

1-1-1974

The effect of a helper role on speech anxiety.

William J. Fremouw
University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation

Fremouw, William J., "The effect of a helper role on speech anxiety." (1974). *Doctoral Dissertations 1896 - February 2014*. 1690.
<https://doi.org/10.7275/nnrc-0g23> https://scholarworks.umass.edu/dissertations_1/1690

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

312066013292938

7511

THE EFFECT OF A HELPER ROLE
ON SPEECH ANXIETY

A Dissertation Presented

by

WILLIAM JOHN FREMOUW

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

July

1974

PSYCHOLOGY

THE EFFECT OF A HELPER ROLE ON SPEECH ANXIETY

A Dissertation Presented

by

WILLIAM JOHN FREMOUW

Approved as to style and content by:

Morton H. Harmatz
Morton Harmatz, Chairman of Committee

Alice H. Eagly
Alice Eagly, Member

Stuart Golann
Stuart Golann, Member

Ronald K. Hambleton
Ronald Hambleton, Member

Richard I. Hasse
Richard Hasse, Member

Norman F. Watt
Norman Watt, Member

Richard Louittit
Richard Louittit, Chairman
Department of Psychology

July, 1974

THE EFFECT OF A HELPER ROLE
ON SPEECH ANXIETY

William J. Fremouw

Abstract

The present study was conducted to assess the effect of a helper model for treatment of speech anxiety. In this model, the helper group learned behavioral techniques for anxiety reduction in a training seminar and then taught the techniques to other speech anxious subjects, the helpee group. A waiting list control group, a training seminar control group, and a low speech anxious comparison group were also included. Forty-one high speech anxious freshmen were divided between the four treatment groups and nine low speech anxious undergraduates formed the low speech anxious group. Both the helpers and helpees significantly reduced speech anxiety on each behavioral and self-report measure relative to the waiting list control group at posttreatment and the improvement was maintained at a three month follow-up. The helpers showed more improvement than the training seminar control group on each dependent measure. Although none of the individual differences were significant, a binomial test of the probability of the helpers improving more than the latent helpers on each of the seven dependent measures was significant. The consistent pattern of data from these two groups implies that real differences between the helpers and latent helpers probably exist. Therefore, these comparisons suggest that the significant behavioral change in the helpers is the product of more than just the training program. The effect of a helper role was interpreted from a learning model of behavior change. Further research and applications of a helper model for treatment were then discussed.

Acknowledgements

I wish to individually thank each person who helped me create, develop, and complete my dissertation. I have the deepest appreciation and respect for my chairman, Morton Marmatz, for his knowledgeable guidance and constant encouragement. In gratitude, I will always try to offer other students the skillful and patient direction that Mort has given me for the past two years. I am also indebted to Stuart Golann and Norman Watt for their contributions to this project. But more importantly, I wish to thank them for everything they have taught me since I first entered graduate school. I cannot even begin to mention the numerous ways they have contributed to my growth as a person and a psychologist. I am also grateful to Drs. Alice Eagly, Richard Hasse, and Ronald Hambleton for their important aid as members of my dissertation committee. In addition to my committee, I am indebted to my research assistants Paul Benoit, Theresa Cooney, and James Markson for their sense of responsibility and hard work over many months. Last, but certainly not least, is my wife, Deloris Ann Fremouw. This is almost as much her dissertation as it is mine. She has scored data, keypunched, made tables, and typed and retyped and retyped, and.... Even if she had not been the best secretary at the University of Massachusetts, her faith in me and her love for me make her contributions the most needed and appreciated.

Thank you, all.

TABLE OF CONTENTS

Abstract.....	ii
Acknowledgements.....	iii
List of Tables.....	vi
List of Figures.....	viii
 Chapter I - Introduction.....	 1
Background.....	1
A Helper Role in Education.....	2
A Helper Role in Nonprofessional Programs.....	3
A Helper Role in Clinical Theory and Practice.....	4
Rationale for this Research.....	6
A Theory of the Helper Effect.....	7
Behavior Focus: Speech Anxiety.....	8
Hypotheses.....	10
 Chapter II - Method.....	 13
Subjects.....	13
Instruments.....	14
Self Report Measures of Speech Anxiety.....	14
Behavioral Measures of Speech Anxiety.....	16
Procedure.....	17
Treatment.....	20
Helpers.....	22
Helpees.....	23
Latent Helpers.....	23
Waiting List Control.....	24
 Chapter III - Results.....	 26
Speech Anxiety Measures.....	26
Reliability of Dependent Measures.....	26
Validity of Dependent Measures.....	27
The Effect of Treatment on Speech Anxiety.....	30
Pretreatment Equivalence of Groups.....	30
Direct Measures of Improvement.....	33
General Self-Report Measures of Speech Anxiety.....	38
Combined Measures of Speech Anxiety.....	40
Generalization Measures of Social Anxiety.....	46
Follow-up Measures of Speech Anxiety and Social Anxiety.....	49
Comparison with Low Speech Anxious Subjects.....	57
Comparison of Treatment Effectiveness with Other Research.....	59

Chapter IV - Discussion.....	67
An Explanation of Effects.....	72
Implications for Research and Practice.....	80
General Research Directions.....	80
Implications for Behavior Modification.....	83
Implications for Treatment Models.....	84
References.....	86
Appendix A - Personal Report of Confidence as a Speaker.....	93
Appendix B - Anxiety Differential.....	95
Appendix C - Social Anxiety Scale.....	98
Appendix D - Behavior Checklist and Overall Anxiety Scale.....	102
Appendix E - Speech Anxiety Treatment Manual.....	104
Appendix F - Follow-up Questionnaire.....	116
Appendix G - Individual Scores at the Pretreatment and Posttreatment Assessment Speeches.....	118

LIST OF TABLES

Table	Page
1 Timetable for Administration of Speech Anxiety Measures.....	21
2 Design of the Experiment.....	25
3 Intercorrelations of Dependent Measures of Speech Anxiety at the Pretreatment Speech.....	28
4 Intercorrelations of Dependent Measures of Speech Anxiety at the Posttreatment Speech.....	29
5 Mean Scores on the Anxiety Measures Between Low and High Speech Anxious Groups.....	31
6 Analyses of Variance on the Anxiety Measures Between Low and High Speech Anxious Groups.....	32
7 Mean Pretreatment and Posttreatment Scores on Speech Anxiety Measures.....	34
8 Analyses of Variance of the Anxiety Measures at Pretreatment Assessment.....	35
9 Multivariate Analysis of Variance of Direct Measures of Speech Anxiety.....	36
10 Tests of Significant Differences Between Pre-Posttreatment Change Scores on Direct Measures of Speech Anxiety.....	39
11 Multivariate Analysis of Variance of General Self-Report Measures of Speech Anxiety.....	42
12 Tests of Significant Differences Between Pre-Posttreatment Change Scores on General Self-Report Measures of Speech Anxiety...	43
13 Percentage of Subjects "Significantly Improved" on Behavioral and Self-Report Measures of Speech Anxiety.....	45
14 Percentage of Subjects in Traditional "Improvement" Categories from Speech Anxiety Data.....	47
15 Multivariate Analysis of Variance of Generalization Measures of Social Anxiety.....	50
16 Analyses of Variance of Generalization Measures of Social Anxiety.....	51

17	Tests of Significant Differences Between Pre-Posttreatment Change Scores on Generalization Measures of Social Anxiety.....	52
18	Mean Pretreatment, Posttreatment, and Follow-up Scores on Self-Report Measures of Speech Anxiety.....	54
19	Analyses of Variance of Self-Report Measures of Speech and Social Anxiety at Follow-up.....	58
20	Analyses of Variance Between Treatment Groups at Posttreatment and the Low Speech Anxious Group.....	60
21	Tests of Significant Differences Between Treatment Groups at Posttreatment and the Low Speech Anxious Group.....	61
22	Analyses of Variance Between Treatment Groups at Follow-up and the Low Speech Anxious Group.....	62
23	Selected Research in Professional Treatment of Public Speaking Anxiety.....	64
24	Mean Change from Professional Treatment and Paraprofessional Treatment of Speech Anxiety.....	65
25	A General Research Grid for a Helper Model.....	82

LIST OF FIGURES

Figure	Page
1 Mean change in speech anxiety on direct measures, the Anxiety Differential, the Behavior Checklist, and the Overall Rating of Anxiety, between pre- and posttreatment assessments.....	36
2 Mean change in speech anxiety on general self-report measures, the Personal Report of Confidence as a Speaker, and the General Anxiety of Speech Rating, between pre- and posttreatment assessments.....	41
3 Mean change in social anxiety on the Social Anxiety and Distress Scale and the Fear of Negative Evaluation, between pre- and posttreatment assessments.....	48
4 Mean scores on general self-report measures, the Personal Report of Confidence as a Speaker and the General Anxiety of Speech Anxiety at pretreatment, posttreatment, and at the 3-month follow-up.....	55
5 Mean scores on self-report measures of generalization, the Social Anxiety and Distress Scale and the Fear of Negative Evaluation at pretreatment, posttreatment, and at the 3-month follow-up.....	56

Chapter I

INTRODUCTION

Background

Albee (1959) and Hobbs (1964) have persuasively warned that the supply of mental health professionals and current model of treatment will never meet the growing demand for mental health services. Less than 30 percent of people most in need of psychological help receive mental health services (Srole, Langer, Michael, Opler, and Rennie, 1962). Furthermore, the traditional mental health services available are both ineffective for many types of problems (Eysenck, 1952; Bergin, 1971), and unavailable to most lower class people (Hollingshead and Redlich, 1958). These challenges have stimulated the use of nonprofessionals as mental health workers. Housewives, college students, senior citizens, and other nonprofessional groups have been assimilated into the mental health system to provide services in many settings (Cowen, 1967).

Outside the mental health system, other nonprofessional groups such as Weight Watchers or Alcoholics Anonymous have emerged to provide human services. Ten years ago, over 265 self-help groups were listed in a national directory (Mowrer, 1964). Today, thousands of these organizations probably exist. In addition, natural helpers such as understanding grandmothers or concerned friends form a huge unknown source of helping relationships for psychological problems.

Traditionally, the positive effect of all these helping transactions has been assumed to be only uni-directional, from the helper

to the helpee, or recipient. Psychotherapy research demonstrates this assumption. While both client variables (Garfield, 1971) and therapist variables (Truax and Mitchell, 1971) have been extensively studied, only client change (Eysenck, 1952; Wolpe, 1958; Bergin, 1971) has been considered. The outcome for the other member of the helping dyad has been ignored.

The rapid expansion of helping roles for psychological problems and the need for new treatment approaches dictate a broader exploration of helping transactions. Research from several areas have begun to provide evidence that helping relationships have instrumental value for more than the helpees. In fact, a helping transaction may have a large positive impact on the helper.

A Helper Role in Education. In education, teachers have begun to test the old expression "the best way to learn something is to teach it." Known variously as learning-through-teaching, peer teaching, or cross-age teaching, the programs generally place a student with academic weaknesses in the role of tutor to teach a younger child the very skills the tutor also lacks. Instead of just the tutee benefiting, both the tutor and tutee are assumed to learn from the experience. Although over 250 learning-through-teaching programs have already been started (Gartner, Kohler, and Reissman, 1971), most programs offer only rich anecdotal data (Lippitt and Lippitt, 1968), or poorly controlled evaluations of the impact of the program on the tutor and tutees (Newmark and Melaragno, 1969).

Cloward (1967) furnishes the first adequately controlled study to show

the dual educational effect of a tutoring relationship. After four hours of tutoring a week for five months, fourth and fifth grade tutees improved six months in reading ability as compared with 3.5 months improvement for their control group. The tenth grade tutors increased their own reading ability 3.4 years as compared with an average improvement of 1.7 year for their control group. These results show that both the tutors and tutees improved significantly from cross-age teaching. A more recent study by Harris and Sherman (1973) demonstrates the effectiveness of peer tutoring among fourth and fifth grade students. When mathematics class was preceded by a period for students in the same class to review their work with another student, both students achieved higher accuracy and rates of performance than during mathematics classes not preceded by the unstructured peer tutoring.

A Helper Role in Nonprofessional Programs. The dual-positive effect of a helper role is also supported by research on nonprofessional programs. In the seminal article in this area, Reisman (1965) noted that helpers often solve their own problems while attempting to aide others. He observed that helpers both increased their self-esteem and learned through teaching. Many self-help groups such as Alcoholics Anonymous, Synanon, Gamblers Anonymous, and Neurotics Anonymous appear to significantly benefit people in leadership or helper roles who attempt to assist others with similar problems. Blum and Blum (1967) suggest that peer self-help groups are generally more therapeutic than professional treatment for many problems such as drug and alcohol addiction. However, no systematic research has been completed to determine the overall effectiveness

and the importance of leadership roles in these groups.

Numerous mental health paraprofessional programs have produced significant attitude, personality, or career goal changes among helpers (Holzberg, 1962; Goodman, 1967; Chinsky, 1969; Golann, Baker and Frydman, 1973) while these programs also affected the helpees in limited ways (Poser, 1966; Rappaport, 1969). Guerney (1969) and Gruver (1971) provide excellent reviews of this research.

In the field of mental retardation, innovative uses of mentally retarded people as paraprofessionals for the treatment of other retarded individuals is increasing (Craighead and Mercatoris, 1973). Initial research has focused on the recipients of the treatments. However, one study by Whalen and Henker (1971) begins to provide rough data on the effect of a helper role for mentally retarded people. In a nine month program, adolescent and adult mentally retarded residents were trained to teach younger, lower level residents basic adaptive skills. The younger residents significantly improved in social behavior from training by their older, better functioning teachers. In addition, the authors gave anecdotal reports that the teachers became more responsible, independent, reliable, and interpersonally skilled from their experience.

A Helper Role in Clinical Theory and Practice. The potential of a helper role to improve learning among both members of a helping relationship has numerous clinical as well as educational applications. Dollard and Miller (1950), Wolpe (1958), Eysenck (1960), Krasner and Ullman (1965), Bandura (1969), and Kanfer and Phillips (1970), among others, have applied learning theory and research to explain psychological disorders as maladaptive behaviors which are learned.

Several researchers such as Bandura (1969) and Meichenbaum (1971) have shown that observing another person model behaviors facilitates performance of new, more adaptive behaviors. An extension of the learning-through-teaching concept to clinical problems implies that being the model or helper may have an important, previously ignored effect for the helpers as well as the observers.

Research demonstrates that role playing can produce behavior change. Several studies explored the impact of a short role playing session on subjects unaware of the purpose of the role playing and uncommitted to change their behavior. Janis and Mann (1965) and Mann and Janis (1968) showed that role playing a "patient" who learned she has lung cancer produced both short and long term reduction of smoking. In poorly designed studies, Strelzer and Koch (1968) and Platt, Krassen and Mausner (1969) replicated the study while Lichtenstein and Keutzer (1969), in a better controlled study, failed to reveal a significant change in smoking behavior from role playing a "cancer patient." In a direct study of a helper role, Mausner and Platt (1971) assigned smokers to the role of either a doctor or a patient. The doctors role played telling the patients that they had lung cancer. Although nonsignificant, the results suggest that playing a helper-doctor role may have more impact on smoking reduction than a helpee-patient role.

Other studies, which involved people explicitly committed to changing their social behavior and who were aware of the purpose of the role playing, further support the general effect of role playing on behavior change

(Lazarus, 1966; McFall and Marston, 1970; McFall and Lillesand, 1971; McFall, 1971; McFall, 1973; and Simonson, 1973). Similarly, Harmatz (1973) has proposed using former overeaters as helpers for other overeaters. He hypothesizes that a helper role will help maintain weight loss among previous overeaters while they assist others to lose weight.

Rationale for this Research

The research cited from education, community mental health, and social psychology converges to support the general hypothesis that a helper role can produce positive change for the helpers as well as the helpees. In contrast with the traditional view that helping relationships only benefit the helpees, a new "helper model" of treatment is proposed. In the "helper model," the helper and helpee share a common problem and both people are expected to benefit from the helping relationship.

Among the many potential benefits of a helping relationship, the present study tests the effect of a helper model on learning new behaviors. Because clinical problems are often viewed as learned behaviors, behavior change is considered the most important and fundamental dimension of change in clinical work. The present study applies a helper model of treatment to people with behavioral problems. The success of a helper model for teaching reading (Cloward, 1967) or mathematics (Harris & Sherman, 1973) promises that a similar helper model may facilitate both the helper and helpee to learn new adaptive behaviors.

A Theory of the Helper Effect. Many theories exist to explain improvement in the recipients of helping relationships. However, the unique aspect of the helper model is the benefit received by the helper. From a learning model, helpers are hypothesized to benefit from helping another person because the helper role creates environmental contingencies which maximize reinforcement for the helper to learn and perform new behaviors. Fear of disappointing the helpees or revealing incompetence to them are negative reinforcers which increase the probability of learning and rehearsing new behaviors or skills before the helping sessions. For example, teachers generally review and learn their material before class to avoid the embarrassment of not being prepared in front of students. In addition, approval and appreciation from the helpees and other helpers positively reinforce new helper behaviors.

From a careful review of role playing literature, the author offers the following specific factors as important for the positive behavior change of people in helping roles such as reading tutors or weight watchers: a) a commitment to change (Greenwald, 1965; McFall and Hammen, 1971); b) an expectation of successful behavior change (Horn, 1968); c) an active involvement in the role playing (Janis and Mann, 1965; Platt and Mausner, 1972); and d) environmental support for new behaviors (Festinger, 1964; Kelman, 1966; and Janis and Mann, 1965).

Placing these factors within a learning theory perspective, commitment to and expectation of behavior change arise from past and current reinforcement for making statements about new behaviors and behavior change. Active involvement in a role increases the orienting responses

to discriminative stimuli and social reinforcement for new behavior. The final factor, environmental support, entails continued social and self-reinforcement for new behaviors.

These factors are facilitated by the contingencies accompanying the helper role. More specifically, the helpers are reinforced for making positive statements to the helpees about behavior change such as "learning arithmetic isn't hard," or "everyone can lose weight." The role of teacher makes the helpers much more involved in the learning processes within helping sessions and between sessions. The helpers are motivated to learn and prepare material before sessions on long division or calorie counting, for example. During sessions, the helper's responsibility to communicate information and facilitate learning makes him very active in the learning process. The helper becomes more sensitive to cues or discriminative stimuli and reinforcement for behavior. For example, the arithmetic tutor learns to check his work carefully; the weight watcher begins to notice small changes in the fit of clothes. The continued reinforcement of the helper role provides environmental support for behavior changes such as doing homework or continued weight loss.

Over time, the external social reinforcement from the helpee becomes supplemented by self-reinforcement for behavior change. The experience of helping another person becomes a source for self-esteem and self-reinforcement which maintains the new behaviors even after the helping role ends.

Behavior Focus: Speech Anxiety. A homogeneous clinical population is necessary to test the dual effect of a helper model on behavior change.

Public speaking anxiety was selected as the behavior problem to be studied for several reasons. First, speech anxiety is a prototype of interpersonal performance anxiety which has a high incidence among the general population (Paul, 1966). The hundreds of students required to take public speaking courses provides a large potential sample of speech anxious subjects who would be motivated to seek help. Furthermore, public speaking anxiety is specific enough to allow rigorous assessment through behavioral and self-report indices, but significant enough to permit generalization of the results to other clinical problems.

For these reasons, speech anxiety has been frequently studied to assess the effectiveness of various psychotherapeutic techniques. Paul (1966, 1968), Paul and Shannon (1966), Migler and Wolpe (1967), Woy and Efran (1972), and Van Egern (1970) have compared systematic desensitization with traditional therapy, placebos and no treatment controls for treatment of speech anxiety. Sanders (1968) compared behavioral rehearsal with systematic desensitization. Calef and MacLean (1970) studied speech anxiety to compare reciprocal inhibition and reactive inhibition. Giffin and Bradley [1969(a), 1969(b)] assessed the impact of nondirective therapy on speech anxiety. Recently, the effectiveness of cognitive, rational-emotive therapy has been explored with speech anxious subjects (Karst and Trexler, 1970; Meichenbaum, Gilmore, Fedoravicious, 1971; and Trexler and Karst, 1972). Through treatment of speech anxiety, the clinical effectiveness of systematic desensitization, rational-emotive therapy and systematic desensitization combined with behavioral rehearsal has been demonstrated. Therefore, substantial precedent exists for studying speech anxiety to test new techniques and models of treatment.

Hypotheses. The overall effect of a helper model for treatment was tested by several specific hypotheses. Speech anxious subjects in the role of helper for other speech anxious subjects were expected to make significant reductions in their public speaking anxiety.

