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ABSTRACT

The study compares the effectiveness of sensitivity training, video taped modeling, and simple instruction in the acquisition, by college students, of certain social skills thought to be necessary if they are to perform effectively as nonprofessionals in a therapeutic role. Sixty subjects randomly selected from a group of 120 volunteers enrolled in an introductory psychology course at the University of Illinois, comprised the subject population. Twenty were placed in each of the three training conditions, which were subsequently evaluated through the use of a slightly modified version of Goodman's Group Assessment of Interpersonal Traits. Findings indicate that untrained subjects performed as well as those trained by modeling or sensitivity training, when specific instructions were given. It is concluded that elaborate training for a volunteer college student population, in the interpersonal skills being investigated, is an inefficient approach to their use as mental health workers. (TL)

Effects of Sensitivity Training, Video Taped Modeling and Instruction on Group Verbal Behavior

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Recent efforts to meet societal need for direct psychological service have increasingly relied upon the skills of various nonprofessionals (e.g. Guerney, 1969). One frequently used source of such manpower is college students, who have been reported to work successfully in a variety of roles and settings (Holzberg, Turner and Knapp, 1967; Poser, 1966; Zax and Cowen, 1967; Verinis, 1970). As more and more programs are initiated, issues such as differential effectiveness and the need for training and selection have been raised (Rappaport, Chinsky and Cowen, in press; Chinsky and Rappaport, 1971). This study addresses itself to the general question "what method of training college students for a therapeutic role is most efficient?"

Questions of training, of course, imply necessary skills. Among the postulated variables believed necessary for an effective therapeutic intervention are certain social skills which have gone under various names, some of which constitute the ability to disclose psychologically meaningful personal information, and to understand the feelings and problems of others (Chinsky and Rappaport, 1971; Rogers, 1957; Truax and Carkhuff, 1969; Goodman, 1969). While these social skills may not be sufficient for an effective therapeutic intervention, most would agree that they are at least necessary (c.f. Paul, 1966). Such skills are of the sort thought of as important for social interaction by the current "group movement," and "sensitivity groups" are seen by some as a method of training (Golembiewski and Blumberg, 1970).

Within the behavior modification literature, a second method of training is suggested. Various authors have found filmed modeling to be an effective means for the training of specific skills (Bandura, 1969). Indeed, this technique has been demonstrated to be explicitly useful for the training of social skills in both children (O'Connor, 1969; in press) and adults (Whalen,

1969). At the same time, recent work has indicated that when a class of complex verbal behaviors rather than a simple one to one response match is required (as in operant imitation studies; c.f. Baer, Peterson and Sherman, 1967), an orienting informational component such as instruction may be necessary (Whalen, 1969). It may even be that normal college students, volunteering for a helping-therapeutic role, do not require the acquisition of new behaviors, and specific orienting information such as instructions is sufficient "training."

The specific purpose of this study was to compare the above mentioned methods of training college student volunteers in social skills. It was hypothesized that under a condition of general instruction, a modeling trained group of college student volunteers would perform better on measures of psychologically meaningful personal self-disclosure, and understanding of the problems and feelings of others, than would either a group who had received sensitivity training, or a group of untrained controls. It was further hypothesized that the sensitivity training group would also perform better than the control group. Finally, it was expected that group differences would disappear under a condition in which all subjects were given specific instructions.

Method

Subjects

A written announcement describing a research and training project in interpersonal skills, and requesting a limited number of male volunteers, was circulated in each of the 50 discussion sections of an introductory psychology course at the University of Illinois. Of the approximately 700 males enrolled, 120 volunteered. Of this group, 60 were randomly selected, and each randomly assigned to one of the three training conditions described below. During the evaluation period one S was lost due to illness, such that the final N = 59.

While earlier research (Rappaport, Chinsky and Cowen, in press) has shown that volunteers for therapeutic helping projects do not differ in personality characteristics from nonvolunteers, given the nature of the task, volunteers were used on both ethical and motivational grounds.

Training Conditions

Sensitivity Training. The 20 S's assigned to sensitivity training (ST) were randomly assigned to one of two experienced, doctoral level sensitivity group leaders. The leaders were paid for their professional time, by the experimenters, and each met with a group of 10 S's once weekly in two-hour sessions over a period of seven weeks. Thus, each subject in this condition received 14 hours of training. The leaders and the experimenters met together prior to the onset of the project to determine goals, which focused on the fostering of interpersonal openness in regard to personal feelings and problems, and enhancing the participants' sensitivity to, and understanding of, the personal problems and feelings of others. The leaders were uninformed as to the purposes of the research.

