## MODIFICATION OF VERBAL AFFECTIVE, EMPATHY,

## AND FEEDBACK RESPONSES IN GROUPS

WITH FACILITATING LEADERS

By

WILLIAM FRANKLIN WHISENANT Bachelor of Science Oklahoma State University Stillwater, Oklahoma

1970

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE May, 1974

Theses 19.74 W5.76m wp.2

OKLAHOMA STATE UNIVERSITY LIBRARY

SEP 4 1974

MODIFICATION OF VERBAL AFFECTIVE, EMPATHY, AND FEEDBACK RESPONSES IN GROUPS WITH FACILITATING LEADERS

Thesis Approved:

Thes ser

Dean of the Graduate College

#### ACKNOWLEDGMENTS

I wish to express my appreciation to my major adviser, Dr. Donald K. Fromme, for his guidance and inspiration throughout this study. I would also like to thank my other committee members, Dr. Kenneth D. Sandvold and Dr. Julia L. McHale, for their support.

A special note of appreciation is expressed to my parents, Mr. and Mrs. Clarence C. Whisenant, who graciously supplied the author for this study.

# TABLE OF CONTENTS

.

Chapter	r <sub>l</sub>																										Pa	age
I.	INTRO	9DUC	TIO	N	•	•	• •	•	•	•	•	•	•	•	•	•	•	•	•	ø	•	•	•	•	•	•	•	1
		Beh Rei	avi nfo	or rce	Mo me	di: nt	fic of	at V	io 'er	n bai	1	Rea	spe	ons	ses		In	Gi	:01	ips	•	•	•	•	•	•	•	2 3 /
II.	METH	0D	• •	•10	•	•	• •		.01		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	12
		Sul Fac Pro Ins App Sco	jec ili cedu tru ara orer	ts tat cti tus Re	or on	s s ab:		Lty	• • • • •	• • • • • • • •		•	•	• • • • •	•	•	• • • • • •	•	• • • •	•	• • • • • •	• • • •	• • • •	`• • •	• • •	0 • • •	• • • • • •	12 12 12 14 15 16
III.	RESU	LTS	••	a	•	•	• •	•	•	•	•	•	•	•	•	e	•	Ð	•	•	•	•	•	¢	•	•	•	17
IV.	DISCI	USSI	ON	•	•	•	• •	•		•	•	•	•	•	•	¢	•	` e	•	•	•	Ð	•	•	•	•	•	19
<b>V.</b>	SUMM	<b>ARY</b>	• • •	0	e.	• .	•	• •	•	•	•	•	•	•		•	٩	. 0		•	•	. •	•	•		•	•	22
SELECTH	ED BI	BLIC	GRA	PHY		•	•••	• •	Ð	•	•	•	. •	•	o	9	ø	0	•		¢	•	•	•	•	•	•	24
APPENDI	IX A ·	- IN	ISTR	UCT	IO	NS		•	0	•	•	0	•	•	•	e	•	•	•	0	c	a	•	•	•	•	•	29
APPENDI	IX B ·	– ВА	SIC	IN	IST	RU	CTI	ON	C	AR	DS	٠	ø	9	•	•	•	•	•	•	•	•	. •	•		, <b>•</b>	•	34
APPENDI	IX C	- QU	IEST	ION	INA	IR	E.	•	•	•	•	•	•	•	•	•	•	•	•	•	. 0	•	•	•	•	•	o	36
APPENDI	IXD	- QU	IEST	ION	INA	IR	ΕF	ÆS	PO	NSI	E :	FRI	EQU	JEI	NC Y	Z	•	•	0	•	•	•	•	•	•	•	•	38 ·

# LIST OF TABLES

Page	ł																										Le	Tab
17	•	•	•	•	•	•		•	. <b>e</b>	•	•	•	¢	•	•	•	•	•	•	•	ance	Var	of	ysis	aly	An	I.	
19	•	•	•	•	•	. •	up	ro	G	er	P	es	nse	poi	es	R	le	ab.	cea	or	einf	of	ber	Num	an	Me	[I. <sup>,</sup>	

#### CHAPTER I

### INTRODUCTION

In 1952 Eysenck (1969) published the results of a survey contrasting the improvement rate of conventional psychoanalytic and eclectic psychotherapy with the spontaneous remission rate for neurotic patients. His results failed to show that psychotherapy facilitated the recovery rate for patients with neurotic disorders. Truax and Carkhuff (1967) support Eysenck's results with their own review of the relevant literature. They report that on the average, conventional counseling and psychotherapy "does not result in average client improvement greater than that observed in persons who receive no special counseling or psychotherapy treatment."

However, as pointed out in a summary and review article by Truax and Mitchell (1971) some individual therapists do get an improvement rate that is significantly better than the spontaneous remission rate while other therapists seem to actually hinder their client's recovery. When averaged together the overall improvement rate is just about equal to that for controls receiving no form of psychotherapy.

Truax and his co-workers (Truax and Mitchell, 1971) have accumulated much evidence to support the contention that the paramount factor that determines a therapist's effectiveness is his interpersonal skills. They have further broken this variable down to three important components: accurate empathy, nonpossessive warmth, and genuineness. As

1.

