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TRAINING AND EVALUATION OF COMMUNICATION SKILLS

ABSTRACT: Two programmes, both of which were aimed at more effective performance in small group discussion, were compared. The first approach consisted of skill training while the second approach, an enriched programme, combined the skill training with a programmed notebook. Both training groups rated themselves as significantly more improved than a no-training control group which showed a slight decrease in self-ratings. The enriched-programme students rated themselves as having improved significantly more than did those given the standard skill training. The group members were also rated by their teachers, outside judges, and their peers in the programme. These criterion measures showed both training groups more improved than the control group, but the training groups did not differ significantly.

Increasingly, counsellors are being urged to expand their roles to include not only the traditional remedial functions but also activities related to prevention, and to human growth and development (Christie & Williamson, 1973; Morrell, Ivey, & Oetting, 1968; Pyke & Ricks, 1973). It is within this latter orientation that the program described in this report was developed. Another trend gathering momentum in the mental-health field is the emphasis on evaluation. The observations of Truax and Carkhuff (1967) that therapists may actually contribute to a deterioration of a client's condition highlight the necessity for systematic evaluation of counselling interventions. The purpose of the present study was to provide and evaluate a service to university students who were concerned about the quality of their performance in classroom discussions (commonly termed tutorials). The programme is an expansion and partial replication of a training approach designed by Pyke and Neely (1970). In the current study, a standard programme (SP) consisting of skill training is compared with an enriched programme (EP) which combines the standard skill training with a programmed notebook. The SP was designed to provide students with the

opportunity to practice overtly, in a relatively safe environment, the actual activities involved in discussion groups. Specific training components closely parallel those described by Pyke and Neely (1970) and include a variety of techniques employed or suggested by others (Dimock, 1961; D'Zurilla, 1964; Flavell, Botkin, Fry, Wright, & Jarvis, 1968; Fry, 1966; Hirschfeld, 1966; Holtzman, Dunham, & Spencer, 1966).

The unique feature of the EP was the addition of a programmed notebook. The notebook was adapted from one prepared by the American Management Association (1964). According to King (1967) this particular programmed text "... demonstrates the best use of varied techniques available in programmed textbooks (p. 60)." It was combined with the SP since it is recommended as a supplementary source for speech students. As it is intended for managerial personnel, some of the booklets were modified to make them more appropriate for university students.

Phillips (1968) has argued that communication training should take place in a social context. If the EP is more effective than the SP, this suggests that the learning of communication skills can occur in a non-social context, since the programmed notebook is completed individually by students. Increases in effectiveness by this enriched group may be due either to the actual learning of skills and the ability then to use the group time more effectively by practising these new skills. The latter interpretation is perhaps more likely and includes Phillips' (1968) criterion that training should take place in a social setting.

The paradigm employed in the study was the pre-test, training, post-test design, with the inclusion of a no-training control group. Criterion measures employed to evaluate the effectiveness of the two training approaches were: 1) participants' assessment of their ability, 2) ratings of participants by their teachers, 3) judges' ratings of videotaped speeches of participants, and 4) ratings of participants by their peers.

METHOD

Participants

Participants were university students who felt in need of communication training. On registration for the programme, students were assigned in counter-balanced fashion to one of the treatment groups ($n=27$ for the SP and 22 for the EP.) The uneven ns of students in the two groups is a result of attrition after assignment to a group. Drop-outs were placed in the CA if they agreed to complete posttests. A no-training control group (CA) of 12 students was composed of those clients who, although interested in the programme, found they were unable to participate primarily because scheduled group meetings conflicted with class times. A second control group (CB) of 12 students were paid \$3.00 an hour for their participation.

Students assigned to the SP were placed in one of five subgroups. All subgroups were treated identically. Similarly, students in the EP

were placed in one of four subgroups. The subgroups varied in size from a maximum of eight to a minimum of four as a function of student timetable restrictions. The same counsellor handled all subgroups.

