

VERBAL AND NONVERBAL COMPONENTS IN ASSERTIVE TRAINING,

by

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## INTRODUCTION

Assertive training is a technique through which individuals deficient in appropriate assertive behaviors are trained to develop more adaptive patterns of assertion. Rimm and Masters (1973) define assertive behavior as:

Interpersonal behavior involving the honest and relatively straightforward expression of feelings. Simply stated, assertive training includes any therapeutic procedure aimed at increasing the client's ability to engage in such behavior in a socially acceptable manner. Behavioral goals usually include the expression of negative feelings such as anger or resentment, but often assertive procedures are employed to facilitate the expression of positive feelings such as affection and praise.

The approach taken by early studies of assertive training has been to compare various treatment procedures on effectiveness in increasing assertive behavior. For example, McFall and Marston (1970) employed tape recorded stimulus situations and required subjects to listen and then respond to stimuli calling for assertive behavior.\* Treatment conditions included a behavior rehearsal and feedback group where subjects responded to the stimuli, replayed their own responses, and then responded again to the same stimulus (for a total of four trials per situation), and a behavior rehearsal and no feedback group where subjects were not afforded the opportunity to review responses. On a self-report measure (Wolpe-Lazarus Assertiveness Questionnaire) and a behavioral measure (subjects' responses rated by judges listening to the audio tape), both of these groups improved in assertiveness relative to controls. In a subsequent

\* For a detailed review of the literature see Appendix.



study McFall and Lillesand (1971) further manipulated treatment conditions by allowing subjects either overt behavioral rehearsal (responding aloud to stimulus model) or covert behavioral rehearsal ("reflecting on a response") to the stimulus model. Both experimental groups were exposed to assertive models, who demonstrated (on audio tape) appropriate responses. A behavioral measure similar to that employed in McFall and Marston (1970) and a self-report questionnaire designed for this specific study supported the conclusion that both experimental groups improved in assertive behavior relative to appropriate control groups. An even broader study of assertive behavior was that of Friedman (1971) who included six treatment conditions. Among these conditions were a Modeling treatment (subjects observed assertive models), a Directed Role Playing treatment (subjects enacted the role of an assertive model following a script), and an Assertive Script treatment (subjects simply read silently the assertive script employed in the other treatment conditions). In general, as compared with a control group, these treatment condition groups improved on a behavioral measure of assertion (Sum Assertion: judges rated tapes of subjects' responses to stimuli requiring assertion) and on a self-report measure of "global" assertiveness (Friedman's Action Situation Inventory, 1971).

Although the above studies have contributed significantly to our understanding of assertive training, the dependent measures employed failed to specifically enumerate individual behaviors which might be considered important in assertiveness. A recent series of studies has greatly increased the precision with which we can define assertive behavior. For example, Eisler, Miller, and Hersen (in press) videotaped

subjects interacting with a live stimulus model and rated the interactions on a five-point scale of overall assertiveness. Based on these ratings, subjects were dichotomized into low or high assertive groups, and judges then rated the videotapes on a series of nine behaviors proposed as components of assertiveness. From these nine behaviors, five specific components capable of differentiating high from low assertive subjects emerged: 1) latency of response (to the stimulus model), 2) loudness of speech, 3) compliance content (complying with unreasonable requests of the stimulus model), 4) content requesting new behavior (subject requesting the stimulus model to change his behavior), and 5) affect (vocal intonation). A later study by Eisler, Hersen, and Miller (1973) demonstrated that different assertive training procedures differentially effected changes in these specific components. This last finding necessitates a reconsideration of the earlier assertive training studies in terms of two general factors: the specific components reflected in the dependent measure, and the type of information presented by the treatment condition. For example, the components isolated by Eisler and his associates may be indices of verbal content (compliance content and content requesting new behavior) or of nonverbal content (latency of response, loudness of speech, affect). Further, the treatment conditions presented verbal and nonverbal information to subjects: a Modeling conditionpresumably presented both, a Modeling plus Instructions condition also presented both, and an Instruction condition presented both. Unfortunately, this confounding in treatment conditions prevents conclusions as to the relative importance of verbal and nonverbal content information. It is possible that an improvement on a verbal component was effected by the verbal

content information in the treatment condition, but it is also possible that such improvement was a function of an interaction between nonverbal and verbal content of the treatment. The experimental design precludes discerning this important difference.

In the Friedman (1971) study the Assertive Script condition presented only verbal content information and was found to be as effective as most other treatment conditions in improving subjects' Sum Assertion scores. However, the Sum Assertion measure was sensitive primarily to verbal content factors (e.g., threat, demand, insult, strong disagreement, request to stop) and, thus, may have failed to indicate changes in nonverbal aspects of assertiveness. Such changes may well have occurred as a function of the Modeling treatment (which included both verbal and nonverbal content information), but the study was unable to assess this possibility. The McFall and Marston (1970) study also neglects to consider verbal and nonverbal components, primarily because the treatment conditions did not independently present either factor. Recall that the treatments entailed behavioral rehearsal with or without feedback, therefore, precluding any experimenter control over the content of the information presented in training. Further, the behavioral measure employed (judges' ratings of global assertiveness) was indiscriminate with respect to the different content factors. Similarly, McFall and Lillesand (1971) used the global assertiveness dependent measure, but presented both verbal and nonverbal content information (by means of assertive models).

The purpose of the present study was to assess the relative contributions of verbal content and nonverbal content to subjects' assertive behavior and to evaluate treatment procedures concentrating on either

factor. Subjects were trained on either verbal content alone, nonverbal content alone, or a combination of both nonverbal and verbal content; and specific changes on these factors were observed. The design employed achieved control at the treatment level and sensitivity at the measurement level of both verbal and nonverbal aspects of assertive behavior.

#### Phase I

In order to prepare a training program for nonassertive individuals it was first necessary to ascertain the type of situation which commonly presented difficulty to such subjects. For this reason the McFall and Lillesand (1970) Conflict Resolution Inventory (CRI) was administered to 171 students of Virginia Polytechnic Institute and State University. In the modified form the CRI presented 31 hypothetical situations in which assertive behavior was appropriate and required subjects to indicate their degree of discomfort associated with assertiveness in each situation. To the same sample of subjects the Rathus Assertiveness Schedule (RAS), which has proven to have acceptable test-retest and split-half reliability and to correlate satisfactorily with behavioral ratings of assertiveness (Rathus, 1973), was also administered. A multiple correlation was performed on all 31 CRI items, the RAS score, and biographical information supplied on the test form. From this data the following criteria were observed in selection of stimulus situations: 1) no correlation, or insignificant correlation with sex or age of the subject, and 2) significant high correlation with RAS scores, such that situations selected correlated positively ( $r > .75$ ,  $p < .05$ ) with the RAS scale of assertiveness.

For those situations selected scripts were written and actors trained. Each situation was rehearsed, videotaped, and reviewed until

actors, director, and technical crew were satisfied with the technical quality of the end product. A total of 12 situations were included in the final videotape. Each situation used the following format: 1) narration explaining the scene, 2) stimulus model (SM) instigating irritating behavior, 3) assertive model (AM) responding to SM, 4) SM escalating or increasing irritating behavior, 5) AM escalating assertion to SM, 6) SM again escalating irritating behavior, and 7) AM again escalating assertion and terminating the scene.

For use in the present study the videotape was edited so that the AM segments were deleted and replaced with 20 sec. blanks.

## Method

### Subjects

The subjects were 40 student volunteers selected on the basis of RAS scores. Subjects were in the lower 2.25% of the sample distribution of RAS scores (based on a sample of 400 Virginia Polytechnic Institute and State University students). Some subjects were clients of the counseling center, referred to the experimenter by counselors aware of the assertive training investigation underway. For these clinical referrals, the same criteria of RAS scores was observed.

### Apparatus

Videotape recordings were made on a Sony AV 3400 videocorder with an AVC 3400 Sony video camera. Tape format was 0.5 in. black and white reel-to-reel. Playback was achieved on a Setchell Carlson Model 12100 television receiver. Supplementary audio input into the AV 3400 videocorder was required; for this purpose a Sony F-98 cardioid microphone was placed on a desk in front of the subject.

### Procedure

All subjects were administered the Minnesota Multiphasic Personality Inventory (MMPI). The assignment to experimental and control groups was random with the constraint of equal group size imposed. The design consisted of five groups: 1) a verbal content group (V), 2) a nonverbal content group (N), 3) a combined verbal-nonverbal content group (VN), 4) a practice control group (PC), and 5) a test-retest control group (TC). There were 8 subjects in each group (n=40). Subjects all volunteered for "an experiment to help people who are uncomfortable in interpersonal

situations." All subjects were seated in the laboratory across a desk from the experimenter, facing both the experimenter and the television monitor and camera. They were then instructed as follows:

"You are going to see a series of videotaped situations on the television in front of you. Studies have shown that practice in responding to uncomfortable situations can be quite helpful, and we would like for you to pay close attention to the tapes. For each situation a short narration will explain what is expected of you. Then our actor (SM) will speak, and the picture will freeze. You are to then respond to me (E) as if I had just said and done what the TV actor did. Remember, pay attention to the narration, the actor, and then respond to me as if I had just done what the actor did. We will be making a videotape of your responses to help us evaluate your progress, but this tape will be kept strictly confidential."

