

Psychological Bulletin

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Behavioral Bibliotherapy: A Review of Self-Help Behavior Therapy Manuals

Russell E. Glasgow

University of Maryland School of Medicine

Gerald M. Rosen

Providence Family Medical Center
Seattle, Washington

This article reviews the current status of self-help behavioral treatment manuals. Organizing concepts and strategies for the development and evaluation of such programs are described. Programs that have been published or empirically tested for the treatment of phobias, smoking, obesity, sexual dysfunctions, assertiveness, child behavior problems, study skills, and physical fitness, as well as general instructional texts, are reviewed. It is concluded that the validation of available self-help behavior therapy manuals is extremely variable at the present time. Future research should evaluate manuals under conditions of intended usage, recruit clinically relevant subjects, employ follow-through and cost-effectiveness indices, include appropriate controls and follow-up assessments, and attempt to identify subject or other clinical predictors of treatment outcome. The clinical and ethical issues raised by self-help programs are also briefly considered.

The term bibliotherapy, in its broadest sense, refers to the use of any literary work, including fiction, in the treatment of physical or emotional problems (see Alston, 1962; Sciabassi, 1973; Tews, 1970). An important subset of bibliotherapeutic materials includes self-help treatment programs that present readers with a specific set of therapeutic procedures. The procedures recommended in such books vary with the particular persuasions of the times. Thus, Dumont (1913) published a self-help treatment that instructed readers on

appropriate methods for developing person magnetism. Today, self-help books may be found on a variety of currently popular techniques, including Gestalt, rational-emotive transactional analysis, and hypnotic procedures.

There has been an increasing trend among behavior therapists to translate their treatment into written self-help materials. The purpose of the present report is to evaluate the current status of behavior therapy manuals and to make recommendations for future research. This review considers treatment programs that consist primarily of written text address prospective clients, and present behavioral approaches. A *behavioral approach* is taken to refer to modeling, aversive conditioning, desensitization, or operant technique (Goldiamond, 1975). The focus of the review is restricted to those manuals that met the above criteria and have been commercially published or empirically tested.

An earlier draft of this article was completed while the authors were at the University of Oregon. Appreciation is expressed to M. Barrera, E. Lichtenstein, and T. Biglan, who reviewed earlier drafts of the manuscript.

Requests for reprints should be sent to either Russell E. Glasgow, Department of Social and Preventive Medicine, University of Maryland School of Medicine, Baltimore, Maryland 21201, or Gerald M. Rosen, Providence Family Medical Center, 1715 East Cherry Street, Seattle, Washington 98122.

It is not our intention to single out written behavior therapies for special consideration. The research, clinical, and ethical issues considered here are applicable to all self-help approaches (Goldiamond, 1976). The extent of bibliotherapeutic and general self-help programs simply made it necessary to set limits on the scope of the article.¹

Because behavior therapy manuals have been applied with varying degrees of therapist contact, it is important to distinguish among different conditions. In the present review, the degree of clients' reliance upon therapist contact has been divided into three categories. The term *self-administered* refers to cases in which a written program constitutes the sole basis for treatment, and clients administer materials without therapist contact. Contact with data-collection personnel may occur under self-administered conditions as long as procedural advice is not given. *Minimal-contact* refers to those cases in which there is some contact with a therapist, but clients rely primarily on a written program. Therapist involvement in minimal-contact conditions is often in the form of weekly phone calls, mail correspondences, or infrequent meetings. In *therapist-administered* programs, clients have regular contact with a therapist, and meetings focus on clarifying or elaborating the information presented in a self-help manual. In well-controlled studies, self-administered, minimal-contact, or therapist-administered conditions may be compared with similar treatment groups that are *therapist directed*, a *placebo* group, or a *no-treatment* control. Under therapist-directed conditions, the sole basis for treatment is contact with a therapist, and a manual is not used.

The remainder of this review is divided into two sections and a discussion. The first section considers methodological issues as they apply to the development and evaluation of self-help manuals. The points discussed are then used in the second section to evaluate the status of current programs.

Strategies for Evaluating Self-Help Programs

General Testing Considerations and Subject Recruitment

Three questions immediately face the designer of a self-control manual: What type of

manual should be constructed, how should the manual be utilized, and how should the manual be evaluated? The first issue most frequently concerns the choice between single-component and multicomponent treatments. Most manuals to date have been of the multicomponent variety, perhaps because of the disappointing long-term effects of single, or isolated, techniques and the increasing emphasis on broad-spectrum behavior therapy (Lazarus, 1971). Whatever the reasons, the concern of researchers and clinicians is the identification of the simplest combination of techniques for maximal effectiveness. At times, multicomponent programs may be preferable, as in the case of individuals at risk for heart disease. Here, combined smoking cessation, weight reduction, and exercise programs appear promising (Maccoby & Farquhar, 1975). However, if complex self-help manuals are unnecessary, a client's time is used inefficiently. Detrimental effects may also accrue if clients who begin with ineffective procedures are then less likely to follow through on critical components of a potentially effective program.

Evaluating whether single- or multicomponent programs are preferred can be accomplished through dismantling strategies (Lang, 1969) or the sequential application of various procedures in a multicomponent program (Bellack, 1975). In this latter strategy, time-series analyses (Gottman, 1973; Jones, Vaught, & Weinrott, 1977) may provide a statistical approach for identifying effective treatment components.

Related to the issues of utilization and evaluation is the degree of congruence between the intended use of a manual (self-administered, minimal contact, or therapist administered) and the conditions under which it

¹ In addition to written behavioral programs, self-directed video and audio programs (Richardson & Grant, Note 1) and television presentations of behavioral treatments (Mikulas, 1976) have been developed. Numerous untested cassettes and records also exist. When nonbehavioral programs are considered, the situation becomes even more complex. One publisher alone lists 160 titles in its "self-improvement library" (Wilshire Book Company), and Kimbrell (1975) noted the publication of some 117 diet books.

is evaluated. Generalization across modes of presentation must be empirically demonstrated rather than assumed. Unfortunately, several authors have made the mistake of testing a technique under therapist-directed or therapist-administered conditions when their goal was to market the program as a self-administered manual.

The issue of generalization across conditions raises considerations as to the methods by which subjects are recruited. Different recruitment methods are appropriate for answering different questions. For example, to generalize to a population that buys manuals at a bookstore, it is important to recruit subjects in a manner approximating this situation. This could best be accomplished by publicizing the self-administered nature of a program and by charging a modest fee for instructional materials. If a comparison between self-administered and therapist-administered programs is intended, it may be important not to specify that some programs will be self-administered. Many people are likely to have preferences for a particular condition. In such cases, investigators can assign some subjects to their preferred conditions and others to nonpreferred conditions. Effects associated with group assignment could then be considered in subsequent analyses.