Apparatus/Materials

The test materials for all students in the SP, the EP, and the CA consisted of the Index of Previous Experience and the Self Rating Form (Pyke & Neely, 1970). The Index of Previous Experience was administered to assess each participant's past experience in communicating in various group contexts. The Self Rating Form is a questionnaire designed to measure an individual's estimation of his own performance in tutorial group situations.

The Tutorial Leaders' Rating Form (Pyke & Neely, 1970), which is comparable to the Self Rating Form, was used by teachers to rate their students individually, according to the student's actual performance in a classroom discussion group. The Rating Scale for Communication Ability, a modification of the form developed by Baker (1970), was used by judges to evaluate the videotaped speeches of students in the treatment groups and the CB.

The programmed notebooks, used in the EP, consisted of five separate booklets each containing questions on various communication skills and an answer sheet. The booklet topics were: 1) two basic tools: symbols and their contexts, and what is communication, 2) words mean different things to different people and how to use words effectively, 3) recognizing statements for what they are and handling generalizations, judgments, and rumors, 4) purposes of speaking, answering questions, classroom discussions, and impromptu speaking, and, 5) planning and delivery of a speech.

Peer ratings were obtained for six different qualities of a speaker's presentation: easily heard, enjoys the experience, maintains eye contact, meaning is clear, stays on topic, presentation shows thought. Judgments of either adequate or inadequate were made for each quality.

Apparatus for the programme included standard stopwatches in order to time formal presentations, debates and discussions, and a videotape recorder and playback unit.

Procedure

The training programme consisted of biweekly meetings, each approximately one hour in duration for a total of 10 sessions. Two additional meetings were used for pretest and posttesting purposes and were attended by both the treatment groups and the CA. The pretesting session consisted of the administration of the Index of Previous Experience and the Self Rating Form. The Self Rating Form was readministered in the final session after completion of the 10 training sessions.

In the first and final training session, each student was required to give a three-minute prepared talk on a topic of his choice. Students in the treatment groups had been informed of this assignment at the

pretesting session. At the conclusion of each talk, the speaker was given feedback from the other group members on the separate qualities described earlier. All presentations were videotaped. These videotapes were viewed and discussed at the following meeting. The third training session was used to illustrate the difference between one-way and two-way communication following the procedure described by Dimock (1961).

The fourth meeting and session nine were both devoted to a general group discussion on an assigned topic with selected students role-playing a tutorial (discussion) leader. An analysis of the experience followed the 45-minute discussion. A debate on an assigned topic was the format for session five. A paraphrasing exercise, similar to that described by Dimock (1961), was incorporated into the debate as well as a search for commonalities in the views of opposing teams. Short impromptu talks formed the content of the next session as well as session eight. In session six, a topic was selected by each participant from a list of 25, while in session eight, no choice of topic was allowed. Subsequent to each presentation a short general discussion of the topic ensued. Session seven differed from the format of all others in that it was an individual meeting of the counsellor with each participant. Participants discussed privately some of their idiosyncratic communication difficulties and made suggestions for the content of future group meetings. The design of later sessions reflects this input. As previously stated, the final training session was structured to mirror session one in format.

In addition to the training programme as described above, the EP participants were given one of the five separate booklets of the programmed notebook to complete each week. Answer forms were handed in to the counsellor who scored them and returned them along with a sheet providing the correct answers.

Pre- and post-ratings of students in the two treatment groups and the CA were obtained from their tutorial leaders. Since students enrolled in the program were not identified for the teachers, the ratings were blind and should be relatively free of a "halo effect" bias. Many teachers failed to complete the Tutorial Leaders' Rating Form on their students; thus, the sample size for this measure is reduced — ratings were received for only eight subjects in each of the three groups.