After Situation 2, for V, N, and VN subjects:

"For the rest of this session we are going to ask you to rate yourself on several points. After each response you will be handed a check list of several points and we want you to keep these points in mind and try to improve on them as the session proceeds."

Subjects in the V, N, and VN groups then went through the series of situations responding to the SM and filling in self-ratings.\* The subjects in the PC group responded to the SM, but were not afforded self-ratings. TC subjects responded to Situations 1 and 2 and were dismissed. One week later TC subjects returned and re-responded to Situations 1 and 2. The training sequence took approximately 2 hrs. per subject; that is, 1 hr. per session (one complete play-through of half of the situations) with two sessions spaced 1 week apart.

#### Rating Procedure

Three judges were shown the complete stimulus videotape in order to

\* The only differential training between groups was that afforded by rating cards. See Appendix.

familiarize themselves with the situations employed. They then viewed the videotapes of subjects responding to Stimulus Models and rated the responses according to specific Rating Criteria.\* So as to avoid confounding nonverbal behavior with subjects' verbal behavior, the videotapes were first rated with the audio portion deleted. The audio was then restored, and the judges considered the remaining variables with both audio and video on. Judges were blind to the treatment conditions and were not allowed to confer with each other prior to recording their ratings.

#### Dependent Variables

Previous studies have demonstrated the relevance of several variables in assertive responding by subjects. Eisler, et al. (1973) employed Duration of Looking, Compliance Content, Content Requesting New Behavior, and Assertive Affect. From these we adopted, respectively, Eye Contact, Giving In, and Requesting New Behavior. Assertive Affect was split into Facial Expression and Voice Qualities. Three new variables, Body Language, Being Specific, and Staying on the Point, were also employed in the present study. Thus, it was felt that the resultant dependent variables reflected either nonverbal behavior (e.g., Eye Contact, Facial Expression, Body Language, Voice Qualities) or verbal content behavior (e.g., Being Specific, Requesting New Behavior, Staying on the Point, Giving In) but did not confound verbal with nonverbal factors.

#### Results

##### Interjudge Reliability

To determine the degree of agreement among the three judges, a series

\* See Appendix.



of correlation coefficients was computed for all three possible pairs of judges on each of the eight dependent variables. In addition, the four verbal variables were combined, as were the four nonverbal variables, to form, respectively, an Overall Verbal and an Overall Nonverbal index. The correlation coefficients and their associated probabilities are reported in Table 1.

From Table 1 it may be seen that interjudge agreement ranged from a low of  $r=.44$  to a high of  $r=.83$ . The most reliable single variables were Eye Contact ( $r$ 's=.78, .82, .83) and Giving In ( $r$ 's=.83, .83, .84) but if two of the three correlation coefficients for any variable were .60 or greater, that variable was arbitrarily considered acceptably reliable. Thus, Voice Qualities, Being Specific, and Requesting New Behavior were included with Eye Contact and Giving In. Judges' ratings of Facial Expression, Body Language, and Staying on the Point were found to be generally too imprecise for further analysis.

Acceptable correlations were found for judges' ratings combined into Overall Verbal ( $r$ 's=.78, .82, .83) and Overall Nonverbal ( $r$ 's=.78, .78, .81) variables.

#### Pretest Measures

In order to determine the degree of similarity among treatment groups prior to treatment, a series of one-way analyses of variance was done on each dependent variable, the three judges' ratings having been averaged to provide a mean score for each subject on each pretest situation. Groups did not differ on any of the pretreatment measures (e.g., Eye Contact,  $F=.560$ ,  $df=4/35$ ,  $p > .05$ ; Voice Qualities,  $F=.583$ ,  $df=4/35$ ,  $p > .05$ ; Being Specific,  $F=1.844$ ,  $df=4/35$ ,  $p > .05$ ; Giving In,  $F=1.296$ ,

Table 1. Correlation coefficients for judges' ratings of all dependent variables. All correlations were significant ( $p < .01$ ).

TABLE 1

## Interjudge Reliability Correlation Coefficients\*

	Judges		
	1-3	1-2	2-3
Eye Contact	.78	.83	.82
Facial Expression	.53	.68	.52
Body Language	.56	.57	.44
Voice Qualities	.60	.72	.69
Being Specific	.67	.64	.69
Requesting New Behavior	.60	.64	.57
Staying on the Point	.44	.55	.70
Giving In	.83	.83	.84
Overall Verbal	.78	.83	.82
Overall Nonverbal	.78	.81	.78

\* All correlation coefficients are significant ( $p < .01$ ).

df=4/35,  $p > .05$ ). Since the variable, Requesting New Behavior, was by necessity dichotomized during the rating procedure, the data for this variable were treated nonparametrically. A Chi Square test revealed significant differences between groups ( $\chi^2=13.475$ , df=4,  $p < .01$ ). Groups PC and V evidenced the most, and Group TC the fewest requests.

An additional simple ANOVA on RAS scores revealed no differences between groups ( $F=.655$ , df=4/35,  $p > .05$ ). It was, therefore, assumed that the five treatment groups were equivalent prior to treatment on all measures of assertion employed except Requesting New Behavior.

#### Pretest-Posttest Difference Scores

The first type of analysis assessed improvement on Situations 1 and 2 which were performed prior to treatment and again following treatment. For each dependent variable a difference score was computed by subtracting the subject's mean rating on Situations 1 and 2 from the mean rating on Situations 13 and 14 (Situations 13 and 14 were replays of Situations 1 and 2) and adding a constant. Kruskal-Wallis one-way analyses of variance were performed on these difference scores.

Pretest means, posttest means, and standard deviations are reported in Table 2. The data in Table 2 suggest that on the variables, Being Specific and Giving In (for the N group), a ceiling effect was present with the five-point scale. Subjects ended up with scores around 4.5 and, at the same time, a reduction in the amount of variance was observed within this group.

Nonverbal Measures. For Eye Contact (Figure 1) group differences significant at the .05 level were found. A series of Mann-Whitney U tests revealed the N group to be superior to all other groups ( $p < .05$ ).

Table 2. Pretest Means, Posttest Means, and Standard Deviation. For Being Specific and Giving In (for the N group) a ceiling effect may have been present with the five-point scale.

TABLE 2

## Pretest Means, Posttest Means, and Standard Deviations

Group	Eye Contact		Voice Quals		Being Spec		Req New Behav		Giving In	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
TC										
Pre	2.48	.759	2.67	.858	2.86	.904	3.67	1.512	2.50	1.249
Post	2.75	.976	3.02	.851	3.44	1.366	4.00	1.852	2.69	1.379
PC										
Pre	2.86	1.000	2.73	.655	3.46	.825	4.58	.791	3.29	.817
Post	2.35	1.300	3.63	.493	3.84	.628	4.67	.712	3.73	.846
V										
Pre	2.23	.817	3.06	.408	3.87	.397	4.50	.689	3.58	.390
Post	2.16	1.213	3.65	.753	4.27	.286	4.92	.233	4.21	.330
N										
Pre	2.59	1.213	3.09	.989	3.88	1.191	4.46	1.399	3.52	1.236
Post	4.29	.374	3.92	.597	4.59	.285	4.92	.233	4.46	.248
VN										
Pre	2.81	.571	2.85	.778	3.46	.936	4.35	.944	3.25	1.140
Post	3.12	1.260	3.09	.735	4.09	.513	4.84	.306	3.90	1.077

Figure 1. Pretest-Posttest changes in Eye Contact. Group differences are significant at the .05 level with the N group superior to all other groups.