Video-Taped Modeling. The 20 S's assigned to the video-taped modeling condition (VTM) were shown, individually, just prior to participation in the evaluation situation described below, a 20 minute black and white video-tape on a 19 inch TV monitor. The video-tape consists of four two-person interactions in which one person reveals personal problems and a second person attempts to understand his problems, while communicating that understanding back to the discloser. The sequences are performed by undergraduate actors who, after eight hours of practice at personal self-disclosure and understanding, were given scripts based on their own real problems. The scripts were edited so as to maximize personal self-disclosure, personal questions, positive feedback and acceptance of feedback. The degree to which the tapes contained such content is reported in Table 1. In conjunction with the

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Insert Table 1 about here
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video-tape, an audio-taped narration was presented, pointing out each of the specific desired behaviors. At pre-determined points the video-tape action was stopped by an experimenter, out of view, and the narration played while a "stop-action" appeared on the TV monitor.

Control condition. Twenty S's were brought into the evaluation situation, described below, with no training. Each of these S's were, at the conclusion of the evaluation procedure, shown the video-taped modeling sequences and discussed this and the evaluation situation with the E in order to fulfill the promise of training.

Evaluation Situation. The Group Assessment of Interpersonal Traits (GAIT) is a structured group situation developed by Goodman (1969), for the evaluation of interpersonal skills. A slightly modified version of this technique was used in this study in order to evaluate the effects of the training conditions. The GAIT is a small group situation in which each group member is asked to tell the group something about his personal life. One person is asked to reveal an interpersonal problem and one other person is asked to try to understand that problem, during a four minute interaction. After the first interaction the next person presents his problem to a different understander, and so on until every one in the group has performed both tasks. A structured rather than an open group format was used in order to simulate therapeutic-like roles.

Each GAIT was attended by six S's and an experimenter. None of the S's were known to one another. S's within each of the training conditions were assigned to one of 10 GAIT sessions such that in each GAIT there were two S's from each condition: one from each of the two ST groups, two from the VTM condition and two Cs.

Dyad interaction for the GAIT sessions was balanced by pre-assigning each subject to a specific dyad for both his disclosing and his understanding task. As the subjects entered the room they were each given a letter tag to pin on their shirts and a pad of paper which indicated the letter of the person to whom they were to respond as an understander. In each group every member was given the task of both disclosing to, and understanding a person who had not been in the same training condition that they had experienced. Thus, his two interactions were with a subject from the two training conditions that were not his own. For example, an S who had been in the sensitivity training condition would either disclose to a modeling trained S or a control S. If he disclosed to a modeling trained S then he would be an understander for a control S. The second GAIT member with the same training experience would reverse these roles. Thus, all possible combinations of dyads were equally represented. Order of dyadic interaction was randomly determined for each group session, as was the actual dyadic pairing, within the constraints of the counter balancing described above. Each dyadic interaction was four minutes long, so that each subject had a chance to interact for a total of eight minutes, four for each task. All GAIT sessions took place within 10 days after completion of the seven week ST groups. One GAIT had five rather than six participants due to the illness of a S.

Following completion of the GAIT each S who had been in a training condition completed a questionnaire which assessed his self reported satisfaction with the training.

Instructions. Of the ten separate GAIT sessions, five were under a general instructional (GI) condition and five under a condition of specific (SI) instructions.

General Instructions. The task starts by asking the group members to tell the group something about their personal lives. After I finish

presenting the instructions, write two statements about your interpersonal relstions on the pad. Later, you will be asked to read either one to the group. In making the statement, try to be as open aa you can about the way you feel or behave in relations with people or one other person. After the first person has read his statement, the one peraon in the group who has his letter will engage him in a four minute conversation. The two-person conversation should focus on the statement, one person expanding it, the other showing understanding. After Person A, Person B reads his statement and the person who has his letter will respond aa an understander, and so on until everyone haa done both taska. In sum, there are two difficult situational problems to solve:

1. Presenting personal problems in a manufactured group situation.
2. Being understanding of a stranger and communicating that understanding in a group.

Take some time now to write your statements and read over the instructions in case they are not clear to you.