The procedure for the CB paralleled the format of the first and last training sessions. The 12 students in this group were divided into two subgroups of six students each. In the first meeting, each of the six students was required to give a three-minute prepared talk on a topic of his own choice. These presentations were videotaped. Five weeks later, the groups reconvened and again each participant gave a three-minute prepared videotaped address. The third criterion measure consisted of the ratings by judges of these videotaped speeches as well as those given by members of the two treatment groups. The speeches were dubbed onto four master tapes. Each tape contained the presentations of some of the students from all three groups — the SP, the EP, and the CB. The pre- and post-contributions of each student were

always put on the same tape. The three judges who supplied the ratings were members of the university counselling agency and had no prior knowledge of any of the students. The Rating Scale for Communicating Ability was used by the judges to assess each student's presentation. Due to mechanical and other difficulties, only 15 students in the EP and 15 students in the SP were rated, as well as all 12 members of the CB.

RESULTS

A one way analysis of variance of the scores obtained from the Index of Previous Experience was non-significant indicating that the SP, EP, and CA students did not differ appreciably in terms of their reported past experience in group situations.

Self Assessed Improvement

An analysis of covariance (Winer, 1962) was used to test the effect of the training experience on self-reported ability. This analysis permits the adjustment of criterion means on the basis of effects of the covariate (pre-test scores). Thus, differences in initial rating levels are controlled. As shown in Table 1, a significant treatment effect was obtained, and a series of F ratios were computed to determine the locus of the effect. The EP members rated themselves as significantly more improved than the SP participants after training ($F = 6.06$, $df = 1/46$, $p < .05$). Both treatment groups regarded themselves as significantly more improved than the CA ($F = 22.09$, $df = 1/36$, $p < .01$ for EP versus CA and $F = 43.36$, $df = 1/31$, $p < .01$ for SP versus CA). The mean pre- and posttest scores for all three conditions are presented in Figure 1.

TABLE 1
ANALYSIS OF COVARIANCE RESULTS

Source	Self-Rating Form			Tutorial Leaders' Rating Form			Judges' Ratings		
	<i>df</i>	<i>MS</i>	<i>F</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Treatments	2	1436.52	21.93*	2	1.11	18.5*	2	107.10	10.93*
Error	57	65.49		20	0.06		38	9.80	
Total	59			22			40		

* $p < .01$

Teacher-Assessed Improvement

Teachers' judgments of changes in individual performance in small classroom group settings were obtained from the Tutorial Leaders' Rating Form. These results were subjected to an analysis of covariance and a significant treatment effect was found (see Table 1). Although the two training groups did not differ reliably in their tutorial leaders'