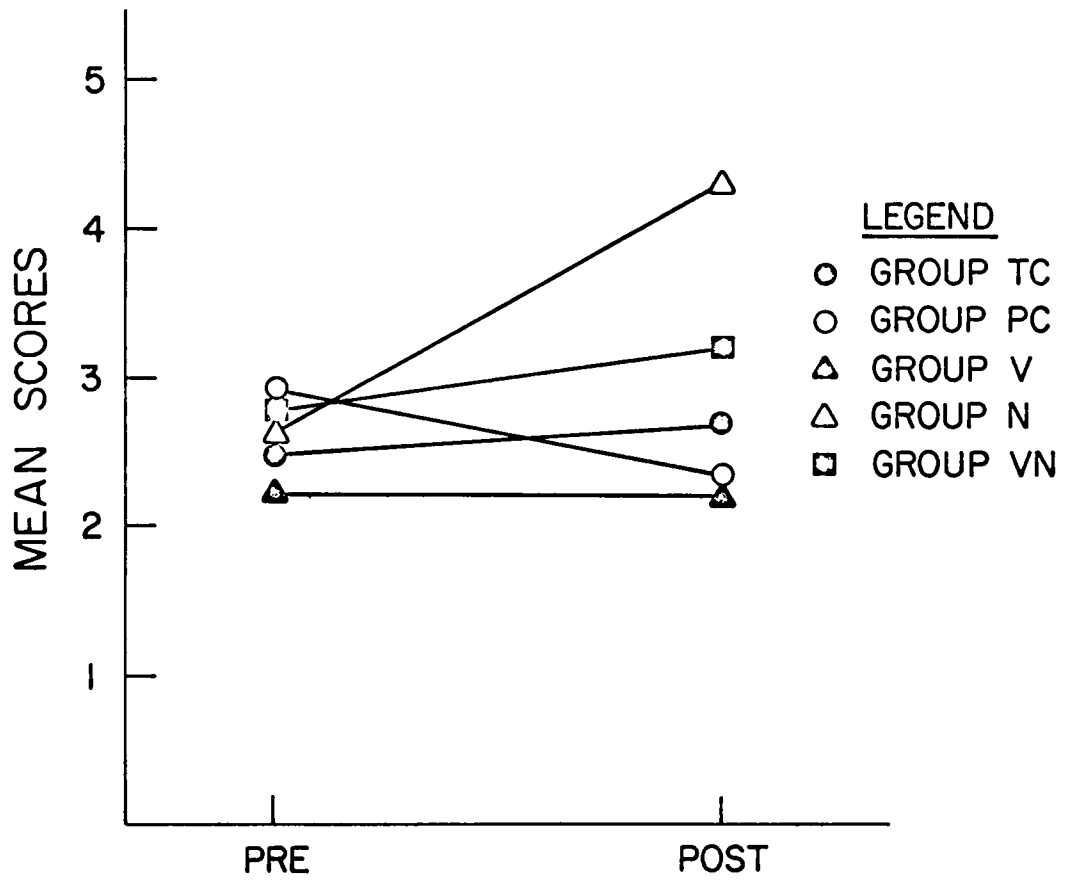


Figure 1. Pretest-Posttest Changes in Eye Contact.



However, the TC, PC, V, and VN groups did not differ from each other. For Voice Qualities (Figure 2) the Kruskal-Wallis test indicated significant ( $p < .01$ ) differences among the treatment group, while the Mann Whitney U tests indicated that no two groups differed significantly at the .05 level.

Verbal Measures. No group differences were obtained for Being Specific (Figure 3) or for Giving In (Figure 4). For Requesting New Behavior a series of binomial tests failed to find any differences.

In addition to group comparisons, changes within each group from pretest to posttest were evaluated using the Wilcoxon Matched-Pairs Signed-Ranks test.

Nonverbal Measures. For Eye Contact only the N group improved significantly ( $p < .01$ ). The PC group performed significantly worse at posttest than at pretest ( $p < .02$ ). On Voice Qualities the V ( $p < .05$ ), N ( $p < .01$ ), and VN ( $p < .05$ ) groups improved significantly.

Verbal Measures. For Being Specific no group improved significantly. Both the V and N subjects improved significantly ( $p < .05$ ) on Giving In.

#### Changes During Treatment

Analyses were also performed using the 36 escalated steps within the 12 individual situations employed during the two treatment sessions. Groups of two successive situations, each involving six escalated steps, were combined, yielding seven trial blocks for a Repeated Measures ANOVA. This permitted assessment of changes occurring during treatment. Since the Test-Retest control group received no treatment sessions, this group was omitted from the analysis. Where applicable, Duncan's New Multiple Range test was performed. Table 4 indicates trial-block means and

Figure 2. Pretest-Posttest changes in Voice Qualities. Significant differences among the treatment groups were found (at the .05 level), but no two groups differed significantly from each other according to the Mann Whitney U test.

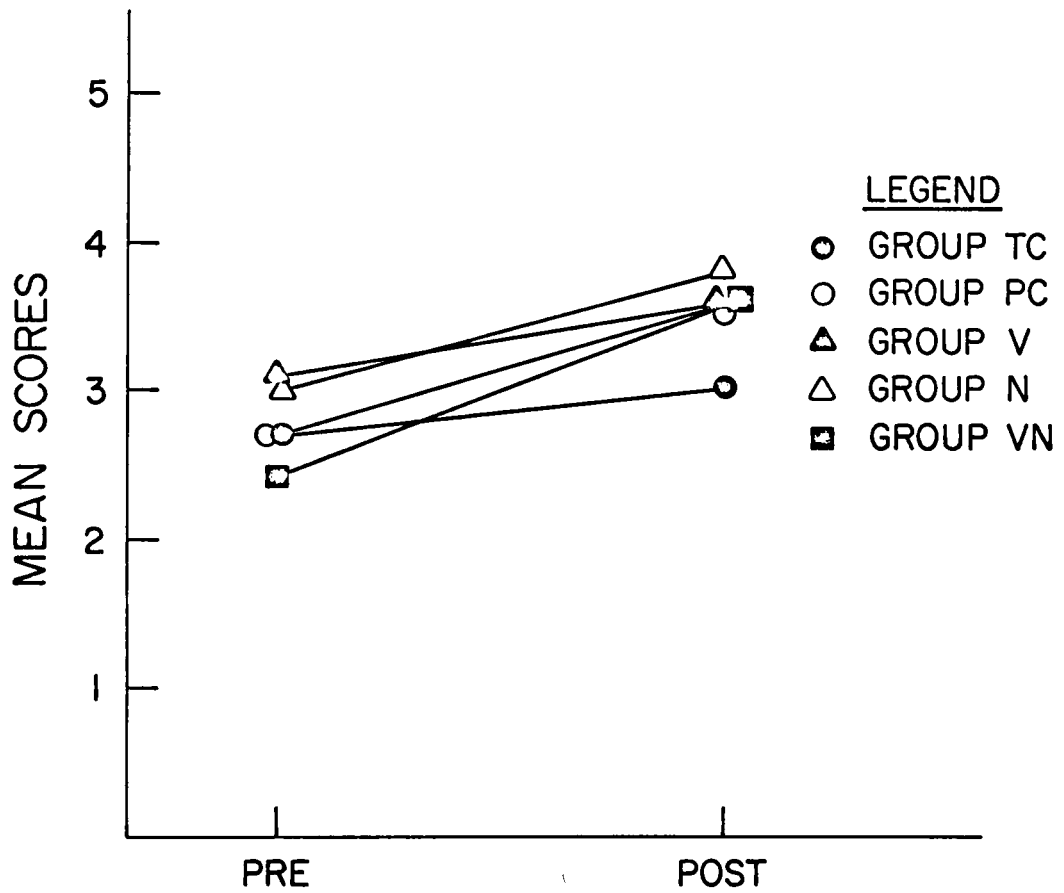


Figure 2. Pretest-Posttest Changes in Voice Qualities.

Figure 3. Pretest-Posttest changes in Being Specific. No group differences were obtained (at the .05 level).

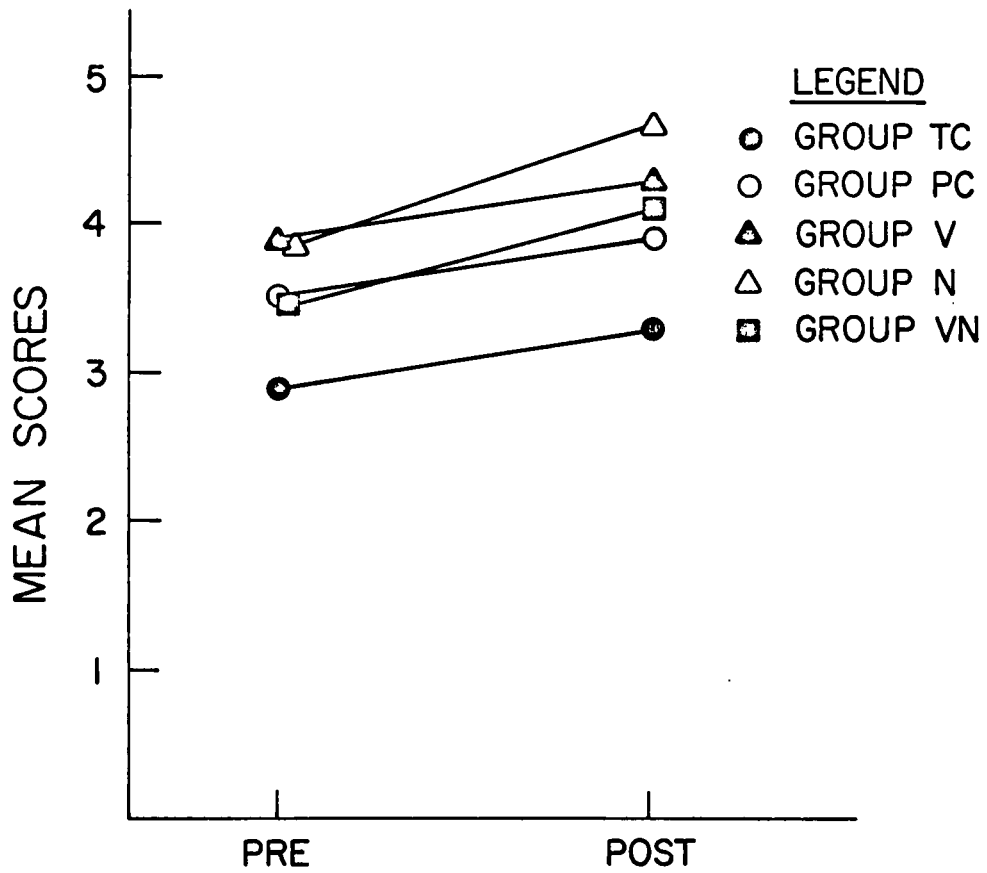


Figure 3. Pretest-Posttest Changes in Being Specific

Figure 4. Pretest-Posttest changes in Giving In. No group differences were obtained (at the .05 level).

