"Com-Mand" represents the application of behavior modification concepts to the study, management, and control of behavior within a more traditional group therapy context. The emphasis of this system is on behavior, and it is predicated on the learning/educational model. The therapist functions merely as an instructor, conducting a variety of behavioral training exercises. The client is taught to observe his own behavior, its consequences, and its effect upon others through the use of various prompts and instructions by the therapist/instructor, and he is directly and immediately reinforced when he does so. The system is presently being studied through use with inmate/addicts in a federal correctional institution. Details of the techniques used and hardware required, as well as an evaluation overview of the program are presented.

(Author/PC)
COM-MAND SYSTEM:

A NEW TECHNIQUE FOR GROUP THERAPY

Presented by

James T. Freeman, Ph.D
Federal Correctional Institution
Terminal Island, California
Department of Justice

and

Peuben E. Stromme, M.A.
Suicide Prevention Center &
Institute for Study of Self-Destructive Behavior
Los Angeles, California

April 29, 1974
Western Psychological Association
Sheraton Palace Hotel, San Francisco, California
Command System: A New Technique for Group Therapy

James T. Freeman
Reuben E. Stromme

A new approach to group therapy has been developed and will be presented which describes the application of behavior modification procedures to a "traditional" group therapy setting through the use of a sophisticated instrumentation system. The technique illustrates how behavior modification practices can be effectively extended to group behavior through the utilization of modern engineering "state of the art."

The essence of the system involves a one-way communication channel between the therapist(s) who are located behind a one-way screen and the clients (Ss) each of whom are equipped with a wireless earplug type receiver. The therapist may thus provide immediate (and private) prompts, instructions, com-mands, etc. to individual Ss, as a function of their behavior (verbal or non-verbal) and he can also provide immediate reinforcement when contingencies are satisfied. The emphasis is placed upon the clients' behavior rather than upon expression of feeling or affect as in most traditional group therapy.

The theoretical rationale relies heavily upon the analysis of verbal behavior developed by B. F. Skinner, particularly, in the use of the "mand" and "tact" as prompts in the control of behavior.
approach is also based upon a learning-educational model rather than a medical/treatment model and the therapist acts more as an instructor as he manages Ss through a variety of behavioral training exercises. Such exercise and interactions are intended to provide our inmate/addict clients, who are notably defective in self-control and interpersonal/social repertories, the capability to ultimately prompt, instruct and to otherwise more effectively self-control their own behavior. Finally, since with our procedure the entire scenario is video-taped, a set of these tapes will be presented which show the effectiveness of the technique in the modification of human behavior in a group therapy setting.
INTRODUCTION:

The development of the "COM-MAND System" represents the application of behavior modification concepts, until now largely restricted to the individual (one-on-one) case, to the study, management, and control of behavior within a more traditional group therapy context. We are thus able to provide a kind of individual (one-on-one) contact or intervention with behavior occurring within a group setting. Further, we have effectively extended behavior modification practices through the utilization of modern engineering "state of the art" as it relates to our hardware system.

The emphasis of this system is on behavior; whereas, we note that a great deal of conventional group therapy seems to concentrate on explorations of feeling and the affective domain without explicit dealing with the client's behavior as such. We do not discount feelings and attitudes, but we are quick to point out to our clients that they find themselves presently in trouble, not specifically because of their feelings or attitudes, but rather as result of some rather specific behavioral acts. It is these defective behaviors then that we set out to study. Finally, the system is dedicated on the learning/educational model rather than the medical/treatment model and the therapist functions more
as an instructor as he conducts a variety of events that could best be described as behavioral training exercises.

With the emphasis placed upon the client's behavior, he is "taught", as it were, to observe his behavior, its consequences, and its effect upon others through the use of various prompts and instructions by the therapist/instructor and he is directly and immediately reinforced when he does so.

Most inmates/addicts are notably defective in their self-control repertoire and we attempt to modify this behavior by generating a kind of mediational or coping kind of behavior wherein they will "check out" their feelings and impulsive tendencies prior to their "acting them out."

