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ABSTRACT

This paper is a systematic attempt to apply the principles and techniques of behavior modification to process and outcome in group therapy. The framework is derived from learning theory, and is aimed at providing a conceptual model for the understanding and practice of group therapy in which symptom redress is the primary goal. A number of promising therapeutic strategies and techniques evolved directly from the application of a behavioral methodology to groups. These strategies and techniques are presented in the -- the development of group cohesiveness, assessment, and intervention. Particular emphasis is placed upon the crucial role of thorough and ongoing assessment. Intervention is comprised of five major therapeutic thrusts, as follows: A.) engaging in graded behavioral tasks both inside and outside the group; B.) training in self-change strategies and techniques; C.) enhancing client motivation and participation in therapy; D.) using group members as therapeutic change agents; and E.) ensuring generalization of newly learned behaviors from the safe confines of the group to the world outside. The advantages and limitations of this approach to group therapy were discussed. (Author)

## BEHAVIOR MODIFICATION IN GROUP THERAPY<sup>1</sup>

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In recent years, group psychotherapy has gained prominence in therapeutic settings as the treatment of choice for a considerable variety of human problems, particularly those of an interpersonal nature. A myriad of theories have emerged that provide a conceptual framework for the practice of group therapy (cf: Gazda, 1968; Golembiewski & Blumberg, 1970; Ruitenbeek, 1969).

While these diverse approaches to group therapy resist classifica-  
tion, one may with utility differentiate between those aimed at symptom  
redress and those seeking personal growth. The former may be described  
as a problem-oriented model geared at providing therapeutic amelioration  
to individuals with severe difficulties in coping and functioning. The  
latter growth-oriented model is more concerned with offering intrapersonal  
and interpersonal growth experiences to individuals.

This paper addresses itself to a discussion of a group therapy  
approach in which symptom removal is the primary goal. The framework for  
this research derives from learning theory, and is aimed at providing a  
conceptual model for the understanding and practice of group therapy.  
More specifically, the approach described here represents a systematic  
attempt to apply the principles and techniques of behavior modification to  
process and outcome in group psychotherapy.

Interest in a behavioral approach to group psychotherapy reflects  
the growing conviction that psychotherapy is a lawful process governed  
by principles of learning and conditioning (Alexander, 1965; Marmor,

ED 074429

934

1966; Skinner, 1953). Krasner (1962), for instance, views psychotherapy as a "lawful, predictable and directive process which can be investigated most parsimoniously within the framework of a reinforcement theory of learning."

While substantive research has been done in operant and respondent conditioning in both laboratory and clinic settings, surprisingly little attention has been directed at applying behavioral techniques to group therapy with out-patient populations. Recently, exemplary research in this area has been done by Liberman (1969, 1970a), who reported that through the selective use of prompts and reinforcements the therapist can shape, modify, and facilitate verbal behavior reflecting group cohesiveness. In addition, Liberman (1970b) demonstrated that systematic use of verbal elicitation and reinforcement techniques can facilitate the growth of independence from the leader, in the form of increased group hostility directed toward the therapist in the later stages of therapy. These findings validate the planned use of verbal operant conditioning as a means of increasing those client verbalization directly related to enhanced group process and outcome. Shapiro and Birk (1967) showed that systematic, preplanned use of approval and attention from the group therapist can function effectively in alleviating such client difficulties as hogging the group's attention, distancing maneuvers, and inability to express anger. Heckel, Wiggins, and Salzberg (1962) effectively eliminated silences in the therapy group by negative reinforcement. Dinoff, Horner, Kuppiewski, Rickard, and Timmons (1960) increased "personal" and "group" references made by group therapy patients through the judicious use of prompts and reinforcements.

These findings support the utility of a learning approach in the understanding and practice of group therapy. However, while a number of studies have demonstrated the use of reinforcement procedures in facilitating group process, little has been done in the way of investigating the use of behavioral techniques within the group setting in facilitating symptom removal (Lazarus, 1968; Wolpe, 1961). In contrast, the efficacy of behavior modification techniques has been well documented by research in individual therapeutic settings (Bandura, 1969; Franks, 1969; Rubin, Fensterheim, Lazarus, & Franks, 1971).

The behavioral methods reported in this paper evolved from a pilot study conducted by the authors involving a small group comprised of two out-patients and two co-therapists. This "mini-group" met two hours weekly over a fifteen-week period, with one follow-up session ten weeks subsequent to termination.

