

Pergamon General Psychology Series

The Practice of
**Behavior
Therapy**
third edition

Joseph
Wolpe

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The Practice of Behavior Therapy

Third Edition

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Preface to the Third Edition

In the eight years since the second edition of this book was published, the main technical advances in behavior therapy have been in the area of deconditioning methods based on *in vivo* exposure, and perhaps on the use of flooding techniques in particular. Cognitive-change procedures have received much more explicit attention but, on the negative side, we have seen the promotion of the absurd claim that changed thinking is the basis of all psychotherapeutic change.

Interest in behavior therapy has grown rapidly, as the greatly increased membership of the American Association for the Advancement of Behavior Therapy proves. The number of practitioners in this field has also expanded but since training opportunities are often below par, a great deal of the practice of behavior therapy leaves much to be desired.

A widespread lack of awareness of the distinctive character of behavior therapy has been alarmingly evident—even among some people who are prominent in the field. One manifestation of this lack is the ongoing “controversy” about the very definition of behavior therapy. Certain classes of unadaptive behavior have their origin in learning, and knowledge of the processes of learning and unlearning must have the greatest relevance to effecting change. Behavior therapy is the application of such knowledge. It is only secondarily a technology. Perhaps the emphasis placed on techniques in the didactic literature of behavior therapy, including the two earlier editions of this book, has played a part in deflecting attention away from principles.

I have included much more emphasis on matters of principle in the present edition; the result is that there are two new chapters. For a detailed exposition of the most basic principles relating to the neuroses, however, the reader must still be referred to *Psychotherapy by Reciprocal Inhibition* (Stanford University Press, 1958). The newcomer will find a painless introduction in my more recent book, *Our Useless Fears* (Houghton Mifflin, 1981).

The text has been largely rewritten or extensively revised and, where indicated, completely reorganized. Only Chapter 16 has survived relatively unscathed. All other chapters have incorporated what have seemed to me the

most significant new contributions to theory and practice. It is obviously not possible to include everything.

I thank Stephen D. Lande and Paul R. Latimer for valuable commentaries on Chapters 3 and 11, respectively. I am most deeply grateful to Betty Jean Smith, my secretary, for her superlative help in every stage of the book's composition.

From the Preface to the First Edition

Before the advent of behavior therapy, psychological medicine was a medley of speculative systems and intuitive methods. Behavior therapy is an applied science, in every way parallel to other modern technologies, and in particular those that constitute modern medical therapeutics. Therapeutic possibilities radiate from the uncovering of the lawful relations of organismal processes. Since learning is the organismal process most relevant to psychological medicine, the establishment of lawful relations relevant to the learning process is the main road to therapeutic power in this field.

However, the scientifically minded behavior therapist need not confine himself to methods derived from principles. For the welfare of his patients, he employs, whenever necessary, methods that have been *empirically* shown to be effective. Colchicum was a well-authenticated and widely used remedy for attacks of gout long before colchicine was isolated or the metabolism of gout understood (Stetten, 1968). In the same way, in present-day behavior therapy, we use mixtures of carbon dioxide and oxygen to alleviate pervasive anxiety without knowing the mechanism of their action. The criterion is the existence of compelling evidence of a relationship between the administration of the agent and clinical change.

A very special difficulty in evaluating how much a psychotherapeutic technique *per se* contributes to change resides in the fact that almost any form of psychotherapy produces substantial benefit in about fifty percent of cases, apparently because of anxiety-inhibiting emotional reactions that therapists evoke in patients (Wolpe, 1958). Therefore, a particular technique must be, *prima facie* at least, effective beyond that level if it is to be even provisionally recommended on empirical grounds. Failure to observe this rule can lead to the gullible acceptance of almost anything that is touted, and back to the pre-scientific chaos of recipes from which modern technological principles have extricated us.

Two themes have recently been prominent among the criticisms voiced by opponents of behavior therapy. One is that it is "mechanistic and nonhumanistic." The two adjectives are usually combined as though they belonged together like face and beard. Insofar as behavior therapy leans on mechanisms it is indeed mechanistic. But nobody can fairly call it nonhumanistic. No basis exists for the idea that others have more compassion than the behavioristic psychotherapist. Internal medicine is not dehumanized when penicillin replaces bloodletting as a treatment for infections; and no more is psychotherapy when conditioning replaces free association.