Woody (1971) points out, these dimensions are almost identical to those that Rogers considers to be necessary for therapeutic change; i.e., empathic understanding, unconditional positive regard, and congruence. Rogers (1957) contends that if these conditions are provided by the therapist, this is all that is necessary for patient improvement. Rogers argues further that selectively responding with these conditions would be damaging rather than helpful.

However, studies that have analyzed therapy sessions of the Rogerian approach, and some interviews with Rogers himself (Truax, 1965), have shown that selective responding does occur and generally those classes of client behavior to which the therapist responds (i.e., reinforces), increase in frequency while those to which the therapist does not respond show no change. In other words, Rogers is an effective therapist but not exactly for the reasons he states.

ιų,

## Behavior Modification

The learning theory approach has been shown to be a very powerful behavior modification tool where the behavior to be modified can be recognized easily and reliably. Also, the Truax studies show that there are reinforcement variables operating even in the complicated interactions that occur during psychotherapy. Ullman, Krasner, and Collins (1961) demonstrated that reinforcing affect words in the TAT stories of neuropsychiatric patients led to increased affective verbalization in a later group therapy session.

#### Reinforcement of Verbal Responses in Groups

Group therapy has evolved in an attempt to meet the needs of the increasing number of people seeking psychotherapy. The group also has the advantage of providing an individual with more persons from whom he can obtain those therapeutic kinds of interactions (e.g., feedback) that effect behavioral change. It also gives one the opportunity of giving help to others. Yalom (1970) contends that this in itself can be therapeutic for the one attempting to assist others.

The reinforcement paradigm has been applied to group interaction very successfully. Liberman (1970, 1971) made a direct application of operant conditioning principles to group therapy. In the experimental group, the therapist was trained to use techniques of social reinforcement to facilitate the development of intermember cohesiveness--also termed intimacy, solidarity, or affection. In the comparison group, the therapist, who was matched along several traits with the experimental group's therapist, used a more conventional, intuitive, group-centered approach in dealing with the group. The results indicated that patients in the experimental group showed more signs of cohesiveness, independence from therapist, quicker symptom remission and greater personality change than did patients in the control group. Similarly, there are many examples of group modification of other verbal response classes: e.g., verbal initiations (Hauserman, Zweback, and Plotkin, 1972), giving opinions (Oakes, 1962), order of speaking (Levin and Shapiro, 1962), conclusions reached (Oakes, Droge, and August, 1961), and personal or group references (Dinoff, Harner, Kurpiewski, Rickard, and Timmons, 1960)。

Most of these studies have used a therapist or group leader to reinforce the responses of the group members. However, Wolf (1961) has suggested that the presence of a therapist may lead to an antitherapeutic dependency on the therapist. Furthermore, Salzberg (1961) has found that verbal interaction by group members is inversely related to the frequency of the therapist's verbalizations. Attempts have been made to replace the therapist with mechanical feedback apparatus as the reinforcing agent.

Hastorf (1968) used sets of lights to manipulate the leadership hierarchy of four-person groups that were given the task of "solving problems in human relations." The subjects first discussed a case for ten minutes after which they were asked to rank the persons in the group, including themselves, on four questions: (1) Who talked the most? (2) Who had the best ideas? (3) Who did the most to guide the discussion? and (4) Who would you say was the group's leader? Responses to these questions were highly correlated and they were combined into a general measure of the perceived status hierarchy of the group. Records were kept of the total number of times each individual talked and the amount of time each subject talked. This was combined with the questionnaire data to obtain a general status ranking in the group. The person who ranked number three was chosen as the target person that was going to be changed to the leader of the group.

The subjects were then told that they would receive feedback from "human relations experts" as to how they were doing in discussing the next case. Each subject had a red and a green light in front of him that could be seen only by him. Subjects were told that the "experts" were to give feedback accordingly: Whenever you make a contribution to the discussion which is helpful or functional in facilitating the group process your green light will go on. Whenever you behave in a way which will eventually hamper or hinder the group process your red light will go on.

In reality the experimenters were controlling all the lights in an effort to manipulate the target person into leading the group. A third session followed lasting ten minutes that involved no feedback lights. Measures of perceived sociometric rankings and actual performance were again taken.

Data from the second session showed that the target person talked more and was perceived as the group leader. The data from the third session indicated that the target person's leadership behavior and his perceived sociometric status were maintained at a lower level but still significantly above the level in the first session.

It must be noted that no attempt was made to formally define leadership or to prescribe just what behaviors should be reinforced or punished on the part of the target person or on the part of the followers. Furthermore, this study does not involve modification of verbal behavior in a clinically therapeutic manner.

One study which did attempt to modify verbal behavior in a therapeutic manner was done by Krueger (1971). The subjects were 18 adolescent male delinquents that were being confined in a correctional institution. The subjects were divided into three groups of six members each with two male therapists randomly assigned to each group. An appropriate behavior was reinforced by a light flash in front of the subject. These light flashes were totalled and could be exchanged for primary reinforcers, such as candy and privileges. There were three conditions of reinforcement. In the peer-reinforcement, (PR), condition the reinforcement was administered by one of the group members. Each subject in this condition took a turn at being the reinforcer. In the adult-reinforcement, (AR), condition reinforcements were administered by the experimenter. In the random-reinforcement, (RR), condition reinforcements were administered on a time basis. This condition was used as a control. In this condition the light flashes were not contingent on actual verbal responses.