Specific Instructions.[3] The task starts by asking the group members to tell the group something about their personal livea. After I finish presenting the instructions, write two direct, clear statements about your interpersonal relations on the pad. Later you will be asked to read one to the group. In making the statement try to be as open as you can about the way you feel or behave in relations wich people or one other person. The task requires that you talk about something that you would like to improve in yourself: a problem, a concern, a dissatisfaction, an embarrassment, confusion in a relationship, etc. It should be a specific, frank, bold statement and not a question. Please avoid statements that are comfortably abstract or nonpersonal. Please discuss an interpersonal aspect of your life which you normally would not discuss in front of strangers. Chances are that neither of your written

statements will be easy to read before a group. Nevertheless, the task requires that you not read the easiest. If your problem is not embarrassing it is probably not a good one. This situation requires that you really be genuine and revealing in your group.

After the first person has read his statement, the one person in the group who has his letter may engage him in a four minute conversation. The two-person conversation should focus on the statement, one person expanding on it and the other showing understanding. There are a number of ways persons try to be understanding:

1. By repeatedly asking abstract questions.
2. By being critical.
3. By dismissing the importance of the problem.
4. By showing how you feel while listening to the problem and conveying your acceptance of the other person.
5. By bringing in your own personal experiences and related feelings.
6. By focusing your questions on the feelings and problems of the other person.

While the first three kinds of understanding are employed much more often in casual conversation, the latter three types are more effective for this situation. It may be tempting to ask abstract questions, be critical, or explain the problem away, but resist. You should emphasize sharing your own feelings and expressing acceptance of the other person; discussing your own related experiences and directing your questions to personal feelings.

After Person A, Person B reads his statement and the one who has his letter will respond as an understander, and so on, until everyone has done both tasks.

In sum, there are two difficult situational problems to solve:

1. Presenting personal problems in a manufactured group situation.
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Measures

Each GAIT session was tape recorded, and later transcribed. The transcripts of each session were presented to two independent raters. Both were fourth year clinical psychology graduate students who were uninformed as to the purposes of the study. They were simply told that these were transcripts of college student groups, in which the students took turns disclosing personal problems of their own, and trying to understand the problems of another. The group transcripts were each divided into six two-person interactions. After reading each interaction the raters were asked to assign a global rating to each of the participants. The discloser was rated on a five point scale ranging from 1 (the discloser's performance was not at all psychologically meaningful) to 5 (the discloser's performance was very pshchologically meaningful). The understander was also rated on a five point scale from not understanding to very understanding. Each subject was thus rated for each role, but subjects were not identified, so that the raters did not know who they were rating.

Each transcript was also rated by two independent trained raters on a series of 23 variables adapted from Whalen's (1969) method of content analysis. This procedure is essentially a frequency count of carefully specified verbal behaviors such as personal self-disclosure, impersonal self-disclosure, positive feedback, etc. This data, while not fully analyzed at the time of this writing, appears to be congruent with the global ratings and will be cited to the extent possible at this time.

Results

The post GAIT questionnaire administered to each of the VTM and ST subjects was analyzed in an effort to evaluate subjects' perceptions of the usefulness

of their training. It was found that both VTM and ST subjects believed that their training significantly helped them to perform in the GAIT situation (t (VTM) = 3.66; t (ST) = 2.10). There were no significant differences in response to the questionnaire between the two ST groups.

The global ratings of psychologically meaningful self-disclosure and understanding, across raters, yielded reliability coefficiencies .53 and .63 respectively. These moderate correlations are at the level found for most global ratings of similar concepts (e.g. Goodman, 1967; Chinsky and Rappaport, 1971). Data for the specific behavioral ratings was found to have 92% perfect agreement across more than 3200 individual statement units. The reliabilities for any given category are all .90 or better.

The design of the study permitted an analysis of the effects of training (three groups) under two conditions of instruction, with each subject performing two roles. Thus, the basic analysis was a 3x2x2 Anova. Table 2 presents this analysis for the global ratings and demonstrates a significant effect of

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Insert Table 2 about here
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training condition (F=3.09/df=2,53; p=.05), and a significant interaction of training with instructions (F=6.65/df=2, 53, p=.002). Since role was not a significant factor in these ratings Table 3 presents the means collapsed across role. It may be seen that, as predicted, the VTM trained group performed

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Insert Table 3 about here
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significantly better than either Cs (F=7.06/df=1, 53, p=.05) or STs (F=5.69/df=1, 53, p=.05) under the general instructions. Contrary to prediction, STs did not perform better than Cs. Under specific instructions there were no significant differences between the groups.