I am grateful to those who have helped in the literary side of the book's production—Mrs. Barbara Srinivasan, Mrs. Aviva Wanderer, and my wife; and to my old friend and colleague, Dr. L. J. Reyna, who, as so often in the past, has been a fount of information and ideas.

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1

Behavioristic Psychotherapy: Its Character and Origin

The central aim of all psychotherapy is to overcome, or at least significantly diminish, consistently recurring behavior patterns that an individual has learned and that are disadvantageous to him.

Consistently recurring responses to particular stimulus conditions are called *habits*. They are almost always a combination of motor, emotional, and cognitive responses. Most learned habits are adaptive—i.e., they subserve biological or acquired needs or avoid injury, pain, or discomfort. But habits that are unadaptive can also be learned; their effects are contrary to the welfare of the organism. Fortunately, these are much less common but some are very troublesome; they are the therapeutic problems. A great many of these habits are primarily emotional, and the emotion involved is usually fear. Fear is the centerpoint of the neuroses, whose treatment is the central focus of this book.

It follows that knowledge of the processes of learning and unlearning ought to be the most fruitful source of methods of eliminating unadaptive habits. Behavior therapy is based upon such knowledge; this is what distinguishes it from all other psychotherapies. The formal definition of behavior therapy is: the use of experimentally established principles and paradigms of learning to overcome unadaptive habits.

THE NAMING OF THE DISCIPLINE

There are many systems of psychotherapy, each based upon a theory. The theory of behavior therapy is quite straightforward: unadaptive habits that

are learned can be unlearned, and the most reasonable way to set about to achieve this is on the basis of knowledge of the learning process. Behavior therapists do many things, some of which—such as the gathering of information—are in a general way common to all psychotherapies. But a therapist can only be said to be doing behavior therapy when he is actually using methods that are derived from experimentally established principles. Such methods aim at weakening and eliminating unadaptive habits, or initiating and strengthening adaptive ones, or both.

The term “behavior therapy,” which was originally introduced by Skinner and Lindsley (1954), owes its general acceptance as the label for this particular therapeutic discipline to Hans Eysenck (1960). Its chief advantage over the labels that competed with “behavior therapy” years ago—“conditioning therapy” and “behavioristic psychotherapy”—was that it seemed more likely to be found acceptable by clinicians than the other terms, which were redolent of the experimental laboratory. Another ostensible advantage was that the word “behavior” would draw attention to what was conceived as the cardinal distinguishing feature of this newcomer to the psychotherapies—its use of behavior to change habits. Behavior of one kind or another, however, is inevitably implicated in all systems of psychotherapy, most commonly verbal behavior of many kinds, that range through incantations, free associations, and “primal scream.” Verbal interactions may, of course, lead to other behavior—such as the carrying out of suggestions or the following of advice. Thus, in retrospect, “behavior therapy” as a label was a poor choice; “conditioning therapy” would have been both more distinctive and more informative.

But “behavior therapy” is firmly established and we have to live with it. We can do this comfortably if we are reasonably vigilant. On the one hand, we must avoid the temptation to accept any method as behavior therapy *just because* it involves activity, and perhaps especially vigorous activity, such as running (Orwin, 1973). On the other hand, we must not exclude procedures whose impact is primarily cognitive on the mistaken ground that cognition is not “real” behavior. It is the latter error that has led to such travesties as “cognitive behavior therapy” (Beck, 1976).

In earlier editions of this book, I expressed the view that there is a generic similarity between behavior therapy and certain other treatments, including psychoanalysis, in which “the behavior itself is conceived as the therapeutic agent,” and that these could be bracketed together as “behavioral therapies.” But since, as indicated above, there is no psychotherapy in which behavior does not figure, the presumed behavioral therapies do not really fall into a class by themselves. If all psychotherapies are in a broad sense behavioral therapies, we must carefully specify what is distinctive about behavior therapy.

A HISTORICAL PERSPECTIVE

The history of behavior therapy is in general the history of psychotherapy, which consisted in the beginning of all the things that people through the centuries did to and for other people to relieve their emotional distress. Most of these activities were based on religious belief or superstition, or theories of magical influence. It was only when practices came to be based on consistent principles that they took on the character of psychotherapeutic disciplines as they are understood today.