In the PR condition the reinforcing group member was instructed to: "Push the button for the group member who says things which you think are helpful." The reinforcer was told that he should give points to the kind of statements that lead to good conversation and to consider those members who show an interest in what is being discussed.

In the AR condition the response categories that were reinforced were defined as: (1) Self-report questions which were worded so as to elicit relevant information from another person; (2) suggestion of solutions, or interpretive reasons; (3) reinforcing statements which included any positive statements; (4) statements that showed positive regard and reduced tension; and (5) statements that showed personal responsibility.

Results demonstrated that subjects in the PR condition had significantly higher response rates and generally were most resistant to extinction and showed more generalization to situations outside of the experimental setting. However, it must be noted that the reinforcement categories were broad and loosely defined and that no assessment was made of the reliability and inter-judge agreement of the experimenter and all the subjects that did the reinforcing. Furthermore, the peer

reinforcers were not even instructed to use the same response categories as the adult reinforcer.

Another experiment that is relevant to the present study was conducted by Whalen (1969). She demonstrated the effects of modeling and detailed instructions in eliciting interpersonal openness from subjects in a group setting. Unlike the present study reinforcement was not given during the group interaction. There were four conditions involving 128 subjects with four subjects per group. Two groups were shown a film of four people interacting in an open interpersonal manner. One of these groups was given detailed exhortative and descriptive instructions, Two more groups were given the same detailed and minimal instructions, respectively, but were not shown the film modeling the desired behavior.

Results indicated that only subjects in the groups that were exposed to both the film model and the detailed instructions tended to engage in interpersonal openness as defined by two of the six response categories, personal discussion and feedback. The other four categories were impersonal discussion, group process responses, descriptive aspects of communicative speech, and unscoreable utterances. Whalen's study shows the importance of both detailed instructions and modeling in eliciting specific behaviors.

The last study to be reviewed is an experiment by Susky (1972) that was conducted parallel to the present one. Four-person groups of college students were instructed to engage in interpersonal interaction using the response categories outlined in the following section, the same categories used in the present experiment. In the experimental condition a digital counter and a red light was in front of each subject.

Whenever a subject said something that corresponded to one of the reinforceable categories his counter was advanced one digit. The counter made an audible click so the other group members could learn vicariously what was expected of them. If three minutes elapsed in which no one in the group got a click all four red lights momentarily flashed on. If one group member fell behind the person having the highest number of counts by ten, then the light of that person who was behind was turned on until he caught up. The control condition involved no counters or lights. The groups were given the same instructions and observed for the same period of time. A tally of the number of reinforceable responses was made during observation of the control groups and compared with the data from the experimental groups.

Results indicated that as predicted the experimental groups with the feedback apparatus did emit significantly more of the categorizeable responses. In fact the subjects in the control condition emitted scarcely any responses that would have been reinforceable.

In the experimental groups it was assumed that the subjects had the "opportunity to model the behavior of the individuals who were responding positively to the suggested mode of interaction, and therefore receiving the most reinforcements." However, most group therapy as currently conducted employs a person who acts as a leader, model, or facilitator. The purpose of the present study was to assess the value of reinforcement feedback apparatus (identical to that used in the Susky 1972 study) when used in conjunction with the facilitating leader in a group setting. It was hypothesized that the feedback apparatus would enhance the effect of the facilitator, therefore, the experimental

8 -

groups would emit more of the categorizeable responses than the control groups.

The Whalen (1969) study illustrated the importance of both detailed instructions and the model. Furthermore, Jacobson (1969) demonstrated that only subjects that were aware of the correct response-reinforcement contingency were able to show conditioning in a verbal conditioning experiment. In the present study it was decided to explain this contingency to the subjects with instructions that were detailed and explicit.

#### The Response Categories

The present study uses the behavior modification paradigm to reinforce certain response categories that are considered to be therapeutic in nature and generally enhance the interpersonal interaction process. The categories were selected in such a way so that they could be easily and reliably judged directly from the manifest verbal content of a subject's response.

The response categories were chosen to include the expression of feelings, giving and asking for feedback about the effects of a person's behavior, and the use of empathic statements. Five categories of responses were designated to encompass the desired behaviors (Appendixes A and B). They are as follows:

1. Any verbal expression of one's current feelings as elicited by members of the group. This expression must be explicit and cannot be merely implied in order to fit this category. For instance, someone might make a sarcastic remark from which anger can be inferred, but only if the person states his affective state of anger does he receive

9:

reinforcement. Furthermore, the feeling must be one that is produced by the group. That is, it does not count for a group member to express a feeling, even a current feeling, that was produced by an outside party. This definition also excludes cognitive, conative, and perceptual subjective state verbalizations such as, "I think," "I wish," or "I hope."