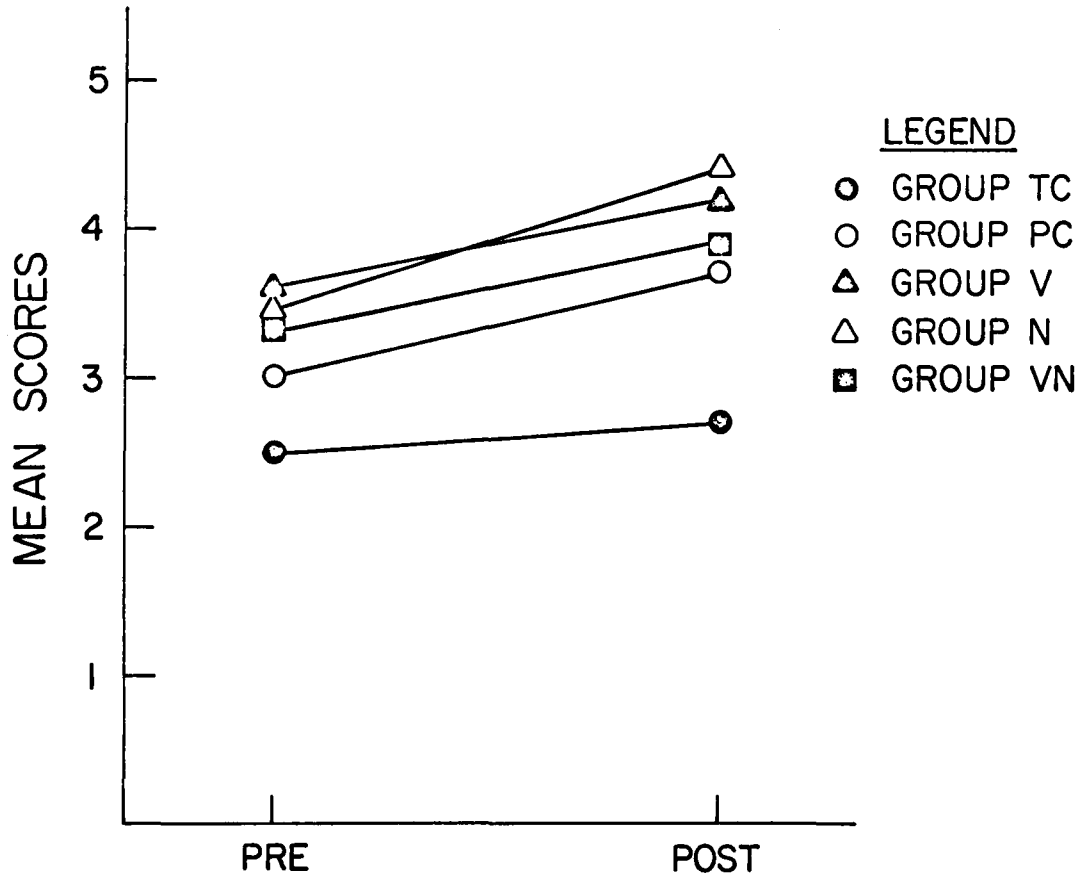


Figure 4. Pretest-Posttest Changes in Giving In.

Table 4. Trial-block means for Verbal and Nonverbal variables. An increasing mean score across trials was observed.



TABLE 4

## Trial-Block Means

	Trials						
	1-2	3-4	5-6	7-8	9-10	11-12	13-14
Eye Contact	2.62	2.97	3.03	2.93	2.99	3.09	2.99
Voice Qualities	2.93	3.24	3.46	3.32	3.54	3.79	3.69
Being Specific	3.67	3.40	4.12	3.97	4.05	4.39	4.21
Giving In	3.41	3.29	4.02	3.84	4.03	4.40	4.08

suggests an increasing trend across trials on all variables.

**Nonverbal Measures.** The Repeated Measures ANOVA for Eye Contact revealed a significant main effect for Groups ( $F=10.11$ ,  $df=3/28$ ,  $p < .01$ ), for Trials ( $F=2.48$ ,  $df=6/168$ ,  $p < .05$ ), and for the Group X Trials Interaction ( $F=3.808$ ,  $df=18/168$ ,  $p < .01$ ). As Figure 5 indicates, the interaction appears to be due to the N group which shows a large, rapid increase in Eye Contact as soon as treatment begins on Trials 3 and 4. Only Groups V and N differed significantly from each other at the .05 level; testing group means collapsed across trials.

For Voice Qualities the Groups effect and the Group X Trials Interaction are not significant; however, the Trials effect is significant ( $F=15.51$ ,  $df=6/168$ ,  $p < .01$ ).

**Verbal Measures.** For Being Specific there was a significant Groups ( $F=3.375$ ,  $df=3/28$ ,  $p < .05$ ) and Trials ( $F=12.019$ ,  $df=6/168$ ,  $p < .01$ ) main effect (Figure 6). By employing Duncan's New Multiple Range test it was found that on Trials 3 and 4 the V and N groups were superior to the PC group. These were the only significant ( $p < .05$ ) differences obtained between groups for the entire Trials analysis. For Giving In only the Trials Effect was significant ( $F=10.524$ ,  $df=6/168$ ,  $p < .01$ ).

#### MMPI Scores

For each treatment group mean T scores on each subtest on the MMPI were computed and are reported in Table 3. Scores elevated above the normal range were found for the PC group (Depression, 70 and Psychasthenia, 74) and for the VN group (Depression, 71; Masculinity-Femininity, 77; Psychasthenia, 74; and Schizophrenia, 75).

Figure 5. Changes during treatment in Eye Contact. The interaction appears due to the N group, which shows a rapid increase as soon as treatment begins.

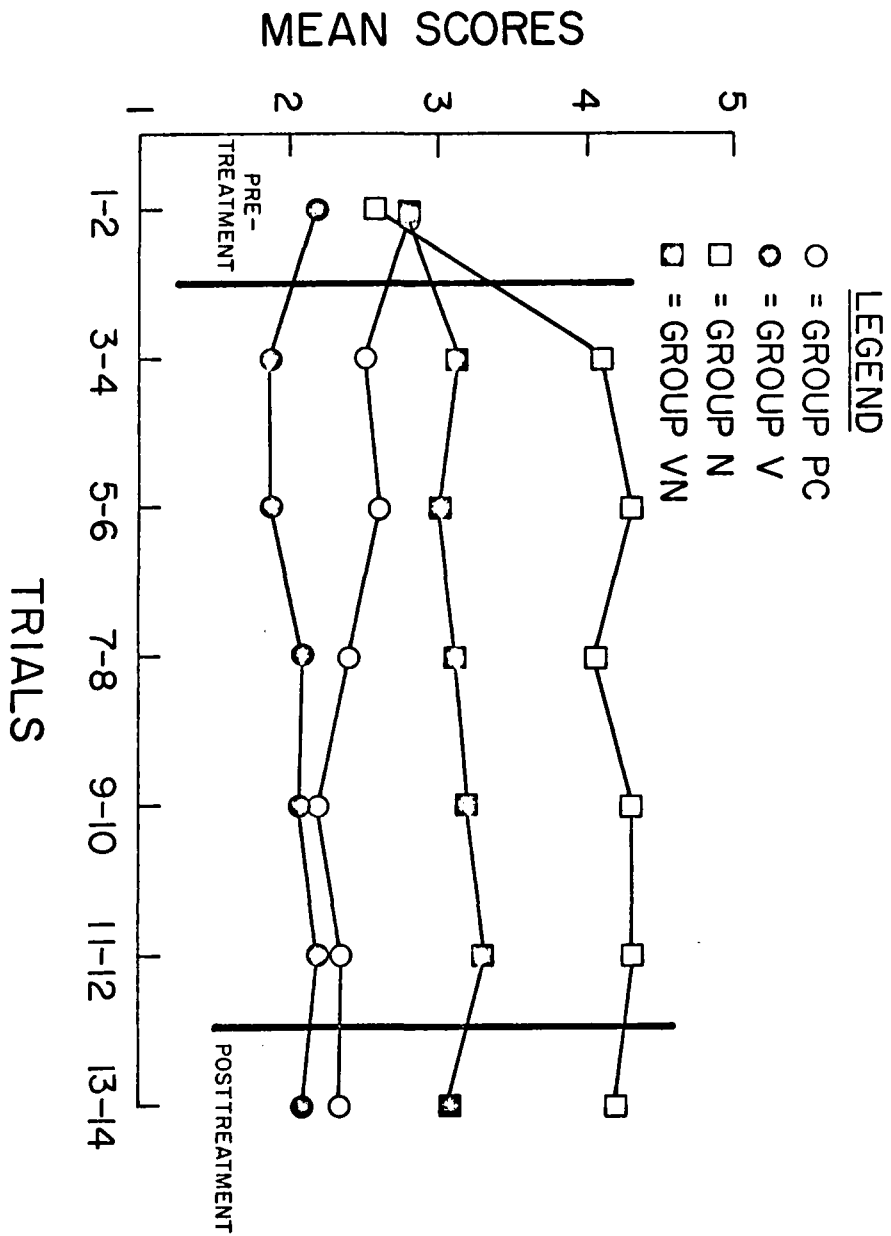


Figure 5. Changes During Treatment in Eye Contact.