The first important psychotherapist in this sense was Anton Mesmer (1779), an Austrian physician who had moved to Paris. He derived his therapeutic practices from the idea that emotional illness could be overcome by equilibrating the patient's "animal magnetism." To achieve this, he made use of a large troughlike arrangement of movable iron rods and mirrors that he called a "bacquet." To an assemblage of patients surrounding the bacquet and forming a closed circle by holding hands, Mesmer would make a dramatic appearance, clad in gaudy robes, holding in his hand his "magnetic wand," with which he would touch and stroke the patients at intervals in the seance. While his methods were highly esteemed by the public, they became the subject of investigation by a joint committee (in which Benjamin Franklin participated). In 1784, this committee issued a disparaging report; but this does not negate the fact that Mesmer had many well-documented therapeutic successes (Darnton, 1968). While the theory of animal magnetism did not stand up to scientific testing, Mesmer's procedures led to the modern practices of suggestion and hypnosis, and other modes of verbal behavior control.

Suggestion generally involves using words to arouse more desirable responses in a situation where undesirable responses are habitual. To the extent that this effort may be successful, it seems to be because the suggested response competes with the preexisting one effectively enough to inhibit it. There will be lasting diminution (or elimination) of the preexisting response to the extent that the inhibiting event results in *conditioned* inhibition (see Chapter 2). If standard practices of hypnotherapy have not had impressive long-term results, it may be because they have not brought the suggested responses into effective apposition with those meant to be eliminated.

An early example of a direct use of competing responses that is remarkably close to some modern practices was unearthed by Stewart (1961) in a book by Leuret (1846). The patient was a 30-year-old wine merchant with a 10-year history of obsessional thoughts that had become so insistent that he had become unable to carry on his business. After admitting the patient to the hospital, Leuret gave him daily assignments of songs to read and learn for recitation the next day. The patient's food ration was made contingent

upon how much he had learned. In six weeks of this regimen, the patient's recitals steadily improved, while his obsessional thoughts became less and less troublesome. At the end of the six weeks, he announced that he had not had the thoughts for several days and felt much better. Leuret found work for the patient as a nurse and a year later noted that he was still well and had become a very efficient nurse. (For further examples of the innovations of this forerunner of behavior therapy, see Gourevitch, 1968; and Wolpe & Theriault, 1971.)

In the more conventional psychiatric setting, a large number of clinical experiments were performed and reported by Janet (1925), but unfortunately no usable rules emerged. The 19th-century therapist had some reason for confidence in the benefits of sympathetic support, advice, persuasion, and nonspecific suggestion. Sigmund Freud introduced the first system of therapeutic methods based on detailed and coherent theoretical principles. Psychoanalytic theory is imaginative and colorful, and Freud's presentation of it had an uncanny persuasiveness that brought an excitement into the field of psychotherapy that it had never previously had. The therapeutic methods that emerged from this theory did not, however, lead to the increase in favorable outcomes for which everybody had hoped (e.g., American Psychoanalytic Association, 1958). The theoretical propositions themselves were not empirically supported either (see, for example, Salter, 1952; Bailey, 1964). Despite the inadequacies of psychoanalysis, Freud's work had two important permanent consequences. He brought to the fore the overriding importance of emotional, as opposed to cognitive, events in the causation of neuroses, and he divested the subject of sex of its prudish social cloak.

Important as these contributions were during the first half of the 20th century, there was scarcely another field of knowledge more insulated from scientific advancement than behavioral therapeutics. No hypotheses were being put to the test, no lawful relations were being established, and no reliable methods for procuring therapeutic change entered the scene. There is an obvious explanation for this. Modern medicine is applied science. Modern psychotherapy could thus only develop when there was something to apply. There had to be a foundation in the form of data from the experimental laboratory.

THE DEVELOPMENT OF AN EXPERIMENTALLY BASED PSYCHOTHERAPY

In the course of the 20th century, experimental studies, most particularly along the lines initiated by Pavlov and Watson, revealed more and more about the characteristics of habits and the factors determining their acquisition, maintenance, and decline. The lawful relations that had been estab-

lished lent themselves to the development of hypotheses to account for the acquisition of patterns of unadaptive behavior, and to suggest methods that might be used to eliminate them.