2. Asking for information from another group member regarding his feelings as defined in Category 1.

3. Seeking information in regard to the effects of one's own behavior on the feelings of the rest of the group members.

4. Statements to another group member regarding your perception of his current behavior, such as noting another member's posture, trembling hands, or chain smoking. This category does not necessarily deal with feelings. Its purpose is to bring subtle behaviors to the attention of the group and give an individual feedback as to how the other group members perceive him.

5. Any attempt to clarify by means of verbal labeling the feeling states of another individual with regard to the current interaction. This is a category designed to elicit empathy as operationally defined. Furthermore, the attempt to clarify the feeling must be in the form of a question and not a statement. For example: "Are you happy?" and not, "You are happy."

Yalom (1970) emphasized a focus on the "here and now process" as a desirable function of the group. Other writers about the group experience (Rogers, 1970 and Perls, 1969) support this view. For the present study it was decided that for a given verbalization to be reinforceable it must concern material that is both current and present.

The term, current and present situation, was operationally defined as the interactions that transpired in the experimental room during the 60-minute period after the experimenter signals to start the group.

## CHAPTER II

#### METHOD

#### Subjects

Subjects were 15 male and nine female Caucasian undergraduates. They signed up for the groups according to time convenience for themselves unaware of which condition they would be. People who knew each other were requested not to sign up for the same group. The mean age was 21.2 years with a range from 17 to 33 years.

## Facilitators.

The facilitators were all clinical psychology graduate students. One was a female and a third year student. The two males were third and fourth year students. All facilitators had had at least one year's experience in group work. For this experiment they were simply instructed to be a model for the group as best they could and to do the things they normally do as a group leader to facilitate the desired interaction. There was some use of group exercises, and there seemed to be a marked difference in the degree of directiveness of the facilitators.

## Procedure

This study consisted of an experimental condition versus a control condition, the effects of which were evaluated across the influence of

the three individuals who acted as facilitators in the groups. Each facilitator conducted one experimental and one control condition making a total of six groups. There were four subjects in each group. Each group met for a period of 60 minutes during which they were requested to interact on a level defined by the response categories.

In the experimental condition a mechanical apparatus was employed to give the subjects feedback signals telling them how effective they were in interacting according to the categories. The apparatus consisted of a digital counter in front of each subject with the dial facing that subject. There was also a red light mounted on top of each counter. Whenever a group member said something that corresponded to one of the reinforceable categories his counter was advanced one digit. The counter made an audible click which informed everyone in the group that that person responded according to the categories requested. If a subject fell ten counts behind the person with the highest score his red light was turned on and left on until he caught up and was less than ten counts behind. If no count was registered for a period of three minutes, meaning that no subject emitted a reinforceable response, then all the lights momentarily flashed on. This informed the subjects that the group as a whole was not using the categories.

In the control condition subjects were given similar instructions initially and observed during the 60-minute period but received no mechanical feedback. In front of each subject for all groups there was a 5" x 7" index card on which the categories of interaction were typed so that the subject could refer to them (Appendix B).

Following the 60-minute interaction all subjects filled out an llitem Likert type scale (Appendix C) that concerned their feelings and perceptions of the experiment.

#### Instructions

Efforts were made to design a set of instructions that were as detailed and explicit as possible without being long, repetitious, and boring (see Appendix A). The first part of the instructions stressed the desirability of expressing one's current feelings about and impressions of another person to him in an honest straightforward manner. Emphasis was made on keeping the expressions relevant to the current situation, the "here and now." It was also stressed that one needs to attempt to express empathy to the other person to develop true communication. Without this, interactions tend to become one-sided or with both parties expressing and neither listening. The distinction was made between value judgements and honest expressions of feeling. This was an attempt to pursuade the subjects to take responsibility for their feelings and perceptions. The groups were also cautioned against getting into the trap of exchanging biographical information that hinders interaction on a close personal basis.

The five reinforceable categories of interaction were then explained and with each an example was given of a response that would fit the category and one that would not fit. An explanation was then given for why the nonreinforceable response did not fit the category. It was pointed out that the responses all pertained to the current situation.

The group was asked to interact with each other using the categories for the next hour. They were informed that they would be observed, monitored, and tape recorded.

The experimental groups were given an explanation of the function and meaning of the feedback apparatus. The artificiality of the situation was acknowledged.

The facilitator was then introduced for all groups. The group was told that he was to assist them in anyway he could. The experimenter then left to go into the observation room and the session began.

#### Apparatus

The subjects were seated in one room, the experimental room, and observed from an adjoining room via a one-way mirror. They were arranged in a semi-circle around a table so that they could all be easily observed. The facilitator was seated on the opposite side of the table with his back to the mirror. In front of each subject was the digital counter with the dial facing that subject. The counters were activated by electrical pulses from the observation room. A red light was mounted on top of each counter. All of this equipment was operated from a control panel in the observation room. On the table were also two omnidirectional microphones. These were connected to a stereo tape recorder and headphones of the experimenter in the observation room. The stereophonic headphones enabled easy distinction of the speakers in the group.