Figure 6. Changes during treatment in Being Specific. On Trials 3 and 4 the V and N groups are superior to the PC group. No other differences were significant at the .05 level.

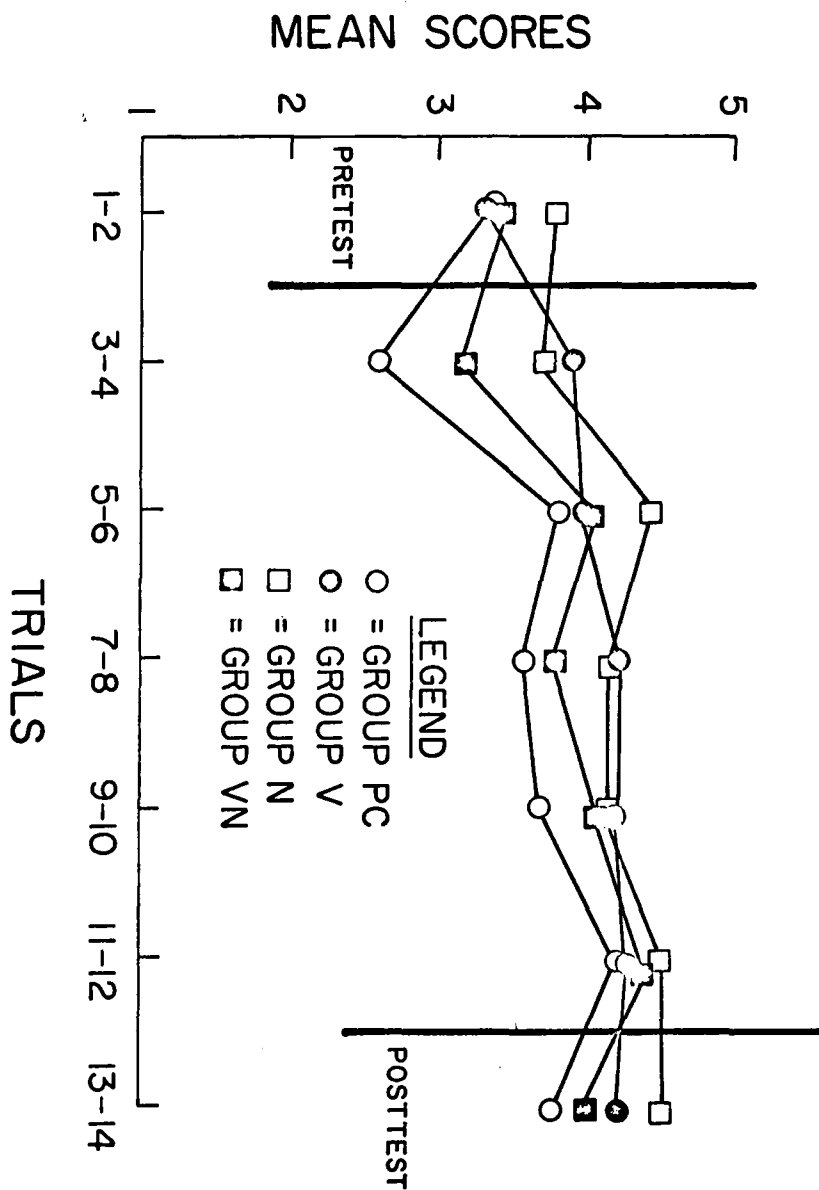


Figure 6. Changes During Treatment in Being Specific.

Table 3. MMPI scores: Group Means. Scores elevated above the normal range were found for the PC group and for the VN group.

TABLE 3

## MMPI Scores: Group Means

Subtest	Group					Overall Mean
	T	P	V	N	VN	
Hs	54	58	44	55	60	54.2
D	52	70*	55	59	71*	61.4
Hy	53	61	48	56	66	56.8
Pd	51	66	48	54	69	57.6
Mf	60	52	56	57	77*	60.4
Pa	54	63	54	57	69	59.4
Pt	56	74*	55	64	72*	64.2
Sc	53	66	52	62	75*	61.6
Ma	51	63	49	62	61	57.2
Si	58	66	63	57	64	61.6

\* Indicates elevation above normal range of scores.



## Discussion

The main purpose of the present study was to isolate verbal and non-verbal components of assertive behavior and to determine if these various components could be manipulated independently. The results were, for the most part, disappointing. On only one of the five measures, Eye Contact, did a group difference emerge showing that Eye Contact is differentially affected by the treatment techniques. The group receiving nonverbal self-coaching tended to improve more on Eye Contact than did any other group. The increase was immediate once treatment began for the N group, and an apparent ceiling was reached early in treatment. It, therefore, would seem reasonable to assume that nonassertive individuals require only that their attention be drawn to this variable and that a minimum of practice be provided to maintain this behavior at a relatively high frequency. Simply informing the subject that it is important to maintain Eye Contact during an assertive encounter is quite an effective "treatment." Although the VN group received exactly the same information regarding Eye Contact as did the N group, immediate changes in this variable were not observed for the VN group. Since the VN subjects were also required to attend to four additional variables (the verbal content variables included), it is quite possible that they were distracted by excessive information. It is also possible that the VN group was more pathological than the N group. MMPI scores were indicative of this possibility, although RAS scores and Pretest Assertion scores argue against it.

It is interesting to note that for Eye Contact practice alone was deleterious; the PC group became poorer at Eye Contact. Since the V group also tended to become worse on Eye Contact while improving on other verbal

variables, it is possible that performance on Eye Contact suffers when attention is focused on other variables. To some extent this possibility may account for the failure of the VN treatment noted above.

Although no other group differences emerged, there were still significant changes from pretest to posttest when the groups were considered individually. The changes that occurred, however, did not support the notion that verbal and nonverbal aspects of assertion could be differentially affected by verbal or nonverbal focus in treatment. For Voice Qualities the V, N, and VN groups all showed significant within-group change. The improvement for the N and VN groups is not surprising since these subjects were specifically instructed to attend to Voice Qualities. However, the change for the V group was difficult to account for. Two possible explanations, both dealing with the nature of the specific instructions, present themselves. The first explanation is that a loud, firm voice is part of a popularly accepted definition of assertion and, therefore, subjects need little additional information to remind them that assertive behavior requires a firm expressive voice. Instructions that focus on any aspects of assertion serve to remind the subject of Voice Qualities also and, thus, result in change. A second possible explanation concerns the formal aspects of the instructions. The V, N, and VN subjects all received some concrete information on which to base their responses. This was not the case for the PC subjects. Assuming that the unassertive subjects who participated in this study were to some degree anxious or uncomfortable about responding to the stimulus models, it is possible that the inclusion of "something" specific on which to practice helps reduce discomfort. The rating criteria for Voice Qualities were

designed to be sensitive to a firm, confident voice (and in the nonassertive direction, to a weak, anxious voice). It is conceivable that subjects perceived the experimental situation as less threatening when they were afforded specific points on which to work. Similarly, subjects concentrating on the specified points may have been able to relax more than the PC subjects, who had to determine for themselves what to practice.

Within-group changes were also observed for the V and N groups on the variable, Giving In. In this case, improvement was expected for the verbal group but not for the nonverbal group. Two potential explanations also occur for these findings. The first is the same as mentioned above-- subjects need very little coaching to remind them that not giving in is important to assertion. The second possibility is a procedural one. The nonverbal behaviors were rated first in order to prevent the verbal responses from influencing the ratings of the nonverbal ones. However, this may have created a bias in the other direction. It is possible that a "halo effect" was created and that favorable impressions formed by the judges (based on the nonverbal variables) resulted in an elevated score on the verbal variables. But, since the nonverbal treatments per se were generally weak, it seems unlikely that much of a bias could have been created.

The results for the combined VN group were disappointing. Though afforded both verbal and nonverbal information, this group showed no between-group effects. Within-group change was observed only on Voice Qualities. This suggests that the VN treatment provided too much information at one time. It is possible that over an extended period of time subjects in a VN treatment condition would evidence significant

improvement, but within the limits of this study this was not the case.

Of the eight variables proposed to measure assertive behavior, only five had interrater reliability high enough to be employed. The failure to achieve adequate reliability for Facial Expression and Body Language may be due to the procedures employed. During the actual rating process these nonverbal variables were rated without audio. For any given subject a particular facial expression (e.g., furrowed eyebrows) and body motion (e.g., leaning away from the camera) was rather invariably used to signal assertion across all situations. But there was a great deal of individual variation in the specific behavior employed. For example, some subjects smiled when being assertive (judging assertion from all other variables), some smiled when being quite nonassertive. The judges in the present study were unable to find much consistency in Facial Expression or Body Language without considering additional dependent measures. In a post hoc exploration of this problem several videotaped sessions were played with both audio and video. When this was done the judges were readily able to agree on these two variables. It would seem, therefore, that observers cannot rely on Facial Expression or Body Language as "pure" indices of assertion. But, given the ancillary information provided by additional dependent variables, Facial Expression and Body Language may prove to be reliable indicators of assertion.