Analysis of the more reliable specific measures of verbal behavior, some of which were completed just prior to presenting this paper and could not be tabulated in this written report, reveal essentially the same findings, the exception being that the ST group did perform significantly better than Cs under general instructions. Also, this data reveals that the VTM group performed at about the same level, regardless of instructions, while the other two groups improved their performance under specific instructions such that the three groups are essentially indistinguishable. Finally, the main effect of instructions reaches significance. Examples of this data for specific verbal behaviors are cited in Table 4.

Insert Table 4 about here

Discussion

The results of this investigation have implications for both the training of nonprofessional mental health workers, and for further research concerning the active process in modeling and sensitivity groups.

The finding that among a group of college student volunteers, untrained Ss perform as well as their VTM or ST counterparts, if specific instructions are given, leads to the conclusion that elaborate training for this population, in the skills investigated in this study, is an inefficient approach to their use as mental health workers.

Each of the training methods investigated may lead to the desired performance. If this is so then the question of training becomes one of efficiency. That is, if viewing a 20 minute film is as effective as participating in a number of hours of sensitivity training, then the modeling procedure is more efficient, particularly in typically time limited college student volunteer programs. Likewise, if specific instructions are as effective as

training procedures, then that is the most efficient technique. The use of efficient techniques for training in the necessary social skills of therapeutic intervention, combined with selection procedures, would free the time of professionals to focus on training nonprofessionals in other skills which may also be necessary for a successful therapeutic intervention.

It appears from this study that volunteers may be largely self selected in regard to social skills, and further training may not be necessary. The study thus lends some support to those who have argued that the success of nonprofessionals has much to do with their "natural" social skills (Cowen, 1967; Poser, 1966; Rioch, 1966). However, since there are undoubtedly individual differences in regard to the skills investigated, even among a self selected population, it is recommended that users of college student volunteers adopt a behavioral selection procedure such as the GAIT. Administered under specific instructions, this procedure should allow selection of those volunteers who are already capable of performing in the desired fashion. Goodman (1969), in fact, has used this method, relying on peer and staff-observer global ratings, as a screening device for the selection of college student companions for elementary school age youngsters. He found that about two-thirds of his volunteers met the specified GAIT criterion performance. He has not, however, reported data on later effectiveness of selected students. Chinsky and Rappaport (1971), relying on global ratings, found that the GAIT had moderate predictive utility for the fostering of therapeutic change when used with college students who were working with chronic hospitalized patients. Neither Goodman (1969) nor Chinsky and Rappaport (1971) emphasized training beyond these social skills. In the future, if such skills are used as selection variables, given the finding that further training beyond specific and clear instructions may not be necessary, professionals can devote training time to other, also necessary, skills, such as specific behavior change techniques.

The question of sensitivity training and particularly its widespread use bears some consideration from the results of this study. The fact that the same behaviors may be produced by more direct methods of behavior change must lead one to question at least the efficiency of sensitivity groups. Furthermore, much of the literature finds not only inadequate specification of outcome criteria, but little control for the possibility that what is regarded as a treatment effect due to the group process may be a situational effect which allows for the performance of the desired behaviors. The data of this study argue for any demonstration of a sensitivity group effect to be shown to be beyond that which can be produced by situational demands and instructions.

While the issue may be an ethical, as well as a scientific, one for sensitivity groups (since these are used in widespread fashion and are literally "sold" to the general public), the same concern exists for demonstration of the effectiveness of filmed modeling procedures. Recent work (Whalen, 1969) on the effects of modeling a class of group verbal behavior, such as those examined in this study, found that modeling procedures alone and detailed instructions alone were each insufficient as a training device for subjects asked to be "open" with a group of strangers. Only training which employed filmed modeling plus "detailed instructions" was effective. Whalen explains these results on the basis of a "motivational" and a "cognitive attention-information" hypothesis. She invokes the following rationale: on the one hand neither the film itself or the detailed instructions alone are sufficient disinhibitors to allow performance in a potentially embarrassing situation. On the other hand, it may be that for a complex class of behaviors to be modeled, it is necessary that the S have his attention directly focused on the desired sort of behavior; instructions may serve to focus attention on the "nonsensing process" (Thibaut and Kelley, 1959) of the film.