In this study, the helpers attended a training seminar to learn behavioral techniques for anxiety reduction. The helpers then demonstrated and taught the techniques to another speech anxious subject. The role of a helper was predicted to reduce speech anxiety for the helper because teaching another person the behavioral techniques would have maximized the reinforcement to learn and to perform the new speaking behaviors. The positive effect of the helper role on behavior change was tested by the following major hypothesis:

- 1) Speech anxious subjects who learn behavioral techniques and teach other speech anxious subjects the techniques significantly decreased their speech anxiety as compared with a control group which only learned the behavior techniques and a group that requested treatment but received no training or treatment.

The traditional assumption that helping transactions have instrumental value for the helpees or recipients was tested by comparing helpee improvement in speech anxiety with the control group not receiving treatment. Comparative studies between professional and nonprofessional helpers have demonstrated, interestingly, that selected mental hospital aides and students can have equal or even superior therapeutic impact to professionals (Carkhuff and Truax, 1965; Poser, 1966;

Zunker and Brown, 1966). The following hypothesis tested the improvement of speech anxious subjects treated by other speech anxious subjects relative to no treatment.

- 2) Speech anxious subjects who received treatment from the nonprofessional helpers decreased their speech anxiety significantly more than a nontreatment control group.

In addition, the effectiveness of a helper role for behavior change relative to other types of treatment was tested by two subhypotheses. First, the helpers were expected to decrease their speech anxiety at least as much as the helpees because the helper role would have maximized the reinforcements for learning the anxiety reduction techniques at least as much as a helpee role.

- 2a) Speech anxious subjects in the helper role decreased their speech anxiety at least as much as subjects who received treatment from them.

A second subhypothesis compared the relative effectiveness of a helper role with traditional, professionally administered therapy for reduction of speech anxiety. The helpers were predicted not to surpass the effects of professional treatment because in the well-designed studies by Paul (1966) and Meichenbaum, et al. (1971), behavioral treatment virtually eliminated the anxiety. Therefore, it would be very difficult to demonstrate the superiority of the helper group to the professional treatment. However, a therapeutic effect among the helpers at least equal to the professional treatment would still have many implications.

- 2b) Speech anxious subjects in the helper role decrease their speech anxiety at least as much as subjects who received professional treatment for speech anxiety.

Chapter II

METHOD

Subjects

Twenty-four males and twenty females who volunteered for a ten hour public speaking training program were selected from the 300 students in the introductory public speaking course at the University of Massachusetts on the basis of self-reports of high speech anxiety on the Personal Report of Confidence as a Speaker (Paul, 1966). The 44 subjects were rated during a four minute speech on the Behavior Checklist of Performance Anxiety, matched for speech anxiety, and distributed across four groups according to their speech anxiety score.

The results of the study are based on 41 subjects who completed both the pretreatment and posttreatment assessments. One subject originally assigned to the helper group terminated the program after one week because of academic difficulties in other courses. The subject's helpee was reassigned to the training control group, the latent helper group, to complete the program. Two subjects in the waiting list control group declined to complete the posttreatment speech because they were "too busy." Data from these 3 subjects were omitted from the analyses to produce a final sample of 11 helpers, 11 helpees, 9 latent helper control subjects, and 10 waiting list control subjects. When the posttreatment assessment speech was conducted one subject in the helpee group was in the infirmary. Therefore, posttreatment direct measures of improvement were not available for this subject.

The Personal Report of Confidence as a Speaker was also administered

to 350 students enrolled in an introductory psychology course. Nine subjects among the lowest ten percent of scores for speech anxiety were given experimental credit to participate in the pretreatment assessments. These low speech anxious subjects were interspersed among the high anxious subjects and the raters were unaware of their identity. This group was included to test the validity of the speech anxiety measures and to provide a low anxiety baseline for each measure of anxiety.

Instruments

Self Report Measures of Speech Anxiety. Two general classes of dependent measures were used to assess the relative effectiveness of the different treatments, self report measures and behavioral measures of speech anxiety. The four self-report measures used to assess speech anxiety were (a) the Personal Report of Confidence of a Speaker; (b) the Anxiety Differential; (c) the General Rating of Speech Anxiety; and (d) the Social Anxiety Scale.

The Personal Report of Confidence of a Speaker, PRCS, (Paul, 1966) is a 30 item shortened form of the original scale by Gilkinson (1942). The scale asks the respondent to describe his thoughts, feelings, and behavior during his most recent speech by answering true or false to descriptions of positive and negative reactions to public speaking situations. The scale provided a self-report measure of speech anxiety which has been used by several investigators such as Paul (1966), Trexler and Karst (1972), and Meichenbaum, et al. (1971) to document predicted changes in speech anxiety from treatment. (See Appendix A.)

The Anxiety Differential, AD, (Husek & Alexander, 1963) is an indirect

measure of anxiety administered just prior to the test speeches. Twelve words are rated in a semantic differential format on bipolar adjectives correlated with anxiety. Husek and Alexander (1963) cite two studies that demonstrated the reliability and validity of the Anxiety Differential as a measure of examination anxiety. In studies of speech anxiety, this measure has reflected a predicted decrease in anxiety after treatment (Paul, 1966; Woy & Efran, 1972; Meichenbaum, et al., 1971). This measure provided an index of the anxiety experienced immediately prior to a speech. (See Appendix B.)

The General Rating of Speech Anxiety, GA, is an overall self report rating of current speech anxiety on a scale from 1 (no anxiety) to 9 (extreme anxiety). This measure provided a simple, quantified overall self-report of current anxiety similar to the Fear Survey Schedule developed by Geer (1965).

The final self-report measure was the 58 item true-false Social Anxiety Scale (Watson & Friend, 1969). This scale consists of two subscales measuring social avoidance and distress and fear of negative evaluation. The Social Avoidance and Distress Scale, SAD, (28 items) assesses the amount of interpersonal anxiety experienced in many social situations. This measure indicates the extent anxiety is a general response style to a variety of interpersonal situations as compared with a specific reaction limited to making speeches before an audience. The Fear of Negative Evaluation Scale, FNE, (30 items) reflects the degree to which a subject worries about people's evaluations of him. Watson and Friend (1969) report several studies which demonstrate the convergent and discriminant

validity of the scales as a measure of social anxiety. Meichenbaum, et al., (1971) used this scale as a measure of generalized treatment effects of speech anxiety in other social-evaluative situations. This scale was included to assess generalized improvement from the treatment. (See Appendix C.)

Additional information was obtained by questionnaires at each assessment period. The questionnaires asked about other helping relationships, confidence as a helper, and generalization of change to other areas.

Behavioral Measures of Speech Anxiety. In addition to self-report measures, behavioral measures were used to assess overt manifestations of speech anxiety. The three behavioral measures were (a) the Behavioral Checklist for Performance Anxiety; (b) the Overall Rating of Speech Anxiety; and (c) the Speech Disfluency Ratio.

Paul's Behavioral Checklist for Performance Anxiety, BC, (1966) had been modified by the author to increase interrater reliability from 20 observable manifestations of anxiety to the 12 items that are most frequently observed and discriminating of change in Paul's original work. Each subject was rated on presence or absence of the 12 behaviors by three trained observers during successive 30-second intervals for the four minute speeches. (See Appendix D.)

The Overall Rating of Speech Anxiety, OA, is similar to the rating scale used by Trexler and Karst (1972). After a speech, each trained rater independently made an overall rating of anxiety on a 15 point scale from 1, no anxiety, to 15, extreme anxiety. This measure provided

a global assessment of public speaking anxiety which allowed observers to consider intensity, duration, and degree of incapacitation of the subjects' behavior not measured by the frequency counts on the Behavior Checklist.

In addition to the checklist and overall rating of anxiety, a content measure of the speech disfluencies during the test speech provided another behavioral measure of speech anxiety. Mahl (1956) has developed an index of the normal disturbances (stutters, repetitions, tongue slips, sentence incompletions, sentence changes, omissions and incoherent sounds) that occur during speech. The number of these disfluencies that occur excluding "ah" sounds divided by the number of words spoken form the "non-ah" speech disfluency ratio (SDR). The validity of the SDR as a measure of anxiety is supported by several studies (Mahl, 1956, 1959; Boomer and Goodrich, 1961; and Geer, 1966). Each speech was recorded and a transcript was typed. From pilot work, the interval from 30 seconds to 90 seconds was most representative of the average SDR for the total four minutes. To minimize rater time, each speech was independently scored for the SDR for this one minute period by 2 trained raters listening to the recording while reading the transcript. The SDR gave a concrete behavioral measure of anxiety.

Procedure

During the third week of the semester, a screening test was given to about 300 students in the 20 sections of the introductory public speaking course. At the time of the testing, each person had completed at least one speech in front of the class. Subjects who scored above

the median of 15 on the Personal Report of Confidence as a Speaker were contacted by phone if they had expressed interest in a program to reduce speech anxiety. During the conversation, common expectations were formed by informing each subject that he was among the top 50% of the total sample on speech anxiety. To maximize expectations of change, each subject was told about the success of the pilot program. The subjects were informed that a new model of therapy was being tested, a self-help model. The general importance of self-help models for other problems such as drug abuse or overeating was stressed during the discussion.

If interested in the program, the person would receive training to reduce speech anxiety either from the experimenter in a small class or from another subject who would be trained by the experimenter. The person would be assigned to be trained by the experimenter to help another speech anxious subject or to receive training from a speech anxious subject depending on the times the person is available. At the end of the conversation, the person was told that to evaluate current speaking ability each subject was required to make a four minute speech on any topic without notes. The subjects were then scheduled at times to give their speeches with 8 to 12 other students. Of the 110 subjects contacted, 72 made appointments to begin the training program. Forty-four appeared for the pretreatment assessment.

At the beginning of the pretreatment assessment, the experimenter again explained the purpose and procedure for the assessment. The raters were introduced as highly trained paraprofessionals who will evaluate the speeches. While the subjects completed the Social Anxiety Scale

and a background questionnaire, a random order for giving the speeches was written on the blackboard. During the other speeches, the subjects were asked to evaluate each speech on a speech critique form. This procedure was included to minimize heightened anxiety among the later speakers by keeping the subjects occupied while awaiting their own speech.

Just before his own presentation when the preceding subject began his speech, each subject went to the front corner of the room and completed the Anxiety Differential, 4 minutes prior to his speech. Each speech was presented in front of a floor microphone without a podium. Tape recorded instructions told the subject to state his name and to begin his speech until told to stop four minutes later. On the recording, a bell was faintly sounded for the raters to perform the Behavior Checklist of Performance Anxiety. At the end of four minutes, the recording told the subject to stop. The speech was tape recorded to assess the Speech Disfluency Ratio. The three raters gave the subjects an Overall Rating of Anxiety after the speech. All speeches were conducted in the same room, which seats about 30 people at tables. After the speech, each subject was given an appointment card for the beginning of the speech training program.

During the next six weeks, the subjects in the treatment groups received from 5 to 10 hours of training in behavioral techniques to reduce speech anxiety. Afterwards, a posttreatment speech assessment was administered to all subjects. The posttreatment assessment procedure was identical to the pretreatment assessment except for the addition of the Personal Report of Confidence as a Speaker and a detailed posttreatment questionnaire.

Three months after the posttreatment assessment, the Personal Report of Confidence as a Speaker, Social Anxiety Scale, and a follow-up questionnaire were mailed to each subject. Table 1 outlines the assessment procedure.

Treatment

The subjects were divided into four groups on the basis of their scores on the Behavior Checklist of Performance Anxiety. Fewer subjects were assigned to the Latent Helper group because the limited number of subjects required filling the more important groups first.

The five-hour treatment program was based on a synthesis of current research on emotional and behavioral change applied to speech anxiety. In the first session deep muscle relaxation was taught to help modify autonomic arousal before public speaking. Then from the work by Meichenbaum, Gilmore, and Fedoravicius (1971), subjects were taught to identify anxiety arousing negative self-statements such as "Everyone will think I'm stupid," and replace them with coping self-statements such as "I can only improve." These techniques in the first two lessons were designed to decrease the physiological and cognitive stimuli that elicit speech anxiety. Most successful treatments of speech anxiety primarily have focused on these techniques to decrease elicitation of anxiety, Paul (1966), Meichenbaum, et al. (1971), Trexler and Karst (1972), and Migler and Wolpe (1967).

Temporarily de-conditioning anxiety to speaking situations does not insure the acquisition of speaking skills necessary to prevent the reemergence of anxiety in future situations. Therefore, the second half

Table 1
Timetable for Administration of Speech Anxiety Measures

Week 3 Screening (N=300)***	Weeks 3 & 4 Pretreatment Assessments (N=44) * (N=9) **	Week 13 Posttreatment Assessments (N=41) *	Weeks 21-23 Two Month Follow-up (N=40) *
Personal Report of Confidence as a Speaker	Background questionnaire	Personal Report of Confidence as a Speaker	Personal Report of Confidence as a Speaker
	General Anxiety Scale	General Anxiety Scale	General Anxiety Scale
	Social Anxiety Scale	Social Anxiety Scale	Social Anxiety Scale
	<i>Immediately prior to speech</i>	<i>Immediately prior to speech</i>	Follow-up Questionnaire
	Anxiety Differential	Anxiety Differential	
	<i>During speech</i>	<i>During speech</i>	
	Behavior Checklist for Performance Anxiety	Behavior Checklist for Performance Anxiety	
	Speech recording for SDR	Speech recording for SDR	
	<i>Immediately after speech</i>	<i>Immediately after speech</i>	
	Overall Speech Anxiety Rating	Overall Speech Anxiety Rating	
		Posttreatment questionnaire	

* High speech anxious subjects

** Low speech anxious subjects

*** Subjects in public speaking course

of the training program taught specific speaking skills to fill learning deficiencies and replace inappropriate avoidance behaviors such as looking at the floor while speaking. Proper speech organization, posture, and gestures were learned and rehearsed in graduated steps from reading aloud to making a 5 minute speech during the final 3 sessions. After each performance, the new speaking skills received immediate feedback and positive reinforcement for the others in the room. This phase of training was based on behavioral rehearsal (Sanders, 1968), and in vivo desensitization (Jones, 1924; Bandura, Blanchard, and Ritter 1969; Ritter, 1969).

All subjects except the waiting list control group received a detailed outline of each lesson and a manual of related readings. (See Appendix E.)

Helpers (N=8 males, 3 females). This group both learned and taught the 5 lesson training program. Five one hour training sessions were conducted by the experimenter in groups from 1 to 4 helpers once a week. In the training sessions, the written treatment program was reviewed. Each technique was defined, modeled by the experimenter, and then performed once by each helper. The training sessions were designed to instruct the helpers how to teach another person a technique such as deep muscle relaxation or coping statements. The actual rehearsal of therapy techniques was minimized to reduce the therapeutic effect of just the training sessions. In addition, the helpers' work with the helpees was reviewed in the group. The experimenter attempted to maintain an atmosphere of a teacher training group and not a therapy group. For

example, unlike most therapy groups, the helpers were required to take notes, read assignments, and prepare homework between training sessions.

After the first two training sessions, the helpers were assigned to teach the behavioral techniques to a high speech anxious subject of the same sex. (Because of scheduling problems, one male helper was assigned a female client.) The helpers then alternated the last three training sessions with five helpee sessions. The helpers and helpees met alone in small research rooms. During the last two sessions, several helper-helpee pairs met in a small classroom to form an audience for each other's speeches. The experimenter observed each helper at least twice during a session to insure conformity with the standardized format and to reinforce both the helper and helpee for their efforts. After each session, the helpers and helpees individually evaluated the session for clarity, relevance, preparation of the helper, and progress of the helpee. Although they were told that these ratings were needed to revise the lesson plans, the evaluation procedure was included to provide another source of reinforcement for the helpers to be well prepared for the sessions.

Helpees (N=7 males, 4 females). The high speech anxious subjects who received training from the helpers formed the helpee group. Each helpee was randomly assigned to a helper with about the same level of speech anxiety. The helpees received five hours of training in behavior techniques to reduce speech anxiety over five weeks.

Latent Helpers (N=1 male, 8 females). This group attended the same 5 hour training sessions with the helpers but they did not teach the

techniques to another speech anxious person. It was explained to them that two models of training were being researched, the alternation of training sessions and helping sessions versus the completion of training before beginning a helping relationship. Consistent with this rationale, each latent helper was told he would be assigned a high speech anxious subject after he had completed the five training sessions. To control for the extra five hours the helpers spent with the helpees, the latent helpers were requested to practice the therapy techniques at least one hour a week and record the time on a time log. This group controls the effect of the therapy training, the supervisory group, and the amount of time practicing the speech therapy.

Waiting List Control (N=7 males, 3 females). A final group of 10 subjects were informed by letter and telephone that treatment was not available after the pretreatment assessment speech because more people had requested treatment than could be accommodated at that time. They were told that a postassessment was necessary and therapy would be provided later in the semester. This group was included to assess the extent of improvement from nonspecific therapeutic factors occurring from the environment, spontaneous remissions, regression effect of the assessment procedure, and the promise of future treatment.

Table 2 summarizes the treatment groups and overall experimental design.

Table 2
Design of the Experiment

Group	N	Pretreatment Assessment Week 3-4	Treatment Week 4-12	Posttreatment Assessment Week 13	Follow-up Week 21-23
Helpers	11	Same for all groups see Table 1	Attend training seminar & teach helpees techniques	Same for all groups	Same for all groups
Latent Helpers	9		Attend training seminar		
Helpee	11		Learn techniques from helpers		
Waiting List Controls	10		None		

Chapter III

RESULTS

Speech Anxiety Measures

Reliability of Dependent Measures. Before analyzing treatment effectiveness, both the reliability and validity of the dependent measures were determined. First, the interrater reliability for the behavioral measures was tested at the pretreatment assessment and the posttreatment assessment. For the pretreatment speech, the interrater reliability of total scores on the Behavior Checklist of Performance Anxiety produced a range of correlations between pairs of the three raters from .75 to .86 (N=50), with a mean correlation of .81. The interrater reliabilities between pairs of observers increased to produce a range from .85 to .88 (N=40) with a mean correlation of .86 at the posttreatment assessment. These significant correlations ($p < .001$) are consistent with other reports of high reliability and objectivity of the Behavior Checklist as a measure of speech anxiety (Paul, 1966; Meichenbaum et al., 1971).

The more general behavioral rating, the Overall Rating of Anxiety, completed by the raters after each speech was also highly reliable. Correlations between the three raters at the pretreatment assessment ranged from .55 to .71 (N=50) with a mean of .64. At the posttreatment speech, the interrater reliabilities increased to a mean of .82 between correlations and a range of correlations from .81 to .84 (N=40). These significant correlations ($p < .001$) on the Overall Rating of Anxiety approximate Trexler and Karst's (1972) interrater reliability of .71

on this scale.

The interrater reliability of the Speech Disfluency Ratio, the third behavioral measure, was also highly reliable and significant ($p < .001$). The interrater reliabilities between two raters was .86 for the pre-treatment speeches ($N=50$) and .96 for the posttreatment speeches ($N=40$).

Validity of Dependent Measures. In addition to reliability, each dependent measure must be a valid index of speech anxiety to test the effect of a helper role on speech anxiety. Although the dependent measures share consensual validation as speech anxiety indices as well as predictive validity in other research (Paul, 1966; Trexler and Karst, 1972; etc.), their validity was further tested in two ways.

As recommended by Cronbach and Meehl (1955), the construct validity of a concept such as speech anxiety can be partially assessed through examining the convergent validity of measures that purport to test the same construct. Table 3 and Table 4 summarize the intercorrelations of the dependent measures at the pretreatment and posttreatment assessment, respectively. The self report measures of speech anxiety are significantly correlated ($p < .001$) at both the pre- and posttreatment speeches. Among the behavioral measures, the Behavioral Checklist and Overall Anxiety Rating are highly correlated together as well as significantly correlated with the self report measures. At the pretreatment speech, the Speech Disfluency Ratio was not significantly correlated with any other measure. However, at the posttreatment assessment, the Speech Disfluency Ratio was significantly correlated with the other behavioral measures and two

Table 3

Intercorrelations of Dependent Measures of Speech Anxiety at the Pretreatment Speech
(N=50)

Measures	Self Report Measures		Behavioral Measures			Generalization Measures	
	PRCS	AD	BC	OA	SDR	SAD	FNE
General Anxiety (GA)	.67**	.55**	.45**	.47**	-.04	.49**	.35**
Personal Report of Confidence as a Speaker (PRCS)		.53**	.51**	.61**	.06	.59**	.55**
Anxiety Differential (AD)			.24**	.24**	.03	.33**	.40**
Behavior Checklist (BC)				.89**	.21	.16	.19
Overall Anxiety (OA)					.13	.20	.22
Speech Disfluency Ratio (SDR)						-.08	.18
Social Anxiety and Distress Scale (SAD)							.52**
Fear of Negative Evaluation Scale (FNE)							

*p<.05, one tail test

**p<.01, one tail test

Table 4

Intercorrelations of Dependent Measures of Speech Anxiety at the Posttreatment Speech
(N=40)

Measures	Self Report Measures		Behavioral Measures		Generalization Measures	
	PRCS	AD	BC	OA	SDR	FNE
General Anxiety (GA)	.65**	.54**	.37**	.35**	.22	.45** .38**
Personal Report of Confidence as a Speaker (PRCS)		.65**	.39**	.41**	.39**	.32* .43**
Anxiety Differential (AD)			.48**	.35*	.29*	.14 .48**
Behavior Checklist (BC)				.89**	.32*	.00 .25
Overall Anxiety (OA)					.38**	.05 .22
Speech Disfluency Ratio (SDR)						.00 .05
Social Anxiety & Distress Scale (SAD)						.60**
Fear of Negative Evaluation (FNE)						

*p<.05, one tail test

**p<.01, one tail test

of the self-report measures of speech anxiety.