The least reliable verbal content variable, Staying on the Point, proved to be both arbitrary and ill-conceived. In the post hoc debriefing judges were frequently unable to agree on what the "point" of the situation actually was. Even when the "point" was evident many subjects appeared to be quite assertive without staying on the point. A firmly spoken

expletive, though "off the point," is nevertheless assertive. In a future study it may prove interesting to correlate overall ratings of assertion with various single measures (such as Staying on the Point) so as to determine the relative importance of each individual variable.

Another methodological problem was the five-point rating scale employed. On several variables there appeared to be a ceiling effect. Pretest ratings were around 3.0 and then rose at posttest to 4.5 out of a possible 5.0. Not only did this decrease the range and variability of posttest scores, it also limited the amount of change that could take place. Thus, the opportunity of finding between-group differences was reduced. In the future it would seem imperative to employ an extended, much broader scale of measurement.

The treatment procedures employed were, compared to other studies, rather weak. No feedback, models, coaching, or scripts were provided. Of greater importance, however, is the fact that practice was always transsituational. Subjects never were allowed to repeat the same situation for practice before going on to the next situation (with the obvious exception of the posttest situations). Essentially then, the measures taken in this study were always measures of generalization-- when rated on any particular situation subjects were naive to that situation. Thus, for example, a measure of Eye Contact for Situation 6 was in reality a measure of generalization of training from the previous five situations. For this reason it is suspected that subjects never had a chance to consolidate their gains before being faced with a new situation.

#### Comparisons With Other Studies

In spite of the weakness of the manipulations in the present study

there are some implications for the assertive training literature in general. Assertion in day-to-day life is both a verbal and a nonverbal process. One sees, as well as hears, other individuals' assertive or non-assertive behavior. If Eye Contact is important in self-assertion, then research based only on audio recording ignores this component. In addition, since it is not likely to change unless specifically attended to, the efficacy of treatments that ignore this component can not be fully determined. For example, the Friedman (1971) study was primarily sensitive to verbal components of assertion, yet it seems obvious now that nonverbal behaviors were affected. Subjects were exposed to one of six different treatment conditions, and a great deal of data was lost by not considering nonverbal behaviors.

The importance of assessing both verbal and nonverbal components of assertion becomes evident in the present study; some of these components are mutable only by very specialized types of intervention. Future research is needed along many lines-- sex differences logically must exist among these components, and, in addition, some of the components are probably of much more immediate importance than others in enabling subjects to appear assertive. Finally, generalization of treatment to invive situations is much in need of investigation.

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VERBAL BEHAVIOR RATING CARD

Think back to your last response and rate yourself on the following points. Use the example given below to help you understand what is expected.

Example: You have been waiting for service in a restaurant and notice that people coming in after you are being served ahead of you. You complain to the waitress.

(1) BEING SPECIFIC

Don't say: "Service in here is lousy. I'm leaving."  
Do Say: "You are waiting on these other people, but I was here first."

1	2	3	4	5
very poor	poor	acceptable	good	very good

(2) REQUESTING NEW BEHAVIOR (Tell the person what you expect)

Don't say: "I'm just not happy with your service."  
Do say: "Will you wait on me right away, please!"

1	2	3	4	5
very poor	poor	acceptable	good	very good

(3) STAYING ON THE POINT

If the waitress says: ". . . but all our food is prepared to order. . . home cooked. . ."  
You say: "That's not the point. I want service when it's my turn."

1	2	3	4	5
very poor	poor	acceptable	good	very good

(4) GIVING IN (Don't give in or make concessions to unreasonable requests)

If the waitress says: "I'll get your order in a minute, but you don't mind waiting for those people with the children, do you?"  
You say: "Yes, I do mind. I was here first, and they'll have to wait their turn."

1	2	3	4	5
very poor	poor	acceptable	good	very good

## NONVERBAL BEHAVIOR RATING CARD

Think back to your last response and rate yourself on the following points. Use the example given below to help you understand what is expected.

Example: You have been waiting for service in a restaurant and notice that people coming in after you are being served ahead of you. You complain to the waitress.

### (1) EYE CONTACT

Don't: Gaze around, avoiding the person's eyes.

Do: Look the person straight in the eye, maintaining eye contact.

1	2	3	4	5
very poor	poor	acceptable	good	very good

### (2) VOICE QUALITIES

Don't: Speak too softly, apologetically, or in a flat, toneless voice.

Do: Speak loudly enough to show you mean what you say, and let your voice show your irritation.

1	2	3	4	5
very poor	poor	acceptable	good	very good

### (3) FACIAL EXPRESSION

Don't: Maintain a blank, bland expression.

Do: Let your face show that you mean business, and that you are displeased.

1	2	3	4	5
very poor	poor	acceptable	good	very good

### (4) BODY LANGUAGE

Don't: Lean away, retreat, or back off.

Do: Lean forward, face the person squarely.

1	2	3	4	5
very poor	poor	acceptable	good	very good

## RATING CRITERIA

1. Eye Contact
  - a. none, avoids completely
  - b. very little, occasionally glances at E
  - c. glances back and forth around E, fixes on E frequently
  - d. looks at E, but can glance away occasionally
  - e. fixes eyes on E, rarely takes eyes off E
  
2. Facial Expression (guidelines, but use your judgment)
  - a. smiles, looks happy or looks fearful a and b differ
  - b. smiles only in degree
  - c. flat, unchanging but not submissive
  - d. slightly furrowed eyebrows, slight expressiveness
  - e. furrowed eyebrows, tight or sneering mouth, wrinkled forehead
  
3. Body Language
  - a. rarely faces E, body turned away
  - b. turns somewhat away, face angled away from E but sometimes faces E
  - c. sits squarely facing E
  - d. head, hands, or body move slightly toward E (not easily discernable)
  - e. head, hands, or body move forward toward E (vigorous and obvious)
  
4. Voice Qualities
  - a. monotonic, apologetic, whines or quivers, almost inaudible
  - b. monotonic and weak volume
  - c. slight, intonation, audible volume
  - d. intonation, firm tone, "punctuation" of words with voice
  - e. almost loud, well-modulated and firmly "punctuated" (qualifier: politeness does not detract)
  
5. Being Specific
  - a. fails to state what exactly is bothersome or states erroneously
  - b. hints at what is bothersome unclearly
  - c. says or responds to what is bothersome, indicates (hints) clearly (but doesn't have to specifically say clearly)
  - d. clearly says or responds to what is bothersome, may mention other minor factors, too
  - e. clearly says what is bothersome, responds to bothersome act-- not a minor act
  
6. Requesting New Behavior
  - a. no requests for new behavior
  - e. any requests for any new behavior
  
7. Staying on the Point (via misleading or misdirected statements, SM may try to lead S away from point)
  - a. changes the point, responds to misdirection, responds irrelevantly
  - b. responds to misdirection but touches on the point
  - c. ignores misdirection, responds to the point with minor digression

- d. ignores misdirection, responds to the point without digression
  - e. corrects SM back onto the point and responds to the point, no digression
8. Giving In
- a. totally capitulates (i.e., lets SM get away without complaint)
  - b. capitulates but complains
  - c. does not give in but does not verbally refuse
  - d. verbally refuses perhaps by repeating the complaint
  - e. firmly refuses, no question about it, no qualification

## APPENDIX

### Review of the Literature

Historically there are two opposing views concerning deficits in assertive behavior. Salter (1949) maintains that "excitation" is a generalized trait in normal individuals and that nonassertion is comparable to inhibition. He, therefore, employed "excitatory exercises" (Salter, 1949) which, in some ways, parallel contemporary assertive training. These "excitatory exercises" included rehearsal in the use of "feeling talk" (e.g., "I really hate that guy."), in the use of facial expressions, in the use of the pronoun, I, in the expression of contradictory opinions, and in agreement with compliments. Finally, Salter espoused training in improvisation to enable clients to be assertive in a broad variety of situations.

Wolpe (1958) differs with Salter's (1949) formulation of nonassertion in that for Wolpe nonassertive behaviors are situation specific. Wolpe does not support a notion of generalized nonassertion as a trait, but rather he contends that nonassertive individuals are nonassertive only in certain contexts. Thus, for example, an individual could be quite assertive with his wife but quite nonassertive with his mother-in-law. This conceptualization of assertive and nonassertive behavior would suggest that assertive training be directed to specific instances and situations reported by the client as presenting difficulty and would dis-  
dain of the general "excitatory exercises" used by Salter. Within Wolpe's framework a therapist would, however, employ a variety of situations in order to promote generalization of assertive behavior to other problematic but untrained situations. Although to date there has been no empirical

evaluation of this generalization notion, evidence does indicate that the situation specific approach is more effective than the "excitatory exercise" approach in treating the majority of the nonassertive cases reported (Rimm & Masters, 1973).