To this end, we have found very helpful a little paradigm which we refer to as "feel-think-do" and we differentially reinforce the "thinking/problem solving" behavior as it occurs in group. It is not too clear to us that, in the case of addicts, extensive therapeutic intervention may be associated with significant change in feeling and attitude, but we are reasonably well convinced that with our technique we can effect some change in the Ss coping behavior and his awareness of behavioral consequences. As we begin to develop this repertoire with the Ss, we then begin to fade our prompts and instructions so that eventually S is prompting and controlling himself. We do this incidentally not only on the
the basis of the therapist's intervention, but by taking advantage of the interpersonal interactions obtaining within the very group itself. Thus, we believe that behavior modification concepts and techniques can be effectively interwoven within the kinds of activities that have traditionally been involved in group dynamics and that have characterized group psychotherapy, per se.

THEORETICAL RATIONALE:

Our work to date has relied extensively on the account of verbal behavior formulated by B. F. Skinner. Although it is, in a way, true that verbal behavior is the "medium" within which any psychotherapy occurs, we are using many of Skinner's concepts and techniques of verbal behavior toward the control of non-verbal, as well as verbal behavior. The basic mode of operation of the system involves the use of the "mand", as described by Skinner. Mands are used in the sense of commands, instructions, primes, and prompts (probes are not likely) as information is provided which will be effective in controlling his verbal as well as non-verbal behavior in the group setting. Effective execution of such mands on the part of the Ss are immediately and directly reinforced by E. It should be noted in this regard that a contract is entered into by all Ss that continued group participation and will be contingent upon
successfully carrying out the prompt/instructions delivered by the therapist/instructor. Thus, the contract itself acts as kind of behavioral prescription. In this contract, Ss are referred to as "participants" and Es as observers" and both parties sign the contract.

BEHAVIORAL TECHNIQUES:
The technique of successive approximation or shaping is involved as Ss may differ widely (at least initially) in their operant level of verbal behavior and some Ss may be at such low strength that echec-like behavior may need to be evoked through "orimes." Ss verbal behavior is further differentially reinforced as he proceeds to verbalize more frequently, and as he begins to deal with different areas of behavior. "Stimulus control" is frequently directly invoked as the therapist provides prompts (SD), which "set the occasion" for Ss verbal/non-verbal behavior which may be directly reinforced by E or indirectly reinforced through other members of the group. Other techniques such as extinction, time out or response cost are also utilized; the later particularly in the case where an S is into exaggerated affect or monopolizing the group, and he is simply prompted to "stop" or "don't speak." It is interesting to note that in cases of Ss receiving this kind of prompt, they may have a tendency to react verbally to the therapist, but since the communication
system is one-way, they are precluded from doing this without risk of group censure. There are, incidentally, several other advantages of not having the therapist directly in the group room. The clients are necessarily compelled to deal with their behavior themselves, they cannot easily fall back or retry upon the therapist as is so often the case. In this sense, they are "treating" themselves as they learn to cope, although the therapist indirectly provides support and information. Also, clients frequently have tendency to want to mediate on the therapist's behavior, i.e., deal with his problems rather than their own, but with this system, this is physically impossible and thus, a lot of energy ordinarily diverted in the traditional group setting is conserved. From the standpoint of analysis and, as noted previously, most of our intervention involves the use of themand. It is also the case that a considerable part of our work involves the use of the tact as defined by Skinner. The therapist clearly attempts to tact S's behavior and, in turn, S begins to tact his own, as well as the behavior of others. By the use of such prompts, it is hoped that a finer-grain discriminative repertoire is thus established. We have found it convenient to associate the use of mands with behavioral prompts (verbal and non-verbal; particularly the latter) while the use of the tact is more clearly involved with what we call "therapeutic" or intraverbal (thematic) prompts.
DESCRIPTION OF SYSTEM:

Classification and Description of Prompts - Following is a list of prompts that we have developed and used along with a brief description of each:

Mand - A strict behavioral prompt such as "uncross your legs," "sit up in the chair," etc.

Multiple S Prompt - Case where several Ss are simultaneously prompted to do or say the same thing or convey the same intent may be used in "cascade" fashion thus summating the effect for a given S.

Cross Prompt - Case where two or more Ss are prompted one at a time and interact as a function of each other, e.g. S1 is promoted to ask S2 "what did you really mean to say" and S2 is prompted to reply to S1 "what are you doing, trying to play therapist?".