The generalization measures of change were significantly correlated with the self-report measures but not the behavioral measures at both pre- and posttreatment. Since these measures are more global self-report measures of social relationships, this result is not unexpected. In general, the intertest correlations between the dependent variables furnished strong evidence of construct validity for all the measures except the Speech Disfluency Ratio.

The second test of validity further supports this conclusion. Nine subjects low in speech anxiety as measured by the Personal Report of Confidence as Speaker were distributed among the 44 high speech anxious subjects in the pretreatment assessment. The means and standard deviations for the low and high speech anxious groups are presented on Table 5. One way analysis of variance of pretreatment speech anxiety scores between the low anxious subjects and the high speech anxious subjects summarized in Table 6 conclusively demonstrate that all the dependent measures except the Speech Disfluency Ratio significantly discriminated between the groups. Because the speech Disfluency Ratio failed both to correlate consistently with other measures of speech anxiety and to discriminate between low and high speech anxious subjects, it was eliminated from further analysis. The remaining seven dependent measures were judged to be of sufficient reliability and validity for subsequent use in the study.

The Effect of Treatment on Speech Anxiety

Pretreatment equivalence of groups. The 41 high speech anxious

Table 5
Mean Scores on the Anxiety Measures Between
Low and High Speech Anxious Groups

Group	N	Self Report Measures						Behavioral Measures						Generalization Measures					
		GA		PRCS		AD		BC		OA		SDR		SAD		FNE			
		X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD	X	SD		
Low Speech Anxious	9	3.1	1.8	5.0	1.7	60.4	14.8	55.9	16.6	21.4	7.8	.026	.011	5.0	4.0	14.0	9.3		
High Speech Anxious	41	5.8	1.4	20.6	4.6	76.1	11.6	87.5	19.5	34.3	6.3	.029	.018	11.9	6.7	21.6	7.6		

Note: GA is General Anxiety, PRCS is Personal Report of Confidence as a Speaker, AD is Anxiety Differential, BC is Behavior Checklist, OA is Overall Anxiety Scale, SDR is Speech Disfluency Ratio, SAD is Social Anxiety and Distress Scale, and FNE is Fear of Negative Evaluation Scale

Table 6

Analyses of Variance on the Anxiety Measures
Between Low and High Speech Anxious Groups

Variable	Source	df	MS	F
General Anxiety	Between groups	1	52.59	23.83**
	Ss within groups	48	2.21	
Personal Report of Confidence as a Speaker	Between groups	1	1792.63	98.01**
	Ss within groups	48	18.29	
Anxiety Differential	Between groups	1	1808.25	12.18**
	Ss within groups	48	148.45	
Behavior Checklist	Between groups	1	7391.64	20.41**
	Ss within groups	48	362.23	
Overall Anxiety	Between groups	1	1227.54	28.06**
	Ss within groups	48	43.74	
Speech Disfluency Ratio	Between groups	1	.0001	.27
	Ss within groups	48	.0003	
Social Anxiety and Distress	Between groups	1	349.13	8.71**
	Ss within groups	48	40.09	
Fear of Negative Evaluation	Between groups	1	430.11	6.88**
	Ss within groups	48	62.53	

**p<.01

subjects were assigned to one of four treatments on the basis of their scores on the Behavior Checklist to minimize random differences in speech anxiety between groups. The pretreatment speech anxiety scores for each group are presented in Table 7. The initial equivalence of the four groups on the speech anxiety measures was tested by one way analyses of variance between groups summarized in Table 8. There were no significant differences between the groups before treatment on any dependent measure.

Direct Measures of Improvement. The amount of speech anxiety the subjects manifested during the pretreatment and posttreatment test speech was directly assessed by a) the Behavior Checklist, b) the Overall Rating of Anxiety, and c) the Anxiety Differential. These three measures reflect acute speech anxiety experienced during the test situation. Group means and standard deviations on these measures are presented in Table 7. The mean change on direct measures of speech anxiety from pretreatment to posttreatment is illustrated in Figure 1.

To assess the effectiveness of the treatments, a multivariate analysis of variance was performed to test the Treatment, Time (pre-post), and Treatment x Time effects simultaneously across the three dependent measures (Morrison, 1967). The multivariate analysis of variance presented in Table 9 revealed a significant Time effect ($p < .001$) and a significant Treatment x Time interaction ($p < .02$). The time effect shows a significant drop in speech anxiety from pretreatment to post-treatment speeches. Furthermore, the Treatment x Time interaction indicates that the decrease in speech anxiety differed significantly

Table 7

Mean Pretreatment and Posttreatment Scores on Speech Anxiety Measures

Treatment	N	Self Report Measures						Behavioral Measures						Generalization Measures					
		GA		PRCS		AD		BC		OA		SAD		FNE					
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD				
Waiting List Control	10	5.5	1.6	19.3	4.9	72.3	9.1	86.5	20.9	34.4	5.5	9.1	4.0	20.7	7.3				
	Pre	5.7	1.7	19.0	4.7	75.0	11.0	72.6	22.0	27.0	9.6	8.9	4.2	18.1	7.3				
	Post																		
Latent Helpers	9	6.0	1.2	21.7	3.9	77.3	9.0	87.9	22.0	34.2	7.6	11.6	7.2	21.6	7.6				
	Pre	3.7	.9	12.2	5.8	66.1	7.1	57.8	19.4	17.9	9.6	8.1	5.4	17.2	9.5				
	Post																		
Helpers	11	6.0	1.6	21.1	4.0	75.0	14.6	92.6	16.7	35.8	4.9	13.2	6.2	23.4	7.1				
	Pre	3.6	1.0	8.1	5.0	58.9	11.3	54.6	25.9	17.9	9.7	6.7	4.7	17.3	9.0				
	Post																		
Helpees*	11	5.6	1.2	20.4	5.7	81.7	9.9	82.9	19.6	33.1	7.5	14.4	7.8	22.7	6.4				
	Pre	3.8	1.7	12.5	8.4	65.5	17.0	43.9	17.0	14.6	4.5	8.3	6.8	16.4	9.4				
	Post																		
Low Speech Anxious	9	3.1	1.8	5.0	1.7	60.4	14.8	55.9	16.6	21.4	7.8	5.0	4.0	14.0	9.3				
	Pre																		

*Pre and post scores for AD, BC, and OA are based on N=10.

Note: GA is General Anxiety, PRCS is Personal Report of Confidence as a Speaker, AD is Anxiety Differential, BC is Behavior Checklist, OA is Overall Anxiety Scale, SAD is Social Anxiety and Distress Scale, and FNE is Fear of Negative Evaluation Scale

Table 8
Analyses of Variance of the
Anxiety Measures at Pretreatment Assessment

Variable	Source	df	MS	F
General Anxiety	Between groups	3	.66	.32
	Ss within groups	37	2.09	
Personal Report of Confidence as a Speaker	Between groups	3	10.13	.45
	Ss within groups	37	22.25	
Anxiety Differential	Between groups	3	102.99	.75
	Ss within groups	37	136.94	
Behavior Checklist	Between groups	3	171.78	.43
	Ss within groups	37	396.62	
Overall Anxiety	Between groups	3	15.57	.37
	Ss within groups	37	42.28	
Social Anxiety and Distress Scale	Between groups	3	53.61	1.29
	Ss within groups	37	41.42	
Fear of Negative Evaluation Scale	Between groups	3	14.36	.29
	Ss within groups	37	49.74	

Table 9
Multivariate Analysis of Variance of
Direct Measures of Speech Anxiety

Source	df _h	df _e	F	P	R ² x 100*
Treatment	9	82.90	1.41	N.S.	—
Time	3	34.00	65.19	<.001	85.19%
Treatment x Time	9	82.90	2.43	<.02	42.25%

*Note: R² x 100 is the percentage of variance in the discriminant function accounted for by that effect with all other effects in the model held constant. It is equivalent to a multivariate generalization of Fisher's η^2 (1951).

between treatment groups.

Multiple comparisons of the change scores were performed on each of the measures by Scheffe's S method (Myers, 1966), the most conservative a posteriori multiple comparison of group means. Presented in Table 10, the multiple comparisons revealed a consistent significant difference ($p < .05$) between the waiting list control group and the helper and helpee group on each dependent measure of improvement. The latent helpers did not differ significantly from the waiting list control group on the Anxiety Differential or the Behavior Checklist. This group did reveal significant improvement ($p < .05$) compared with the waiting list control group on the third measure, the Overall Anxiety rating. No other group comparison was significant on the direct measures of speech anxiety.

As summarized by Figure 1, the waiting list control group had relatively unchanged levels of anxiety over the time of the study. Overall, the latent helper group showed more improvement than the waiting list control group. However, this difference in improvement was not significant on two of the three dependent measures. In contrast, both the helpers and helpees demonstrated a significant and approximately equal decrease in speech anxiety compared with the waiting list controls. The helpers and helpees consistently showed more improvement than the latent helpers but this trend did not reach significance.

General Self-Report Measures of Speech Anxiety. Two additional self-report measures of speech anxiety, a) the Personal Report of Confidence as a Speaker and b) the General Anxiety Rating, were completed at the pretreatment and posttreatment speeches. These scales assess

Table 10
Tests of Significant Differences Between
Pre-Posttreatment Change Scores on
Direct Measures of Speech Anxiety

Measure	Group	Group		
		Latent Helpers (N=9)	Helpees (N=10)	Helpers (N=11)
Anxiety Differential	Waiting List Controls (N=10)	14.0	19.0*	18.9*
	Latent Helpers		5.0	4.9
	Helpees			-.1
Behavior Checklist	Waiting List Controls	16.2	25.1*	24.1*
	Latent Helpers		8.9	7.9
	Helpees			-1.0
Overall Anxiety	Waiting List Controls	9.5*	11.7**	11.1**
	Latent Helpers		2.2	1.6
	Helpees			.6

Note: Table entries are differences obtained by subtraction of group means in the column from group means in the row.

* $p < .05$, (Scheffe's S method)

** $p < .01$, (Scheffe's S method)

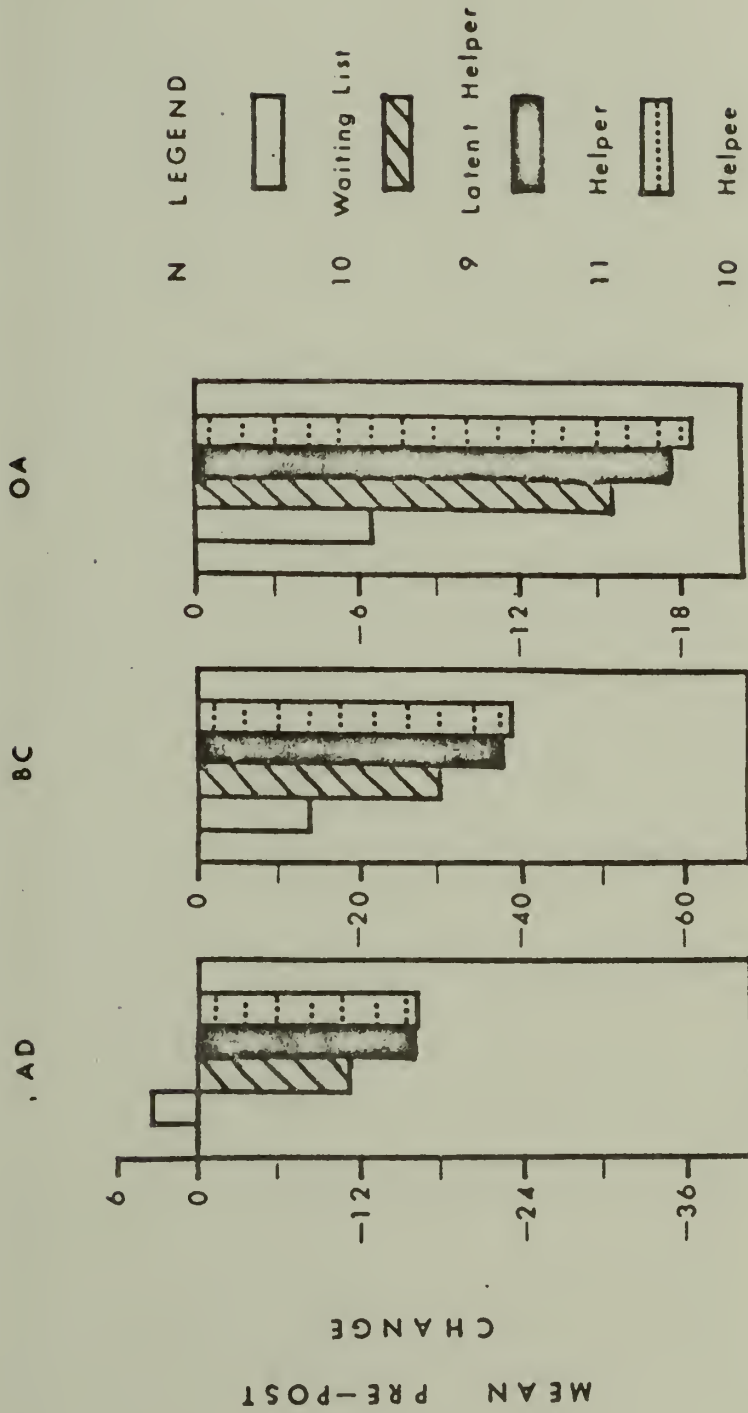


Figure 1. Mean change in speech anxiety on direct measures, the Anxiety Differential (AD), the Behavior Checklist (BC), and the Overall Rating of Anxiety (OA), between pre- and posttreatment assessments.

more general or chronic speech anxiety than measured by the direct measures in the test speech. Group means and standard deviations for these measures are summarized in Table 7. The mean change in self-report measures from pretreatment to posttreatment is shown in Figure 2. Similar to the analyses of the direct measures, a multivariate analysis of variance summarized in Table 11 yielded a significant ($p < .001$) Time effect and Treatment \times Time interaction on the self-report measures. Scheffe's S test of difference between mean change scores on the measures summarized in Table 12 produced a consistent pattern of differential improvement across measures. The helpee group ($p < .10$), latent helper group ($p < .05$), and helper group ($p < .01$) showed significantly more improvement than the waiting list control group but did not significantly differ from each other. [Because Scheffe's S method is extremely conservative, Myers (1966) recommends that $p < .10$ be considered significant.]

In summary, the hypothesized reduction in speech anxiety by both the helper and helpee groups supported by the direct measures of anxiety was further confirmed by analyses of these general self-report measures. Moreover, the helpers demonstrated more improvement than the helpees, although this trend did not reach significance. On these general self-report measures the latent helper group also revealed significant change.

Combined Measures of Speech Anxiety. To estimate the percentage of subjects who improved from a particular type of treatment, the data were evaluated on the basis of individually significant change scores. Each subject was classified as "significantly improved" on an anxiety measure if reduction in anxiety from pre- to posttreatment was greater than 1.65

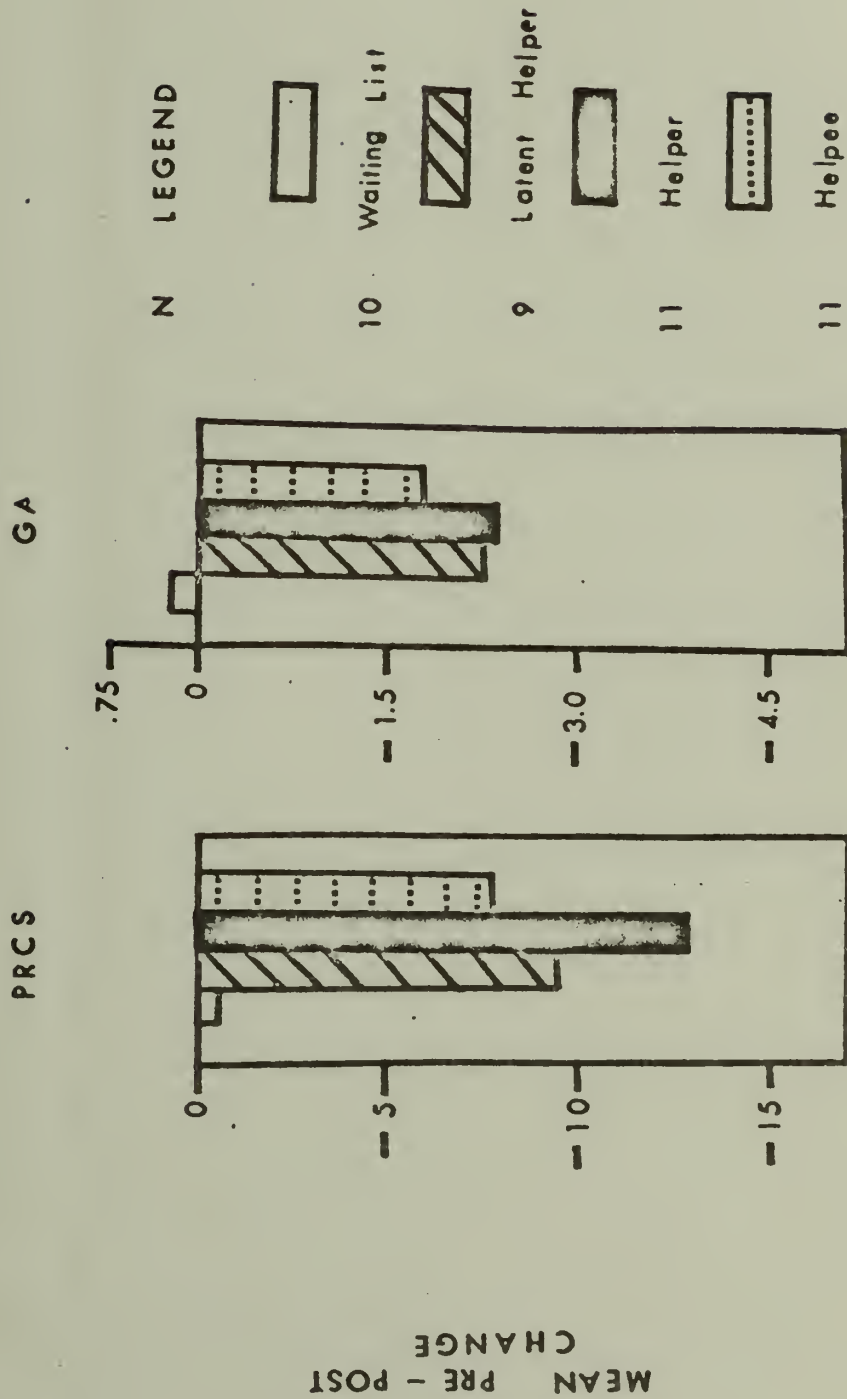


Figure 2. Mean change in speech anxiety on general self-report measures, the Personal Report of Confidence as a Speaker (PRCS), and the General Anxiety of Speech Rating (GA), between pre- and posttreatment assessments.

Table 11
Multivariate Analysis of Variance of General
Self-Report Measures of Speech Anxiety

Source	df _h	df _e	F	P	R ² x 100*
Treatment	6	72	1.15	N.S.	
Time	2	36	36.45	<.001	66.91%
Treatment x Time	6	72	4.20	<.001	43.03%

Note: R² x 100 is the percentage of variance in the discriminant function accounted for by that effect with all other effects in the model held constant. It is equivalent to a multivariate generalization of Fisher's η^2 (1951).

Table 12

Tests of Significant Differences Between
Pre-Posttreatment Change Scores on General
Self-Report Measures of Speech Anxiety

Measures	Group	Group		
		Latent Helpers (N=9)	Helpees (N=10)	Helpers (N=11)
Personal Report of Confidence as a Speaker	Waiting List Controls (N=10)	9.0**	7.4*	12.6***
	Latent Helpers		-1.6	3.6
	Helpees			5.2
General Anxiety	Waiting List Controls	2.5**	2.0**	2.6***
	Latent Helpers		- .5	.1
	Helpees			.6

Note: Table entries are differences obtained by subtraction of group means in the column from the group means in the row.