A number of therapeutic strategies and techniques evolved from these initial efforts in systematically applying behavioral principles to group therapy. Some of the more promising of these strategies and procedures will be presented in the context of three primary therapeutic endeavors: (1) development of group cohesiveness, (2) assessment, and (3) intervention.

#### Development of Group Cohesiveness

The development and maintenance of group cohesion play a critical role in group therapy (Yalom, 1970). Indeed, the importance of cohesiveness as a therapeutically beneficial variable in group process and outcome has constituted a fundamental, underlying assumption of virtually all theoretical systems of group therapy.

Cohesiveness refers to those intermember behaviors which reflect mutual interest, concern, empathy, affection, support, assistance and acceptance. In social learning terms, the existence of group cohesiveness may be regarded as an index of group members' potential social reinforcing value to one another. In this view, fostering and maintaining group cohesiveness is tantamount to establishing group members as strong reinforcing agents to each other.

Since most patients referred for group therapy have major difficulties in the area of interpersonal competence and comfort, it is expected that they will benefit in a prevailing atmosphere of group cohesiveness in which new adaptive responses can be safely tested out and supported. It is believed that to the extent that behaviors conducive to group cohesiveness occur, the probability of symptom redress through the group is enhanced.

Therefore, throughout therapy considerable attention is focused upon actively and directly establishing cohesiveness among members of the group. Cohesiveness may be developed and maintained in the following specific ways--through establishment of a common language system, relaxation training, and systematic use of prompts and reinforcers.

#### Establishing a Common Language System

In the assumption that group cohesiveness is directly related to the extent to which group members clearly communicate and understand one another, the group is immediately introduced to a descriptive language system that is based upon behavioral referents. As a language system which is grounded upon observable events, behavioral terminology is precise and largely devoid of the interpretive and inferential processes

characteristic of other language systems. As a result, there is increased likelihood of accurate and efficient communication arising from the use of a language system which is more behavioral and less inferential.

#### Relaxation Training

In the beginning sessions of the group, it is likely that the presence of moderate to high levels of anxiety--both specific and general--function to inhibit the development of group cohesiveness. To the extent that such anxiety can be reduced, constructive group cohesiveness is facilitated. For this reason, relaxation training is employed as a means of reducing the anxiety and discomfort experienced during the initial sessions of the group. In this procedure, the patient is taught to relax the major muscle groups of the body through systematic instruction and practice (Jacobson, 1938). In this way, relaxation responses come to assume a dominant mode over anxiety responses through the principle of reciprocal inhibition (Wolpe, 1969).

#### Systematic Prompting and Reinforcing

Group cohesiveness may be further facilitated by the systematic prompting and reinforcing of motor, verbal, and emotional responses reflecting group cohesiveness. Prompting refers to a statement directed toward a patient that attempts to elicit a particular response.

Reinforcement refers to a statement directed to a patient that acknowledges and supports something the patient has said or did. Attention, interest, acceptance and approval--expressed verbally as well as through facial and postural ones--function as social reinforcement in strengthening those client behaviors upon which they focus (Lieberman, 1970a).

Social prompts and reinforcements of responses constituting group cohesion are employed at two levels. The therapist prompts and rewards client actions and verbalizations that reflect group cohesiveness. Concurrently, he also uses selective promptings and reinforcements to establish and maintain prompting and rewarding behaviors directed at group members by other individuals in the group. Recent research indicates that while the therapist is initially instrumental in establishing the group culture, over time the group members take over from the therapist some of his influence in shaping behavior (Lieberman, 1970a). Thus, since the therapist is certainly not the sole determiner of behavior in the group, from the onset he should behave systematically in ways which increase the group members' prompting and rewarding of each other's behaviors. Moreover, as group cohesiveness is enhanced, the reinforcement value of each group member is increased, and is in turn fed back into the system--contributing to further development of cohesion.

#### Assessment

Crucial to a behavioral approach is the prominent role of thorough and ongoing assessment throughout the entire therapeutic enterprise. Indeed, an abiding characteristic of a behavioral model of clinical intervention is a methodology placing a heavy reliance on empirical data as the stuff from which treatment decisions are made. The course of therapy at each step of the way is carefully guided by the data. Accordingly, assessment of group members' presenting problems, concerns, strengths, weaknesses, and interests constitutes a vital and continuous endeavor throughout therapy.

Initial assessment is directed toward determining the specific therapeutic goals of each member of the group. Toward this end, a primary focus during initial group sessions is upon specifying target behaviors for each group member and for the group as a whole. Every effort is made to help the individual patient to pinpoint his difficulties precisely and specify them in behavioral terms. The group plays a prominent role in this endeavor by helping each individual to identify alternative behaviors that lead to an alleviation of his presenting problems. By ensuring from the onset of therapy that the goals are visible and observable, both therapist and patient can continually assess their progress in achieving their objectives and maximize their chances of attaining success.