Experimental Design Issues

Although it is generally accepted that placebo or attention controls should be included in treatment outcome studies, such comparison groups are often absent in research on self-help manuals. One reason for this may be that placebo interventions control for the nonspecific factor of therapist contact (Paul, 1969), a variable that is often absent under self-help conditions. However, other nonspecifics that can influence treatment outcome, such as expectancy of improvement, need to be considered. Accordingly, appropriate placebo controls are needed when assessing self-help manuals.

The importance of expectancy checks on placebo controls is well appreciated (Borkovec & Nau, 1972; Hampton, 1973; Osarchuk & Goldfried, 1975). When manuals are em-

ployed, such checks should optimally occur shortly after clients have received their program and have had the opportunity to acquaint themselves with the procedures. The more typical method of checking expectancy induced by brief treatment descriptions distributed before manuals are received is less adequate. This approach may test the credibility of therapy rationales, but it fails to evaluate subjects' initial reactions to the actual program.

The specific nature of a control condition will be determined by one's conception of the active ingredients in the treatment manual. The factors on which control and treatment manuals could be equated include treatment rationales and expectancies, format and length of the manuals, amount of homework required, number and spacing of sessions and assignments, levels of task difficulty, and whether significant others are involved. It may often be useful to employ a minimal treatment condition to control for basic procedures inherent in any program directed at a particular problem. McFall and Hamm (1971) have illustrated this point in the context of therapist-directed treatments for smoking cessation. When a self-administered program is being tested, a totally self-administered placebo manual is desirable. One of the advantages of designing placebo manuals to parallel a self-administered program is the possibility of administering treatments in double-blind fashion (Rosen, Glasgow, Barrera, 1976). For example, materials may be distributed through the mail without therapist contact. In this way, the possibility of therapist or experimenter bias (Rosenthal, 1966) is minimized.

Efficiency-Effectiveness Indices

Several considerations important in outcome research are particularly critical when evaluating self-help programs. The subjects frequently fail to complete self-administered or minimal-contact programs and this makes the collection of follow-through measures, as recommended by Thoresen and Mahoney (1974), vital. Such checks provide valuable information on the utility

of a self-help program. For example, a time-series analysis performed on daily self-monitoring data could relate behavior changes to specific points in a multicomponent program. Follow-through data can be further related to outcome measures and can clarify issues of therapy process.

Follow-up assessments are essential because self-control procedures have been presumed to be superior to therapist-directed programs with regard to maintenance of therapeutic gain (Kopel & Arkowitz, 1975). It is important that follow-up assessments be of sufficiently long intervals. Unless shorter periods are empirically justified for specific targeted areas (see Hunt & Bepalec, 1974, for data relevant to smoking), a 6-month follow-up interval, as recommended by the *Journal of Behavior Therapy and Experimental Psychiatry*, serves as a conservative and desirable standard. When follow-up assessments are planned, efforts should be made to insure participation of a large percentage of the original subject pool. In this regard, it helps to state clearly in initial treatment contracts that follow-up participation is expected. It also helps to request routinely names of friends and relatives who will always know a client's whereabouts.

Cost-effectiveness indices are also relevant. Self-help procedures allow for reductions in costly professional time so that potentially effective treatments can reach greater numbers of clients. When a self-administered program is not as effective as a therapist-administered procedure, its use may still be justified by cost-effectiveness superiority. This issue can only be evaluated when cost-effectiveness data are available and related to the needs of a particular client or clinic setting.

Related to the efficiency and effectiveness of self-help manuals is the need for program developers to provide guidelines that assist potential consumers in determining the appropriateness of any given program. The behavioral problems that are most responsive to a particular program should be specified. If subject predictors of self-administered treatment outcomes are known, then readers should be informed of these. Instructional characteristics of a program (such as read-

ability level) that may also influence treatment outcome and a client's choice of materials should be specified.

Review of Current Manuals

In this section, self-help manuals that meet the criteria specified in the introduction are reviewed.² The manuals are organized according to the problem areas for which they are intended.

Fear Reduction

Self-help manuals for fear reduction generally train readers in systematic desensitization (Wolpe, 1958), which has recently been interpreted as training in self-control (Goldfried, 1971). Numerous studies have demonstrated that clients can successfully self-direct desensitization with minimal aid from a therapist (cf. Baker, Cohen, & Saunders, 1973; Cotler, 1970; Donner & Guerny, 1969; Lang, Melamed, & Hart, 1970; Migler & Wolpe, 1967; Morris & Thomas, 1973). The first written program for self-administering desensitization was developed by Kahn and Sandler (cited in Kahn & Baker, 1968). Kahn and Baker (1968) recruited individuals with a variety of subclinical phobias and compared the Kahn and Sandler program (accompanied by a record and used under minimal-contact conditions) with therapist-directed desensitization. Both treatment groups were judged equally improved on the basis of telephone interviews conducted 3 months after the completion of therapy.

²In addition to standard literature review procedures, a number of steps were taken to insure the comprehensiveness of the project. Letters requesting information on self-help treatment manuals were sent to the directors of APA-approved programs in clinical psychology. Researchers active in the field of self-control, or whom we had reason to believe had developed such programs, also received letters. Additionally, notices and requests for information were placed in the *APA Monitor* and the *Association for Advancement of Behavior Therapy Newsletter*. Finally, a preliminary summary chart for this article, accompanied by a request for corrections and notification of omissions, was sent to respondents and clinical directors.

Repucci and Baker (1969) provided additional self-report data on the usefulness of Kahn and Sandler's program in treating sub-clinical phobias. Thirty-nine students in an undergraduate psychopathology course self-administered desensitization for individually targeted sources of discomfort and anxiety. Eighty-five percent of the students were judged to have shown some improvement on the basis of their self-reports. When subjects were separated at the median "total cure rating," it was found that "high-cure" subjects held significantly more sessions.

Although studies on Kahn and Sandler's manual are encouraging, exclusive reliance on self-report measures limits their significance. A similar concern holds for two experiments on undergraduate phobics reported by Phillips, Johnson, and Geyer (1972). In their first study, treated subjects initially met with therapist for one session. They then administered treatment under minimal-contact or self-administered conditions, using a short instructional manual (not cited). Ratings made by self-administered subjects indicated less improvement than did ratings of subjects who received minimal therapist contact, but differences were not statistically significant. Subjects in the combined treatment groups reported significantly more change than did untreated controls.

In the second study reported by Phillips et al. (1972), subjects first received training in hierarchy construction or relaxation procedures, and then self-administered the remainder of their program. A nonsignificant difference on self-rated change favored subjects trained in hierarchy construction. Although 48.5% of the subjects completing treatment rated themselves cured or greatly improved, over two thirds of the participants failed to complete their programs.

Dawley, Guidry, and Curtis (1973) reported on the use of a manual (Dawley & Wenrich, 1973) accompanied by audiotaped relaxation instructions under minimal-contact conditions. A homosexual patient hospitalized for acute depression and situational anxiety used the treatment materials for a fear of crowds. Because additional psychotherapies and chemotherapy were ongoing during hos-

pitalization, it is difficult to evaluate the contribution of the written manual to report treatment outcome. A revision of the original program has been published by Wenrich, Dawley, and General (1976).