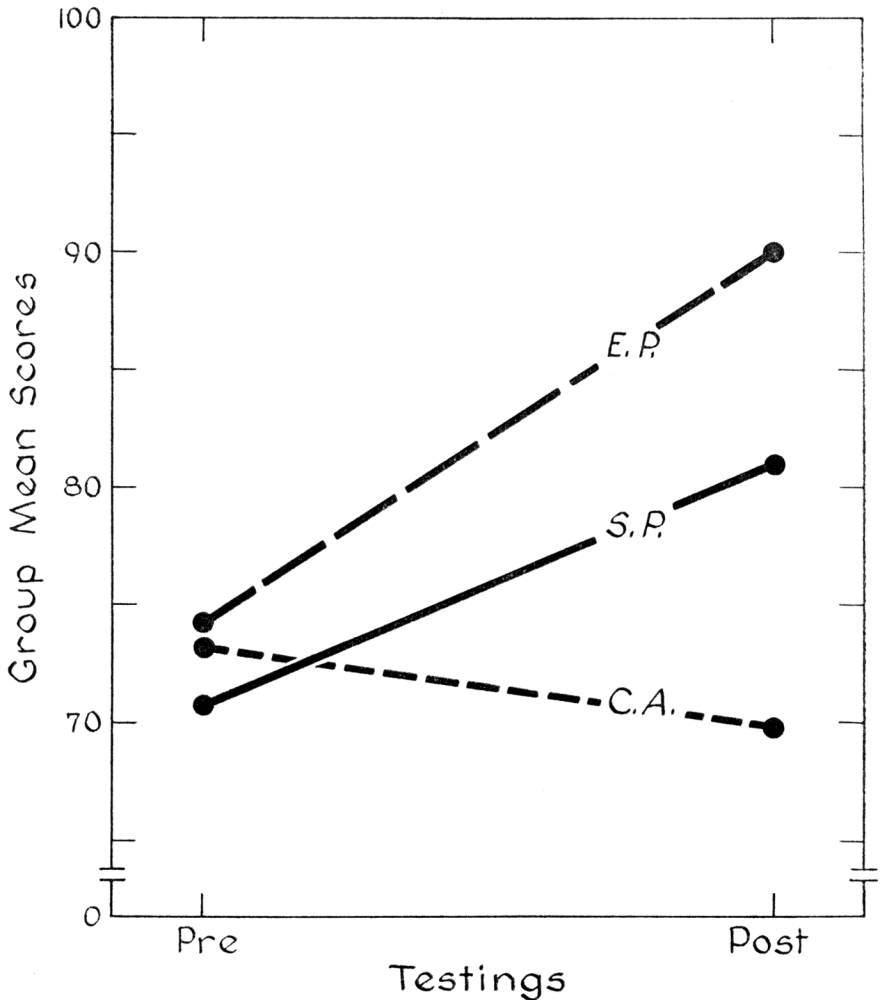


FIGURE 1

Pre- and Posttest Means on the Self Rating Form.

ratings after training, both were rated as significantly more improved than the CA ($F = 26.60, df = 1/13, p < .01$ for the SP versus the CA and $F = 28.85, df = 1/13, p < .01$ for the EP versus the CA). Figure 2 shows the pre- and posttest means on this measure for all three groups.

For comparison purposes, Figure 2 also contains the mean pre- and post-ratings for a group of 30 randomly selected students, not in the programme, but for whom tutorial leader ratings were available (CC).

Not surprisingly, these students are initially superior to those in the programme. However, at the time of posttesting, their teachers rated them lower than both the treatment groups. Thus, the training programme was effective in improving the participants' level of performance above that of the "average student."