Group discussion and feedback are also used in assessing the degree of congruency between each group member's affective and behavioral responses. Patients are guided toward defining their goals in terms of both affective and behavioral components, with commencement of intervention contingent upon accomplishing this to the satisfaction of all involved.

Both established and experimental assessment measures are used; those that appear to be especially helpful are listed below:

1. Personal History Questionnaire (Lazarus, 1971)
2. Reinforcement Survey Schedule (Annon, 1971)
3. Fear Survey Schedule (Wolpe, 1969)
4. Fundamental Interpersonal Relationship Orientation-Behavior (FIRO-B) (Schutz, 1957)
5. Multiple Affective Adjective Checklist (MAACL) (Zuckerman & Lubin, 1970)

Through the periodic administration of these assessment measures, continuous data are generated on such variables as fears, hostility,

depression, interpersonal anxiety, group cohesiveness, and preferred reinforcers. These assessment measures generate empirical data which are useful in determining intervention strategies. One of the assessment procedures, the MAACL, is routinely administered at the end of each session, the results of which are "fed back" and discussed at the beginning of the next session. The reactivity associated with this way of employing the MAACL generates anecdotal information useful in pointing out new or alternative intervention procedures not suggested by the empirical data.

### Intervention

In addition to the behavioral procedures used in connection with such group process variables as the development of cohesiveness, a variety of behavioral techniques aimed directly at enhancing group outcome are employed. Rather than describing these intervention procedures in and of themselves, they will be presented in the context of some larger therapy issues.

Accordingly, the intervention strategy involves five major therapeutic thrusts, as follows: (1) engaging in graded behavioral tasks both inside and outside the group, (2) training in self-change strategies and techniques, (3) enhancing client motivation and participation in therapy, (4) using group members as therapeutic change agents, and (5) programming for generalization of new behaviors to occur.

#### Engaging in Behavioral Tasks

After pinpointing his target behaviors, each group member constructs two hierarchies of behavioral tasks which represent graded steps toward achieving his therapy goals. One hierarchy consists of specific behavioral

tasks that are to be engaged in within the group. The other hierarchy is comprised of behavioral tasks that are to be performed outside of the group. These two hierarchies intermesh with each other. Group members, in working their way up the "outside-group" hierarchy, concurrently rehearse the corresponding behavioral tasks on the "inside-group" hierarchy as a means of preparing themselves for engaging in the parallel behaviors in the real world.

For example, a male patient with behavioral deficits in interpersonal relations may construct behavior task hierarchies consisting of various social situations that are arranged in order of their increasing anxiety-arousal potential. Through roleplaying in the group, he rehearses behaving in specific social situations that he is about to encounter in the real world as part of his outside-group behavioral tasks.

In this way, the client can test out new response patterns first within the safe confines of the group, receive feedback and suggestions on his performance, and then armed with practice, attempt to perform the new behaviors in his natural environment.

#### Training in Self-Change Strategies and Techniques

Group members are instructed in self-change strategies and procedures throughout the therapy process. It is emphasized that they are not only learning new and adaptive ways of behaving; they are also learning self-change strategies that will enable them to continue to help themselves long after the group is over. For example, they are taught how to go about changing their environment in ways that will reward and support the kinds of behavior they want, and extinguish the kinds of behaviors they do not want (Watson & Tharp, 1972). In addition, group participants are trained

in specific self-control techniques. For example, relaxation is taught to group members as a self-control skill to call upon as the situation demands.

#### Enhancing Client Motivation

There are a number of ways, based upon behavioral principles, of enhancing group members' motivation and participation in therapy.

First, it is explained to them that they can effectively help themselves to move in therapy by arranging rewarding consequences to follow their engagement in behavioral tasks. Accordingly, they are asked to identify a variety of rewarding activities--individual as well as group reinforcers-- which they arrange as contingencies. For example, some of the group rewards they may identify are (1) talking in the group about successful experiences in carrying out the behavioral tasks, (2) earning a half hour of extra therapy time, and (3) accumulating increments of additional therapy sessions over and beyond those scheduled. Group contingency arrangements are established by the participants themselves, who structure them to function in a positive manner and not as a negative sanction.