* $p < .10$, (Scheffe's S method)

** $p < .05$, (Scheffe's S method)

*** $p < .01$, (Scheffe's S method)

times the standard error of the measurement. This statistical definition of "significantly improved" is a significant change in speech anxiety ($p < .05$) appropriate for comparisons of individual tests scores (Kerlinger, 1964).

Among the five measures of speech anxiety, the three measures used in several other studies were selected for this analysis: the Behavior Checklist, Anxiety Differential, and the Personal Report of Confidence as a Speaker. These measures furnish data on speech anxiety from objective ratings of behavior during a speech, self reports of cognitively experienced anxiety just prior to a speech, and general self reports of past speech anxiety, respectively.

Improvement rates presented for each measure in Table 13 further demonstrate that subjects in the helper role gained the most overall improvement in speech anxiety on each type of measure. The helpee and latent helper group yielded roughly equal percentages of significant improvement across the three measures. Consistent with previous analyses, the waiting list control group showed no significant improvement on two of the measures and only 20 percent improvement on the third measure.

To provide an overall estimate of treatment effectiveness, the data in Table 13 were combined into four levels of improvement. Subjects with significant anxiety reduction on all three measures were categorized "much improved". Significant anxiety reduction in two, one, and zero measures were classified as "improved," "slightly improved," and "unimproved", respectively. A final category of "therapeutic success" was defined as a significant reduction on at least two of the three

Table 13
Percentage of Subjects "Significantly Improved" on Behavioral
and Self-Report Measures of Speech Anxiety

Treatment Group	N	Behavior Checklist	Anxiety Differential	Personal Report of Confidence as a Speaker
Helpers	11	73%	36%	64%
Helpees	10 ^a	60%	30%	36%
Latent Helpers	9	55%	11%	44%
Waiting List Control	10	20%	0%	0%

^aNOTE: For the Helpees, N=11 on the Personal Report of Confidence as a Speaker

measures. When the results were combined in this manner, 54 percent of the helpers were "therapeutic successes." In comparison, 40 percent of the helpees, 22 percent of the latent helpers and none of the waiting list controls were "therapeutic successes" (Table 14).

Fisher's exact probability test (Siegel, 1956) of the success rates confirmed significant overall improvement by the helpers ($p < .01$) and helpees ($p < .05$) relative to the waiting list control group. The success rate of the latent helpers reflected improvement intermediate between the waiting list control group and the helper and helpee groups. However, their success rate was neither significantly greater than that of the waiting list controls nor significantly less than those of the helpees and helpers. Although higher, therapeutic success among the helpers did not reach significance when compared with the helpees.

In summary, the analyses of individual improvement rates within treatment groups provide additional support that a helper model produces a dual reduction in speech anxiety. Significantly more helpers and helpees than waiting list controls improved on an overall criterion of therapeutic success. The latent helpers did not significantly differ from either subjects who received no treatment or subjects who received training and also helped another person.

Generalization Measures of Social Anxiety. The Social Avoidance and Distress Scale and the Fear of Negative Evaluation Scale were administered to obtain self-report measures of treatment generalization to these other areas of social anxiety. The means and standard deviations for these measures are presented in Table 7. Figure 3 graphically

Table 14
Percentage of Subjects in Traditional "Improvement" Categories
from Speech Anxiety Data

Treatment	N	Unimproved	Slightly Improved	Improved	Much Improved	Treatment Success
Helpers	11	9%	36%	27%	27%	54%
Helpees	10	30%	30%	30%	10%	40%
Latent Helpers	9	11%	67%	22%		22%
Waiting List Control	10	80%	20%			0%

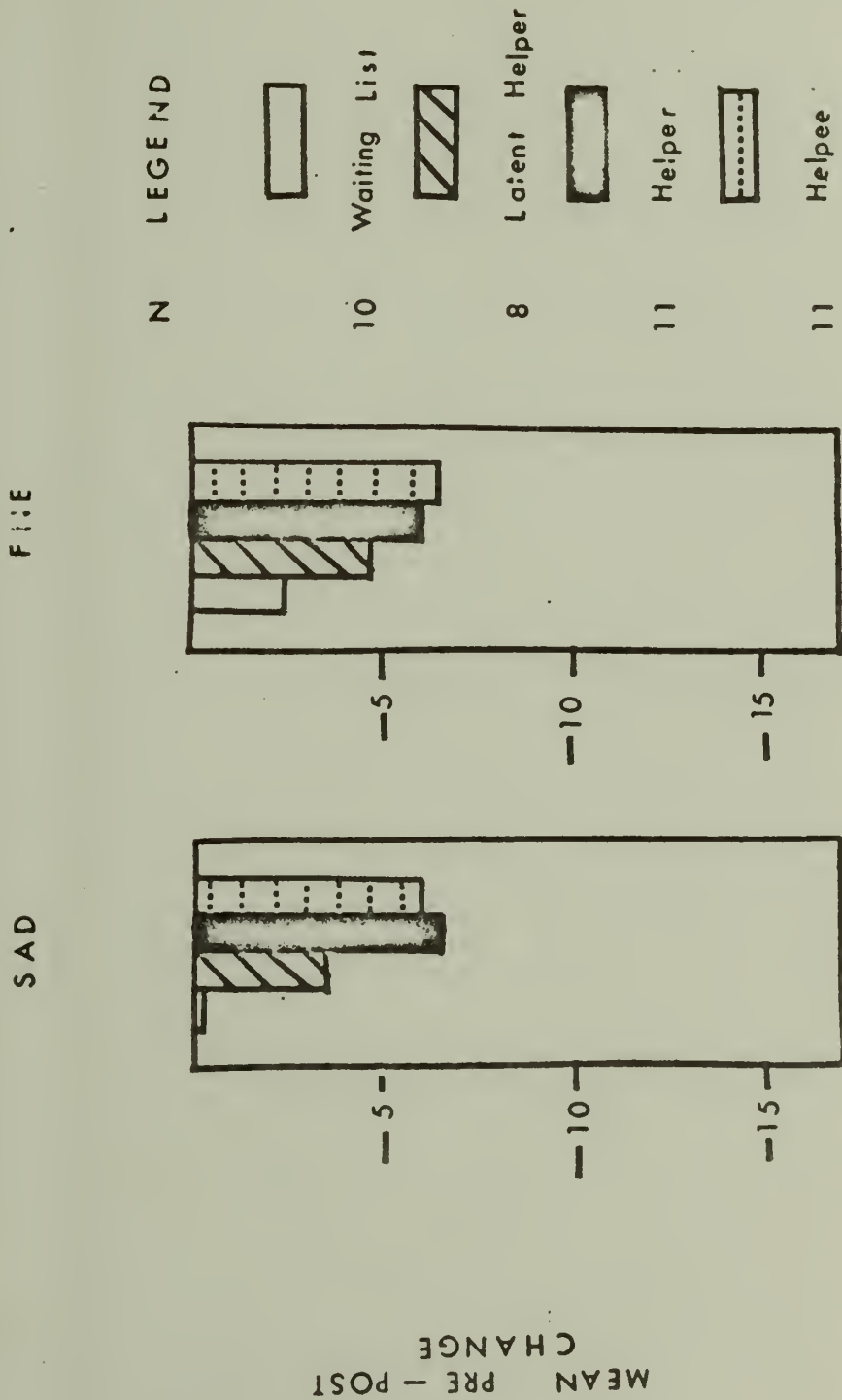


Figure 3. Mean change in social anxiety on the Social Anxiety and Distress Scale (SAD) and the Fear of Negative Evaluation Scale (FNE), between pre- and posttreatment assessments.

presents the mean change in social anxiety as assessed by Social Avoidance and Distress Scale and the Fear of Negative Evaluation Scale from pretreatment to posttreatment assessment. A multivariate analysis of variance of these generalization measures (Table 15) revealed a significant decrease in social anxiety over time ($p < .001$). However, the Treatment x Time interaction was only a trend ($p < .10$) when analyzed across both measures. When univariate analyses of variance were performed on each measure (Table 16), the Fear of Negative Evaluation Scale did not yield a significant interaction effect. However, the Social Avoidance and Distress Scale did reveal a significant Treatment x Time interaction ($p < .01$). Scheffe's S test of change scores was performed on the Social Avoidance and Distress Scale (Table 17). Both the helpers and helpees showed more generalization of change on this scale than the waiting list control group ($p < .05$). No other differences between groups approached significance.

In conclusion, the helpers and helpees showed generalization of improvement from speech anxiety to change on the Social Anxiety and Distress Scale but not the Fear of Negative Evaluation Scale. The latent helpers were not significantly different from either the waiting list control group or the helper group in change on the Social Anxiety and Distress Scale.

Follow-up Measures of Speech Anxiety and Social Anxiety. To determine the long range effects of the treatment program, a three-month follow-up was conducted by mail with each subject. The follow-up battery consisted of a questionnaire about the treatment program (see

Table 15
Multivariate Analysis of Variance of
Generalization Measures of Social Anxiety

Source	df _h	df _e	F	P	R ² x 100*
Treatment	6	70	.22	N.S.	
Time	2	35	21.09	<.001	54.6%
Treatment x Time	6	70	1.9	<.10	

*Note: R² x 100 is the percentage of variance in the discriminant function accounted for by that effect with all other effects in the model held constant. It is equivalent to a multivariate generalization of Fisher's η^2 (1951).

Table 16
Analyses of Variance of Generalization
Measures of Social Anxiety

Variable	Source	df	MS	F
SAD	Between Ss			
	Treatments	3	39.01	.32
	Ss within Treatments	36	122.53	
	Within Ss			
	Time	1	714.02	34.97**
	Treatment x Time	3	85.95	4.21**
	Time x Ss within Treatments	36	20.42	
FNE	Between Ss			
	Treatments	3	9.82	.04
	Ss within Treatments	36	245.50	
	Within Ss			
	Time	1	1020.1	24.94**
	Treatment x Time	3	30.39	.74
	Time x Ss within Treatments	36	40.91	

**p<.01

Table 17

Tests of Significant Differences Between
Pre-Posttreatment Change Scores on
Generalization Measures of Social Anxiety

Measure	Group	Group		
		Latent Helpers (N=8)	Helpees (N=11)	Helpers (N=11)
Social Anxiety and Distress Scale	Waiting List Controls (N=10)	3.4	5.9*	6.2*
	Latent Helpers		2.5	2.8
	Helpees			.3

Note: Table entries are differences obtained by subtraction of group means in the column from the group means in the row.

* $p < .05$, (Scheffe's S method)

Appendix F), the Personal Report of Confidence as a Speaker, the General Anxiety Rating, the Social Anxiety and Distress Scale and the Fear of Negative Evaluation Scale. Forty of the original 41 subjects completed the follow-up battery. One subject in the helper group had left school and could not be contacted.

Unfortunately the results of the follow-up data do not allow clear comparisons between the original treatment groups. After the posttreatment assessment speech, the E felt ethically responsible to provide treatment promised to the waiting list control subjects who still desired assistance. As repeatedly shown by the data, the waiting list controls had remained highly speech anxious and all 10 subjects requested treatment. Nine subjects were individually given three hours of speech training by the nine former latent helpers. The remaining subject was seen by the experimenter for three hours. Because the end of the semester did not permit completion of the 5 hour program, these former waiting list subjects cannot be considered helpees equivalent to the original 11 helpers nor can the nine new helpers for them be grouped with the first helper group. Instead, these subjects provide an estimate of the reduction in speech anxiety on self report measures from an abbreviated helping relationship.

Table 18 provides a summary of the mean pretreatment, posttreatment, and follow-up scores on the general self-report measures of speech anxiety and the generalization measures of social anxiety. Figure 4 graphically summarizes the data from the Personal Report of Confidence as a Speaker and General Anxiety Scale. Figure 5 illustrates the data from the Social Anxiety and Distress Scale and Fear of Negative Evaluation Scale.

Table 18
Mean Pretreatment, Posttreatment, and Follow-up Scores
on Self-Report Measures of Speech Anxiety

Treatment	N	General Self-Report Measures				Generalization Measures			
		GA		PRCS		SAD		FNE	
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	\bar{X}	SD
Waiting List Control	10								
Pre		5.5	1.6	19.3	4.9	9.1	4.0	20.7	7.3
Post		5.7	1.7	19.0	4.7	8.9	4.2	18.1	7.3
Follow-up		3.6	1.6	8.6	5.3	6.2	3.3	13.0	8.4
Latent Helpers	9								
Pre		6.0	1.2	21.7	3.9	11.6	7.2	21.6	7.6
Post		3.7	.9	12.2	5.8	8.1	5.4	17.2	9.5
Follow-up		2.9	.6	9.1	4.3	6.8	5.8	13.8	9.6
Helpers ^a	11								
Pre		6.0	1.6	21.1	4.0	13.2	6.2	23.4	7.1
Post		3.6	1.0	8.1	5.0	6.7	4.7	17.3	9.0
Follow-up		3.5	1.3	7.4	4.3	5.1	4.5	15.6	9.2
Helpees	11								
Pre		5.6	1.2	20.4	5.7	14.4	7.8	22.7	6.4
Post		3.8	1.7	12.5	8.4	8.3	6.8	16.4	9.4
Follow-up		3.3	1.4	9.3	6.4	7.5	6.5	14.3	9.4

^aN=10 at Follow-up

Note: GA is General Anxiety, PRCS is Personal Report of Confidence as a Speaker, SAD is Social Anxiety and Distress Scale, and FNE is Fear of Negative Evaluation Scale.

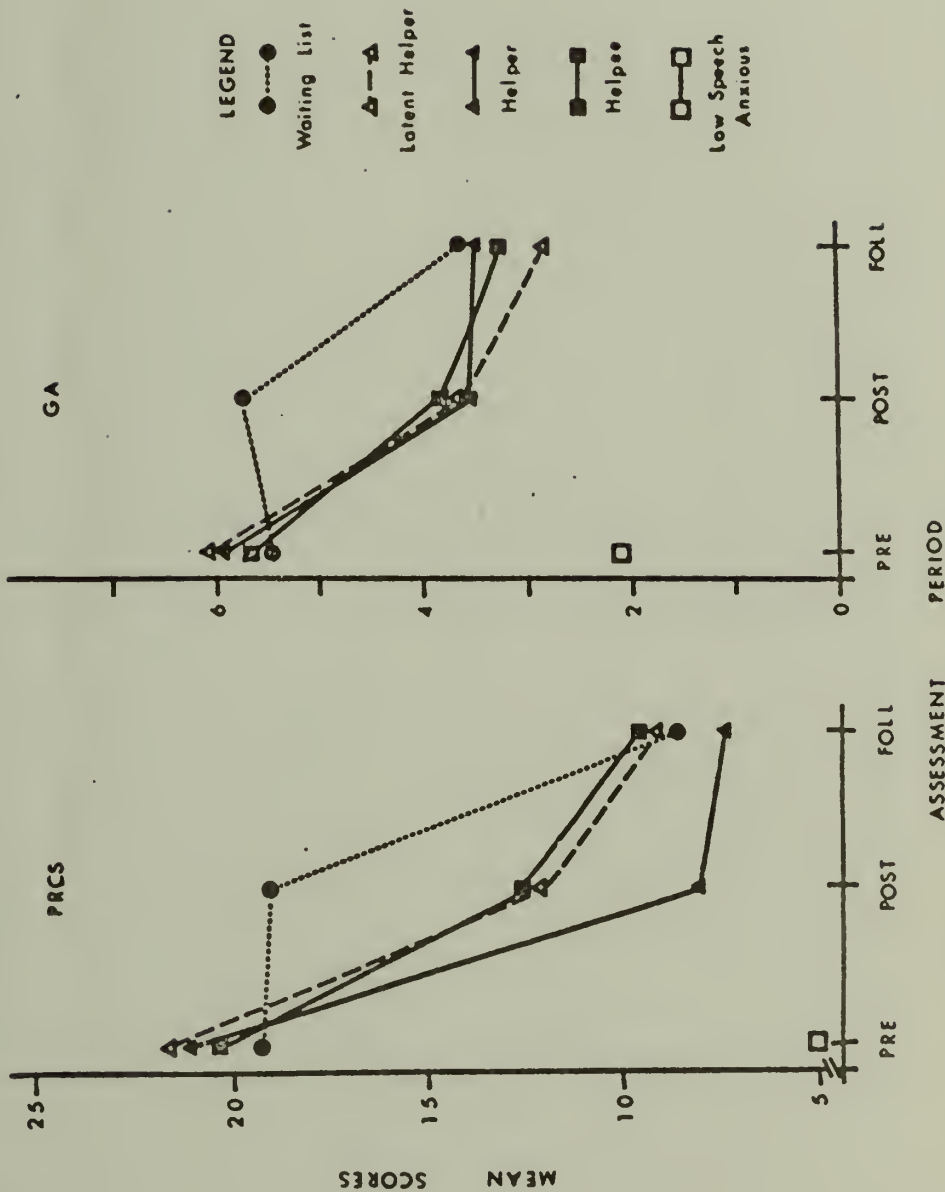


Figure 4. Mean scores on general self-report measures, the Personal Report of Confidence as a Speaker (PRCS) and the General Anxiety of Speech Anxiety (GA) at pretreatment (PRE), posttreatment (POST), and at the 3-month follow-up (FOLL). (Note that "improvement" is reflected by lowered scores.)

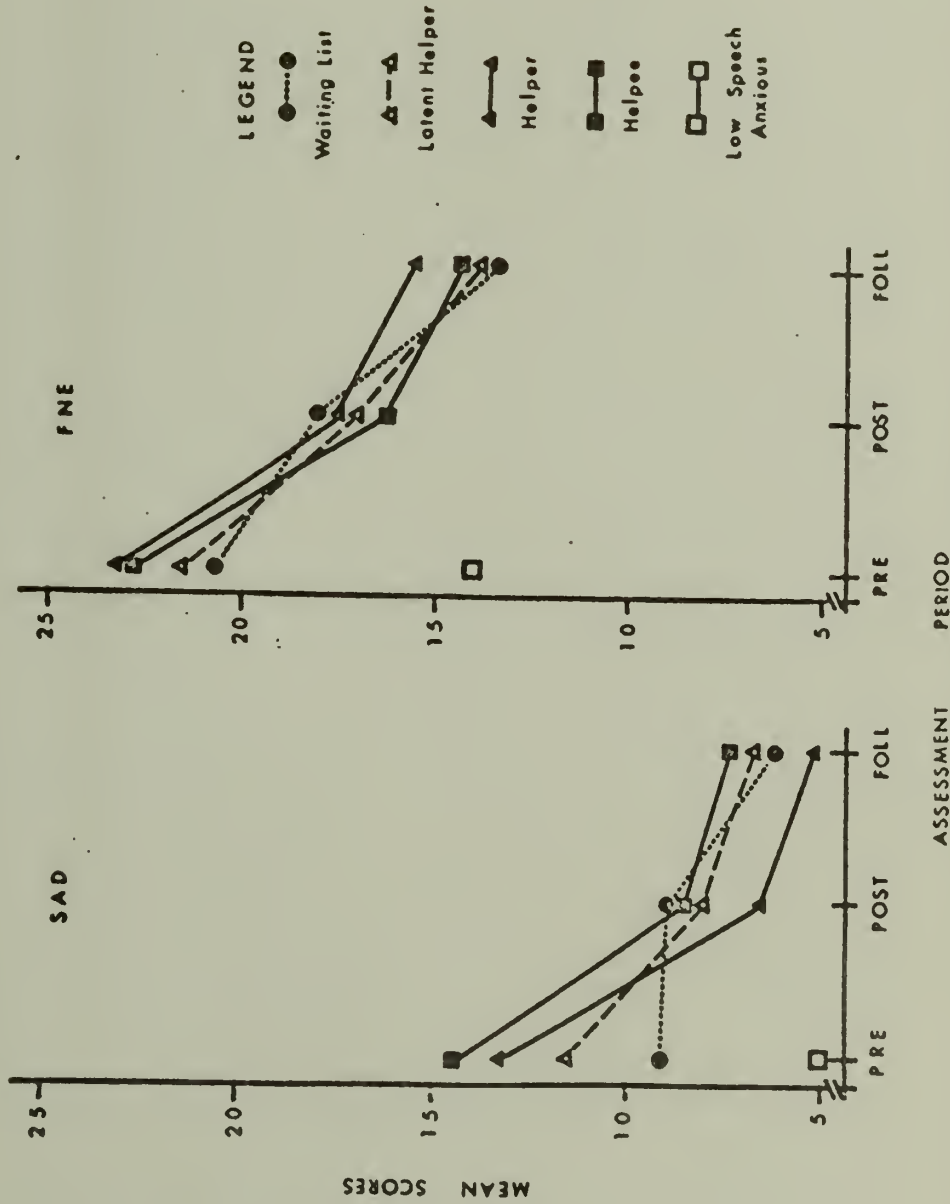


Figure 5. Mean scores on self-report measures of generalization, the Social Anxiety and Distress Scale (SAD) and the Fear of Negative Evaluation (FNE) at pretreatment (PRE), posttreatment (POST), and at the 3-month follow-up (FOLL). (Note that "improvement" is reflected by lower scores.)