Clark (1973) had subjects who were phobic of snakes participate in five self-administered training sessions that employed a self-help desensitization manual and a relaxation audiotape. During these initial sessions subjects completed relaxation training and hierarchy construction. Subjects were then assigned to "desensitization proper" under self-administered, minimal-contact, or therapist-directed conditions. On the "harmless snake" item from a fear survey schedule, self-administered subjects rated their fear significantly lower than did therapist-directed subjects with minimal-contact subjects falling between these two groups. Between-group differences on a behavior approach test and a "fear thermometer" ratings were not significant. Clark reported that 14 of 29 eligible subjects dropped out of the study, although it remains unclear at what points in the programs this occurred.

Rosen (1976b) has revised a program tested in two earlier studies (Rosen et al 1976; Barrera & Rosen, in press). In the first study, highly fearful snake phobics were assigned to self-administered desensitization, desensitization with minimal therapist contact, therapist-directed desensitization, no treatment, or a self-administered placebo control. Between-groups differences were not observed on a behavior approach test, although on self-report and heart-period data the combined desensitization groups significantly differed from the combined controls. At a 2-month follow-up, self-administered subjects tended to show greater continued improvement than subjects in minimal-contact or therapist-directed desensitization groups, although differences were not significant. In a subsequent report (Rosen, Glasgow, & Barrera, 1977), differences between desensitization and control conditions on self-report measures were maintained at a 2-year follow-up.

Congruent with other findings (Repucci & Baker, 1969), subjects' progress in treatment

in the Rosen et al. (1976) study was highly correlated with posttreatment performance. It was also observed that nearly 50% of subjects in self-administered and minimal-contact desensitization groups failed to complete their programs. In a subsequent study (Barrera & Rosen, in press), a pleasant-events contingency contracting supplement failed to increase subjects' involvement in self-administered desensitization.

Marshall, Presse, and Andrews (1976) tested a self-administered desensitization manual for public speaking anxiety (Marshall & Andrews, 1972). The manual was used under self-administered and minimal-contact conditions and was compared with therapist-directed desensitization, no treatment, or a placebo control accompanied by the manual under minimal-contact conditions. None of the treatment procedures had a significant effect on behavioral manifestations of anxiety during a public speaking assessment situation. However, all treated groups demonstrated greater reductions on self-report measures that did no-treatment or placebo groups. As in earlier studies, the dropout rate for self-administered subjects was high (5 of 11), and half of the remaining subjects failed to complete their programs. Marshall et al. (1976) found a greater tendency for generalization of self-reported improvement among therapist-directed as compared with self-administered subjects.

A manual specifically designed for the treatment of agoraphobia was evaluated by Mathews, Teasdale, Munby, Johnston, and Shaw (in press). This manual is the only tested fear-reduction program to significantly depart from traditional desensitization; it instructs subjects in the use of in vivo practice, recommends tranquilizers to reduce uncomfortable levels of tension, and extensively involves the participation of spouses. Twelve married agoraphobic women who used the manual required half the therapist contact previously provided in clinic-based treatments while evidencing comparable levels of improvement. The results also suggested that self-directed treatments lead to significantly greater maintenance of treatment gains.

A number of issues clearly emerge from a review of the literature on fear-reduction manuals. Most important is the issue of increasing self-administered subjects' follow-through. Although current self-help manuals benefit as many as 50% of participating subjects, an equally large percentage of subjects often fails to complete treatment. It would be useful if future research attempted to identify alternative instructional formats or contracting systems that would increase subjects' involvement.

Maintenance and generalization of treatment effects are also important considerations, and future research should include follow-up assessments. At the present time, the few studies providing data on these issues have found greater maintenance effects for self-directed subjects (Baker et al., 1973; Mathews et al., in press; Rosen et al., 1976), but a tendency for therapist-directed subjects to show greater generalization of effects (Marshall et al., 1976).

Smoking Cessation

Although there exist several manuals for which formal evaluations could not be located (Multiple Risk Factor Intervention Trial, 1975; Ross, 1974; Smoke Watchers International, 1970; Stanford Heart Disease Prevention Project, 1975), developers of self-help smoking programs have generally attempted to validate their programs. Research has been aided by the fact that smoking is a relatively discrete behavior, easily and reliably observed. Also, there is an agreed-upon absolute criterion of success, namely, abstinence; and investigators generally use a common measure of change by evaluating success in terms of percentage of baseline smoking rate (Hunt & Bspalec, 1974; McFall & Hammen, 1971).

The earliest reported evaluation of a smokers' self-help manual was by Ober (1968). This study reported findings characteristic of later studies in the area: self-control groups were not superior to a placebo control, and there was substantial relapse (to approximately 55% of baseline) at a 1-month follow-up. Similarly, Winett (1973)

found that a contingency contracting manual significantly increased the efficacy of a gradual reduction program, but between-groups differences at follow-up were absent. Harris and Rothburg (1972) noted the problem of "partial relapse" at follow-up after use of their manual, although no data were presented in their report. In the Danaher and Lichtenstein (Note 2) report, a placebo control was as effective as any of several covert conditioning treatment manuals, even at posttesting.

Mantek and Erben (1974) reported encouraging results with a brief instructional manual that focuses on stimulus-control procedures. In an initial study, the group using the self-help manual was superior to several treatment and control groups at posttesting, but between-groups differences were no longer significant at a 2-month follow-up. In subsequent pilot work on untreated controls and relapsed subjects from the first study, a behavioral contracting component was added to the original manual and led to a promising 58% of subjects abstinent at follow-up. In a later study conducted under self-administered conditions, the original manual alone, behavioral contracting alone, and a combination of these two procedures led to abstinence in over 50% of subjects contacted at a 15-month follow-up. Between-groups differences in this study were not observed. If this finding were replicated and ambiguities in early reports clarified, it would represent a significant advance in the area.

Generally disappointing findings with single-treatment approaches (Bernstein & McAlister, 1976; Lichtenstein & Danaher, 1976; Yates, 1975) may account for the recent use of broad-spectrum multicomponent smoking reduction programs. A typical multicomponent treatment manual includes self-monitoring, stimulus control, self-reward, covert procedures, and some type of aversive conditioning (electric shock, rapid smoking). Unfortunately, results with these programs have also been discouraging. Pilot work by Pechacek (Note 3) has suggested that a complex anxiety-reduction manual can add to the efficacy of a general treatment program. However, there were dropout problems in this

study and follow-up data are not yet available. In a study by Danaher (1977), groups receiving a multicomponent self-help manual were not superior to comparison groups either immediately after the treatment program or at follow-up. Conway (1977) did not find any of a number of groups receiving a multicomponent manual superior to those receiving no treatment. Although a revision of the manual (Conway, 1975) in combination with rapid smoking was superior at posttesting to rapid smoking alone (Conway & Morton, Note 4), between-groups differences at a 1-month follow-up were not significant. Glasgow (1977) did not find a multicomponent manual under either minimal-contact or therapist-administered conditions to be more effective than therapist-directed rapid smoking or placebo treatments. The minimal-contact group in this study was more efficient than other treatment groups.