Second, telephone-calling is established and maintained as a vehicle for the delivery of prompts and rewards. Group members are instructed to make one phone call each day for a week to either of the therapists. Upon telephoning, a number of rewarding consequences accrue to them: (1) they receive much social praise and approval, (2) they earn a group reward in the form of a half hour of extra therapy time, which is contingent upon the successful execution of a phone call a day for a full week by all patients, and (3) they further reinforce their phone-calling

behavior by engaging in a preferred activity afterwards. In this way, the behavior of making regular telephone calls to the therapists can be quickly and successfully established. These phone calls can enormously enhance the reinforcing value of the therapists. Moreover, telephone-calling may take on a positive value in its own right, and may subsequently be employed as an effective reinforcer. Group members are instructed to engage in their behavioral tasks and to report their successful completion by telephoning the therapists. In short, phone calling--which may once have had neutral or perhaps even aversive value--may come to assume a powerful incentive and reinforcing function.

#### Using Group Members as Therapeutic Agents

Group participants are systematically groomed as therapeutic agents within the group in the following specific ways:

(1) Through the systematic prompting and rewarding of each other's behaviors, group participants serve as therapy agents in fostering cohesiveness.

(2) By raising exploratory questions and offering suggestions, group members help each other during assessment in specifying presenting complaints in behavioral terms.

(3) By providing feedback, group members aid one another in labeling their behaviors and emotional responses appropriately and congruently.

(4) By roleplaying significant people in each other's real life, group participants enable one another to test out and feel out new response patterns in a safe context.

(5) By modeling certain targeted behaviors, group members function as highly effective therapeutic agents.

(6) By helping each other set up their hierarchies of weekly behavioral tasks, group members play a vital role in designing each other's intervention programs.

In addition, attempts are made to cultivate group members as change agents outside of the group. This may be accomplished in the following ways:

First, while group participants are assigned separate weekly behavioral tasks between group sessions, they give it the flavor of a joint undertaking by setting up a group contingency whereby successful completion of the week's task assignments by all participants earns a group reward.

Secondly, contact between members between group sessions is established by systematically rewarding regular phone-calling behaviors first to the therapists and then to one another. By carefully structuring the task behaviors to be engaged in over the telephone, the function of the telephone calls between group members changes from (1) calling for the sake of calling, to (2) monitoring and prompting each other's behaviors, to finally (3) rewarding one another for successful task completions. In this systematic manner, responsibility for monitoring, prompting and reinforcing group members outside of the group moves from the therapists to the group participants themselves.

Thirdly, group members are securely established as change agents outside of the group by incorporating them into each other's behavioral tasks. For example, one patient's task completion hierarchy may involve

calling another group member and engaging in specific behavioral tasks over the telephone.

#### Ensuring Generalization

A major concern in psychotherapy is the generalization of newly acquired responses from the clinic setting to the real world outside. This issue is an especially critical one in group psychotherapy, where new adaptive responses learned in the safe confines of the group must be extended to the outside world if benefits to the patient are to be maximized. There is no reason to expect such generalization to occur naturally; it is necessary that it be specifically programmed for as an integral part of the therapeutic process.

The transfer of new behaviors from the group to the outside can be greatly facilitated by a careful structuring of the group. Group participants are encouraged to constantly relate what they are learning in the group to the world outside. Each group member progresses through the following programmed steps, each of which serves to tie together what happens in the group with what happens outside: (1) specifying those targeted behaviors relating to enhanced functioning in the real world; (2) observing and counting their occurrence in the natural environment; (3) learning adaptive response patterns in the group setting by using real-life problem situations as the focal point for desensitization, modeling, behavioral rehearsal, and assertive training; and (4) performing newly acquired behaviors in the natural environment.

The group culture prompts and rewards the participants for engaging in these behavioral tasks outside of the group during each step of the intervention program. A critical point in therapy is reached when the

patients try out their new behaviors in their natural environment. At this point the group functions in the crucial role of instigating these initial performances of the targeted behaviors and reinforcing them, until reinforcing contingencies extant in the natural environment take hold. This is a critically important step in therapy, for if new behaviors initiated in the group are to endure, they must be subsequently supported by the natural environment.

Moreover, through group feedback and suggestions in the form of prescribed tasks, the individual learns to discriminate and engage in those particular target behaviors in situations where there is a high probability that they will be reinforced by the natural environment.

In this connection, the use of group members' natural relationships can serve as a valuable adjunct in fostering and maintaining behavior change. Since an individual's social nexus constitutes an integral part of his daily world, it follows that the transfer of behaviors can be facilitated by relying upon significant others (e.g., parents, spouses, siblings, or friends) in the patient's natural environment as change agents (Tharp & Wetzel, 1969). Since people to a large extent control other people's reinforcers, there is much to be gained from soliciting the cooperation of natural mediators in prompting and rewarding group members' performance of the targeted behaviors.