To reinforce a subject the experimenter pressed the appropriate button for that subject. This advanced the counter in front of the subject and a counter in the observation room. The pulse also registered on a graphic event recorder and reset an interval timer. The timer was set for three minutes and if no reinforcement was given to any subject during that interval the timer would automatically flash all the red lights on in the experimental room and reset for another three minute interval. The red lights in the experimental room could also be individually switched on from the control panel in case any subject got ten or more counts behind. An electric timer with a buzzer signal at the end was set for 60 minutes and used to determine the end of each group.

#### Scorer Reliability

A reliability check was made between the experimenter, who made all the reinforcements in this study, and another scorer, Helen Susky, who used the same category system in her study cited earlier (Susky, 1972). Typed manuscripts of material from a session of a group of four people instructed to interact in a manner similar to the present study, expressing feelings, feedback, and empathy, were used. This material was divided up into scoreable units defined as uninterrupted verbalizations, each expressing a complete thought, similar to a sentence clause. Each scorer independently evaluated 670 of these units and judged whether or not they were reinforceable. There were disagreements on 46 of these units yielding a reliability of 93 percent. It should be noted that it was not necessary to determine agreement on individual categories because in the actual experiment this discrimination was not made during the reinforcement process.

### CHAPTER III

## RESULTS

The facilitators in this study were considered as a sample from a population of potential facilitators, therefore, the appropriate denominator for the F of the experimental versus control treatments is the interaction term with only two degrees of freedom. This F was not statistically significant.

The F for differences between facilitators was significant at the .01 level. This merely shows that some facilitators were better than others. The most interesting test was that for interaction which was also significant at the .01 level. Results of the analysis of variance are summarized in Table I.

#### TABLE I

			the second s		
Source	SS	df	MS	F	P
Between cells	2276.000	5	 		
Treatments	661.500	1	661.500	1.736	n.s.
Facilitators	852.250	2	426.125	6.758	.01
Interaction	762.250	2	381.125	6.044	。01
Within cells	1135.000	18	63.055		
Totals	3411.000	23			
· · · · · · · · · · · · · · · · · · ·					

## ANALYSIS OF VARIANCE

There were no significant differences in responses on the questionnaire. The results are summarized in Appendix D.

Verbal responses of the facilitators were also counted and categorized. This was done post hoc to explore the interaction component of the variance. Several features seemed to distinguish the behavior of the facilitator in the high frequency group. First, this person spoke 49 times during the hour as compared with 82 and 91 verbalizations by the other two facilitators in the feedback conditions. Secondly, 40 percent of his responses fell in one of the reinforcement categories, as compared with 31 percent and 32 percent for the other facilitators. Finally, 28 percent of his responses involved information seeking regarding group members' feelings (category 2) as compared with values of 15 percent and 18 percent for the other facilitators. The picture which emerges is that of a task oriented person who keeps his interventions to a minimum.

#### CHAPTER IV

## DISCUSSION

The significantly different influences of the facilitators that was shown in this study further support the findings of Truax and Mitchell (1971) that there are differences in effectiveness of therapists and counselors. However, as the significant interaction shows, these differences in facilitator effectiveness is very much dependent on which experimental condition is used. That is, some facilitators can benefit from working in conjunction with feedback apparatus and some cannot.

A significant difference between groups due solely to experimental versus control treatment was not found. There were only one and two degrees of freedom used to test this effect but if one examines Table II closely he can see that differences due to treatment seem to be highly dependent on the qualities of the facilitator.

## TABLE II

MEAN NUMBER OF REINFORCEABLE VERBAL RESPONSES PER GROUP.

Condition	Facilitator A	Facilitator B	Facilitator (		
Experimental	13.25	17.00	39.50		
Control	12.75	12.25	13.25		

If one had a good sized sample of facilitators with the relevant characteristics of Facilitator C, then it is likely that a big difference would be observed between conditions with and without mechanical feedback. On the other hand, if the sample of facilitators all had the relevant characteristics of Facilitator A in Table II, then it seems unlikely that a significant difference would be found even with a large sample. It should be pointed out that this finding only reflects the ability to work well with the experimental apparatus.

In the post hoc analyses of the facilitators' behavior, some features emerged that distinguished the behavior of the facilitator in the experiment with the highest frequency of categorizable responses. This facilitator had fewer overall interventions. This outcome is similar to Salzberg's (1961) findings of an inverse relationship between therapist verbalization and group interaction. Also, this facilitator had a higher percentage of his responses that corresponded to the reinforceable categories, particularly category 2, information seeking regarding group members' feelings. This facilitator kept his interventions to a minimum. As long as the group was interacting on the appropriate level he said little. His interventions were largely to redirect the group when it strayed from the task.

The methods used in this study are presented as an analogue to group psychotherapy. The subjects were taken from a population of normal undergraduate college students. In this approach there is much pressure on the individual to respond. There is the authoritative pressure of the experimenter and group leader plus the influence of the peers plus some impersonal devices on the table in front of the person that deal out rewards and punishments in a rather cold manner. Furthermore, the most effective facilitator seems to be one that is very task oriented. In this respect, conscientious precautions should be taken before applying these techniques to a more emotionally disturbed population.