Although studies on smoking reduction manuals have been well conducted, Lichtenstein's (1971) adage, "Good designs—ineffective treatments," applies. However, there may be reason for guarded optimism. Recent studies on therapist-administered self-control strategies suggest the potential superiority of multicomponent behavioral approaches (Delahunt & Curran, 1976; Lando, 1977). If these programs can be successfully translated into written self-help formats, the negative trend in reported findings may be reversed. Public opinion polls have also indicated that a substantial number of individuals who want to stop smoking but are reluctant to attend smoking clinics would undertake self-directed programs (McAlister, 1975). Future research should therefore consider the application of treatment techniques under self-administered and minimal-contact conditions. Only a few investigators have evaluated these time-saving approaches thus far (Glasgow, 1977; Mantek & Erben, 1974; Danaher & Lichtenstein, Note 2).

Weight Reduction

As with the area of smoking cessation, maintenance issues are of central concern when evaluating weight-reduction programs (Bellack, 1975; Hall & Hall, 1974; Jeffrey,

1977; Stunkard & Mahoney, 1976), and multicomponent manuals have generally been employed. The typical self-help program for obesity includes self-monitoring, nutritional information, stimulus control techniques, and some form of self-reward. To this basic package one or more additional components (coverant techniques, relaxation, exercise, family support) are often added. Unlike the area of smoking cessation, self-help weight-control programs appear effective, at least under therapist-administered and minimal-contact conditions.

The earliest published and most well known behavioral manual for weight reduction is Stuart and Davis' *Slim Chance in a Fat World* (1972), which is based on Stuart's research efforts in a therapist-directed context (Stuart, 1967, 1971). Balch and associates (Balch & Balch, 1976; Balch & Röss, 1974; Lindstrom, Balch, & Reese, 1976) conducted a series of studies that employed Stuart's manual in a group meeting format and a 9-week program. In Balch and Ross (1974), a therapist-administered condition was superior to "partial treatment" and no treatment. Therapist-administered subjects lost an average of 10.6 lb. (4.8 kg) during the program and an additional 3.3 lb. (1.5 kg) over a 6-week follow-up period. However, treatment conditions were formed by self-selection rather than random assignment, making results difficult to interpret. Lindstrom, Balch, & Reese (1976) found the Stuart and Davis program to be equally effective under minimal-contact and a variety of therapist-administered conditions. All treatment groups lost significantly more weight than did a no-treatment control group at the end of treatment. Differences between individual treatment groups and the control group were marginally significant at a 6-week follow-up. Average weight loss for treatment groups ranged from 5.3 lb. (2.4 kg) to 7.2 lb. (3.3 kg) after treatment. These losses were generally maintained or increased during the relatively short follow-up interval, with group averages ranging from 6.2 lb. (2.8 kg) to 8.6 lb. (3.9 kg) less than pretreatment weights. Balch & Balch (1976) found therapist-administered group treatment to be

equally effective, regardless of professional affiliation of the group leader (psychologist, social worker, or nurse), and weight losses were of similar or slightly greater magnitude than those in the Lindstrom et al. (1976) investigation.

Hagen (1974) reported the first evaluation of a weight-reduction manual on a self-administered basis. The manual was derived from a program validated in a therapist-directed context by Wollersheim (1970). Treatments under self-administered, therapist-administered, and therapist-directed conditions were equally effective and superior to no treatment. The groups who received the manual averaged weight losses of 12-15 lb. (5.4-6.8 kg) over 10 weeks of treatment, and treatment gains were largely maintained over a relatively short (4-week) follow-up period. Hagen's study was exemplary for its low dropout rate and its utilization of eating habit measures in addition to weight-loss data. However, subjects were "highly motivated" female undergraduates, and generalizations to other client types may be unwarranted.

The manual tested by Hagen (1974) was also evaluated by Fernan (cited in Stunkard & Mahoney, 1976), who distributed the program unit by unit or in its entirety under self-administered and therapist-administered conditions. The unit-by-unit therapist-administered treatment was most effective, yielding a mean weight loss of 11.8 lb. (5.4 kg) during a 10-week treatment program. In another investigation of the same manual (Tobias & MacDonald, 1977), a minimal-contact condition was equal to a behavioral contracting procedure, and both conditions were superior to placebo and no-treatment controls.

Mahoney has employed a research strategy in which all subjects are provided with stimulus-control information, and the effects of adding various components to this core treatment are then investigated. In this manner, Mahoney, Moura, and Wade (1973) evaluated the contribution of various consequent control strategies and found that a therapist-administered monetary self-reward group was significantly better than a self-administered group without contingencies. Weight losses in

this study averaged as much as 12 lb. (5.4 kg). However, a 60% dropout rate at a 4-month follow-up makes it difficult to interpret long-term effects in this study.

In a second study of therapist-administered conditions, Mahoney (1974) compared self-reward for appropriate eating habits with self-reward for weight loss, self-monitoring alone, and no treatment. The self-reward-habit-change group lost more weight than other groups, averaged weight losses of 8.3 lb. (3.8 kg) over 8 weeks of treatment, and generally maintained treatment effects or improved more over a 1-year follow-up period. Like Hagen (1974), Mahoney collected measures of changes in eating habits and found them to be highly correlated with weight loss. A revision of the earlier programs has since been published (Mahoney & Mahoney, 1976).

Jeffrey (1974) evaluated a modification of the Mahoney manual (Mahoney & Jeffrey, 1974) and found two therapist-administered groups with monetary self-reward to be equal to a therapist-administered external-reward group at end of treatment. Subjects lost an average of 6 lb. (2.7 kg) during a 7-week program. Self-reward subjects maintained their losses after treatment, but external-reward subjects did not; at a 6-week follow-up, self-reward subjects were significantly better. Like Mahoney, Jeffrey is in the process of publishing a revision of earlier programs (Jeffrey & Katz, in press).

Hanson, Borden, Hall, and Hall (1976) recently evaluated a programmed weight-control manual developed by Hanson. At the end of a 10-week treatment program, minimal-contact, therapist-administered, and therapist-directed groups were all superior to placebo and no-treatment control groups. At a 1-year follow-up, the minimal-contact condition had led to the greatest reductions in weight (an average of 9.8% of initial body weight was lost), although between-groups differences were not statistically significant. This study suffered from a high dropout rate, but its use of chronically obese subjects and the inclusion of an extended follow-up are to be commended. A further test of Hanson's manual has been provided by Barrios and

Christensen (Note 5), who found that at posttesting, a minimal-contact condition was superior to a minimal-therapist-contact group that did not receive the manual. As in Hanson et al. (1976), between-groups differences at follow-up were not significant.