#### Advantages and Limitations

Employment of a behavioral model in conducting group therapy has certain distinct advantages. One of the primary advantages of this approach is the increased probability that what is learned in the group will be extended to the client's real world. This enhanced likelihood

of the generalization of new behaviors arises in part from the very nature of an approach which emphasizes the targeting, monitoring, and controlling of specific problem behaviors occurring outside of the group.

A second important advantage of the approach described in this paper is the greater likelihood that group members will leave therapy with a strong belief in their ability to manage and modify their own behavior. The importance of having a patient learn that he has the ability and the responsibility of self-directing his own behavior cannot be over-emphasized. Individuals who have developed self-control skills in their repertoire clearly have a wider range of existential choices and alternative behaviors open to them. In a real sense, free will comes easier for them.

Another prominent advantage of a behavioral approach to group therapy is its utilization of a descriptive language system that is based upon behavioral referents. The descriptive language system employed in psychotherapy by and large has not been conducive to the carrying out of sound, scientific research. Concepts of psychotherapy are frequently clothed in a language which is vague and inferential. Such language is not sufficient for the scientific study of psychotherapy variables unless these concepts can be defined in terms of identifiable and measurable individual responses and experimental operations (Shapiro & Birk, 1967). There is clearly considerable research advantage in a descriptive language system that is more behavioral and less inferential (Weiss, 1971). In addition to its research value, a descriptive language which is grounded on behavioral observations leads to increased likelihood of effective and efficient communication among members of the group.

A fourth major advantage of a behavioral model for the practice of group therapy relates to the heavy reliance placed upon empirical data as the basis for evaluating progress and making treatment decisions. Because group members' therapy goals and the criteria for attaining those goals are defined objectively in behavioral terms, evaluation of outcomes is facilitated. Moreover, behavior therapy techniques, with their built-in assessment, lend themselves well to ongoing evaluation.

A fifth significant advantage is the painlessness with which behavior changes can be effected with the present approach. Group participants learn that they do not necessarily have to subject themselves to painful or traumatic experiences in order to alter their behaviors. By carefully structuring graded tasks into their intervention programs and by approaching the performance of their targeted behavior by successive approximations, group participants learn that they can change their behaviors rather painlessly. As a result, dropouts from therapy due to pain and discomfort are minimized.

There are a number of disadvantages associated with the use of this therapy approach. One of the major limitations of a behavioral model for conducting group therapy relates to the necessity of establishing a new descriptive language system which is at times radically at variance with the language system of the patient. As a result, a major endeavor throughout therapy is a didactic thrust aimed at teaching group participants an alternative way of viewing the determinants of their behavior.

A second limitation underlying the approach described in this paper is the enormous demand upon the therapists' time. The manner in which the group is conducted results in much therapist time being consumed outside

of group sessions in such therapeutic activities as conducting assessment, gathering data, designing intervention programs, reassessing, prompting and reinforcing through telephone calls and so forth. These important therapist behaviors are engaged in on a frequent and ongoing basis throughout virtually every phase of therapy.

Another limitation in the approach employed is one common to all therapy endeavors: participants in therapy must be motivated to change. The therapy approach described in this paper is very directive; it is also extremely goal-oriented and task-oriented in nature. Considerable energy expenditure on the part of group participants is required to engage in such behavioral tasks as monitoring behavior, arranging rewards, making telephone calls, and performing novel behaviors. The individual client is continually assessing the effort required in making a response against the rewards available to him for doing so. In short, no matter what rewards both therapists and group members are able to bring to bear, the client must at the least want to change enough to do the work of the therapy program (Watson & Tharp, 1972). Nevertheless, as outlined in this paper, there is much that therapists can do in arousing and sustaining group members' motivation throughout the therapeutic enterprise.

FOOTNOTES

1. This paper was presented at the annual convention of the American Psychological Association, Honolulu, September, 1972. The study was conducted while the authors were clinical interns at the Queen's Mental Health Clinic, Honolulu, Hawaii. The authors wish to express their gratitude to Michael Jay Diamond for his enthusiastic and insightful supervision throughout the duration of the study. Grateful acknowledgement is also extended to Rene Tillich and Roberta Edel for their continuous prompts and reinforcers in support of the authors' efforts.
  
2. Order of authorship was determined by a coin toss. Requests for reprints should be sent to Walter S. O. Fo, Department of Psychology, University of Hawaii, Honolulu, Hawaii, 96822.

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