Counter Prompt - A prompt deliberately introduced which is counter to a previous prompt or inconsistent with Ss expectation or habitual mode of behaving.

Multiple Choice Prompt - Case where S is given two or more prompts to execute and given his choice as to which to respond. He may also be asked to defend or explain his choice.

Rhetorical Prompt - A pure informational prompt for S to "check out" - He is not required to respond overtly, similar to the "coverant."
Extinction - Used to stop or weaken ongoing behavior. May also be used in the sense of "time out," e.g., "don't speak," "cool it," "change the topic" or "don't reinforce S.

Reinforcement - Any of a variety of events, verbal or non-verbal, used to strengthen behavior - popularly known as "strokes."

Hardware:

The basic features of the system involve, first of all a therapy room equipped with a one-way screen behind which are located the therapist (also possibly a co-therapist), staff observers, the video camera and VTR equipment, and the control console proper. Eight response stations are provided. The heart of the system involves a one-way communication system (E to S) which consists of a transmitter unit housed in the control console and ear plug type receivers provided the Ss. Thus, casual observation would reveal a group of eight Ss in a normal group type setting each of whom, however, are individually "wired" to the control console at Es disposal. The console consists of an array of eight push-to-talk buttons which can activate from one to eight stations singly or in combination. All eight stations can also be activated simultaneously. There is an audio output from the console to the video tape recorder (also audio can be recorded independently) so that all of the E to S verbal interactions (prompts, instructions, etc.) will be superimposed in real time upon the VTR.
record. Thus, the complete group therapy scenario can be recaptured and played back for purposes of training and debriefing.

Software:
Although hardware requirements have been defined, much remains to be accomplished in the way of supporting software. Accordingly, we are in the process of developing a "Users Manual" which will document the theoretical and behavioral rationale, samples of various kinds of behavioral exercises that have been developed and used, as well as a lexicon of standard type behavioral prompts and instructions that may be pre-recorded (some instructions may be bi-lingual). Since the system is still very much in the experimental stage, we are continually learning new uses, developing new techniques, and gaining new knowledge that will be beneficial to potential users. We are well aware that even the most sophisticated hardware system - with all the exciting technological possibilities, it may provide, is largely useless without the supporting software that instructs the user "how to use it."

EVALUATION:
Although as noted above, we are still too early in the developmental stages to have generated much research data in the way of baseline or the reversibility paradigm characteristic of behavioral modification procedures, we have established some
internal evaluation procedures whereby the effects of the technique may be assessed. First of all, it should be recalled that the entire group procedure is video taped. The therapy session proper lasts for about one hour, followed by a thirty minute debriefing session. A scoring procedure is being developed whereby behavioral measures across the five program phases (twenty sessions over a period of approximately four months) may be plotted. Each of the program phases has a specific behavioral objective which will be recorded as the client achieves it. In addition, we are administering the Mini Mult at the end of each program phase. We also plan to develop an objective-type test of cognitive skills involving behavioral processes, as well as the development of an autobiographical essay type measure where Ss hopefully will be able to provide anecdotal type information relating to his utilization of behavioral techniques. Finally, we do have some informal evaluation as to the effectiveness of our procedure. Several of our Ss who have had extended experience with the system have continued to do exceptionally well following their release to the streets. Of course, we do not know conclusively to what extent our "treatment" has affected such an outcome, but several of the Ss were recidivists who had undergone extensive conventional group therapy which didn't seem to work, and experienced observers have been sufficiently impressed that the present approach has indeed generated some
different and apparently more successful behaviors. At any rate, further development plans call for continued and more intensive follow-up and evaluation.

FUTURE DEVELOPMENT:

Our present plans are for a more highly sophisticated audio-visual communication system, as an outgrowth of what is only our second generation COM-MAND SYSTEM. As noted, software will continue to be developed concurrently. We also plan to incorporate another reinforcement dimension in the form of an audio-tone signal to be used as a conditioned reinforcer. In this regard, we hope to achieve a finer shaping of behavior at a molar level much in the manner of those working in biofeedback and visceral learning have done at the molecular level. We thus believe by the effective melding of technology and behavior science, we can better help our clients to develop the kind of effective self-control associated with responsible coping behavior.