The figures show that after three months, both the helper and helpee groups had maintained their anxiety reduction on each of the self-report measures. Furthermore, the latent helpers and especially the waiting list controls revealed improvement after the abbreviated treatment program between posttreatment and follow-up. Analyses of variance of the follow-up scores presented in Table 19 revealed no significant differences between groups on any of the self report measures (all $F's < 1$).

The shortened treatment program administered by the latent helpers apparently reduced high speech anxiety among the waiting list controls on self report measures. However, the effect of the shortened program on behavioral measures of speech anxiety is unknown. The absence of a nontreatment control group at follow-up precludes a direct test of the effect of this three-hour program compared with improvement from other factors such as completion of the public speaking course. In summary, the follow-up data demonstrated both the long term maintenance of improvement in the original helper and helpee groups and furnished additional evidence that speech anxious helpers can effectively reduce anxiety in other people.

Comparison with Low Speech Anxious Subjects. The amount of improvement from the treatments can be compared with the "low anxiety" baseline established by the low speech anxious subjects at the pretreatment assessment. Table 7 presents the means and standard deviations for both the low and high speech anxious subjects. At pretreatment, the high speech anxious subjects were significantly higher than the low speech anxious

Table 19
Analyses of Variance of Self Report Measures
of Speech and Social Anxiety at Follow-up

Variable	Source	df	MS	F
General Anxiety	Between groups	3	.96	.57
	Ss within groups	36	1.66	
Personal Report of Confidence as a Speaker	Between groups	3	7.22	.27
	Ss within groups	35	26.51	
Social Anxiety and Distress Scale	Between groups	3	10.99	.41
	Ss within groups	36	26.99	
Fear of Negative Evaluation	Between groups	3	12.85	.16
	Ss within groups	36	81.99	

subjects on each dependent measure ($p < .01$) (see Table 6). When the high speech anxious groups at posttreatment were compared with the low anxious group (Table 20), the original differences between groups on the social anxiety measures, the Social Anxiety and Distress Scale and the Fear of Negative Evaluation Scale, were no longer significant.

Other analyses of variance between groups still revealed significant differences on the five measures of speech anxiety ($p < .05$). Scheffe's S tests summarized in Table 21 revealed that differences between the waiting list control group and the other groups were the only source of these differences. The helpers and latent helpers were no longer significantly different from the low speech anxious group on any measure of speech anxiety. The helpees only differed from the low anxious group on the Personal Report of Confidence as a Speaker. The helpees continued to score higher on this measure than the low anxiety group ($p < .10$, Scheffe's S).

When analyses of variance (Table 22) were performed between treatment groups at the follow-up assessment and the low speech anxious group, no significant differences remained between the original high speech anxious groups and the low speech anxious groups (all F 's < 1). After the treatment programs, the nonsignificant differences between the formerly high speech anxious subjects and the low speech anxious subjects provide further evidence that the program was highly effective in reducing speech anxiety.

Comparison of Treatment Effectiveness with Other Research

This study has demonstrated that both the helpers and helpees reduced their speech anxiety relative to the no treatment control group.

Table 20
Analyses of Variance Between Treatment Groups at
Posttreatment and the Low Speech Anxious Group

Variable	Source	df	MS	F
General Anxiety	Between groups	4	8.35	4.25**
	Ss within groups	45	1.96	
Personal Report of Confidence as a Speaker	Between groups	4	271.78	8.44**
	Ss within groups	45	32.20	
Anxiety Differential	Between groups	4	401.87	2.49*
	Ss within groups	44	161.83	
Behavior Checklist	Between groups	4	1056.85	2.47*
	Ss within groups	44	428.46	
Overall Anxiety	Between groups	4	221.28	3.05*
	Ss within groups	44	72.56	
Social Anxiety and Distress Scale	Between groups	4	23.04	.86
	Ss within groups	45	26.71	
Fear of Negative Evaluation Scale	Between groups	4	26.08	.35
	Ss within groups	44	74.74	

* $p < .05$

** $p < .01$

Table 21
Tests of Significant Differences Between
Treatment Groups at Posttreatment and the Low Speech
Anxious Group

Measures	Groups	Groups			
		Latent Helpers (N=9)	Helpees (N=11) ^a	Helpers (N=11)	Low Speech Anxious (N=9)
General Anxiety	Waiting List Controls (N=10)	2.03**	2.06**	1.89*	2.2**
	Latent Helpers		.03	-.14	.17
	Helpees			.17	.14
	Helpers				.31
Personal Report of Confidence as a Speaker	Waiting List Controls	6.78	6.46	10.91***	14.00***
	Latent Helpers		-.32	4.13	7.22
	Helpees			4.45	7.54*
	Helpers				3.09
Anxiety Differential	Waiting List Controls	8.89	9.50	16.10*	14.56
	Latent Helpers		.60	7.21	5.67
	Helpees			6.60	5.10
	Helpers				-1.15
Behavior Checklist	Waiting List Controls	14.83	28.70*	17.96	16.71
	Latent Helpers		13.87	1.14	-.12
	Helpees			-10.74	-11.99
	Helpers				-1.25
Overall Anxiety	Waiting List Controls	9.11	12.4**	9.10	5.6
	Latent Helpers		3.2	-.02	-3.55
	Helpees			-3.3	-6.84
	Helpers				-3.5

Note: Table entries are differences obtained by subtraction of group means in the row from group means in the column.

* $p < .10$ (Scheffe's S method)

** $p < .05$ (Scheffe's S method)

Table 22
Analyses of Variance Between Treatment Groups at
Follow-up and the Low Speech Anxious Group

Variable	Source	df	MS	F
General Anxiety	Between groups	4	.75	.49
	Ss within groups	43	1.54	
Personal Report of Confidence as a Speaker	Between groups	4	13.05	.56
	Ss within groups	44	23.09	
Social Anxiety and Distress Scale	Between groups	4	11.98	.48
	Ss within groups	44	24.97	
Fear of Negative Evaluation Scale	Between groups	4	18.71	.23
	Ss within groups	44	81.91	

Although significant, the amount of behavior change derived from this program is unknown compared with professional treatments of speech anxiety. To provide an estimate of the effectiveness of the helper model compared to other types of treatment, the results of the study are presented with data from professionally administered treatments reported by Paul (1966) and Meichenbaum et al. (1971).

The major parameters of the treatments presented by Paul and Meichenbaum et al. are outlined in Table 23. Each study compared systematic desensitization and a form of "insight" therapy with an attention-placebo and waiting list control group. Although the studies differ in experience of therapists with desensitization, length of treatment, and style of treatment (individual versus group), the results of the treatments are roughly comparable on two identical measures of speech anxiety, the Anxiety Differential and the Personal Report of Confidence as a Speaker. After systematic desensitization both studies reported significant improvement ($p < .05$) in anxiety on both measures. However, the insight therapies in the studies did not produce equal reductions in speech anxiety. The cognitively oriented insight therapy used by Meichenbaum was significantly effective on both measures while Paul's Neo Freudian-Rogerian insight therapy only yielded significant changes on the Anxiety Differential compared with its respective waiting list control group.

Table 24 summarizes the data from the Paul (1966), Meichenbaum et al. (1971) and helper model treatment of speech anxiety. The data from the waiting list control group are also presented for each study. To

Table 23

Selected Research in Professional Treatment of
Public Speaking Anxiety

Author	Population Source	Therapy N	Therapy Type	Therapists N	Therapists Experience	N Therapists Prior Experience with Treatment	Length of Treatment
Paul - 1966	College Students in Public Speaking Course	15	Individual Systematic Desensitization	5	6-18 yrs.	0	5 hours
		15	Individual Insight (Neo Freudian & Rogerian)			5	
Meichenbaum, Gilmore, & Federovicias - 1971	Volunteers from Advertisements	11	Group Systematic Desensitization	2	3-4 yrs.	1	8 hours
		11	Group Insight (Cognitively Oriented-Rational Emotive)			2	

Table 24

Mean Change from Professional Treatment and Paraprofessional
Treatment of Speech Anxiety

Study	N	Anxiety Differential						Personal Report of Confidence as a Speaker					
		Pre		Post		Change Pre-Post	Pre		Post		Change Pre-Post		
		M	SD	M	SD		M	SD	M	SD			
Paul - 1966													
Individual Desensization	15	80.2	9.2	66.4	8.2	13.8		21.9	3.5	9.7	4.1	12.2	
Individual "Insight"	15	77.0	10.1	69.3	8.7	7.7		21.0	2.2	14.8	5.3	6.2	
Waiting List Control	22	74.5	12.4	73.1	12.4	1.4		21.6	3.0	16.6	5.6	5.0	
Meichenblau, et. al, - 1971													
Group Desensization	11	72.8	16.8	60.7	12.6	12.1		19.9	4.3	13.0	4.0	6.9	
Group Cognitive Insight	11	76.8	14.9	66.5	11.9	10.3		22.6	3.9	13.5	3.7	9.1	
Waiting List Control	7	68.1	13.6	70.7	18.4	-2.6		20.1	5.5	21.0	5.0	-0.9	
Fremouw - 1974													
Helpers	11	75.0	14.6	58.9	11.3	16.1		21.1	4.0	8.1	5.0	13.0	
Helpees*	10	81.7	9.9	65.5	17.0	16.2		20.4	5.7	12.5	8.4	7.9	
Waiting List Control	10	72.3	9.1	75.0	11.0	-2.7		19.3	4.9	19.0	4.7	.3	

*Note: N=11 on Personal Report of Confidence as a Speaker

provide an estimate of the improvement in the samples from extra-experimental factors. Comparison between studies shows that the mean change on both the Anxiety Differential and Personal Report of Confidence of a Speaker was greater for the helper group than any other professionally treated group. In addition, the improvement of the helpee group exceeded all the other professional treatments on the Anxiety Differential and was within the range of change scores on the Personal Report of Confidence as a Speaker.

These two comparisons must be considered relative to the baselines of improvement for their respective samples shown by the waiting list control groups. The waiting list control group for the helper study showed the least improvement on the Anxiety Differential and median improvement on the Personal Report of Confidence as a Speaker. Therefore, the larger absolute improvement of the helpers cannot be attributed to unique nontreatment factors in the study.

In conclusion, the comparison between professional and paraprofessional treatments on two identical measures of speech anxiety demonstrated that the Fremouw "Helper" group, as hypothesized, improved at least as much as the most effective professional treatments of comparable length. Perhaps even more impressive, the helpers' clients, the helpees, also improved within the range of professional treatment effectiveness.

Chapter IV

DISCUSSION

The present study was conducted to assess the effect of a helper model for treatment of behavioral problems. In this model, a person with a behavioral problem learns therapeutic techniques in a training seminar and he teaches the techniques to another person with a similar problem. The results of the study address two basic hypotheses. Does a helping relationship produce reduction of speech anxiety for a) the helpers and b) the helpees?

The following results demonstrate significant behavioral improvement for the helpers in the helper model of treatment. High speech anxious subjects who learned therapy techniques and then taught the techniques to other speech anxious freshmen significantly improved when compared with a waiting list control group. The helpers showed significant reduction in anxiety on each behavioral and self-report measure. After treatment, the helpers no longer differed from low speech anxious subjects on any measures of speech anxiety. When the improvements on three dependent measures were combined into an overall index of anxiety reduction, the helpers had the highest success rate among the groups. Furthermore, the change in speech anxiety generalized to reduction of anxiety in more general social situations and the improvements in both speech and social anxiety were still maintained after three months.

These results suggest that, contrary to traditional treatment models, clinical problems can be ameliorated without placing a person in a patient or client role. Instead, people who learned behavioral techniques in a

training seminar and then taught the techniques to another person can significantly reduce their own speech anxiety without assuming a "patient" role.

To understand the source of the helper effect, the improvement among the helpers was compared with the effects of the training seminar without teaching another speech anxious freshman. The latent helpers, who received the same training and readings as the helpers, provide the data for this comparison. Unfortunately, matching and scheduling procedures yielded more females in the latent helpers than the other groups. Change scores from the helper and helpee groups were combined and tested for differential improvement between sexes. The absence of a sex effect on any measure of anxiety reduction suggest that the nonrandom sex distribution did not confound the data from the latent helpers.

Overall, the latent helpers showed more anxiety reduction than the waiting list control group but less than the helper group. For example, on the combined measures of improvement (Table 14), the success rate of the latent helpers (22 percent) was neither significantly greater than that of the waiting list control group (0 percent) nor significantly less than that of the helpers (54 percent). The moderate reduction of speech anxiety among the latent helpers was revealed on the analyses of the individual anxiety measures. Just learning the techniques produced significant improvement on one of three direct measures, the Overall Rating of Anxiety, and each of the self-report measures of anxiety relative to the waiting list control group. On the other hand, the helpers showed improvement greater than the latent helpers on each dependent

measure. However, the relatively small sample sizes of 11 and 9 and the high variability within the groups decreased the power of the statistical analyses.

Although none of the differences were significant, a binomial test (Siegel, 1956) of the probability of the helpers improving more than the latent helpers on each of the seven dependent measures was significant ($p < .01$). The consistent pattern of those two groups across the measures implies that real differences between the helpers and latent helpers probably exist. Therefore, the data from these comparisons suggest that the behavioral change in the helpers is the product of more than just the training program.

The second major hypothesis tested the effect of the helper model on the traditional recipients, the helpees. Because research has already demonstrated that receiving or learning behavioral treatments can improve speech anxiety (Paul, 1966; Sanders, 1968), the helpees were expected to benefit from the relationships with the helpers. Consistent with this prediction, the helpee group also revealed significant reductions in speech anxiety on each behavioral and self-report measure. Overall, the helpees had the second highest success rate (40 percent) among the four groups. In addition to changes in speech anxiety, the improvements also generalized to social anxiety and were maintained after three months.

These results support the major hypotheses of the study. When a person with a behavioral problem learns therapy techniques and teaches them to another person with a similar problem, both persons significantly

improved. The data from the latent helper group partially qualify conclusions about the therapeutic effect of teaching another person the techniques. Nevertheless, the data clearly demonstrate an effective, nonprofessional model for increasing treatment of behavioral problems.

The minor hypotheses of the study were also supported. These tests compared the improvement among the helpers with improvement in two other types of treatment groups, a) clients of nonprofessional therapists and b) clients of professional therapists. In both cases, the helpers were expected to improve at least as much as the helpees because the active, helper role was hypothesized to maximize reinforcement for practicing and mastering the anxiety reduction techniques at least as much as a helpee role. The helpers were not expected to reveal significantly greater improvement than either group because in many cases behavioral treatment of speech anxiety was reported virtually to eliminate the problem (Paul, 1966; Meichenbaum, et al., 1971). Therefore, at best, the helpers could only duplicate the results from the professional treatments.

In the first comparison, the improvement by the helpers was compared with the change among the helpees. As predicted, the helpers improved as much as the helpees. On direct measures of anxiety during the assessment speeches, the helpers and helpees improved almost identically. On general self-report measures of anxiety, the helpers showed even greater, although nonsignificant, improvement than their clients. Thus, the "helper model" produced equal and significant behavior changes for both the helpers and the helpees.

As a second test the improvement among the helpers was compared with outcome data from the two most successful, professional treatments of speech anxiety reported in the literature. In these studies, seven professional therapists with a range of therapy experience from 3 to 18 years provided either systematic desensitization, Rogerian-oriented insight therapy, or cognitively-oriented therapy for 52 speech anxious subjects. Although it was inappropriate to perform a precise statistical comparison across studies, the helpers showed more absolute improvement on both the Anxiety Differential and the Personal Report of Confidence of a Speaker than any of the professional treatment groups. Equally impressively, the helpers' clients, the helpees, improved within the range of outcomes from the best professional treatments available.

There are two important differences between the helper model and the professional treatments: a) the treatment personnel and b) the treatment. Although the behavioral treatment techniques taught by the helpers contained several common elements with the professional treatments such as deep muscle relaxation and cognitive structuring, there are enough differences in the behavioral programs to preclude any conclusions about the effectiveness of just professionals versus helpers as therapists. In general, these cross-study comparisons suggest that a helper trained in a variety of behavioral techniques is at least as effective for both himself and a client as professional therapists who administered systematic desensitization, cognitive structuring, or insight therapy.

An Explanation of Effects

The results of this study show that the helper model of treatment reduced speech anxiety for both the helpers and helpees. In the following sections, several potential explanations for the anxiety reduction among the helpers are first considered and then rejected due to data from the waiting list and latent helper control groups. Then, a learning theory explanation of the helper effect is presented for future research.

At the most general level of explanation, anxiety reduction from factors extraneous to the treatment program are controlled by data from the waiting list control group. The stability of high anxiety among this group on each measure of speech anxiety shows that additional time in rhetoric classes, regression effects from repeated testing, familiarity with the assessment procedures, and the promise of treatment did not reduce speech or social anxiety on any measure except the Fear of Negative Evaluation Scale.

On this one generalization measure, the waiting list control group did reveal moderate improvement from extraneous factors. Reduction of social anxiety on the scale may reflect a general increase of social confidence most students experience between the first weeks of freshmen year and later in the semester. On the other hand, the waiting list control group showed no improvement on the Social Anxiety and Distress Scale while the treatment groups did reveal significant change. Therefore, conclusions about generalization of the helper effect can only be made on the basis of the Social Anxiety and Distress Scale and not the

Fear of Negative Evaluation Scale.

As a more specific control than the waiting list group, the latent helpers were included to measure the effect of learning the therapy techniques without teaching another person. As previously noted, the latent helpers showed change on self-report measures of anxiety but these reductions in anxiety were not supported by either the Anxiety Differential or the Behavior Checklist measures of actual speaking behavior. The third direct measure, the Overall Anxiety rating, did reflect significant change when compared with the waiting list group. The marginal therapeutic effect of this group can be attributed to several sources. First, the improvement may be the result of a "Hawthorne effect" (Roethlisberger, 1941) which often occurs when subjects are exposed to any form of treatment, real or placebo, that they believe to be beneficial. Both Paul (1966), and Meichenbaum, et al. (1971) reported that attention-placebo treatments created changes in attitudes, self-perceptions, and expectations of improvement in speech anxiety that were reflected by self-report measures but not supported by direct, behavioral measures of actual speaking behavior. The latent helpers showed this same pattern of inconsistent improvement between behavioral and self-report measures. However, the nonspecific treatment effects cannot be separated from several other factors controlled by the latent helper group.

The second potential source of improvement among the latent helpers is participation in the therapy training program. The behavioral treatment program was designed to first teach techniques to decrease physiological and cognitive arousal in public speaking situations. Deep

muscle relaxation and coping statements (Meichenbaum, et al., 1971) were taught during the first two sessions to achieve this goal. However, the maintenance of anxiety reduction in future situations may depend upon the development of public speaking skills and not just anxiety reduction techniques. Otherwise, a person who has reduced his initial anxiety to a speaking situation may still lose his organization, avoid eye contact, etc., while speaking and again become speech anxious. Therefore, after presenting the anxiety reduction techniques, the program taught public speaking skills. Speech organization, posture, and the use of gestures were demonstrated and practiced in successively longer speaking situations.

During the five hours of training, the latent helpers both observed and performed each technique. They received detailed descriptions of the techniques and they were asked to rehearse the techniques one hour a week. On the posttreatment questionnaire the latent helpers reported practicing a mean of 47 minutes per week. Unfortunately, the absence of an attention-placebo control group in this study does not allow a distinction between the impact of this training program and a simple "Hawthorne effect."

The improvement in the latent helper group could be attributed to still another possible variable, the anticipation of helping. The latent helpers expected to teach another freshman the therapy techniques later in the semester. The future responsibility of helping another person may have created many of the same contingencies for the latent helpers as the helpers to prepare and rehearse the therapy techniques. Although no helpees were currently assigned to the latent helpers, they

knew that five training sessions would be their only opportunity to learn the techniques before helping another student. The absence of a training group who did not anticipate a future helper role precludes the direct test of the effect of the training program on a group that does not anticipate the responsibility of helping another person.

Additional control groups are necessary to separate a Hawthorne effect, the training program, and the anticipation of a helper role from whatever unique effects are produced by the actual helping of another person. A helper group that does not first learn therapy techniques also would be needed to further explore the helper effect. The consistent superiority of the helpers to the latent helpers on each dependent measure and the higher success rate both indicate that some additional sources of anxiety reduction probably exist beyond the changes observed in the latent helpers. Obviously, these questions require further exploration and research.