•

#### CHAPTER V

## SUMMARY

Reinforcement theory has been shown to be an effective tool in therapeutic behavior modification according to the abundant literature. Group therapy evolved in an attempt to reach more people more effectively and it seems inevitable that these two approaches would merge. A few relevant studies show that this union is feasible. Susky (1972) demonstrated that mechanical feedback instruments can be used to elicit therapeutic responses in groups of college students.

The purpose of the present study was to assess the value of mechanical reinforcement instruments used in conjunction with facilitating group therapists in eliciting therapeutic responses of feeling expression, feedback, and empathy verbalizations.

Twenty-four college students divided into six groups of four each participated in the experiment. Three facilitators were assigned one experimental and one control group each. In the experimental groups digital counters and lights were used to feedback information to them during the group session. They were signaled when they were interacting according to the requested mode by the counters and they were signaled that they were failing to use the categories of interaction appropriately by the lights.

In the analysis it was found that although there was no significant difference between the experimental and control condition there was

significance between facilitators and a significant interaction component in the variance both at the .01 level. This illustrates that some group leaders enhance their facilitative influence by working with the feedback apparatus while others do not.

Post hoc analysis of the facilitators' responses pointed out some possible determinants that might account for this difference. The facilitator having the greatest effect with the experimental apparatus had the fewest verbalizations and the greatest percentage of responses that fit the reinforcement categories, particularly the category "seeking information regarding other group members' feelings". The most effective facilitator seems to be one that is task oriented, keeping his interventions to a minimum and allowing the group considerable autonomy.

#### SELECTED BIBLIOGRAPHY

#### Bandura, Albert

1969 <u>Principles of Behavior Modification</u>. New York: Holt, Rinehart and Winston.

Bergin, Allen E., and Sol L. Garfield

1971 <u>Handbook of Psychotherapy and Behavior Change: An</u> <u>Empirical Analysis</u>. New York: John Wiley and Sons, Inc.

Dinoff, Michael, Robert F. Horner, B. S. Kurpiewski, Henry C. Rickard, and Edwin O. Timmons

1960 "Conditioning Verbal Behavior of a Psychiatric Population in a Group Therapy-Like Situation." <u>Journal of Clinical</u> <u>Psychology</u>, 16:4:371-372.

Eysenck, H. J.

1969 "The Effects of Psychotherapy: An Evaluation." In Melvin Zax and George Stricker, eds. <u>The Study of</u> <u>Abnormal Behavior: Selected Readings</u>. The MacMillan Company.

Gibb, Jack R.

1971 "The Effects of Human Relations Training." In Allen E. Bergin and Sol L. Garfield, eds. <u>Handbook of Psycho-</u> <u>therapy and Behavior Change: An Empirical Analysis</u>. New York: John Wiley and Sons, Inc.

Hastorf, Albert H.

1968 "The 'Reinforcement' of Individual Actions in a Group Situation." In Leonard Krasner and Leonard P. Ullman, eds. <u>Research in Behavior Modification</u>. New York: Holt, Rinehart and Winston.

Hauserman, Norma, Stanley Zweback, and Alan Plotkin

1972 "Use of Concrete Reinforcemtn to Facilitate Verbal Invitations in Adolescent Group Therapy." <u>Journal of</u> <u>Consulting and Clinical Psychology</u>, Vol. 38 (1), 90-96. Jacobson, L: I.

1969 "The Effects of Awareness, Problem Solving Ability, and Task Difficulty on the Acquisition and Extinction of Verbal Behavior." Journal of Experimental Research in Personality, 3:203-213.

Krasner, Leonard, and Leonard P. Ullman.

1968 <u>Research in Behavior Modification</u>. New York: Holt, Rinehart and Winston.

Krueger, Doris El-Tawil

1970 "Operant Group Therapy with Deliquent Boys Using Therapist's Versus Peer's Reinforcement." (Unpub. doctoral dissertation, University of Miami.)

Levin, Gilbert, and David Shapiro

1962 "The Operant Conditioning of Conversation." Journal of the Experimental Analysis of Behavior, 5:3:309-316.

Liberman, Robert

- 1970 "A Behavioral Approach to Group Dynamics." <u>Behavior</u> <u>Therapy</u>, 1:141-175, 312-327.
- 1971 "Reinforcement of Cohesiveness in Group Therapy." Archives of General Psychiatry, 25:168-177.

Oakes, William F.

1962 "Reinforcement of Bales' Categories in Group Discussion." <u>Psychological Reports</u>, 11:427-435.

Oakes, William F., Arnold E. Droge, and Barbara August

1960 "Reinforcement Effects on Participation in Group Discussion." <u>Psychological Reports</u>, 7:503-514.

Perls, Frederick S.

- 1969 <u>Gestalt Therapy Verbatim</u>. Lafayette, Calif.: Real People Press.
- 1970 "Four Lectures." In Joen Fagan and Irma Lee Shepherd, eds. <u>Gestalt Therapy Now</u>. New York: Harper Colophon Books.

Poser, Ernest G.

1969 "The Effects of Therapists' Training on Group Therapeutic Outcome." In Melvin Zax and George Stricker, eds. <u>The</u> <u>Study of Abnormal Behavior: Selected Readings</u>. The MacMillan Company.

Rogers, C. R.