In the therapeutic setting the assertive training procedure is typically one of therapist modeling with role-playing interchange between the client and therapist. This essentially encompasses four components: 1) modeling of appropriate assertive behaviors, 2) behavioral rehearsal on the part of the client, 3) feedback to the client from the therapist, and 4) reinforcement of the client's assertive attempts (generally by the therapist's verbal expression of approval). Although employed in a therapeutic "package," each of these components may be discussed individually.

Bandura (1971) suggests that modeling can result in observational learning, in inhibition or disinhibition of previously learned responses, or in response facilitation.

Central to the observational learning effect of modeling is the contention that the response trained was not previously demonstrated in the observer's repertoire of behavior or at least was not observed under conditions parallel to the modeled situation. Procedurally, the model exhibits a novel (to the observer) response and the observer subsequently reproduces that response.

Inhibitory effects of modeling result in a decrement in the modeled response or class of responses. Numerous accounts may be found in the literature supporting the hypothesis that, for example, the observation of a model being punished for a response will result in a subsequent decrease in the frequency of that response in the observer. Wheeler (1966)

demonstrated that vicarious punishment could bring about a decrement in aggressive behavior in an observer. Disinhibitory effects of modeling are evidenced by the increase or reappearance of previously inhibited responses. Representative of this effect of modeling are studies in which phobic behaviors are replaced by approach behaviors (Bandura, 1971). In these procedures, generally, models demonstrate to the observer that the approach response has no aversive consequences, and ultimately the observer disinhibits his approach behaviors.

The final effect of modeling, that of facilitating a response or class of responses already available to the observer, can easily be confused with the disinhibitory effect. A distinction may be made in that the later effect implies some type of "encumbrance" or pressure opposing the response. The facilitative effect may thus be distinguished by the lack of such encumbrances; the response is a socially sanctioned response, albeit low in frequency of occurrence. Methodologically these two effects are perspicuous-- the facilitative effect acting upon the assertive response, the disinhibitory effect focusing primarily on the hypothesized inhibitor.

The importance of the modeling component in assertive training has been investigated in several studies, but only Friedman (1971) manipulated modeling unconfounded with behavioral rehearsal. Friedman (1971) employed the following treatment conditions:

1. Directed Role Playing (DRP)  
Subjects rehearsed aloud (4 times) an assertive role presented in a written script. The script required the subject to assert himself against an irritating and insulting individual ( $M_1$ ).

2. Improvised Role Playing (IRP)  
Subjects constructed their own responses to  $M_1$ , while  $M_1$  followed (4 times) the written script.
3. Modeling (M)  
Subjects observed two models playing the roles of M and the assertive responder ( $M_2$ ). Again,  $M_1$  and  $M_2$  enacted (4 times) the standard written script.
4. Modeling Plus Directed Role Playing (M&DRP)  
Subjects observed (2 times)  $M_1$  and  $M_2$  performing the written script, then subject assumed the role of  $M_2$  (2 times) and roleplayed opposite  $M_1$ .
5. Assertive Script (AS)  
Subjects simply read (4 times) the script used in the above conditions but did not overtly respond.
6. Nonassertive Script (NAS)  
Subjects read (4 times) a neutral script, one devoid of assertive content.

For each of the treatment conditions only one situation was employed.

Several modes of assessment were employed to evaluate the different treatment conditions. The primary behavioral measure entailed an interaction with a live confederate who became increasingly more annoying to the subject. Subjects' verbal responses were tape recorded and rated by blind judges on five verbal categories (e.g., threat, demand, insult, strong disagreement, request to stop). The total number of responses in all five categories was deemed the Sum Assertion score, and interscorer reliability on this measure was considered acceptable ( $r=.86$ ,  $n=51$ ).

In addition to the Sum Assertion measure, subjects were given a self-report measure of assertiveness (e.g., the Action Situation Inventory, or ASI, Friedman, 1971) composed of ten descriptions of hypothetical situations with five or six alternative reactions to each situation. The subjects choice of reaction was rated either assertive or nonassertive, and a total assertion score obtained. The correlation of individual ASI



with Sum Assertion scores was unacceptable. However, when the ASI was employed to dichotomize subjects into low (fewer than 5 assertive reactions) or high (5 or more assertive reactions) assertive groups the mean difference in Sum Assertion scores between these groups was significant ( $p < .001$ ,  $t=4.28$ ). Friedman (1971), therefore, concluded that the ASI reflected a global index of assertiveness. This conclusion seems adequately supported by the data.

Posttreatment-pretreatment difference scores on the Sum Assertion measure revealed significant improvement ( $p < .05$ ) in all treatment groups, as compared with the NAS groups. The M&DRP condition proved superior to all other treatment conditions (at least at the .05 level) except for the IRP condition; although M&DRP Sum Assertion posttreatment scores were markedly higher than IRP, this comparison failed to achieve statistical significance. M, DRP, IRP, and AS groups did not differ from each other. In all pretreatment-posttreatment Sum Assertion score comparisons no significant sex main effect or Sex X Treatment interaction was observed.

The analysis of Sum Assertion scores obtained at a two-week follow-up revealed results differing from those discussed above. Follow-up minus pretreatment scores evidenced a significant Sex X Treatment interaction ( $p = .02$ ). For male subjects the M&DRP treatment was the only condition which differed significantly from the NAS control, though M&DRP did not differ (at the .05 level) from the M or DRP treatments. For female subjects the IRP treatment alone differed significantly from the NAS control but did not differ from the AS treatment group.

To summarize Friedman's (1971) Sum Assertion findings it may be said

that, immediately following posttreatment, all treatments (e.g., M&DRP, M, DRP, IRP, and AS) are significantly effective ( $p < .05$ ) in comparison with the NAS control. But after a two-week period the M&DRP condition alone (for males) and the IRP condition alone (for females) remained effective in improving the Sum Assertion scores.

Friedman (1971) noted that for those subjects rated as highly assertive on the ASI (5 or more assertive reactions), the mean pretreatment Sum Assertion score was 7.2. Reasoning that the efficacy of the various treatment procedures would be reflected in the ability of low assertive subjects to approach the Sum Assertion scores of high assertive subjects, Friedman established two criteria indicative of improvement. Since the mean pretreatment Sum Assertion score for nonassertive subjects was 2.6, a change of 4.0 or more would elevate these subjects to the Sum Assertive level for assertive subjects. Similarly, a terminal score of 7.0 or greater for nonassertive subjects was reflective of improvement in assertiveness. Thus, criteria of change (4.0 points) and of terminal score (7.0 points or greater) were imposed on the six treatment conditions.

In post-pretreatment criterion scores (no sex breakdown was reported) all groups achieved criterion significantly more frequently than the NAS group. For both change and terminal scores the M&DRP condition was the most effective, though the difference failed to achieve statistical significance in comparison of M&DRP with M conditions (in change scores) and M&DRP with M and IRP conditions (in terminal scores). In follow-up minus pretreatment comparison a marked Sex X Treatment effect was obtained. For the male subjects M&DRP remained the most effective treatment, with IRP the least effective. No other analyses revealed this later finding--

that IRP was inferior to NAS). However, for female subjects IRP tended to be the most effective treatment, with NAS the least effective. Only when all other treatments as a group were compared with NAS (for both change and terminal criteria) was statistical significance (at the .05 level) attained. Although, in light of the interactive nature of the sex and treatment data presented above, collapsing across the sex variable is misleading. Friedman nevertheless presented combined data for criterion behavior at follow-up. Combined scores indicated the M&DRP treatment to be the most effective (for change and terminal criteria) and the NAS treatment to be the least effective.

In summary, when considering both Sum Assertion scores and criterion scores for male subjects, the most effective treatment is M&DRP. For female subjects IRP tended to be the most effective treatment. Friedman discussed one possible explanation for these findings in terms not of sex differences but of differences in types of nonassertiveness evidenced by the subjects. Briefly, the suggestion was made that the M&DRP condition provided both overt response repetition and a modeled series of cues (e.g., visual, gestural, and auditory) for assertive behavior. Thus, this treatment would be of primary importance to subjects who did not have the appropriate assertive behaviors in their repertoire-- the observational learning effect of modeling. On the other hand, the IRP treatment provided no cues for assertive behavior but did require behavioral rehearsal. In general, the IRP and DRP conditions were equally effective, suggesting that for those subjects who could construct their own assertive responses, explicitly modeled cues were not necessary. Further support for this suggestion was found within Friedman's IRP group. Those subjects

within the IRP treatment who evidenced improvement were, by self-report, personality data, and experimenter ratings, initially capable of producing assertive responses; whereas those subjects who failed to improve were socially inhibited and initially incapable of generating assertive responses (Friedman, 1971).

A major practical implication of the Friedman (1971) study is the importance of matching the treatment program to the needs of the subject. Modeling alone rarely emerges as a treatment of choice for nonassertive individuals; behavioral rehearsal (e.g., M&DRP) appears to be a necessary concomitant. In instances where the subject has assertive responses in his repertoire but fails to employ them frequently or appropriately, an IRP treatment probably will suffice to increase assertive behavior; modeling in this case is presumably extraneous.