The most extensive research with self-help manuals in the obesity area has been conducted by Bellack and his colleagues. Bellack, Schwartz, and Rozensky (1974) found a minimal-contact condition to be as effective as a therapist-administered one, and both yielded results superior to a self-administered condition at posttesting. Unfortunately, no follow-up was conducted, and a later study (Bellack, 1976) failed to replicate the difference between minimal-contact and self-administered groups. In a third study (Bellack, Rozensky, & Schwartz, 1974), in which the contribution of various supplements to the basic stimulus-control package was evaluated, it was found that self-monitoring prior to eating enhanced the procedures, although significant differences with comparison groups were not always observed.

Bellack has also shown that overt self-consequation in the form of assigning oneself a letter grade (Bellack, 1976) and covert self-consequation in the form of practiced covert imagery (Bellack, Glanz, & Simon, 1976) can significantly increase the efficacy of the basic program. Weight losses in these studies averaged slightly over 1 lb. (.4 kg) per week during a relatively short 7-week treatment, and they were maintained during a follow-up period of similar length. Although a further investigation of self-consequation (Schwartz, 1976) failed to find significant differences between a number of self-reward (financial, Premack, or no self-reward) or behavioral contracting (self-determined, externally determined, or no contract) groups, problems with subject follow-through were encountered that make the findings difficult to interpret.

A larger weight loss than has typically been reported was obtained by Polly, Turner, and Sherman (1976). They reported on a selected case study in which therapist-administered individual counseling with self-instructional weekly handouts produced an in-

itial weight loss of 26 lb. (11.8 kg) over a 9-week period. However, no follow-up was reported, and it is difficult to generalize from case reports.

Most recently, Brownell and his colleagues have developed a pair of comprehensive weight-reduction manuals—one for the client and one for a partner or spouse. A study evaluating the client manual (Brownell, Heckerman, & Westlake, Note 6) found that subjects in a therapist-administered group lost significantly more weight during the program than did those in either minimal-contact or no-treatment groups. At a 3-month follow-up, subjects in the therapist-administered group maintained approximately a 10-lb. (4.5-kg) weight loss, whereas those in the minimal-contact group returned to roughly their posttreatment weights. At the 6-month follow-up, differences between treated groups again favored the therapist-administered group but were no longer significant.

An investigation of the partner or spouse manual (Brownell, Heckerman, Hayes, Westlake, & Wilson, Note 7) revealed that at the end of a 10-week treatment program, subjects whose spouses received the manual under therapist-administered conditions lost more weight than did no-treatment subjects. The former group was also nonsignificantly better than therapist-directed groups whose spouses did not receive the manual. Overall weight losses for the spouse's-manual group— $M = 18.4$ lb. (8.4 kg)—were among the best reported in the literature. A 6-month follow-up is currently being conducted on this study.

Despite the variety of programs and the large number of related studies, a fairly consistent pattern of findings has emerged from studies on self-help manuals for weight reduction. Manuals employed under minimal-contact or therapist-administered conditions produce at least short-term weight losses, but the adequacy of entirely self-administered conditions appears less certain (Bellack, 1976; Bellack, Schwartz, & Rozensky, 1974; Hagen, 1974; Mahoney et al., 1973; Tobias, 1973). It does appear that the addition of self-consequence variants to a basic stimulus-control manual significantly enhances treatment effects (Bellack, 1976; Bellack et

al., 1976; Mahoney, 1974; Mahoney et al., 1973).

The developers of self-help weight-reduction manuals have conducted excellent studies in an attempt to validate their programs, and current findings are generally favorable for therapist-assisted conditions. Nevertheless, several critical comments should be noted. The magnitude of change observed in most studies—7–15 lb. (3.2–6.8 kg)—has been statistically significant, but the clinical relevance (Lick, 1973) of such findings is not clear when patients may be 50–100 lb. (22.7–45.4 kg) overweight. The use of undergraduate analogue-type subjects is also questionable when serious clinical issues are of interest (Bernstein & Paul, 1971). Although results at follow-up assessments are often positive, most studies have employed short-term follow-up periods, and the use of 6-month to 1-year intervals suggests less favorable maintenance effects (Hall & Hall, 1974). This finding is particularly important in light of evidence suggesting that recurrent weight loss followed by weight gain may be more detrimental to health than is long-term stabilization of weight (Mann, 1974). Future studies could also make greater use of placebo controls or alternative-treatment groups. Comparison groups whose procedures are modeled after those of such organizations as *Take Off Pounds Sensibly* or *Weight Watchers* would be particularly relevant. Finally, reviewers of the obesity literature have commented on the huge individual variability observed in treatment studies (Bellack, 1975; Hall & Hall, 1974; Jeffrey, 1977; Stunkard & Mahoney, 1976). Since subject predictors of treatment outcome do not appear forthcoming, research should attempt to find techniques that produce more consistent effects across subjects (Bellack, Rozensky, & Schwartz, 1974).

Sexual Dysfunctions

Books of advice on sexual techniques have been with us for many years (cf. Van de Velde, 1930). Recently there has been a transition from technique books to do-it-yourself treatment manuals based on the behaviorally

oriented techniques of Masters and Johnson (1970). Programs have been developed for the treatment of female orgasmic dysfunctions (Barbach, 1975; Heiman, LoPiccolo, & LoPiccolo, 1976; Kline-Graber & Graber, 1975), premature ejaculation (Lowe, cited in Lowe & Mikulas, 1975; McIlvenna & Vanderwoort, 1972; Zeiss & Zeiss, in press), and general dysfunctions (Kass & Stauss, 1975; McCarthy, 1975; Raley, 1976). Other programs primarily written for therapists could potentially be employed by nonprofessionals on a self-administered basis (e.g., Kaplan, 1975).

Lowe and Mikulas (1975) treated 10 couples under minimal-contact conditions, using a manual for premature ejaculation developed by Lowe. Treated couples' self-reported estimates of ejaculatory control ranged from 4.5 to 59 min., after treatment, and were significantly greater than those of untreated subjects. Zeiss (1977) also reported on the successful treatment of two cases under minimal-contact conditions.

With the exception of programs for premature ejaculation, current self-help sex therapies have not been evaluated in any controlled manner. The only other program for which data have been reported is that of Kass and Stauss (1975). Thirty couples with unspecified dysfunctions were treated under minimal-contact conditions. Of the 19 couples who remained in treatment past the initial week, all but one member were orgasmic by the end of the program. Possible reasons for the large percentage of subjects dropping out of treatment were not provided.

It is unfortunate that self-help sex therapy books have not been more adequately assessed, since it appears possible that instructional advice offered in some texts could increase behavioral complaints. For example, Barbach (1975) advised women with inhibitions about masturbation to prolong self-stimulating experiences and exaggerate reactions. This advice appears to be based on a flooding strategy to reduce anxiety. Yet, there is no evidence to demonstrate that individuals can successfully self-administer procedures based on prolonged exposure. Should the instructed strategy not be successful, a

reader could become sensitized and have her inhibitions exacerbated.