- 1957 "The Necessary and Sufficient Conditions of Therapeutic Personality Change." Journal of Consulting Psychology, 21, 95-103.
- 1970 <u>Carl Rogers on Encounter Groups</u>. New York: Harper and Row.

Ruitenbeck, Hendrik M.

1971 <u>Group Therapy Today: Styles, Methods, and Techniques.</u> New York: Atherton Press, Inc.

Salzberg, Herman C.

1961 "Manipulation of Verbal Behavior in a Group Psychotherapeutic Setting." Psychological Reports, 9:183-186.

Truax, Charles B.

1965 "Reinforcement and Non-Reinforcement in Rogerian Psychotherapy." Journal of Abnormal Psychology, 71, 1-9.

Truax, Charles B., and R. R. Carkhuff

1967 <u>Toward Effective Counseling and Psychotherapy: Training</u> and Practice. Chicago: Aldine Publishing Company.

Truax, Charles B., and Kevin M. Mitchell

1971 "Research on Certain Therapist Interpersonal Skills in Relation to Process and Outcomes." In Allen E. Bergin and Sol L. Garfield, eds. <u>Handbook of Psychotherapy and</u> <u>Behavior Change: An Empirical Analysis</u>. New York: John Wiley and Sons, Inc.

Ullman, Leonard P., Leonard Krasner, and Beverly J. Collins

1961 "Modification of Behavior Through Verbal Conditioning." Journal of Abnormal and Social Psychology, 62:1:128-132.

Whalen, Carol

1969 "Effects of a Model and Instructions on Group Verbal Behaviors." Journal of Consulting and Clinical Psychology, 33, 5, 509-526.

## Wolf, A.

1961 "Group Psychotherapy with Adults: The Alternate Meeting." Paper read at APGA Conference, New York, January 27, 1961. In Richard L. Bednar, and G. Frank Lawlis, "Empirical Research in Group Psychotherapy." Eds., Allen E. Bergin and Sol L. Garfield, <u>Handbook of Psychotherapy and</u> <u>Behavior Change: An Empirical Analysis</u>. New York: John Wiley and Sons, Inc.

Wolf, A., and E. K. Schwartz

1962 <u>Psychoanalysis in Groups</u>, New York: Grune and Stratton.

Woody, Robert Hanley

1971 <u>Psychobehavioral Counseling and Therapy</u>. New York: Appleton-Century-Crofts.

Yalom, Irvin D.

1970 <u>The Theory and Practice of Group Psychotherapy</u>. Basic Books, Inc.

## APPENDIXES

J

APPENDIX A

INSTRUCTIONS

÷

#### INSTRUCTIONS

This experiment is designed to help you get to know each other on a personal basis. One way you can do this is by noting your feelings in the present situation and then sharing these feelings with the other group members. If your feelings are about another person's actions, tell him. If your feelings are good, chances are he will continue his behavior. If your feelings are bad, he may be willing to change. On the other hand, if others are not told of the effects of their behavior, they are not likely to change. The better you are able to specify what you like or dislike about the other person's actions, the more easily understood you will be. It is also a good idea to keep your expressions of feelings relevant to the current situation--the "here and now." In no way will either of you be able to change the past. Finally, you may attempt to give the other person empathy and understanding. This is perhaps the most valuable thing one person can give another. When you genuinely understand how the other person feels, he will naturally feel closer to you.

Some ways of expressing ourselves impair communication since they are open to debate. For example, do not make value judgments like, "what you just did is good or bad" or speculate about motives, such as, "You just say that because you're angry."

One way to avoid involvement is to spend time gathering information about another person; for example, "What are you studying here at school?", "Where are you from?", or "How are you classified?". This is socially programmed use of time that we all have learned but it can hinder getting to know each other on a personal basis.

These five categories (at this time the experimenter points to cards in front of each subject on which the basic categories are outlined) are along the lines of what we've been talking about. They include ways of interacting that have been shown to be effective in establishing and maintaining close personal relationships. They are:

<u>CATEGORY 1</u>: Any verbal expression of your current feelings resulting from interaction with the group. An example that fits the category is, "I appreciate your interest." An example that does not fit is, "I feel great because I just aced an exam." This does not fit because it was produced by interaction outside the group.

<u>CATEGORY 2</u>: Seeking information from another group member regarding <u>his</u> feelings. An example of this would be, "How did you feel when she ignored your question?" An example that would not fit might be, "Have you ever felt that way before?" This refers to feelings outside the current situation and therefore does not fit the category.

<u>CATEGORY 3</u>: Seeking information regarding your <u>own</u> behavior. An example of this would be, "Does my persistence on this subject irritate you?" If you said, "Do people who talk a lot bother you?", this would not fit because it refers to people in general and not <u>your</u>. specific behavior.

<u>CATEGORY 4</u>: Statements to another group member regarding <u>your</u> perception of <u>his</u> behavior. For example, "You're really making a contribution to this conversation." It wouldn't fit if you said, "He's really coming on strong," because the statement was not made directly to the person whose behavior is in question.

<u>CATEGORY 5</u>: Any attempt to clarify the expressed feelings of another person. For example, "Are you saying you feel good now?" An example that does not fit this category would be a simple, "Yeah, I agree." This doesn't fit because it does not clarify a feeling.