Before considering a learning theory explanation of the helper model, a more parsimonious explanation of the helper effect must be examined. The improvement by the helpers could be interpreted as the direct product of 10 hours in the program as compared with 5 hours participation by the helpees and latent helpers. However, if improvement were only a direct function of time, the latent helpers and helpees should have improved equally after 5 hours of training while the helpers should have exceeded the improvement of both groups. Instead, after the same amount of time, the helpees improved more than the latent helpers on direct measures of behavioral change. In fact, the helpees

improved as much as the helpers who had spent twice as much time in the program. The anxiety reduction during the test speeches was determined by not just the amount of time, but the way time was spent in the program. Therefore, the data from the direct measures do not support a simple interpretation of the helper effect as a function of practice or amount of training.

In this study, the helper role was hypothesized to maximize natural contingencies for helpers to learn and practice new anxiety reducing skills. To explain the helper effect within a learning model, the acquisition of knowledge about anxiety reducing techniques such as deep muscle relaxation should be distinguished from the performance of the new speaking behaviors. Bandura (1969) has already shown the importance of the distinction between acquisition and performance of new behaviors in his work on observational learning. A helper probably cannot change his or a helpee's behavior until he has acquired the requisite skills or knowledge through the training sessions. For example, alcoholics, smokers, or overeaters are often well informed about many methods for self-control. However, just knowledge of behavioral techniques seldom guarantees the performance of the new behaviors. Instead, pressure from family or friends, or even medical problems are often necessary before persons attempt to change their behavior.

In self-help groups, the knowledge for behavior change is acquired through indoctrination in the group philosophy. The self-help groups appear to be most successful for the people who then assume leadership or helper roles and receive reinforcement for the new behaviors. As

in this study, a helper role is one way to create reinforcers for a person to attempt or maintain behavior change. From this theory of the helper effect, knowledge of behavior change techniques may be a necessary, but not a sufficient condition for the helper effect. The natural contingencies from the responsibility of helping another person also may be necessary for performance of the anxiety reduction techniques to produce improvement beyond the initial effects of just learning the techniques.

Interviews with the helpers provide anecdotal data to confirm the reinforcing potential of the helper relationship. Prior to meeting the helpees, the helpers reported on questionnaires that fear of embarrassment in front of the helpee was a negative reinforcer for them to prepare to teach the first lesson. Later, most helpers said that reinforcement for preparation and involvement changed from fear of embarrassment to a desire to help their clients improve. Several helpers derived additional reinforcement for their knowledge and performance of the techniques when they began to proselytize the training techniques to their roommates, rhetoric classes, and families. In retrospect, all the helpers believed that reviewing, explaining and demonstrating the techniques helped them learn the skills.

The anxiety reduction in the helpees provides additional support for the growing evidence that paraprofessional helpers can provide equally effective treatment as professionals (Poser, 1966; Zunker & Brown, 1966). The helpees were individually taught a composite of behavioral techniques for anxiety reduction. The helpers and helpees

rehearsed the specific techniques as many as two and three times per session. Therefore, the helpers both taught the helpees the techniques and required them to practice the techniques. The sharing of a common problem and the personal investment of the helper and helpees in the relationship appears to compensate for the helpers' inexperience and lack of traditional training.

In several helping dyads, the initially defined roles of helper and helpee became blurred as the two speech anxious freshmen gave each other suggestions and feedback on the therapy techniques. The identical improvement of the helpers and helpees on the direct measures of anxiety may reflect the reciprocal nature of the helping relationships in the helper model. Poser (1966) has suggested that the enthusiasm, optimism, and lack of a professional role increase the effectiveness of paraprofessional treatment. Statements by the helpers and helpees about their partners appear to confirm this idea. For example, when one helpee was asked on a questionnaire to state the best qualities of her freshman helper she replied, "(The helper) was sincerely interested that I was getting something out of it. She was generally enthusiastic. She seemed to know what she was doing. I was impressed." (After reading many comments like these, one wonders how many professional therapists earn this type of praise.)

The helpers produced more than behavior change in speech anxiety for themselves and their clients. For both groups reduction in anxiety generalized to social situations as measured by the Social Anxiety and Distress Scale and open-ended questionnaires. General confidence gained

by a successful experience as a helper may be one major, unexplored benefit from a helper model that extends beyond specific behavior change. Research by Holzberg (1962) and Golann, et al. (1973) among paraprofessional helpers have revealed general effects on career goals, attitudes, and personality. In fact, one of the helpers changed his major from pre-law to education just because of his unexpected success as a helper on his client and himself. Although untested in this study, overall confidence gained from the helper role may account for the large increase in self-perceptions of speaking competence on the self-report measures.

Before drawing more general implications from these results, some of the features of the study should be cited which help increase the significance of the results. The subjects were primarily 18 year old freshmen with little or no prior training in psychology or experience in teaching. Unlike other paraprofessional programs such as Holzberg (1962), or Chinsky (1969), the helpers were randomly selected from a group requesting help for their immediate problem and not interested in paraprofessional training. Their arbitrary assignment to helper and helpee roles eliminated any potentially beneficial self-selection factors that operate in most paraprofessional programs.

Furthermore, speech anxious subjects were required to meet and teach strangers techniques they had just learned earlier in the week. Initially, this experience was reported to be very anxiety arousing for both helpers and helpees. Although the situation can be viewed as therapeutic, the performance of even minimal social behaviors necessary for helping relationships, such as conversing or relaxing in the presence

of the other people, were difficult for this population. The performance of a helper role for people with different problems such as overeating or smoking would probably be much easier.

The small sample sizes within the groups reduced the power of the statistical tests. Therefore, the significant reduction of anxiety by the helpers and helpees relative to the waiting list control group is impressive. Thus, the completely random assignment of inexperienced subjects to a helper role, the small sample sizes, and the potentially interfering nature of the target behavior with performance of the helper role all mediated against treatment effectiveness. Therefore, the significant effect of the helper model on behavior change suggests generalizations to other populations and target behaviors.

Implications for Research and Practice

General Research Directions. The present research is an empirical demonstration of a two-directional helper model for behavior change in clinical populations. In other areas, research on the helper effect has not focused on behavioral outcomes or have often lacked sufficient controls. For example, in education, only Cloward (1967) and Harris and Sherman (1973) furnish systematic data on the use of a helper model for academic problems. Descriptions of the helper effect in self-help groups such as Weight Watchers or Alcoholics Anonymous by Reisman (1965) or Brady (1966) have not been controlled studies with objective measures of change. Evaluations of paraprofessional programs, reviewed by Gruver (1971) and Guerney (1969) have focused on attitude and personality change among the helpers and not behavior change.

The initial success of the helper model now invites further exploration along the general lines of primary and applied research. Systematic studies are needed to explore the client variables, the helping process, and the outcomes from this model of intervention. To be feasible, a laboratory analogue of a helper model that permits greater sample sizes and a smaller more circumscribed behavioral problem would be necessary. McFall's (1971) work with assertion training may be a prototype for the type of specific behavioral problem and time limited intervention that would facilitate further research on the helper effect.

To help conceptualize some of the potential variables for more systematic exploration, a general research paradigm for a helper model is presented on Table 25. One of the most important independent variables on Table 25 is "type of problem." Applied research could test the application of a helper model in other problem areas such as smoking, depression, obesity, or drug dependence. However, treatment of more severe problems such as depression or drug dependence increases the risks of harmful effects from a helper model. Obviously, proper supervision and monitoring of helpers would be essential in any research of this kind. A behaviorally oriented helper model combines both an effective technology with an efficient service delivery system. The current controversies surrounding the use and misuse of behavioral techniques in prisons and schools highlight the underlying legal, moral, and ethical issues that must be carefully considered.

Naturalistic observations of existing self-help groups, such as Weight Watchers or Alcoholics Anonymous, would be another area for

Table 25

A General Research Grid for a Helper Model

Client Independent Variables	Process Independent Variables/ Dependent Measures	Outcome Measures
<u>Helper</u>		<u>Helper</u>
1) Personal Characteristics - Sex, Age, Social Class		1) Behavior Change
2) Type of Problem		2) Personality Change
3) Degree of Problem		3) Generalization of change
4) Motivation & Expectation of Change		4) Permanance of change
5) Experience as a Helper		
6) Amount and Type of Training as Helper		
	<u>Helper-Helpee</u>	
	1) Interpersonal behaviors - teaching, rehearsing, talking	
	2) Interpersonal attraction	
	3) Role definition	
	4) Preparation/involvement	
	5) Length of helper-helpee dyad - amount, duration	
<u>Helpee</u>		<u>Helpee</u>
1) Personal Characteristics - Sex, Age, Social Class		1) Behavior Change
2) Type of Problem		2) Personality Change
3) Degree of Problem		3) Generalization of Change
4) Motivation & Expectation of Change		4) Permanance of Change
5) Experience as a Helpee		

exploration. Research about natural self-help groups is a promising area to explore questions about generalization of improvement to personality and self-concept as well as the helping process itself. As in the case of other areas of treatment, identification of variables that allow optimal helper-helpee matching would be a significant step toward refinement and improvement of treatment delivery.

Implications for Behavior Modification. Theoretically, the helper effect is created by the social reinforcement and punishment from the relationship with the helpees. In traditional therapy, the social reinforcement of approval, acceptance, and encouragement, generally called "unconditional positive regard," has been considered by Rogers (1957) as one necessary condition for improvement. In more behavioral terms, both Krasner (1955) and Skinner (1953) have viewed attention from others in helping relationships as "generalized reinforcers" for change. Interpersonal relationships and social reinforcers such as praise and attention have been systematically manipulated to produce and maintain behavior change. For example, Williams (1959) extinguished bedtime crying of an infant by removing parental attention; while Ayllon and Haughton (1964) alternatively increased and decreased public hallucinations among psychotics by manipulating staff attention. In educational settings, disruptive behavior has been successfully changed through group contingencies which maximize social reinforcement from peers for appropriate behavior (Patterson, 1965; Long and Williams, 1973). Consistent with this approach, the helper model creates a helping relationship and directs the natural social reinforcers from this helping relationship toward

mutually beneficial goals of learning and practicing the therapeutic techniques. As behavior modification begins to explore more complex phenomena and techniques, social reinforcement and group contingencies are an important new area for development.

Implications for Treatment Models. At a more general level are the implications of the helper model on current models of treatment delivery. Significant improvement by both the helpers and helpees in conjunction with the comparability of the results with professional treatment suggest two reasons to carefully reexamine the role of professionals in direct delivery of human services. First, the relative success of nonprofessionals for treatment of groups such as drug users, alcoholics, or juvenile delinquents where traditional professionals have generally failed (Blau, 1969) may be further enhanced by a helper model of treatment in which the paraprofessional shares the same problem as the client. In addition, the use of nonprofessionals multiplies and extends the impact of professional time and knowledge. Unfortunately, many basic changes in concepts of mental health services would be necessary before professionals shift from a direct service model to a helper model. In this model professionals would develop treatment programs, train and then supervise nonprofessionals who, in turn, help themselves and others for most mental health problems.

A pyramid model of treatment could be developed within institutions based on the pioneering work by Whalen and Henker (1971) with mentally retarded residents. Residents of institutions would be assigned to be a helper or teacher for other patients. The better functioning residents

would teach social, vocational, or recreational skills to lower functioning residents, and both would benefit. Many intriguing possibilities exist. Persons with similar problems could be paired or persons with complementary problems could be matched. For example, an unassertive resident could be assigned to teach another unassertive person to more directly express himself. Given the proper training and supervision, the helper would learn and model assertive behavior for his helpee and both would improve. As an alternative, an overly assertive, argumentative person could be asked to help an unassertive person. In this case, the already boisterous person would easily model the direct expression of feelings. However, in the process of teaching appropriate social relationships, the helper may learn more appropriate, unassertive behaviors. In both cases, the helpee would later become the helper for another resident. The staff become consultants and supervisors for the "patient-therapists" and not provide the direct treatment.

After pausing for a moment to consider the severe challenges presented by a) the ineffectiveness of traditional treatments (Eysenck, 1952; Bergin, 1971); b) the lack of sufficient mental health manpower (Albee, 1959); c) the extreme class bias in current mental health service delivery (Hollingshead and Redlich, 1958); and d) the ubiquitous core problem presented by the majority of impaired people who have never received mental health services (Srole, et al., 1962; Golann, 1974), the helper model provides an intriguing new service delivery model for further consideration.

References

- Albee, G. Mental Health Manpower Trends. New York: Basic Books, 1959.
- Ayllon, T., and Haughton, E. Modification of symptomatic verbal behavior of mental patients. Behavior Research and Therapy, 1964, 2, 87-97.
- Bandura, A. Principles of Behavior Modification. New York: Holt, Rinehart & Winston, 1969.
- Bandura, A., Blanchard, E. B., & Ritter, B. The relative efficacy of desensitization and modeling approaches for inducing behavior, affective, and attitudinal changes. Journal of Personality and Social Psychology, 1969, 13, 173-199.
- Bergin, A. The evaluation of therapeutic outcomes. In A. Bergin, & S. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change. New York: John Wiley & Son, 1971, 217-270.
- Blau, T. H. Psychologist views the helper. In C. Grosser, W. E. Henry, & J. G. Kelly (Eds.), Nonprofessional in the Human Services. San Francisco: Jossey-Bass, 1969.
- Blum, E. M., and Blum, R. H. Alcoholism, Modern Psychological Approaches to Treatment. San Francisco: Jossey-Bass, 1967.
- Boomer, D. S., and Goodrich, D. W. Speech disturbance and judged anxiety. Journal of Consulting Psychology, 1961, 25, 100-164.
- Brody, J. Neurotics helped by aiding others. New York Times, Feb. 13, 1966, section 1, 66.
- Calef, R. A., and MacLean, G. D. A comparison of reciprocal inhibition and reactive inhibition therapies in the treatment of speech anxiety. Behavior Therapy, 1970, 1, 51-58.
- Carkhuff, R. R., and Truax, C. B. Lay mental health counseling: The effects of day group counseling. Journal of Consulting Psychology, 1965, 29, 426-431.
- Chinsky, J. M. Nonprofessionals in a mental hospital: A study of the college student volunteer. Unpublished doctoral dissertation, University of Rochester, 1969.
- Cloward, R. D. Studies in tutoring. Journal of Experimental Education, 1967, 36, 14-25.

- Cowen, E. L. Overview and directions for future work. In E. L. Cowen, E. A. Gardner, & M. Zax (Eds.), Emergent Approaches to Mental Health Problems. New York: Appleton-Century Crofts, 1967, 389-455.
- Craighead, W. E., and Mercatoris, M. Mentally retarded residents as paraprofessionals: A review. American Journal of Mental Deficiency, 1973, 78, 339-347.
- Cronbach, L., and Meehl, P. Construct validity in psychological tests. Psychological Bulletin, 1955, 52, 281-302.
- Dollard, J., and Miller, N. E. Personality and Psychotherapy. New York: McGraw-Hill, 1950.
- Eysenck, H. J. The effects of psychotherapy: An evaluation. Journal of Consulting Psychology, 1952, 16, 319-324.
- Eysenck, H. J. (Eds.) Behavior Therapy and the Neuroses. New York: Pergamon, 1960.
- Festinger, L. Behavioral support for opinion change. Public Opinion Quarterly, 1964, 28, 404-417.
- Garfield, D. L. Research on client variables in psychotherapy. In A. Bergin & S. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change. New York: John Wiley & Son, 1971, 271-298.
- Gartner, A., Kohler, M., & Riessman, F. Children Teach Children. New York: Harper & Row, 1971.
- Geer, J. H. The development of a scale to measure fear. Behavior Research and Therapy, 1965, 3, 45-53.
- Geer, J. H. Effect of fear arousal upon task performance and verbal behavior. Journal of Abnormal Psychology, 1966, 71, 119-123.
- Giffin, K., and Bradley, K. Group counseling for speech anxiety: An approach and a rationale. Journal of Communication, 1969, 19, 22-29. (a)
- Giffin, K., and Bradley, K. An exploratory study of group counseling for speech anxiety. Journal of Clinical Psychology, 1969, 25, 98-101. (b)
- Gilkinson, H. Social fears as reported by students in college speech classes. Speech Monograph, 1942, 9, 141-160.
- Golann, S. E. The case problem controversy and the right to treatment. In S. E. Golann and W. J. Fremouw (Eds.), Perspectives on the Right-to Treatment. New York: Federal Legal Publications, in press.

- Golann, D. E., Baker, J., Frydman, A. A. Demands and coping in the undergraduate therapeutic-companion experience. American Journal of Community Psychology, 1973, 1, 228-237.
- Goodman, G. An experiment with companionship therapy: College students and troubled boys - assumptions, selection, and design. American Journal of Public Health, 1967, 57, 1772-1777.
- Greenwald, A. G. Effects of prior commitment on behavioral change after a persuasive communication. Public Opinion Quarterly, 1965, 29, 595-601.
- Gruver, G. G. College students as therapeutic agents. Psychological Bulletin, 1971, 76, 111-127.
- Guerney, B. E. Psychotherapeutic Agents: New Roles for Nonprofessionals, Parents, and Teachers. New York: Holt, Rinehart, & Winston, 1969.
- Gurin, G., Veroff, J., & Feld, S. Americans View Their Mental Health. New York: Basic Books, 1960.
- Harris, V. W., and Sherman, J. A. Effects of peer tutoring and consequences on the math performance of elementary classroom students. Journal of Applied Behavior Analysis, 1973, 6, 587-597.
- Harmatz, M. Personal communication, May 16, 1973.
- Hobbs, N. Mental Health's third revolution. The American Journal of Orthopsychiatry, 1964, 34, 822-833.
- Hollingshead, A. B., and Redlich, F. C. Social Class and Mental Illness. New York: Wiley, 1958.
- Holzberg, J. D. The significance of the companionship experience for the college student. In College Student Companion Program: Contribution to the Social Rehabilitation of the Mentally Ill. Hartford, Conn.: Conn. State Department of Mental Health, 1962, 39-48.
- Horn, D. Some factors in smoking and its cessation. In E. F. Borgatta, and R. R. Evans (Eds.), Smoking, Health, and Behavior. Chicago: Aldine, 1968, Pp. 12-21.
- Husek, T. R., and Alexander, S. The effectiveness of the anxiety differential in examination stress situations. Educational and Psychological Measurement, 1963, 23, 309-318.
- Janis, I. L., and Mann, L. Effectiveness of emotional role playing in modifying smoking habits and attitude. Journal of Experimental Research in Personality, 1965, 1, 84-90.

- Jones, M. C. The elimination of children's fears. Journal of Experimental Psychology, 1924, 7, 383-390.
- Kanfer, F., and Phillips, J. Learning Foundations of Behavior Therapy. New York: Wiley, 1970.
- Karst, T. O., and Trexler, L. D. Initial study using fixed role and rational-emotive therapy in treating public-speaking anxiety. Journal of Consulting and Clinical Psychology, 1970, 34, 360-366.
- Kelman, H. The induction of action and attitude change. In C. Backman & P. Secord (Eds.), Problems in Social Psychology. New York: McGraw-Hill, 1966, 141-152.
- Kerlinger, F. N. Foundations of Behavioral Research. New York: Holt, 1964.
- Krasner, L. The use of generalized reinforcers in psychotherapy research. Psychological Reports, 1955, 1, 19-25.
- Krasner, L., and Ullman, L. P. Research in Behavior Modification. New York: Holt, Rinehart and Winston, 1965.
- Lazarus, A. Behavioral rehearsal versus non-direct therapy versus advice in effecting behavior change. Behavior Research and Therapy, 1966, 4, 209-212.
- Lichtenstein, E., Keutzer, C. S., & Himes, K. H. "Emotional" role playing and changes in smoking attitudes and behavior. Psychological Reports, 1969, 25, 379-387.
- Lippitt, R., and Lippitt, P. Cross-age helpers. National Education Association Journal, March, 1968.
- Long, J. D., and Williams, R. L. The comparative effectiveness of group and individually contingent free time with inner-city junior high school students. Journal of Applied Behavioral Analysis, 1973, 6, 465-474.
- Mahl, G. F. Disturbances and silences in patient's speech anxiety in psychotherapy. Journal of Abnormal and Social Psychology, 1956, 53, 1-15.
- Mahl, G. F. Measuring the patient's anxiety during interviewing from expressive aspects of his speech. Transactions, New York Academy of Science, 1959, 21, 249-257.
- Mann, L., and Janis, I. L. A follow-up on long term effects of emotional role playing. Journal of Personality and Social Psychology, 1968, 8, 339-342.