It is hoped that future authors of self-help sex therapies will follow a conservative and empirical approach when developing their programs.

Assertiveness - Social Skills

Since the publication of *Your Perfect Right: A Guide to Assertive Behavior* (Alberti & Emmons, 1970), numerous assertiveness training books have been published (Alberti & Emmons, 1975; Bloom, Coburn, & Pearlman, 1975; Cotler & Guerra, 1976; Dawley & Wenrich, 1976; Fensterheim & Baer, 1975; Gambrill & Richey, 1976; Lange & Jakubowski, 1976; Lazarus & Fay, 1975; Phelps & Austin, 1975; M. J. Smith, 1975). A review of this rather competitive marketing situation was recently provided by Landau (1976).

Only one attempt to test empirically the clinical efficacy of an assertiveness training program was located. Gambrill (Note 8) found an earlier draft of her published social skills training manual to be useful in increasing women's rates of initiated social contacts. Subjects participated in therapist-administered group meetings, therapist-administered group meetings with self-reinforcement training, group meetings without instructional materials, or no treatment. During the group meetings, an experimenter was present but participated only minimally. The treated groups receiving instructional materials were generally more improved on self-monitored data than were controls. Other measures indicated that self-reinforcement may have added to the efficacy of the manual and of the group meetings.

Should future studies demonstrate the clinical efficacy of self-help assertiveness training books, it would be useful to identify specific and critical procedural components, as McFall has attempted with therapist-directed programs (McFall & Lillesand, 1971; McFall & Marston, 1970; McFall & Twentyman, 1973). Unfortunately, the rush to publish is apparently greater at the present time than the desire to assess systematically. Conse-

quently, clinicians who use current programs have to base their preferences on personal inclinations rather than on substantive data.

Child Behavior Problems

A sizable number of self-help books for parents dealing with child-management problems have recently been published (Alvørd, 1973; Azrin & Foxx, 1974; Baker, Brightman, Hiefetz, & Murphy, 1976; Becker, 1971; Becker & Becker, 1974; Beltz, 1971; Carter, 1972; Krumboltz & Krumboltz, 1972; Madsen & Madsen, 1972; Mocht, 1975; Patterson, 1971; Patterson & Gullion, 1971; Sheppard, 1973; D. E. P. Smith, 1964; L. S. Watson, 1973). Books that provide similar instructional programs for teachers or other professionals are not listed among these references. The cited books attempt to teach parents a variety of behavioral methods that have generally been tested and found effective under therapist-directed conditions (cf. Eyberg & Johnson, 1974; Foxx & Azrin, 1973; Patterson, 1974; Walter & Gilmore, 1973; Wiltz & Patterson, 1974). Unlike other clinical areas reviewed in this article, the readers of child-management books hope to change the behaviors of at least one other individual in addition to their own. This raises important ethical considerations (cf. O'Leary, Poulos, & Devine, 1972; Stolz, Wienckowski, & Brown, 1975; Winnett & Winkler, 1972) beyond the scope of this review.

Few attempts have been made to assess the utility of child-management manuals. D. E. P. Smith (1964) presented self-report and examination data to demonstrate that parents and teachers had a better knowledge of behavioral parenting principles after reading his book. Although these data are useful, more controlled studies with objective indices of behavioral change are needed. The importance of this point has been demonstrated by Nay (1973), who instructed mothers of "normal" children on time-out procedures through the use of written materials, a lecture presentation, a lecture presentation accompanied by videotaped modeling, or a modeling - role-playing presentation. When

results on a pencil-and-paper questionnaire were considered, all treated groups had equivalent knowledge of time-out procedures and were significantly superior to the no-treatment group. When the criterion of treatment effectiveness was mothers' ability to respond to audiotaped analogue situations, the group receiving written materials was significantly less effective than other treatment groups.

Patterson's group at Oregon Research Institute found significant changes in target child behaviors after parents read Patterson and Gullion (1971) or Patterson (1971) but before therapists had intervened (Patterson, 1975). Christensen (1976) tested the Patterson and Gullion (1971) manual under therapist-administered individual counseling, therapist-administered group counseling (six parent sets), and self-administered conditions. Parents in the last condition were able to call a project therapist if they had questions, but regular contact as in a minimal-contact condition was not provided. The clinic-based groups generally evidenced more improvement than the self-administered group on parent monitoring and audiotaped home observational data.

In what is clearly the most ambitious and controlled project in this area, Baker, Hiefetz, and Brightman (1972) worked with 160 families who had a retarded child in need of behavioral training. The authors developed ten "mini-manuals" for teaching parent skills. The utility of these programs was evaluated by assigning parents to self-administered, minimal-contact, or therapist-administered conditions, therapist-administered group meetings with home visits, or no treatment. On behavioral and self-report measures, all treated groups were generally equivalent and superior to the no-treatment group. A book based on the five "mini-manuals" dealing with self-help skills and behavior problems is being published (Baker et al., 1976).

In addition to general texts on child management, Azrin and Foxx (1974) have written a program specifically for toilet training children. In an uncontrolled study conducted under therapist-administered conditions, Butler (1976) observed a significant decrease in mean frequency of reported urine accidents.

Butler also noted numerous reports in which parents failed to train their children successfully when working on a self-administered basis. Similarly, in a small controlled study, Matson and Ollendick (1977) found that only one of five mothers in a self-administered group was able to successfully toilet train her child, compared with four of five mothers in a therapist-administered group.

The number of current child-management programs clearly exceeds the number of related validation reports. Further studies are needed in which control conditions and dependent variables other than self-report are employed. An interesting issue to note in relation to child-management texts is their readability. Arkell, Kubo, and Meunier (1976) rated several parent-training manuals according to Fry's (1968) readability formula: A wide discrepancy in readability levels among current programs was found. It would be useful if similar analyses were extended to other problem areas.

Study Behavior - Test Anxiety

Self-control approaches to improve student's academic performance received their impetus from Robinson's book, *Effective Study* (1970). McReynolds and Church (1973) evaluated Robinson's SQ3R study technique (survey, question, read, recite, review) with college undergraduates under therapist-administered conditions. The addition of self-contracting for study time did not significantly add to the effectiveness of the basic program, although both treatment conditions were superior to no treatment on self-reported study habits and number of credit hours earned. Differences on grade point average (GPA) were nonsignificant.

Beneke and Harris (1972) evaluated a comprehensive study skills manual for college students. Self-administered and therapist-administered conditions were found equally effective, and both groups had higher GPAs at the end of the term than did a no-treatment group. Unfortunately, only 9 of the 53 original subjects completed all the lessons, differences were not significant at follow-up, and the no-treatment group was

composed of self-selected dropouts. Harris and Ream (1972) evaluated a modified version of the Beneke and Harris (1972) program for high school students. This study, which was also plagued by dropout and follow-through problems, found no differences between therapist-administered and no-treatment conditions.