You will note that all interactions pertain to the current situation; the interactions that will take place in this room. In addition, they emphasize feelings rather than ideas. I am asking you to interact with each other for a period of 60 minutes, using these categories.

I will monitor this group discussion by way of the microphone and one-way mirror. Your conversation will be tape recorded and kept confidential. It will be used only in the analysis of the experiment and then erased.

#### FOR EXPERIMENTAL GROUPS ONLY

Whenever someone makes a statement that fits one of the categories, I will activate the counter which is in front of that person. The counter makes a loud click and this will give you the information that you are interacting according to the categories. The counter keeps a record of your total and if anyone falls too far behind, the red light on his counter will be turned on. This will indicate that either he is falling behind and may need assistance, or that someone may be dominating the conversation. If no click is heard for a period of three minutes, all lights will flash on. This will be a signal that the group as a whole is not using the categories.

I realize that this apparatus makes for an artificial situation but it is the least distracting method that I've found to give you information regarding your interactions without interrupting those interactions.

# BOTH GROUPS

This is (first name of facilitator). He (She) will help you in the experiment in any way he (she) can. When I rap on the window of the observation room, that will be your signal to begin. APPENDIX B

•

.

BASIC INSTRUCTION CARDS

- CATEGORY 1. Any verbal expression of your current feelings resulting from interaction with the group.
- CATEGORY 2. Seeking information from another group member regarding <u>his</u> feelings.
- CATEGORY 3. Seeking information regarding your own behavior.
- CATEGORY 4. Statements to another group member regarding your perception of <u>his</u> behavior.
- CATEGORY 5. Any attempt to clarify the expressed feelings of another person.

## HERE & NOW

APPENDIX C

.

•

QUESTIONNAIRE

## QUESTIONNAIRE

NAME		AGE		SEX_	· • · · · · · · · · · · · · · · · · · ·	
CLASS	SRACE	(NATIONALI	ſY)			
		ğ Definitely	Z Moderately	Neutral	a B Moderately	a befinitely
1.	Did you enjoy this experiment?					
2.	Was it easy for you to interact in this group?		<del></del>			•
3:	Did you feel that this experiment was worthwhile to you personally?					
4。	Were you able to follow the instructions?					<del></del>
5。	Was the group as a whole able to gollow the instructions?				<del></del> ,	
6.	Were you able to openly discuss your feelings?					~ . -
7.	Was the group as a whole able to openly discuss feelings?		<u> </u>		•	
8.	Did you learn something about yourself?		· · ·			
9.	Do you now feel closer to the other members of the group?				<del></del>	
10.	Did the group members generally seem concerned about each other?					<u> </u>
11.	Do you think this experience will help you in other situations?	. ·			········	

APPENDIX D

QUESTIONNAIRE RESPONSE FREQUENCY

• •			Experimental		Control								
Question	Def No	Mod No	Neutral	Mod Yes	Def Yes	Def No	Mod No	Neutral	Mod Yes	Def Yes			
1.	0	2	, <b>1</b>	8	1	0	0	0	3	9			
2.	O	2	· · · 2	8	0 -	. 0	3 .	0	8	1			
3.	1.	2	; 0	, <b>7</b>	2	0	0	1	6	5			
4.	1	2	. <b>5</b>	4	. <b>O</b> r	Ū į	3	· 2	<sup>-</sup> 5	2			
5.	0	4	3	, <b>5</b>	: . O·	O.	4	1	6	1			
6.	0	4	2	. 6	0 <sup>1</sup>	1	1	· 0	· 6	4			
7.	0 -	3	· <b>3</b> ·	6	; O	Ð	<sup>;</sup> 1	3	6	2			
8.	2	; <b>0</b>	· 1	6	3	0	0	2	7	3			
9.	0	: 1	· 1	4	6	O.	0	Ċ C	8	4			
10.	0	:	2	· 7	3	0	0	1	· 7	4			
11.	1	1	; <b>3</b> ;	4	3	0	1	1	6	4			
			· · · · · · · · · · · · · · · · · · ·	· · · ·					4 				

# QUESTIONNAIRE RESPONSE FREQUENCY

## VITA

William Franklin Whisenant

Candidate for the Degree of

Master of Science

Thesis: MODIFICATION OF VERBAL AFFECTIVE, EMPATHY, AND FEEDBACK RESPONSES IN GROUPS WITH FACILITATING LEADERS

Major Field: Psychology

Biographical:

- Personal Data: Born in Hominy, Oklahoma, June 22, 1947, the son of Mr. and Mrs. Clarence C. Whisenant.
- Education: Graduated from Hominy High School, Hominy, Oklahoma, in May, 1966; received Bachelor of Science degree in Psychology from Oklahoma State University in May, 1970; completed requirements for the Master of Science degree at Oklahoma State University in May, 1974.
- Professional Affiliations: Member of Southwestern Psychological Association, Biofeedback Research Society, and Oklahoma State Psychological Association; selected for psychology traineeship with Veterans Hospital, Oklahoma City, Oklahoma, September, 1973 to August, 1974.