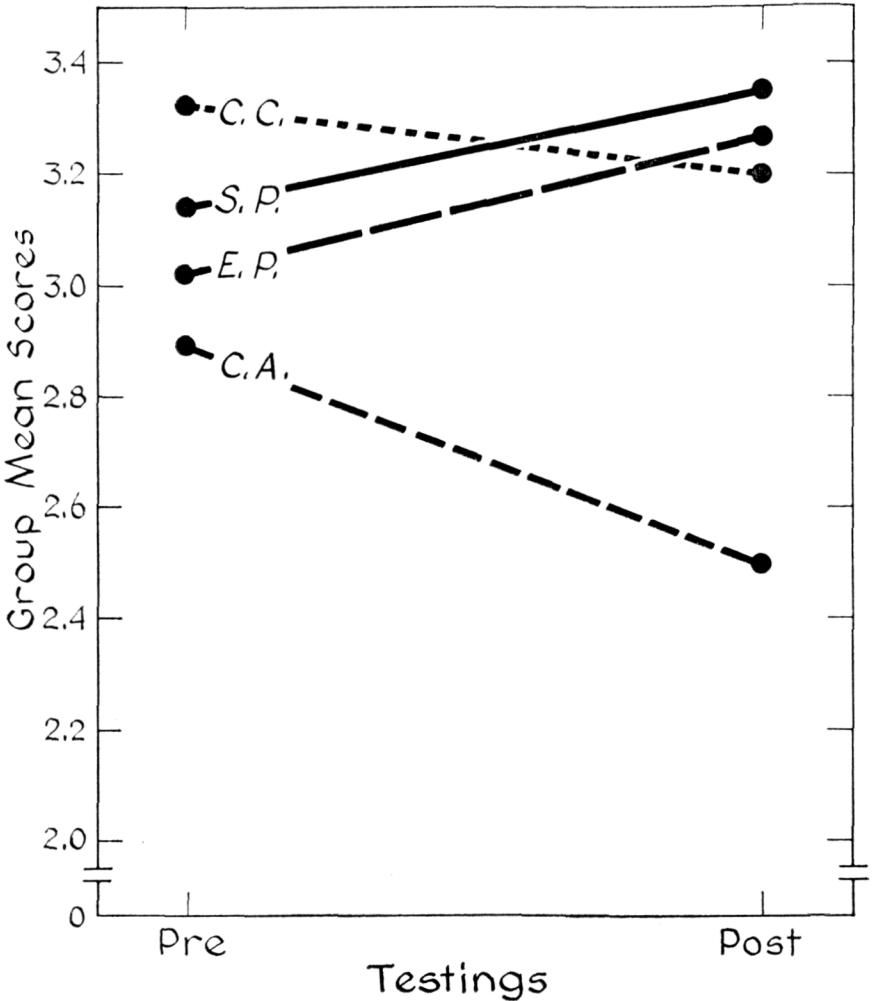


FIGURE 2

Pre- and Posttest Means from Teachers on the Tutorial Leaders' Rating Form.

Judge-Assessed Improvement

A procedure recommended by Winer (1962, p. 225) was utilized to determine the interjudge reliability of ratings of the videotaped student

presentations. The estimates of reliability ranged from .89 to .98, indicating a high degree of consistency among judges. For the purposes of a covariance analysis, a score was calculated for each student based on the average of the three judges' ratings. Again, as indicated on Table 1, a significant treatment effect was obtained. Both treatment groups were rated by the judges as significantly more improved than the no-training control group ($F = 15.41, df = 1/24, p < .01$ for SP versus CB and $F = 18.46, df = 1/24, p < .01$ for EP versus CB). The two training groups, however, were not rated as significantly different by the judges. These results are displayed in Figure 3.

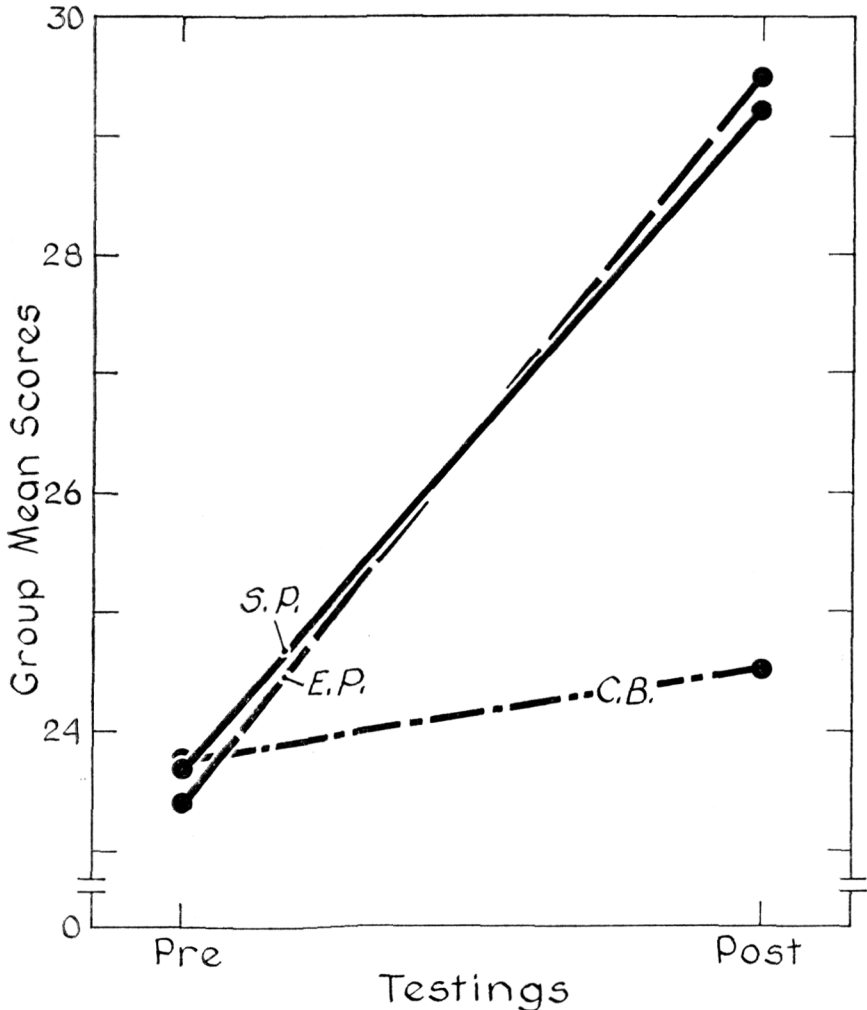


FIGURE 3

Pre- and Posttest Means from Judges on the Rating Scale for Communicating Ability.