Allen (1973) investigated the effectiveness of a study-counseling manual for college students in a well-controlled experiment. He found no differences on outcome measures between minimal-contact and therapist-administered groups, although minimal-contact subjects completed less of the program than did subjects with high therapist contact. The combined treatment groups were more improved than a no-treatment group on a number of self-report and performance measures. A relaxation program did not significantly add to observed treatment effects.

Richardson has developed a test anxiety program that combines a self-study manual with videotapes and computer-guided practice tests. The entire program can be self-administered and only requires a secretary to instruct students in the mechanics of videotape-deck and computer operation. Evaluations of the program have been mixed, with Richardson, O'Neil, Grant, and Judd (Note 9) finding it highly successful and Grant (cited in Richardson & Grant, Note 1) finding it only moderately effective.

Cesa (1974) studied the efficacy of a brief self-help manual with junior college students. Although a self-reinforcement component was not found to increase the effectiveness of the basic self-monitoring package, it did lead to the greatest number of follow-through problems. Furthermore, manual groups were not superior to a placebo control group on any measure. The implication of these results for clinical populations is unclear, since subjects were average students participating in a mandatory class experiment, rather than underachievers volunteering for treatment.

The most extensive work with behavioral bibliotherapy for study skills has been conducted under minimal-contact conditions by Richards and his colleagues (see Groveman, Richards, & Caple, 1975). An initial study

(Richards, 1975) demonstrated that a basic program modeled after Robinson's (1970) SQ3R method was superior to no treatment. This finding has been replicated in two other experiments (Richards, McReynolds, Holt, & Sexton, 1976; Richards, Perri, & Gortney, 1976). Stimulus-control (Richards, 1975) and self-consequence procedures (Richards, McReynolds, Holt, & Sexton, 1976) do not appear to add to the effectiveness of the basic program, but supplemental self-monitoring components do (Richards, 1975; Richards, McReynolds, Holt, & Sexton, 1976). Although a number of self-monitoring procedures have been investigated, they all appear to produce equivalent results (Richards, McReynolds, Holt, & Sexton, 1976; Richards, Perri, & Gortney, 1976).

Richards' research has also demonstrated that college students who were initially uninformed about their study habits benefited significantly more from self-monitoring than did those already knowledgeable about their study behavior (Richards, McReynolds, Holt, & Sexton, 1976; Richards, Perri, & Gortney, 1976). Finally, Richards, Perri, and Gortney (1976) found that subjects who received faded therapist contact during treatment were superior at follow-up to subjects with steady therapist contact.

Investigators of self-help study skills programs have evaluated their techniques with a wide variety of client populations and therapeutic conditions. These programs are largely based on Robinson's (1970) SQ3R system and can successfully be undertaken with little or no therapist contact (Allen, 1973; Richards, 1976; Richardson et al., Note 9). Behaviorally oriented consequence procedures (Cesa, 1974; McReynolds & Church, 1973; Richards, McReynolds, Holt, & Sexton, 1976), relaxation training (Allen, 1973), and stimulus-control procedures (Richards, 1975) have failed to produce incremental improvements over the basic program. The one added component that has been found useful is self-monitoring (Richards, 1976).

Areas most in need of attention in future research are the high attrition rate (Beneke & Harris, 1972; Harris & Ream, 1972) and

poor compliance with therapeutic procedures (Allen, 1973; Cesa, 1974; McReynolds & Church, 1973) noted by previous investigators. In this regard, subject characteristics may prove important, as demonstrated by the differential efficacy of self-monitoring for informed students (Richards, McReynolds, Holt, & Sexton, 1976; Richards, Perri, & Gortney, 1976). Further matching of treatment procedures to specific subject deficits may help to maintain subjects' follow-through by providing procedures most relevant to individual needs.

Physical Fitness

The risks associated with low rates of physical activity and the attendant benefits of regular exercise are now well documented (e.g., Fox & Haskell, 1968; Kannell, Castelli, & McNamara, 1967; Mann, Garrett, Farhi, Murray, & Billings, 1969; Turner, Polly, & Sherman, 1976). Psychologists are beginning to contribute to health research (APA Task Force on Health Research, 1976), and a number of self-help manuals for increasing exercise behavior have been developed.

Almost all self-help manuals in this area have relied on the pioneering work on aerobics by K. H. Cooper (K. H. Cooper, 1968; 1970; M. Cooper & Cooper, 1972). The aerobic program concentrates on conditioning the cardiovascular system and consists of a series of gradually more difficult and strenuous workouts. A detailed chart lists the number of "aerobic points" earned for each activity, and one works to earn a certain weekly point total. The program has been demonstrated to produce substantial increases in cardiovascular fitness (K. H. Cooper, 1970).

Nash has developed a pair of manuals to increase and maintain exercise behavior. Her body conditioning manual was utilized in a multicomunity study by the Stanford Heart Disease Prevention Program (Maccoby & Farquhar, 1975). This study found that a community receiving intensive instruction on changing behaviors related to heart disease (diet, smoking, and exercise) was superior to control communities on smoking, cholesterol levels, a "risk index," and a variety of

other measures. However, the manual was only a small part of the intervention and its contribution is difficult to determine. A second manual to maintain exercise behavior is currently being evaluated under therapist- and self-administered conditions and is being compared with no treatment (Nash, Note 10).

Turner, Polly, and Sherman (1976) described their approach to individualized exercise programming and illustrated it with a case study. The subject was given therapist-administered individual counseling that relied on a variety of instructional materials and K. H. Cooper's *New Aerobics* (1970). Substantial increases in physical fitness, as measured by Brouha's (1943) step test were observed, and the client continued to improve over a 13-week follow-up period.

Self-help behavioral approaches to increase exercise behavior deserve further attention. An effective core program has been identified so that the development of instructional supplements and the issue of maintaining treatment effects can now be addressed. An attractive feature of this area is the availability of easily administered objective indices of cardiovascular fitness such as resting heart rate, the step test (Brouha, 1943), and the 12-minute run (K. H. Cooper, 1970).

General Instructional Materials

In addition to programs for specific targeted behavior problems, more general self-help texts (Flanders, 1976; Foster, 1974; Mahoney & Thoresen, 1974; Robbins & Fisher, 1973; D. L. Watson & Tharp, 1972) have been written. These programs most often teach the reader to (a) specify a behavior requiring change, (b) set goals and develop a self-change contract, (c) self-monitor the target behavior's frequency of occurrence, and (d) rearrange relevant antecedents and consequences within an operant framework. On occasion, additional procedures such as systematic desensitization, modeling techniques, or interpersonal skills training are discussed (e.g., Flanders, 1976; D. L. Watson & Tharp, 1972).

Courses in which students have conducted self-modification projects have often used

general instructional materials (Bakker & Armstrong, 1976; Barrera & Glasgow, 1976; McGaghie, Menges, & Dobroski, 1976; Tasto, in press). The most widely used text in such courses has been that of D. L. Watson and Tharp (1972), for which case studies on self-modification projects have been reported (Kau & Fischer, 1974; Tharp, Watson, & Kaya, 1974).

