to avoid further deviant behavior.

As in most complex clinical cases, treatment was multifaceted, meaning that a number of different techniques were employed to modify different components of the disorder. His own beliefs about his problem were that he was suddenly seized by a desire, which he could not consciously control, and that his subsequent actions were "involuntary." Analysis of the sequence of events that always preceded exposure altered Mr. B's expectation that he was unable to control his behavior. He was shown how he himself was instrumental in transforming a relatively weak initial urge into an overpowering compulsion to expose because he attended to inappropriate thoughts and feelings and engaged in behaviors that increased, rather than decreased, the temptation. It was explained that the time to break this behavioral chain, to implement the self-control strategies he would acquire as a result of treatment, was at the beginning when the urge was weakest. In order to do this, he would have to learn to be aware of his thoughts, feelings, and behavior, and to recognize the early warning danger signals.

Specific tension states had often precipitated exposure. Accordingly, Mr. B was trained to reduce this tension through the procedure of progressive relaxation. Instead of exposing himself, he learned to relax, an activity incompatible with exposure behavior. Assertion training was used to help Mr. B cope constructively with feelings of anger and to express them appropriately, rather than to seek relief through deviant behavior. Using role-playing, the therapist modeled an appropriate reaction and then provided Mr. B with reinforcing feedback as he rehearsed progressively more effective ways of responding to anger-inducing events. In covert modeling Mr. B was taught to imagine himself in a range of situations that customarily had resulted in exposure, and to see himself engaging in alternative responses to exposure, for example, relaxing away tension, expressing anger appropriately, reminding himself of the conse-

quences of being caught, or simply walking away from a tempting situation.

Aversion conditioning was used to decrease the positive appeal exposure had for him. During repeated presentations of the videotape of his exposure scene, a loud, subjectively aversive police siren was piped over earphones he was wearing on an unpredictable schedule. In addition to this classical conditioning procedure in which Mr. B had no control over the presentation of the aversive stimulus, an avoidance and/or escape contingency was introduced at some sessions. By shouting "stop!" as soon as he heard the siren begin, Mr. B could terminate it. Whereas Mr. B initially found watching the videotape pleasurable and sexually arousing, he progressively lost all sexual interest in it. He reported that he experienced marked difficulty in concentrating on the scene because he began to anticipate the disruptive—and given his personal social learning history, an understandably frightening—police siren in connection with thoughts of exposure. The siren was also paired systematically with a range of fantasies of different situations in which he would expose himself. In addition to the siren, Mr. B learned how to associate self-administered aversive cognitive events with deviant thoughts or images. For example, imagery of an aversive event, such as being apprehended by the police, was coupled with thoughts of exposure. Periodically, Mr. B's sexual arousal to the videotape was assessed directly by measuring penile erection in order to provide an evaluation of his progress.

Mr. B had exposed himself only to women he did not know personally. The final treatment method consisted of asking Mr. B to expose his penis in front of a panel of three male and three female therapists. This procedure was extremely aversive to him and was designed to associate the act of exposure with unpleasant consequences.

Following every session with the therapist, Mr. B was given specific homework assignments to complete. These included self-monitoring and recording any urges to expose himself, so as to ensure awareness about any signs of reverting back to old habits. Other assignments involved practicing relaxation exercises and recording the degree to which the relaxation was associated with reduced tension; rehearsing the association of aversive imagery with fantasies of exposure, recording the intensity of the aversive imagery and the clarity of the exposure fantasies on ten-point rating scales; and engaging in assertive behavior where appropriate during interactions with other patients and staff on his assigned ward. Direct observation of his interpersonal behavior on the hospital ward provided an index of his utilization of assertive behavior.

Finally, after speaking with the therapist about cooperation and apparent progress in the treatment program, Mr. B's wife agreed to several joint therapy sessions which used behavioral methods for improving marital communication and interaction. Although the behavioral assessment had indicated that Mr. B's exhibitionist behavior was not directly caused by an unhappy marriage or lack of sexual satisfaction from his wife, the rationale was that improvement in these spheres of functioning would help consolidate and sup-

port his self-control over deviant sexual behavior acquired through the rest of the treatment program.

On leaving the hospital at the end of treatment, Mr. B continued to self-monitor any thoughts or feelings about exposing himself, to relax systematically, to assert himself, and to rehearse the pairing of aversive imagery with thoughts of exposure. Every week he mailed these records to the therapist for analysis, a procedure designed to generalize treatment-produced improvement to the real world and to maintain self-control over time. Another facet of this maintenance strategy was a series of booster sessions that were scheduled approximately four months after therapy in which he returned to the hospital for a week of intensive treatment along the same lines as described above.

In large part owing to the therapist's strong recommendation, the court gave him a suspended sentence. A two-year follow-up showed that Mr. B had refrained from any exhibitionism, had experienced very few such desires, and felt confident in his newly found ability to control any urges that might arise.

## The Case of Diane T

Diane T was a nineteen-year-old college junior who had sought therapy at the psychological clinic of the university on the advice of a professor in whom she had confided. Struggling to keep back her tears, Diane slowly began to tell her therapist of her unhappiness—of her sense of loneliness, social insecurity, anxiety, and depression. The strain of her personal problems was beginning to interfere with her sleep and with her school work. An otherwise excellent student, Diane was finding it increasingly difficult to concentrate or study because of persistent anxiety and overpowering negative feelings about herself. A shy person, she had become almost completely withdrawn socially. This accentuated her sense of loneliness and depression.

The therapist spent the first session or two getting to know Diane and creating a climate of trust and cooperation, two indispensable elements of all effective therapy. Gradually the therapist began to pinpoint the specific conditions that were currently responsible for Diane's distress. Much of this information was obtained during a detailed, structured clinical interview. In addition, the therapist asked Diane to become an active participant in the therapeutic process by keeping a daily diary in which she was to record events relevant to her problem and her reactions to them. Diane's self-monitoring provided the therapist with the sort of specific information he needed to assess the variables influencing her behavior. It also helped Diane to become aware of the reasons for her unhappiness.

A focal point in Diane's problems was her shyness in social interactions. She was overly self-conscious, unable to express her feelings publicly, and