- Mausner, B., and Platt, E. Smoking: A Behavioral Analysis. New York: Pergamon Press, 1971.
- McFall, R. M., and Hammen, C.L. Motivation, structure and self monitoring: Role of nonspecific factors in smoking reduction. Journal of Consulting and Clinical Psychology, 1971, 37, 80-86.
- McFall, R. M., and Lillesand, D. B. Behavior rehearsal with modeling and coaching in assertion training. Journal of Abnormal Psychology, 1971, 77, 313-323.
- McFall, R. M., and Marston, A. An experimental investigation of behavior rehearsal in assertive training. Journal of Abnormal Psychology, 1970, 76, 295-303.
- McFall, R. M. Behavioral rehearsal with modeling and coaching. Journal of Abnormal Psychology, 1971, 77, 313-323.
- Meichenbaum, D. H. Examination of model characteristics in reducing avoidance behavior. Journal of Personality and Social Psychology, 1971, 17, 298-307.
- Meichenbaum, D. H., Gilmore, J. B., & Fedoravicious, A. Group insight versus group desensitization in treating speech anxiety. Journal of Consulting and Clinical Psychology, 1971, 36, 410-421.
- Myers, J. Fundamentals of Experimental Design. Boston: Allyn and Bacon, 1966.
- Migler, B., and Wolpe, J. Automated self-desensitization: A case report. Behavior Research and Therapy, 1967, 5, 133-135.
- Morrison, D. Multivariate Statistical Methods. New York: McGraw-Hill, 1967.
- Mowrer, O. H. The New Group Therapy. Princeton, N. J.: D. Van Nostrand, 1964.
- Newmark, G., and Melaragno, R. J. Tutorial community project: Report on the first year, May, 1968 - June, 1969. Santa Monica, Calif.: System Development Corporation.
- Patterson, G. R. An application of conditioning techniques to the control of a hyperactive child. In L. P. Allman and L. Krasner (Eds.) Case Studies in Behavior Modification. New York: Holt, 1965, Pp. 370-375.
- Paul, G. Insight versus Desensitization in Psychotherapy. Stanford, Calif.: Stanford University Press, 1966.

- Paul, G. Two year follow-up of systematic desensitization in therapy groups. Journal of Abnormal Psychology, 1968, 73, 119-130.
- Paul, G., and Shannon, D. T. Treatment of anxiety through systematic desensitization in therapy groups. Journal of Abnormal Psychology, 1966, 71, 124-135.
- Platt, E. S., Krassen, E., & Mausner, B. Individual variation in behavior change following role playing. Psychological Reports, 1969, 24, 155-170.
- Poser, E. G. The effect of therapist training on group therapeutic outcome. Journal of Consulting Psychology, 1966, 30, 283-289.
- Rappaport, J. Nonprofessionals in a mental hospital: College students as group leaders. Unpublished doctoral dissertation, University of Rochester, 1969.
- Riesman, F. The "helper" therapy principle. Social Work, 1965, 10, 27-32.
- Rioch, M. J., Elkes, C., & Flint, A. A. National Institute of Mental Health Pilot Project in Training Mental Health Counselors. Washington, D. C.: U. S. Department of H.E.W., Public Health Service Publication No. 1254, 1965.
- Ritter, B. The use of contact desensitization, demonstration-plus-participation, and demonstration alone in the treatment of aerophobia. Behavior Research and Therapy, 1969, 7, 175-184.
- Roethlisberger, F. Management and Morale. Cambridge: Harvard University Press, 1941.
- Rogers, C. R. The necessary and sufficient conditions of therapeutic personality change. Journal of Consulting Psychology, 1957, 21, 95-103.
- Sanders, B. D. Behavior rehearsal and imaginal desensitization in reducing public speaking anxiety. Dissertation Abstracts, 1968, 28, 3065-3066.
- Siegel, S. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.
- Simonson, N. R. A comparison of modeling, improvisation, and modeling with improvisation in the treatment of social inadequacy. Paper presented at the meeting of the Eastern Psychological Association, Washington, May, 1973.

- Skinner, B. F. Science and Human Behavior. New York: Macmillan, 1953.
- Srole, L., Langer, T. S., Michael, S. T., Opler, M. K., & Rennie, T. A. Mental Health in the Metropolis. New York: McGraw-Hill, 1962.
- Strelzer, N. E., and Koch, G. V. Influence of emotional role playing on smoking habits and attitudes. Psychological Reports, 1968, 22, 817-820.
- Truax, C. B., and Mitchell, K. M. Research on certain therapists interpersonal skills in relation to process and outcome. In A. E. Bergin and S. L. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change. New York: John Wiley, 1971.
- Trexler, L. D., and Karst, T. L. Rational-emotive therapy, placebo and no treatment effects on public speaking anxiety. Journal of Abnormal Psychology, 1972, 79, 60-67.
- Van Egern, L. F. Psychophysiology of systematic desensitization: The habituation model. Journal of Behavior Therapy and Experimental Psychiatry, 1970, 1, 249-255.
- Watson, D., and Friend, R. Measurement of social evaluative anxiety. Journal of Consulting and Clinical Psychology, 1969, 33, 448-457.
- Whalen, C. K., and Henker, B. A. Pyramid therapy in a hospital for the retarded: Methods, program evaluation and long term effects. American Journal of Mental Deficiency, 1971, 75, 414-434.
- Williams, C. D. The elimination of tantrum behavior by extinction procedures. Journal of Abnormal and Social Psychology, 1959, 59, 269.
- Wolpe, J. Psychotherapy by Reciprocal Inhibition. Stanford: Stanford University Press, 1958.
- Wolpe, J., and Lazarus, A. A. Behavior Therapy Techniques. New York: Pergamon, 1966.
- Woy, J. R., and Efran, J. S. Systematic desensitization and expectancy in the treatment of speaking anxiety. Behavior Research and Therapy, 1972.
- Zucker, V. G., and Brown, W. F. Comparative effectiveness of student and professional counselors. Personnel and Guidance Journal, 1966, 44, 738-743.

Appendix A

Personal Report of Confidence as a Speaker

Name (print) _____ Phone _____
 Address _____

PRCS

This instrument is composed of 30 items regarding your feelings of confidence as a speaker. After each question there is a "true" and a "false". Try to decide whether "true" or "false" most represents your feelings associated with your most recent speech, then put a circle around the "true" or "false". Remember that this information is completely confidential and will not be made known to your instructor. Work quickly and don't spend much time on any one question. We want your first impression on this questionnaire. Now go ahead, work quickly, and remember to answer every question.

- | | | |
|---|---|---|
| 1. I look forward to an opportunity to speak in public. | T | F |
| 2. My hands tremble when I try to handle objects on the platform. | T | F |
| 3. I am in constant fear of forgetting my speech. | T | F |
| 4. Audiences seem friendly when I address them. | T | F |
| 5. While preparing a speech I am in a constant state of anxiety. | T | F |
| 6. At the conclusion of a speech I feel that I have had a pleasant experience. | T | F |
| 7. I dislike to use my body and voice expressively. | T | F |
| 8. My thoughts become confused and jumbled when I speak before an audience. | T | F |
| 9. I have no fear of facing an audience. | T | F |
| 10. Although I am nervous just before getting up I soon forget my fears and enjoy the experience. | T | F |
| 11. I face the prospect of making a speech with complete confidence. | T | F |
| 12. I feel that I am in complete possession of myself while speaking. | T | F |
| 13. I prefer to have notes on the platform in case I forget my speech. | T | F |
| 14. I like to observe the reactions of my audience to my speech. | T | F |
| 15. Although I talk fluently with friends I am at a loss for words on the platform. | T | F |
| 16. I feel relaxed and comfortable while speaking. | T | F |
| 17. Although I do not enjoy speaking in public I do not particularly dread it. | T | F |
| 18. I always avoid speaking in public if possible. | T | F |
| 19. The faces of my audience are blurred when I look at them. | T | F |
| 20. I feel disgusted with myself after trying to address a group of people. | T | F |
| 21. I enjoy preparing a talk. | T | F |
| 22. My mind is clear when I face an audience. | T | F |
| 23. I am fairly fluent. | T | F |
| 24. I perspire and tremble just before getting up to speak. | T | F |
| 25. My posture feels strained and unnatural. | T | F |
| 26. I am fearful and tense all the while I am speaking before a group of people. | T | F |
| 27. I find the prospect of speaking mildly pleasant. | T | F |
| 28. It is difficult for me to calmly search my mind for the right words to express my thoughts. | T | F |
| 29. I am terrified at the thought of speaking before a group of people. | T | F |
| 30. I have a feeling of alertness in facing an audience. | T | F |

Appendix B

Anxiety Differential

Word Association Test

Name _____ Date _____

On the following page, 18 words are listed for you to rate on a scale of adjectives. Two words form each scale. By making a check mark along the scale you indicate what you associate with the word.

Where you mark the space, indicates how related you feel the adjective is to the word you are rating. For example, look at the following scale:

University of Massachusetts

fun _____ : _____ : _____ : _____ : _____ : _____ : _____ boring
highly moderately slightly both or slightly moderately highly
neither

If you feel that the University of Massachusetts is "highly" fun, you would check the space on the extreme left. On the other hand, if you feel that it is "highly" boring, you would check the space on the extreme right. If you felt it was neither fun nor boring check the middle space; the other spaces reflect points inbetween.

Remember: Never put more than one check mark on any scale. And also be sure to check every item. If you feel that a pair of adjectives does not apply, or if you are undecided, place the check mark in the center space. Do not leave the line blank.

straight	Finger _: _: _: _: _: _: _: _:	twisted
helpless	Me _: _: _: _: _: _: _: _:	secure
tight	Breathing _: _: _: _: _: _: _: _:	loose
strong	Screw _: _: _: _: _: _: _: _:	weak
wet	Hands _: _: _: _: _: _: _: _:	dry
loose	Today _: _: _: _: _: _: _: _:	tight
frightened	Me _: _: _: _: _: _: _: _:	fearless
deep	Germs _: _: _: _: _: _: _: _:	shallow
good	Hands _: _: _: _: _: _: _: _:	bad
careful	Breathing _: _: _: _: _: _: _: _:	carefree
stiff	Fingers _: _: _: _: _: _: _: _:	relaxed
calm	Me _: _: _: _: _: _: _: _:	jittery
tight	Hands _: _: _: _: _: _: _: _:	loose
hot	Breathing _: _: _: _: _: _: _: _:	cold
tight	Screw _: _: _: _: _: _: _: _:	loose
carefree	Me _: _: _: _: _: _: _: _:	worried
clear	Anxiety _: _: _: _: _: _: _: _:	hazy
loose	Fingers _: _: _: _: _: _: _: _:	tight

Appendix C

Social Anxiety Scale

Name _____ Date _____

Social Situation Scale

First print your name and student number on this sheet. This test contains 58 items about your feelings in social situations. Read each statement and mark either True or False by circling in the correct space. Work quickly and do not spend much time on any one question. Give your first impression to the question. Now begin, work quickly, and remember to answer each question:

- | | | |
|--|---|---|
| 1. I feel relaxed even in unfamiliar social situations. | T | F |
| 2. I try to avoid situations which force me to be very sociable. | T | F |
| 3. It is easy for me to relax when I am with strangers. | T | F |
| 4. I have no particular desire to avoid people. | T | F |
| 5. I often find social occasions upsetting. | T | F |
| 6. I usually feel calm and comfortable at social occasions. | T | F |
| 7. I am usually at ease when talking to someone of the opposite sex. | T | F |
| 8. I try to avoid talking to people unless I know them well. | T | F |
| 9. If the chance comes to meet new people, I often take it. | T | F |
| 10. I often feel nervous or tense in casual get-togethers in which both sexes are present. | T | F |
| 11. I am usually nervous with people unless I know them well. | T | F |
| 12. I usually feel relaxed when I am with a group of people. | T | F |
| 13. I often want to get away from people. | T | F |
| 14. I usually feel uncomfortable when I am in a group of people I don't know. | T | F |
| 15. I usually feel relaxed when I meet someone for the first time. | T | F |
| 16. Being introduced to people makes me tense and nervous. | T | F |
| 17. Even though a room is full of strangers, I may enter it anyway. | T | F |
| 18. I would avoid walking up and joining a large group of people. | T | F |
| 19. When my superiors want to talk with me, I talk willingly. | T | F |

Social Situation Scale

Page Two

- | | | |
|---|---|---|
| 20. I often feel on edge when I am with a group of people. | T | F |
| 21. I tend to withdraw from people. | T | F |
| 22. I don't mind talking to people at parties or social gatherings. | T | F |
| 23. I am seldom at ease in a large group of people. | T | F |
| 24. I often think up excuses in order to avoid social engagements. | T | F |
| 25. I sometimes take the responsibility for introducing people to each other. | T | F |
| 26. I try to avoid formal social occasions. | T | F |
| 27. I usually go to whatever social engagements I have. | T | F |
| 28. I find it easy to relax with other people. | T | F |
| 29. I rarely worry about seeming foolish to others. | T | F |
| 30. I worry about what people will think of me even when I know it doesn't make any difference. | T | F |
| 31. I become tense and jittery if I know someone is sizing me up. | T | F |
| 32. I am unconcerned even if I know people are forming an unfavorable impression of me. | T | F |
| 33. I feel very upset when I commit some social error. | T | F |
| 34. The opinions that important people have of me cause me little concern. | T | F |
| 35. I am often afraid that I may look ridiculous or make a fool of myself. | T | F |
| 36. I react very little when other people disapprove of me. | T | F |
| 37. I am frequently afraid of other people noticing my shortcomings. | T | F |
| 38. The disapproval of others would have little effect on me. | T | F |
| 39. If someone is evaluating me I tend to expect the worst. | T | F |
| 40. I rarely worry about what kind of impression I am making on someone. | T | F |
| 41. I am afraid that others will not approve of me. | T | F |

Social Situation Scale
Page Three

- | | | |
|---|---|---|
| 42. I am afraid that people will find fault with me. | T | F |
| 43. Other people's opinions of me do not bother me. | T | F |
| 44. I am not necessarily upset if I do not please someone. | T | F |
| 45. When I am talking to someone, I worry about what they may be thinking about me. | T | F |
| 46. I feel that you can't help making social errors sometimes, so why worry about it. | T | F |
| 47. I am usually worried about what kind of impression I make. | T | F |
| 48. I worry a lot about what my superiors think of me. | T | F |
| 49. If I know someone is judging me, it has little effect on me. | T | F |
| 50. I worry that others will think I am not worthwhile. | T | F |
| 51. I worry very little about what others may think of me. | T | F |
| 52. Sometimes I think I am too concerned with what other people think of me. | T | F |
| 53. I often worry that I will say or do the wrong things. | T | F |
| 54. I am often indifferent to the opinions others have of me. | T | F |
| 55. I am usually confident that others will have a favorable impression of me. | T | F |
| 56. I often worry that people who are important to me won't think very much of me. | T | F |
| 57. I brood about the opinions my friends have about me. | T | F |
| 58. I become tense and jittery if I know I am being judged by my superiors. | T | F |

Appendix D

Behavior Checklist
and
Overall Anxiety Scale

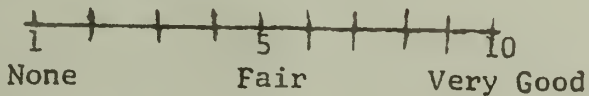
Name _____ Rater _____

Date _____ - Speech No. _____

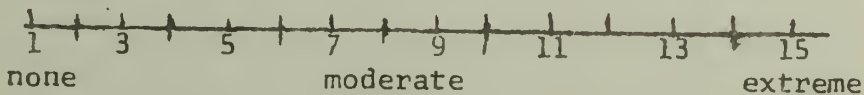
	1	2	3	4	5	6	7	8	Σ
1. Sway & shuffles feet (taps)									
2. Extraneous arm and hand = inappropriate									
3. Hand tremors or shakes									
4. Arms & hands immobile, rigid									
5. Face tense, grimaces, contortions									
6. Face expressionless, little use of									
7. Eye contact avoided									
8. Swallows & clears throat									
9. Breathes heavily or quickly, sighs									
10. Voice quivers, trembles, cracks									
11. Inappropriate laughter, giggles									
12. Voice blocks, stammers, hesitations									
									ΣΣ

Comments:

Organization of speech



Overall Anxiety



Appendix E

Speech Anxiety
Treatment Manual

<u>Week</u>	<u>Date</u>	<u>Session</u>	
1	10/1	1	Pre-training Assessment Speech
2	10/8	2	Theory of Speech Anxiety Learn Deep Muscle Relaxation Begin Negative Self-Statements Read p. 80-87 Read "Relaxation" Practice Relaxation daily Make a list of negative self-statements
		3	<u>Meet Client</u> - Teach Relaxation and Begin Negative Self-Statements
3	10/15	4	Review 1st Session - Continue Coping Statements Read "Negative Self-Statements" Practice Relaxation daily Practice identifying negative self-statements and coping statements
		5	<u>Meet Client</u> - Finish Negative Self-Statements and Begin Coping Statements
4	10/22	6	Review 2nd Session - Speech Organization Read 260-275 Write short speech Practice techniques
		7	<u>Meet Client</u> - Speech Organization and Coping Statements
5	10/29	8	Review 3rd Session - Behavioral Rehearsal and Use of Body Read 309-316 Practice techniques
		9	<u>Meet Client</u> - Behavioral Rehearsal and Use of Body
6	11/5	10	Review Sessions - Review all techniques Plan final meeting
		11	<u>Meet Client</u> - Rehearse Post-Evaluation Speech using all the techniques
7	11/12 - 11/20	12	Post-training speech

Lesson 1

Speech Training Program

1. Let's begin. Introduce yourself and ask your clients about the meeting time. Re-explain the rationale and purpose of the treatment. (Don't be nervous, the S is new at this too!)

2. Explore history of speech anxiety

How long has this occurred? In what type of situations does it occur? Does anxiety occur in other situations such as groups of friends, class discussions, or meeting new people? (This will give you some information to use later and help you to know each other)

3. Relaxation training

Explain purpose and describe general procedure of successive muscle tensing and relaxation.

Demonstrate technique with your right hand and forearm. Tense arm, point out where the muscles are located over nuckles and in the forearm. Say "RELAX" then release tension. Describe the warm relaxed feeling in your arm.

Use method on "Relaxation training" sheets to instruct S in relaxation. Begin with deep breath, hold it, and then slowly exhale.

Conduct training. Tell S to tense a specific group of muscles in the order listed below. Hold tension for 5 seconds then release when you say "RELAX". Wait 5-10 seconds to feel warm, relaxed feeling. Repeat once more then do the next group on the list below:

1. Right hand and forearm
2. Right hand, forearm, and bicep
3. Left hand and forearm
4. Left hand, forearm, and bicep
5. Neck, tighten chin and throat muscles
6. Chest, arch back and tighten muscles
7. Right leg - push down into floor
8. Left leg - push down into floor

After each group has been relaxed twice, the S should be very comfortable and calm. Bring the person back to "normal" by counting backwards from 4 to 1. Say "On the count of 1 move your legs, at 2 move your hands and fingers, at 3 move your arms and head, at 4 open your eyes and sit up."

(Very good, you're now a relaxation therapist and you're both very, very, very relaxed).

Instruct S to practice relaxation training once a day for the major muscle groups and to say "RELAX" before releasing tension. This will classically condition the word "relax" with low muscle tension after 15-20 practices. In anxious situations, S will be able to calm himself by becoming aware of the muscles that are tense and relaxing them. Remember you can't be anxious if your muscles are relaxed no matter how hard you try.

Lesson 1
Speech Training Program
Page Two

(So far so good, the first session is always the hardest. Now on to the fun. You're both calm, right? Right! This isn't as bad as you thought it would be).

4. Cognitive Structuring or "Everything you always wanted to know about talking to yourself but never dared ask!!!!" Okay, here we go.

Explain the fact that how people interpret situations determines their reactions. Everyone talks to himself, however, what he says makes a huge difference in how he feels and performs in social and speech situations. There are two general types of self-statements:

- 1) Negative, self-defeating statements such as "I can't do it," "No one likes me," "They'll think I'm stupid."
- 2) Positive, constructive statements such as "I'm not sure how I'll do, but it won't hurt to try."

5. Together, talk about the self-statements you both make before giving a speech. Use the list of your self-statements as examples. Ask the S for his self-statements and write them down with your negative self-statements. Generate as many as possible, 10 to 15, to show the S how prevalent they are in his life.

(Very good, the rest is easy. You are simply going to point out how harmful and irrational these ideas are).

6. Begin with your own negative self-statements, show how each (at least 5) are irrational and destructive and can be restated much more constructively. We want to raise the S's conscience about what he says to himself. You have now identified the enemy - negative, defeativistic self-statements that makes public speaking more difficult for many people than necessary.

In the next session, specific, constructive self-statements will be taught to replace the old, harmful ideas in speaking situations.

Fill out session evaluation forms. They are very important.

Homework for the S

- 1) Practice relaxation training daily.
- 2) Observe and write 3, yes 3 negative self-statements a day in speaking or social situations. Ask the S to bring the list back to the next session. Tell him that you'll teach him a good replacement on those old, destructive statements.