McGaghie and Menges (1975) and McGaghie, Menges, and Dobroski (1976) used D. L. Watson and Tharp's (1972) book as an instructional text in undergraduate educational psychology classes. Although personal consultation was available from the instructors, students generally conducted their projects with little guidance. Most frequent among the students' targeted behaviors were study habits, physical exercise, smoking, and weight reduction. Goal-attainment scaling (Kiresuk & Sherman, 1968) was used to specify objectives for each student's project and to measure outcomes in relation to these objectives. Outcome data showed that over 70% of the participants judged their projects to be successful.

Barrera and Glasgow (1976) used D. L. Watson and Tharp's (1972) book to help students in a self-modification course set up individualized programs. Targeted problems were similar to those reported by McGaghie, Menges, and Dobroski (1976). Seventeen of the 20 students who completed the course were judged to be satisfied with their program's outcome. On 3-month follow-up, to which 19 of the 20 students responded, 83% of the students rated their target behaviors as either further improved or about the same, relative to the end of the course. Ninety-five percent were extremely or moderately confident that self-modification skills could be generalized to other behaviors.

Future self-modification courses can provide settings to evaluate a number of issues more carefully. With the exception of D. L. Watson and Tharp (1972), general instructional materials have not been validated in any systematic manner. No published text has been adequately tested under self-administered or minimal-contact conditions, and studies employing placebo and no-treatment

control groups have not been reported. It also remains unclear when general texts are preferable to more focused manuals that deal with single problem areas. And finally, although texts like that of D. L. Watson and Tharp (1972) are probably useful, it remains uncertain when they are necessary, or to what extent they contribute to the success of classroom self-modification projects. Thus, Schallow (1975) held class discussions that paralleled the D. L. Watson and Tharp (1972) book, but the actual text was not reported to have been used. Although only 14 of 45 students evidenced significant change, as indicated by time-series analyses of self-monitoring data, even the least successful subjects had mean project ratings greater than "moderately successful." Other investigators have reported teaching successful self-modification projects in which only brief instructional handouts or no supplemental texts were used (e.g., Mencke, 1973). It would appear that further work is needed to clarify when general instructional texts facilitate self-directed change.

Discussion

Although self-instructional applications of behavior therapies are of recent origin, they are receiving considerable attention. This review located over 75 self-help manuals and texts that have been published or reported on during the past 5 years. More than 60 studies or case reports relating to these programs have been conducted during the same period. Undoubtedly, other manuals, reports in press, and investigations in progress were not located.

The extent to which self-help programs have been validated remains extremely variable. Programs for weight reduction, study behavior, fear reduction, and exercise appear to produce at least short-term benefits, although some therapist assistance may be needed (weight reduction), and problems with subject follow-through often exist. In the areas of weight reduction and study behavior, investigators have begun to evaluate various supplements to their basic instructional programs.

Other areas of clinical study are further behind in their development. A good deal of controlled research on smoking cessation has failed to identify a treatment program that produces lasting effects. Extensive validation work is needed before treatment manuals for sexual dysfunctions, assertiveness training, and child behavior problems can be used with confidence. Finally, self-help programs are beginning to appear in areas of clinical interest not covered by the present review: problem drinking (Miller & Munoz, 1976), insomnia (Thoresen & Coates, 1976), and relaxation training (Rosen, 1976c, 1977) are three examples of such areas. In these cases, adequate empirical evaluations of self-help programs have yet to appear in the literature.

Although each targeted area has unique problems and evaluation considerations, the following issues were found to be of general concern:

1. Investigators should agree on common definitions for such terms as *self-administered*, *minimal contact*, and *therapist administered*.

2. Subjects should be recruited and treated in a manner congruent with the question of interest. Outcome findings from therapist-administered programs say little about a consumer-client's ability to self-administer the program at home. Findings are similarly limited when undergraduate analogue subjects are employed (Bernstein & Paul, 1971), a practice that is at times difficult to justify (Rosen, 1975).

3. The relevant and effective components of current instructional programs have generally not been identified. Attempts to clarify such process issues are particularly important when multicomponent programs are used.

4. Research on maintaining subjects' participation in self-help programs is clearly needed because subjects frequently drop out of treatment or fail to follow through on assigned procedures. Research could explore procedural variations, alternative contracting systems, or modified instructional formats. At least minimal data collection on subjects'

follow-through should be required of all published studies.

5. Studies should include cost-effectiveness indices so the relative efficiency of self- and therapist-directed programs can be assessed.

6. Issues of maintenance and generalization of treatment effects require the inclusion of follow-up assessments in future published studies. Current findings do not consistently support the hypothesis that self-control procedures are inherently superior to therapist-directed programs when long-term treatment benefits are considered.

7. Attempts to identify subject predictors of treatment outcomes should probably continue so that specific programs can be accurately matched with particular client types and clinical problems.

Many self-help programs are likely to be developed in applied settings in which clinicians will question whether recommended levels of experimental control can be achieved. Although partially controlled investigations may not produce as great a level of yield as do factorial designs (Paul, 1969), there do exist evaluation strategies that provide valuable information. Use of consecutive referrals (e.g., Patterson & Reid, 1973), single-subject designs (e.g., Leitenberg, 1973), and sequential presentations of various treatment components with continuous data collection (e.g., Bellack, 1975) are design strategies applicable in almost any setting. Accordingly, clinicians in applied settings are encouraged to collect data and assess the effects of their interventions and instructional materials.

The possibility of developing empirically validated self-help programs is an exciting one. In addition to the important clinical implications of such programs (Rosen, 1976a), there exist implications for the conduct of treatment outcome research. For example, self-administered or minimal-contact programs can be used as comparison conditions against which to evaluate the effects of more time-consuming and costly therapist-directed interventions. In addition to providing a cost-effectiveness standard, self-administered or minimal-contact controls may avoid ethical problems associated with delayed or un-

treated conditions. It also becomes possible to assess treatments and placebos under double-blind self-administered conditions.

Investigators who properly assess published self-help books and find them ineffective should be able to inform their colleagues of these findings. It is reasonable to expect that journal editors and their reviewers will not publish negative outcome findings that only demonstrate that unpublished instructional manuals require further development. But once a program has been published and is commercially available, both positive and negative findings are highly relevant. In such cases, journal editors are urged to avoid whatever biases exist toward the selective publication of positive and significant treatment effects.

A visit to one's local bookstore will confirm that behavioral bibliotherapies constitute only a small proportion of the enormous number of unsubstantiated self-help texts currently available. Attempts to regulate or endorse any self-help book through governmental, professional, or consumer-oriented agencies raise serious and complex issues (Goldiamond, 1976; Rosen, 1976a, 1977). Until such issues are resolved, periodic reviews of self-help therapies may enable therapists and consumers to choose more intelligently among available bibliotherapy materials.

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Received January 2, 1977 ■