Peer-Assessed Improvement

Students in the treatment groups rated each other's performance on two occasions — the initial and final training sessions. The student presentations rated by peers are the same as those rated by independent judges. The percentage of the total number of adequate ratings for each student was calculated for each session and the group percentage means for the first and final training sessions were compared using a *t* test for correlated means. Both groups showed significant improvements as judged by their peer audience ($t = 3.69$, $df = 19$, $p < .01$ for SP and $t = 5.07$, $df = 17$, $p < .01$ for EP). The enriched training group made the larger gain, an increase of 17 percent. The comparable figure for the EP group was 9 percent. Improvements were shown on all six qualities, but eye contact and enjoyment of the experience were the two characteristics that showed the greatest gain for both groups.

DISCUSSION

In this study, an attempt was made to evaluate the effectiveness of a counselling programme aimed at assisting clients to improve their communication skills. Goodstein and Grigg (1959) as well as Ogston (1970) stress the importance of client assessments of the utility of the counselling experience and in keeping with this position, clients rated their own communication ability before and after training. Clearly, the participating clients felt their abilities were significantly enhanced after training, while those who did not participate showed a slight deterioration in self-assessed performance. While this result is gratifying in itself, confidence in the value of the programme is increased by the finding that teachers rated participating students as more effective communicators — to the extent that their level of performance was above that of the "average student." Also, impartial judges rated the quality of speech presentations of participants as significantly improved and much superior to that of a group of students not participating in the treatment.

Phillips' (1968) contention that communication training must take place in a social context is supported by our data. Although clients participating in the EP were spending more time in training (completing the programmed note-book) they did not show significant improvements (apparent to external judges) greater than those accruing to students given standard training. Not surprisingly, the EP students regarded themselves as achieving greater gains than did those in the SP, as illustrated by the significant difference between the groups on the Self Rating Form and the trend for greater gains with peer ratings. These internal judgments, however, were not supported either by the students' teachers or by impartial judges. It appears then that any improvements in communicating ability which came about through completion of the programmed notebook used here are not reflected in the small classroom discussion situation, nor in the presentation of more formal speeches.

It seems clear that a programmed textbook approach to communication training of the type employed in this study, although economical in terms of counsellor time, is unlikely to lead to the achievement of skills which can be recognized by outside judges.

In summary, the results of this study, combined with those reported by Pyke and Neely (1970), indicate that the general skill training programme as designed has merit in enhancing the communication abilities of students. These improvements are apparent not only to the clients themselves but also to their teachers and to impartial judges. Consistent results were obtained in the two studies even though different counsellors and different criterion measures were employed.

RESUME: On a comparé deux programmes visant à améliorer le fonctionnement d'un petit groupe de discussion. La première approche consistait dans l'entraînement à l'habileté. La deuxième approche était un programme enrichi combinant à la fois l'entraînement à l'habileté et un cahier programmé. Les membres de ces deux groupes s'estimèrent significativement meilleurs que ceux d'un groupe contrôle dont les auto-évaluations dénotaient une légère diminution de fonctionnement. Les membres du programme enrichi s'évaluèrent comme étant encore meilleurs que ceux du programme standard. Les sujets furent aussi évalués par leurs professeurs, par des juges et par leurs pairs. Ces dernières évaluations ont montré que les groupes ayant reçu un entraînement s'étaient davantage améliorés que le groupe contrôle. Toutefois, on n'a pas noté de différences significatives entre les deux groupes ayant reçu un entraînement.

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