(That is a good, busy first session. Next week you'll teach more interesting material. Now, reward yourself. Have a cigarette, a beer, or a ??*!!? Say to yourself that the first session is over, I did better than I thought. A little positive reinforcement never hurt anyone, especially you. Here's my positive self-statement for the lesson - ready? - writing these lessons can only get easier!!

Lesson 2

Speech Training Program

Cognitive Structuring - Coping Skills

1. Review the relaxation training and self-statements with the S. Reinforce the S for any attempts to use either technique. Look at the self-statements the S wrote and have him tell you why each one is harmful and illogical. If the S forgets to write them down, ask for some and you write them down to show how stupid they look.

(That finishes last week's material, now on to the new techniques. See how easy this is?)
2. We've identified the negative self-statements that inhibit speech ability. Now to replace them with more adaptive, positive self-statements. There are 4 specific stages for positive, coping self-statements:
 1. Preparing for a speech.
 2. Confronting and beginning the speech.
 3. Coping with feeling during the speech.
 4. Reinforcing self-statements after the speech.
3. From your list, give examples of each type of coping statement. (You're defining and modeling these skills according to your teaching model). Ask the S to give his own coping statements and write them down. (Writing them down makes them easier to use later and is reinforcing to the S).
4. Model a whole sequence of coping self-statements; i.e., "What is it I have to do? I won't think negatively. Relax, take a slow deep breath. I can handle this situation, my training will help. It will be over shortly. This isn't as bad as I thought. It worked, I was able to do it. It's getting easier each time. My tutor will be proud of me - I'm proud of me."
5. Ask the S to rehearse a series of coping statements. First a preparatory statement, then a beginning statement, third, a during statement, and then a self-reinforcing post statement. Give feedback, emphasize the positive and specify 1 or 2 specific areas for change if necessary. Repeat once more.

(Be patient, this will take awhile to learn a new way to think differently.)
6. After 2 trials, its time to get out of your chairs and approximate a speech. The situation will be reading aloud in class a short paragraph to practice self-statements. (Select an excerpt about Relaxation or Negative Self-Statements). Model preparatory self-statements while seated, then get up and walk to the front of the room to read while modeling beginning self-statements. Begin reading. After each sentence, give a "during" self-statement. Afterwards, model several positive self-statements.

(Congratulations! You did your first really active modeling - each time will be easier. Tell yourself you did well to get up and do it).

Lesson 2
Speech Training Program
Page Four

7. Now ask the S to do the same reading and give coping statements. Be sure he gets up to do it to make this more realistic. Repeat the readings 2, yes 2 more times. Give feedback each time. Practice is essential to learn this new skill. Coping statements seem awkward at first, but they are very important.
8. Fill out session evaluation forms.

Homework for the S

- 1) Continue to practice relaxation training.
- 2) Continue to note negative self-statements.
- 3) Replace negative self-statements with coping statements. Write down 5 situations in which the S used coping statements instead of negative self-statements.

(Lesson 2 is over. You are both learning a lot of new skills and improving your speaking ability. Time to reinforce yourself for what you've done.

Lesson 3

Speech Training Program

1. Review previous work with relaxation, negative self-statements and coping statements. Ask if the S has used any of these techniques and reinforce any uses.
2. For practice, model once more a series of coping self-statements for a speech. Then have the S do the same.

(Okay, enough of the old, on to the new material. Today you are going to further develop coping statements while learning to write speeches).

3. We are going to rehearse giving short speeches using all the techniques learned. First we must define the proper organization for a speech. There are 5 parts:

- 1) Introduction
- 2) Thesis - or Main Point
- 3) Body - development of Main Point
- 4) Restatement of thesis
- 5) Conclusion

Read chapter on speech organization for full explanation of each part. Go over each part with S, i.e., Introduction - can begin with personal statement, reason for speech, simple opening, etc.

4. After discussing each part, talk about organizing a speech. Remember the first coping statement. "What is it I have to do?" In a speech, you have to present thesis or point. Begin with your thesis, what is it I want to say. This should be a simple point.

The develop a body or elaboration of the point.

Third, restate the thesis towards the end of the body.

Fourth, form a simple introduction. Now you know what you are going to say, you can make a better introduction.

Fifth, compare a conclusion that summarizes the thesis and body of the speech. If possible, it may refer back to the introduction to make a complete package of ideas.

5. Now model a whole speech with a simple thesis. Using coping statements, "What is it I have to do? Let me take it one step at a time. What is my main point? Let me develop that a little. Restate main point. Think of a good introduction now a good conclusion. That's good!" Write a short outline such as the speech on page 270 on bells.

Lesson 3
Speech Training Program
Page Six

6. Ask the S to use coping statements while composing a very short speech. Be sure the S does not give any negative self-statements.

Here are topics for a short speech:

- 1) How to relax
- 2) How negative self-statements hurt people
- 3) The importance of coping statements

7. You both have short speeches composed. Model giving the speech using all the coping statements. Just concentrate on coping statements. Do not worry about your delivery. Have the S give his speech using preparatory, before, during, and after coping statements. Give feedback, discuss coping statements, "Was the thesis clear?" Be sure S gives positive reinforcement. Repeat 3 times. The S will get more comfortable with coping statements. Begin to use gestures towards end of speech. Next lesson will elaborate their use.
8. Fill out evaluation forms.

Homework for the S

- 1) Continue relaxation training
- 2) Continue to monitor negative self-statements
- 3) Continue to use coping statements

(Again, this is a busy lesson. Reinforce yourself for completing it. You both have learned a lot!)

Lesson 4

Speech Training Program

1. Review previous work. Ask client about the use of relaxation techniques, negative self-statements, and coping statements in other situations. Reinforce use of techniques.
2. Review more specifically the lesson on speech organization. Remind client to build speech around thesis. Review other parts of speech building. After the thesis, compose the body, then the introduction, and finally the conclusion. Include the coping statements, "What is it I have to do?" "What's my main point?" Think of a good introduction and now a good conclusion. That's good.
(You're taught how to relax, use coping statements, compose speeches, and how to teach how to put the relaxed body back with your coping, competent mind.)
3. Every speaker has a body as well as a mind. Today, we're going to talk about using the body more effectively to deliver a speech. (Remember second grade, "Stand up straight Johnny/Jeanny." The first aspect is yes, you guessed it, good posture!

Model and exaggerate 3 bad speaking postures, for the client, and ask them to identify them:

- 1) Feet too wide apart like the Colassus of Rhodes.
- 2) Shifting weight noticeably from one foot to another and swaying.
- 3) Arms folded, behind back, hands on hips or in pockets.
(Imitate Ed Sullivan with his arms folded & swaying,
(Really big show!))

Then define and demonstrate appropriate posture. Feet comfortably apart and weight balanced with arms and hands loose. (Ready to gesture at a moments' thesis).

4. Now, the main lesson for today will be to become comfortable using gestures appropriately. To do this, we'll just exaggerate them so the real ones will then be easier.

Use the short speech the client wrote the previous week on one aspect of speech training for demonstration. Also give coping statements: "What is it I have to do? Exaggerate my hands. That won't be hard. It's only for practice."

Begin to read the speech in an exaggerated manner. Think of a favorite comedian, i.e., LBJ, Dick Nixon, and ham it up. Really use gestures. Do the whole speech, then discuss the gestures, postures.

Now have the client give the speech with exaggerated gestures, including coping statements. Give feedback. You repeat the speech again with less exaggeration. Concentrate on using appropriate gestures and good posture. Then have the client repeat it once more.

Alternate giving the speech until gestures are more comfortable and appear more natural. Use a different speech after a few times for variety. Remember to include coping statements before, and after the speech. During the speech they should be said silently.

5. This is the final lesson. Review again the techniques. Wish the client luck.

("See, it's all over, it wasn't as bad as you thought. You've learned several new skills to help you in many new situations. You did very well. Now back for the evaluation. Remember to approach the speech using your new skills." See you then!)

LESSON 5

Review

1. This lesson is a total review of the program. First, do the deep muscle relaxation, beginning with a deep breath. Tense and relax each muscle group twice. Ask client where he feels tense.
 - 1) right arm
 - 2) left arm
 - 3) neck backward
 - 4) neck downward
 - 5) back
 - 6) stomach
 - 7) right leg
 - 8) left leg
2. Ask client to name any recent negative self-statements he made. Have him describe the situation and substitute coping statements.
3. Model series of coping statements. Especially, those prize-winning statements.

"What is it I have to do.
-- Talk on something I know."
"Remember no negative self-statements."
"Be confident, you know your material."

Relax, take a deep breath.
Rehearse my first line.
What's my main thesis?

Get a good stance. Take a deep breath.

Say the thesis.
Slow down, keep it slow.
You're doing okay.
Keep your body okay.
Slow down. Relax.
It's almost over.

It's done and I did better than I thought.
What did I do well _____

My voice was calmer, I was more relaxed, my body
was better, etc.

What's one thing I should remember next time _____
I'm improving a little each time.

4. Review main parts of a speech and emphasize the importance of having a clear thesis or main point in mind before opening your mouth.
 - A) Introduction B) Statement of thesis C) body
 - D) Restatement of thesis E) conclusion

5. Review importance of body. Plant your feet before starting talk.
Use one hand for gesturing.
6. Okay, it's time for the real thing. Model giving your four minute speech. Be sure to say aloud Coping Statements -- before and after.
Use note cards if needed.
7. Now it's your client's turn. Talk to him before, such as "Are you relaxed, check arms and legs. Say first line over and go slow. Get a good stance, then start." After the speech, ask the client what coping statements he should say. Give feedback. Repeat your speech again, without note cards again modeling coping statements. Have him repeat it again without note cards.
8. Fill out final evaluation forms, schedule the part training speech and wish him good luck.

(That's it, it's over. It wasn't so bad. Five weeks went quickly and you learned, as well as taught, several very useful skills. Remind yourself of your own progress and success, and remember what to work on in your next speech. You may not be a great orator yet, but at least you are a relaxed one).

Appendix F

Follow-up Questionnaire

FOLLOW-UP QUESTIONNAIRE

1. Rate your current general level of public speaking anxiety by circling one number on the scale.

1	2	3	4	5	6	7	8	9
no		mild		moderate		strong		extreme
anxiety		anxiety		anxiety		anxiety		anxiety

2. What was your grade for the final speech in your Rhetoric class? _____

3. What was your final grade for the course? _____

4. Since the end of the program, has the training been helpful to you in areas other than public speaking? Circle your answer.

1	2	3	4	5
not at all	a little	moderately	much	very much

Please specify the areas and give an example:

5. Have you taught anyone else any of the techniques you learned?

Yes _____ No _____

If yes, please describe what you taught and how long you spent.

6. What was your major in September? _____

What is your major now? _____

Did your experience in the program affect your choice of majors in any way? _____

1	2	3	4	5
not at all	a little	moderately	much	very much

Please describe how it influenced you:

7. How confident are you in your ability to help someone else with speech anxiety?

1	2	3	4	5	6	7	8	9
no		mild		moderate		strong		extreme
confidence		confidence		confidence		confidence		confidence

8. How did the program affect your confidence in other ways, if any?

Appendix G

Individual Scores at the Pretreatment
and Posttreatment Assessment Speeches

Data Format: Pretreatment Assessment; cards 1-50

<u>Column Number</u>	<u>Variable</u>
1-3	Subject number
5	Card number, 1=Pre, 2=Posttreatment
7	Treatment group, 1=Waiting List Control 2=Latent Helper 3=Helper 4=Helpee 5=Low Speech Anxious Control
9	Sex, 1=Male, 2=Female
11-12	Age
13	Class, 1-Freshman, 4=Senior
14-15	High School Average
16	General Anxiety Scale
17	Importance of Public Speaking, 1=none, 9=extreme
18	Expectation of Improvement, 1=none, 9=very great
19	Previous experience tutoring, 0=none, 1=some
21-22	Personal Report of Confidence as a Speaker
24-25	Social Anxiety and Distress Scale
26-27	Fear of Negative Evaluation Scale
29-31	Anxiety Differential
33-34	Behavior Checklist - Rater A
35-36	Behavior Checklist - Rater B
37-38	Behavior Checklist - Rater C
40-42	Behavior Checklist - Total Score
44-46	Speech Organization (1-10) Rater A, B, C
48-49	Speech Organization - Average Rating
51-52	Overall Speech Anxiety - Rater A (1-15)
53-54	Overall Speech Anxiety - Rater B
55-56	Overall Speech Anxiety - Rater C
58-59	Overall Speech Anxiety - Total
61-62	Number of Subjects in Assessment Group
63-64	Order of Speech Presentation

Data Format: Posttreatment Assessment; cards 51-91

<u>Column Number</u>	<u>Variable</u>
1-3	Subject number
5	Card number
7	Treatment group
9	General Anxiety Scale
10-18	Miscellaneous questionnaire
21-64	Same format as card 1
66-67	Score on coping statement test

014 1 1 1 181855950 17 0518 068 222227 088 58 65 021211 32 0601

018 1 1 2 181915781 16 0906 059 221620 058 45 45 110808 27 0605

030 1 1 1 191 7561 16 0516 073 242226 072 755 56 111010 31 0403

032 1 1 1 181815960 16 1427 088 331925 080 957 73 111008 29 0801

040 1 1 1 191216870 26 1328 070 423132 105 778 73 151213 40 1001

044 1 1 2 171885670 22 0830 078 252628 079 867 70 121213 37 1005

051 1 1 1 1816870 18 0922 069 252226 073 989 93 121009 31 1102

054 1 1 1 283919570 27 1620 085 494045 134 147 40 151515 45 1105

059 1 1 1 181 3831 12 0615 070 293031 090 977 80 121211 35 1110

060 1 1 2 181 4770 22 0525 063 312926 086 878 77 131311 37 1111

024 1 2 2 181917971 24 2428 077 151720 052 87 75 081008 26 0805

028 1 2 2 181816540 25 1727 073 353438 107 223 23 151415 44 0401

036 1 2 2 181886561 26 0523 091 302832 090 58 65 121213 37 0805

041 1 2 2 18188465 17 083 222224 068 966 70 090909 27 1002

046 1 2 2 181885641 24 0723 074 393033 102 967 73 151313 41 1007

048 1 2 1 171885290 19 1519 078 252730 82 978 83 101112 33 1009

055 1 2 2 171887670 16 0205 070 413540 116 536 47 151211 39 1106

057 1 2 2 171918760 25 0928 088 182821 067 999 93 051205 22 1108

065 1 2 2 181856770 19 1420 062 373238 107 746 57 131313 19 0101

025 1 3 1 181813950 25 1628 075 302531 086 58 65 111013 34 0906

027 1 3 1 181888570 25 1220 084 353238 105 55 50 151414 43 0908

035 1 3 1 304756791 22 1018 078 271326 066 967 73 140612 32 0804

038 1 3 1 242788660 19 2630 046 383735 110 735 50 131514 42 0807

039 1 3 1 181855770 15 0516 072 282727 080 878 77 081108 27 0808

042 1 3 1 201817671 22 1407 085 332930 092 878 77 141112 37 1003

047 1 3 2 181 7660 24 1624 089 302029 079 989 90 130811 32 1008

050 1 3 1 191815551 18 0625 075 383130 108 767 67 141313 40 1101

058 1 3 2 192917270 23 1929 098 373034 101 777 70 131211 36 1102

061 1 3 1 2217266 1 14 0728 060 393544 117 645 50 131313 32 0401

062 1 3 2 18185670 25 1423 063 272710 073 340 40 111209 32 0402

013 1 4 1 181856250 28 2629 085 382833 089 535 43 121213 37 0404

021 1 4 1 171856470 21 0814 077 272822 080 7 70 121304 22 0802

022 1 4 1 181855750 19 1019 080 272622 075 89 90 131211 36 0803

023 1 4 1 181004560 21 0523 050 262732 085 2 20 131414 41 0804

025 1 4 2 191855750 08 0520 077 271728 072 98 85 120509 26 0807

029 1 4 1 181017750 25 2220 086 253318 076 657 60 081305 26 0402

031 1 4 2 18184871 19 1629 086 221023 064 877 77 070609 22 0404

043 1 4 1 181856750 17 0327 087 323135 098 947 67 141313 40 1004

052 1 4 2 181858550 28 1830 100 453746 128 1 2 15 151515 45 1103

053 1 4 2 181016060 22 1816 082 231414 051 009 90 120706 25 1104

063 1 4 1 211015460 17 1814 057 323430 096 857 73 121211 35 0403

010 1 5 1 1920159 05 1124 065 161512 044 756 60 090603 18 0401

012 1 5 1 223828 07 1230 065 180205 025 080 87 050101 07 0403

015 1 5 2 1818566 06 0414 084 182523 066 35 40 061210 28 0602

016 1 5 2 1719145 08 0510 050 141119 044 56 55 020612 27 0602

020 1 5 1 1810530 03 0110 061 202122 063 77 70 100705 22 0801

034 1 5 1 1818527 03 0402 072 302626 082 70 80 131110 34 0803

045 1 5 1 05 0109 044 252022 067 372 83 100606 22 1006

049 1 5 1 1817528 04 0203 036 171010 055 008 90 050707 19 1010

056 1 5 1 1929148 04 0515 067 172110 057 088 87 040705 16 1107

014 2 1 5 21 0921 079 322529 086 856 63 111013 34 1101 06

018 2 1 4 025 17 0308 062 131621 040 078 80 040706 17 1102

030 2 1 7 01 22 0212 084 242016 060 867 70 060909 24 1108

032 2 1 5 18 1225 082 191818 055 086 77 060707 20 1103

040 2 1 7 21 1227 078 262328 077 908 87 070911 27 0702 06

044 2 1 7 28 1230 025 252025 070 078 80 051002 24 1210 04

051 2 1 7 13 1313 058 101313 036 088 83 020603 11 1301 08

054 2 1 8 01 01 1313 025 202335 100 44 40 131415 41 1127 06

059 2 1 3 12 0716 069 282238 088 733 47 111213 36 1312 03

060 2 1 4 01 17 0616 068 302335 088 445 47 131013 36 1111 04

024 2 2 251136001 10 1220 062 111211 034 002 90 010332 06 1308 12

028 2 2 571136002 21 1227 069 272228 077 657 60 120911 32 1202 05

036 2 2 3672 20021	18 0204 067 251827 070 977 77 020511 18 1207 11
041 2 2 4561370012	08 0221 078 311919 068 878 77 060406 16 1203 13
046 2 2 3552270010	17 0210 060 202423 067 868 77 080911 28 1208 09
048 2 2 5751460011	06 1015 073 212317 061 978 80 030506 17 0202 08
055 2 2 4781260011	05 0404 059 202022 062 988 83 020607 14 0205 10
057 2 2 3652420021	00 0720 070 022807 017 926 80 010101 03 1211 10
065 2 2 3672460001	16 0826 057 202252 064 998 83 051011 26 0203 09
025 2 3 3682230020	00 0517 059 161720 053 999 90 010409 14 0207 14
027 2 3 3782230021	17 0726 061 171727 061 977 77 040711 22 1212 07
035 2 3 2771520011	07 0209 047 111215 038 978 80 060709 22 1206 08
038 2 3 5552260011	17 1828 068 171716 050 978 80 030606 15 0208 11
039 2 3 3751460011	05 0107 051 040909 022 998 87 010302 06 1313 07
042 2 3 3781560021	01 0610 043 191312 044 997 87 010302 06 1303 12
047 2 3 2881430071	04 0507 071 111009 030 957 70 020404 10 1211 09
050 2 3 5451330011	07 0726 073 343936 106 877 73 091313 24 0901 12
058 2 3 4751560031	09 0409 053 142117 052 988 83 030605 14 1102 12
061 2 3 4552220021	05 0724 074 303236 098 767 67 111210 33 1201 06
062 2 3 526 335011	08 1227 048 171317 047 765 60 050609 20 1106 10
013 2 4 6342230020	06 2429 070 131411 038 966 70 030507 15 1304 06
021 2 4 2762260011	11 0403 067 222024 066 868 72 050807 20 1205 08
022 2 4 4671360000	11 1211 055 060710 023 998 87 010205 08 1204 14
023 2 4 2551360071	05 0222
026 2 4 5572520001	12 0413 073 111028 029 998 87 030306 12 1209 13
029 2 4 4671330011	08 1317 050 091415 038 860 83 030405 12 1104 09
031 2 4 2771490011	08 1023 075 091310 037 985 73 010405 10 1305 07
043 2 4 6253230011	08 0226 021 272425 076 978 80 030607 16 1106 07
052 2 4 4671330001	00 0824 087 171922 007 867 87 020610 01 1303 07
053 2 4 2671290001	04 1112 043 081311 032 998 87 020407 13 0904 11
063 2 4 2671230020	05 0100 044 101617 043 998 87 040508 17 0206 09