This study, however, found that specific instructions alone and modeling alone were each sufficient to induce the desired performance. It is instructive to look at the situational and instructional differences in this study as opposed to Whalen's (1969). Firstly, (in this study) the criterion performance situation itself was structured. Each S had a role to play and a time to perform it. The Whalen (1969) study employed open, free response groups. In addition, the modeling film in this study, unlike Whalen's (1969) was combined with a narration which may have had the same attention focusing effect she attributes to her detailed instructions. Finally, the specific instructions used here are much more detailed, including actual examples, than are Whalen's (1969) "detailed instructions." This difference, plus the structured situation, may account for the effectiveness of instructions alone.

The above discussion must raise the same question regarding modeling which is raised in regard to sensitivity training. The data of this investigation argue that for some behaviors, and some populations, the same effects may be achieved by structuring an appropriate situation and giving specific instruction as by presenting a modeling film (Heller, 1969). It may be that defined situations and instructions are exactly what modeling is, at least under conditions when it can be assumed that Ss have the necessary behaviors in their repertoire, and acquisition of new behaviors is not necessary. The argument may also hold for acquisition, but demonstrations of that will require further research with subjects who have a clearly demonstrated prior deficit, and who then undergo situational and instructional treatment.

TABLE 1

BEHAVIORS MODELED UNDER VIDEO-TAPED MODELING FILM

ROLE	CATEGORY OF VERBAL BEHAVIOR	PERCENTAGE
DISCLOSER	PERSONAL SELF-DISCLOSURE	70.3%
	ACCEPTS FEEDBACK	12.3%
	IMPERSONAL OR OTHER	17.4%
UNDERSTANDER	PERSONAL SELF-DISCLOSURE	13.0%
	PERSONAL QUESTIONS	34.0%
	POSITIVE FEEDBACK	47.3%
	IMPERSONAL OR OTHER	5.7%
TOTAL (ACROSS ROLES)	PERSONAL SELF-DISCLOSURE	50.5%
	PERSONAL QUESTIONS	12.3%
	POSITIVE FEEDBACK	16.4%
	ACCEPTS FEEDBACK	8.1%
	IMPERSONAL OR OTHER	12.7%

NOTE - This verbal content analysis combines the behavioral ratings of four "disclosers" and four "understanders" in a series of four dyadic interactions.

TABLE 2

ANALYSIS OF VARIANCE OF GLOBAL RATINGS OF PSYCHOLOGICAL MEANINGFULNESS FOR THE DISCLOSER ROLE AND UNDERSTANDING FOR THE UNDERSTANDER ROLE.

SOURCE	df	SS	MS	F	PROB.
TRAINING (T)	2	3.65	1.82	3.09	.05
INSTRUCTIONS (I)	1	1.31	1.31	2.22	.14
T X I	2	7.84	3.92	6.65	.002
ERROR	53	31.27	.59		
ROLE (R)	1	.02	.02	.04	.82
T X R	2	.19	.09	.16	.85
I X R	1	.00	.00	.00	.91
T X R X I	2	1.02	.51	.83	.44
ERROR	53	32.71	.61		

TABLE 3

MEAN GLOBAL RATINGS OF SUBJECTS ACROSS ROLES

TRAINING CONDITION	GENERAL INSTRUCTIONS	SPECIFIC INSTRUCTIONS
MODELING GROUP	3.35	2.83
SENSITIVITY GROUP	2.53	3.15
CONTROL GROUP	2.40	2.93

Modeling > control under general instructions, $F=7.06$, $df=1,53$, $p < .05$

Modeling > sensitivity under general instructions, $F=5.69$, $df=1,53$, $p < .05$

NOTE = This analysis combines global ratings of psychological meaningfulness for the discloser role and understanding for the understander role.

TABLE 4

Examples from Behavior Rating Data

Mean Frequency of Personal Discussion in the Disclosure Role

	GI	SI
VTM	17.15	16.72
ST	10.55	16.95
C	6.00	17.70

Mean Frequency of Impersonal Discussion in the Disclosure Role

	GI	SI
VTM	14.30	9.35
ST	15.10	4.35
C	25.05	7.90

Note: For both categories of behavior, instruction is a significant main effect, and the improvement of Cs and STs is significant under the SI condition (Fs are very large).

Footnotes

1. Now at the University of Connecticut.

2. This research was conducted under a grant to Julian Rappaport from the University of Illinois Research Board.

3. Specific instructions are adapted from those used by Goodman (1969).

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