A program of assertive training analogue research conducted by Eisler and his colleagues (c.f., Eisler, Miller, & Hersen, in press; Eisler, Hersen, & Miller, 1973; Hersen, Eisler, & Miller, 1973) has been of value both in further identifying the effective ingredients in assertive training and in isolating specific behavioral components of assertiveness. In one of their earlier studies Eisler, Miller, and Herson (in press) videotaped a sample of psychiatric patients engaging in a series of role playing situations-- situations in which assertive behavior was appropriate. The videotapes were subsequently rated by judges on a five-point scale of overall assertiveness and, on the basis of these ratings, were dichotomized into a high or low assertive group. It was found that high assertive subjects could be differentiated from low assertive subjects on six specific behavioral measures: 1) latency of response (to the annoying

individual), 2) content requesting new behavior (subjects requesting the annoying individual change his behavior), 3) affect (appropriate vocal expressiveness), 4) loudness of speech, 5) compliance content (acceding to the annoying individual), and 6) self-ratings on the Wolpe-Lazarus assertiveness questionnaire (Wolpe & Lazarus, 1966). Thus, this first empirically derived profile of an assertive individual specifies that persons who are judged as being assertive ". . . tend to respond to interpersonal problems quickly and in a strongly audible voice with marked intonation. . . , do not automatically accede to the demands of others, and are more likely to request that the interpersonal partner change his behavior' (Eisler, et al., in press).

Progressing from the above empirical definition of assertive behavior, Eisler, Hersen, and Miller (1973) varied treatment modalities and observed changes in the six specific behavioral correlates of assertiveness. Three treatment conditions were employed: 1) a test-retest control (C), 2) a practice control (PC), and 3) a modeling condition (M). Treatment and assessment was effected by means of a Behavioral Assertiveness Test (BAT) composed essentially of the interpersonal situations employed in the previous study -- subjects responded to a live stimulus model, were videotaped, and rated. Subjects in the M treatment responded to the stimulus model and then observed a videotaped assertive model, who had been trained explicitly to produce the specific assertive behavior, responding in the same situation. This sequence-- stimulus model, subject's response, assertive model-- was repeated four times per situation for a total of six situations. For the PC group the treatment presented the same situations as in the M group, but the assertive model

was omitted. Thus, the sequence followed was: stimulus model, subject's response, then repeat (again, four responses per situation for six situations). In the C group subjects interacted once only with the stimulus model in each BAT situation and then were retested after three days by means of another single exposure to the BAT.

Pretest-posttest changes in the BAT revealed that the M group achieved the longest duration of reply, the greatest number of requests for new behavior, greater affect, louder speech, and greatest overall assertiveness. These changes were significantly greater than the PC or C groups, which did not differ from each other on any of the observed variables. No differences were obtained on the duration of looking, latency, or compliance measures.

In a later replication of the above study Hersen, Eisler, and Miller (1973) followed essentially the same procedure but also included an Instruction (I) and a Modeling Plus Instruction (M+I) group. Subjects in the later group observed the stimulus model in the BAT, responded, observed the assertive model, received focused instructions, and then repeated the situation (four exposures to each of six BAT situations). I group subjects observed the stimulus model, responded, received instructions, and then repeated the situation (also four exposures to each of six BAT situations). The instructions employed in M+I and I conditions were specifically focused on those assertive behaviors in which the assertive models were coached. For example, models were trained to respond with a lengthy reply and in a fully audible voice; subjects were instructed to ". . . talk loudly enough . . . and . . . make sure you talk long enough. . ." (Hersen, et al., 1973).

In summarizing the efficacy of treatment conditions, as compared with practice and test-retest controls, it was concluded that the M+I condition was the most effective in changing "duration of reply," "affect," and "overall assertiveness" and, in fact, failed to improve only the compliance content measure. The M+I and M conditions were the most effective in improving "content requesting new behavior," but did not differ from each other on this measure. "Duration of looking" at the stimulus model was improved most by the M+I and I treatments (again no differences between these treatments on this item), and the "loudness" variable was most influenced by the I treatment.

Unfortunately, a problem arises when attempts are made to compare Friedman's (1971) findings with those derived from the Eisler, et al. (1973) research program. All of the subjects who, in the later program of research, received any type of modeling treatment at all also engaged in behavioral rehearsal. Thus, it does not seem possible to make unfounded statements about the role of modeling, per se, in assertive training. Research to date does support a general (albeit weak) conclusion-- modeling alone was rarely effective without behavioral rehearsal, and modeling plus behavioral rehearsal was further enhanced by the addition of focusing instructions.

An investigation of behavior rehearsal in assertive training was conducted by McFall and Marsten (1970). Subjects in the two behavior rehearsal (BR) groups were exposed to taperecorded stimulus models and required to respond to the situation as appropriately assertively as possible. At this point subjects in the BR plus feedback (F) condition listened to a playback then verbally evaluated their own responses. In

the behavior rehearsal-no feedback (BR-NF) condition subjects were simply asked to "recall and reflect" their own responses and then to verbally evaluate them. Each experimental subject received four replays for each of six situations. Additionally, two control groups, a no treatment (test-retest) and a placebo (discussion) control, were employed. Four dependent measures significantly discriminated the treatment groups from the control groups: 1) a behavioral test, 2) a self-report anxiety scale, 3) a psychophysiological measure (e.g., pulse), and 4) the Wolpe-Lazarus assertiveness questionnaire (Wolpe & Lazarus, 1966). On all measures the BR+F group tended, but not significantly, to show more improvement than the BR+NF group. It may reasonably be argued that the NF group generated covert feedback as a function of their "recall and reflect" instructions, and that this covert feedback accounted for the observed similarities to the BR+F group.

If, as indicated, a covert feedback procedure is effective in increasing assertive behavior, perhaps a covert behavioral rehearsal procedure would also be of value. McFall and Lillesand (1971) investigated this question in a study incorporating an overt behavioral rehearsal (OBR) and a covert behavioral rehearsal (CBR) group. Both groups listened to a stimulus model (taperecorded), and the OBR subjects responded aloud. The CBR subjects, however, were instructed not to respond aloud but to "think of" an appropriate response. After the response phase both groups listened to two assertive models (taperecorded) making assertive responses to the stimulus model and were then coached (i.e., focused instructions) in specific assertive behaviors (e.g., "Let your voice express your irritation."). Following coaching both groups were afforded feedback of



their responses-- the CBR group was instructed to "think back to" their responses, the OBR group heard a taped replay-- and then repeated the same situations. These procedures were followed for ten different situations and results were compared to a test-retest control group. Pre- and posttreatment evaluation was achieved by means of a behavioral role playing test (rated by judges) composed of some of the situations used in training and some untrained situations. In addition, a self-report questionnaire designed for this study (e.g., the Conflict Resolution Inventory or CRI) was administered prior to and subsequent to training.

According to the CRI data both OBR and CBR groups improved significantly ( $p < .001$ ) as compared with the control group; the CBR group tended nonsignificantly to show greater improvement than the OBR group. Post-treatment scores on the behavioral role playing test indicated both that the CBR and OBR groups improved in assertiveness as compared with the control group, and that some generalization of improvement to the untrained items took place. Again the CBR group tended nonsignificantly to show greater improvement than the OBR group. This later finding led the investigators to hypothesize that, in very unassertive subjects, the exposure to feedback of ineffectual and weak responses is discomforting and thus, to some degree, inhibits potential gains from the treatment program. Therefore, the suggestion was made that a covert rehearsal procedure be employed, at least initially, with extremely unassertive patients.

In preparation of this review of the assertive training literature only one study was found in which verbal reinforcement was systematically investigated. An analogue experiment conducted by Young, Rimm, and

Kennedy (1973) failed to demonstrate augmentation of a behavioral role-playing task (c.f., McFall & Marsten, 1970) as a function of verbal reinforcement. Subjects engaged in role playing, with the experimenter serving both as an assertive model and as a stimulus model, were either verbally reinforced by the experimenter (e.g., "Good" or "Well done") or were not. Both experimental groups improved relative to nontreatment and placebo controls but did not significantly differ from each other.

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# VERBAL AND NONVERBAL COMPONENTS IN ASSERTIVE TRAINING

by

Neil E. Aronov

(ABSTRACT)

Nonassertive subjects were exposed to one of three treatment conditions designed to isolate the verbal and the nonverbal components of assertive behavior and were videotaped while responding to a series of stimulus situations. The treatments focused on verbal factors alone, nonverbal factors alone, or a combination of both verbal and nonverbal factors. Experimental subjects and subjects in Test-Retest and Practice control groups were rated by three judges on eight specific behaviors (e.g., Eye Contact, Facial Expression, Body Language, Voice Qualities, Being Specific, Requesting New Behavior, Staying on the Point, and Giving In). Eye Contact, a nonverbal variable, was the only measure found to evidence a differential effect of treatment: subjects trained on nonverbal factors alone improved significantly in Eye Contact relative to subjects in the verbal and combined treatment conditions. Possible explanations for the otherwise insignificant effects of treatment and several methodological problems were discussed.