Progress in this direction had its origin in Watson and Rayner's (1920) famous experiment on Little Albert.¹ This 11-month-old child, who was generally of a phlegmatic disposition, was observed to be disturbed by the loud noise made when an iron bar was struck behind him. By striking the bar each time the child touched a white rat, the experimenters quite soon conditioned a fear of this animal and, by generalization, of other furry objects. They proposed four possible strategies by which this conditioning might be overcome: (1) by experimental extinction, (2) by "constructive" activities around the feared object, (3) by "reconditioning" through feeding the child candy in the presence of the feared object, and (4) by stimulating erogenous zones in the presence of the feared object. Although Albert's departure from the hospital prevented the implementation of any of these suggestions, it is worth noting that the last three of them accord with the counterconditioning model which will be discussed in detail later.

A few years later, the third of these suggestions—reconditioning by feeding—was employed by Mary Cover Jones (1924a) in the treatment of children's phobias. She described her method as follows:

During a period of craving for food, the child is placed in a high chair and given something to eat. The feared object is brought in, starting a negative response. It is then moved away gradually until it is at a sufficient distance not to interfere with the child's eating. The relative strength of the fear impulse and the hunger impulse may be gauged by the distance to which it is necessary to remove the feared object. While the child is eating, the object is slowly brought nearer to the table, then placed upon the table and, finally, as the tolerance increases, it is brought close enough to be touched. Since we could not interfere with the regular schedule of meals, we chose the time of the midmorning lunch for the experiment. This usually assured some degree of interest in the food and corresponding success in our treatment.

Jones (1924b) detailed the application of this method to the case of a three-year-old boy called Peter—"one of our most serious problem cases"—who recovered after daily treatment over a period of two months. That hunger had a role in the process of overcoming the fear habit was shown by the fact that the effectiveness of the method increased when hunger was greater. On the other hand, "the repeated presentation of a feared

¹Even though Harris (1979) has pointed out that the magnitude and extent of Albert's fear conditioning has often been overstated in the literature, there is no doubt that some fear conditioning occurred. The relevant point is that the experiment provided a starting point for such later work as is described below.

object, with no auxiliary attempt to eliminate the fear, is more likely to produce a summation effect than an adaptation." The correspondence of these observations on the fears of a child with certain findings in experimentally neurotic animals (see Chapter 4) is worth noting. As the first to establish such lawful relations in a psychopathological content, Jones has earned an honored place in the history of behavior therapy.

At about the same time, Burnham (1924), starting from a mental hygiene orientation, was also proposing the use of counteractive behavior as the agent of habit change. The recommendation of graduated tasks in the treatment of neurotic patients did not reappear until years later in the writings of Herzberg (1941) and Terhune (1948), though neither of these therapists was aware of competing responses as the agent of habit change.

In the meantime, in the field of experimental psychology, the most studied habit-eliminating process was, and has continued to be, experimental extinction, the gradual decrement in strength and frequency of responses that are evoked without reinforcement; the mere absence of reinforcement weakens habits, by processes discussed in Chapter 2. Dunlap (1932) probed the therapeutic possibilities of this, and evolved the technique called "negative practice," whereby undesirable motor habits are overcome as a result of their being deliberately evoked again and again. It was not long afterwards that Guthrie (1935) drew attention to the general applicability of counterconditioning methods such as those Jones had demonstrated, and concluded that the simplest rule for breaking a habit is "to find the cues that initiate the action and to practice another response to these cues" (Guthrie, 1935, p. 138). An indispensable ingredient of the formula was that the cue to the original response had to be present while the other behavior prevailed. The new response could then inhibit the original one and thereby weaken it.

An unequivocal demonstration of the therapeutic power of response competition was provided by its success in the treatment of experimental neuroses. These are persistent anxiety-response habits that can be deliberately induced in animals, first reported from Pavlov's laboratories (Pavlov, 1941) at the beginning of this century. A dog would be placed on a table in a small chamber, held in a harness that restricted its movements. A high level of anxiety was elicited in the animal either by noxious stimulation or by a strong motivational conflict. This anxiety was conditioned to the sights and sounds of the experimental situation. By repetition of the anxiety arousal, a rising level of anxiety conditioning developed to the experimental chamber and contiguous stimuli, a level that was eventually very high indeed. A striking feature of this anxiety was its extreme persistence; it was not in the ordinary course of events diminished in intensity either by exposure to the experimental cage or by prolonged removal from it. The calm behavior of the animals in their living cages contrasted with this most strikingly. Some anxiety was, however, manifest in environments that did include stimuli resembling those in the environment of the experimental cage, as might be expected. A