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THE EFFECTS OF TREATMENTS FOR PUBLIC SPEAKING
ANXIETY ON SELF-EFFICACY EXPECTATIONS

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ABSTRACT

Self-efficacy theory states that psychological treatments, regardless of form, alter level and strength of self-efficacy. The purpose of this study was to test Bandura's (1977) self-efficacy theory in the context of performance-based treatments for public speaking anxiety. The subjects were 106 undergraduate students divided into three groups. Group I was composed of 39 speech anxious subjects in a specialized class for speech anxious students. Group II was composed of 34 speech anxious subjects from standard introductory public speaking classes. Group III was composed of 34 speech anxious subjects from classes wherein minimal or no performance of public speaking was required. Subjects in all groups completed self-report measures of anxiety and self-efficacy. Subjects in Groups I and II responded to an additional subjective measure on self-assessed mastery. Speeches by Group I subjects were rated for degree of skill and mastery by a behavioral measure. The major findings of this study were that: (a) strength and, to a lesser extent, level of efficacy expectations regarding public speaking were affected significantly by the performance-based treatments for public speaking; (b) no clear inverse relationship was shown to exist between self-efficacy and anxiety; (c) persistence in performing, regardless of self-assessed mastery, leads to increased self-efficacy expectations; (d) in the presence

of a performance-based treatment program cue-controlled relaxation training provided no additional enhancement of efficacy expectations; (e) the independence of self-efficacy expectations from skill was supported. The results of this study did not provide information regarding the influence of mastery on self-efficacy expectations. The results are discussed in light of self-efficacy theory and recommendations for future research are made.

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CHAPTER I

INTRODUCTION

Statement of Purpose

This study investigates Albert Bandura's self-efficacy theory as an explanation for behavior change in those who are anxious about delivering speeches. According to this view, reductions in anxious or defensive behavior are produced not by psychological treatments, but rather by the treatments' effects on altering the level and strength of an individual's self-efficacy expectations. Simply stated, self-efficacy expectations are one's degree of self-assuredness about performing a given task. Bandura hypothesized that efficacy expectations determine whether coping behavior will be initiated, the amount of effort that will be expended, and how long the individual will sustain the effort.

In Bandura's social learning analysis, performance accomplishments provide the most influential efficacy information because the information is based on an individual's own behavior in the feared situation. A performance accomplishment is effective action by an individual toward completing a feared task.

Empirical tests of self-efficacy theory (Bandura & Adams, 1977; Bandura, Adams, & Beyer, 1977) confirm that different treatment approaches alter expectations of

personal efficacy, and the stronger the source of efficacy information, the greater are the changes in self-efficacy. Bandura and colleagues found in their studies with snake phobic subjects that treatments based on performance accomplishments produced higher, stronger and more generalized expectations of personal efficacy than vicarious experiences alone. The phobic subjects in Bandura's theory testing studies showed significant increases in self-efficacy expectations as a result of treatment programs emphasizing performance accomplishments.

The present study was designed to assess the effects on self-efficacy expectations of treatment programs emphasizing performance accomplishments for subjects anxious about public speaking. The subjects in the present study described themselves as fearful of public speaking and such fear is seen as a social phobia (American Psychiatric Association, 1980).

The majority of previous research on public speaking anxiety (e.g. Fremouw & Zitter, 1978; Paul, 1966; Paul & Shannon, 1969) has assessed changes in self-reported anxiety and changes in behaviorally assessed anxiety. The unique aspect of this study is that it investigates changes in self-efficacy expectations of subjects anxious about public speaking.

Review of Literature

Scholarly interest in anxiety-related problems has produced volumes of theory and research. Research efforts have been aimed at exploring the etiology, assessment and treatment of anxiety-related problems. The general area of anxiety disorders to be addressed here is that of phobias, and, more specifically, public speaking anxiety which is a form of social phobia (American Psychiatric Association, 1980). Most of the research and effective treatment of phobic responses has been developed from behavioral rationale.

Behaviorists view phobic anxieties as responses generated by the attachment of an intense fear response to an otherwise neutral object or situation. This response may be learned directly from the family, or it may be learned from a traumatic experience with the object or situation (Barrett et al., 1972). Social learning approaches (Bandura, 1977) treat internal processes as covert events that are manipulable and measurable, and recognize these processes as highly influential to behavior. These internal processes are extensively controlled by external stimulus events and in turn affect outward responsiveness (Bandura, 1969). One such set of internal processes which is thought to affect overt behavior is that of expectancy factors (Lick & Bootsin, 1975).

In their review of literature assessing the importance of a subject's expectations of therapeutic gain in

facilitating fear reduction, Lick and Bootsini (1975) noted that in spite of the methodological problems in many studies, expectancy factors are thought to be significant change mediators. These authors suggested several mechanisms that may explain how expectancy mediates change in behavior: 1) increased compliance with real treatment procedures; 2) increased tendency to test reality after having undergone an "effective" therapy with subsequent fear extinction and self-reinforcement for behavioral improvement; 3) modification of demand characteristics after treatment; and 4) modification of cognitive events controlling fear responding. With the aid of these thoughts as well as his own research experience, Albert Bandura developed his theory of self-efficacy, a cognitive construct which mediates human behavior and influences behavior change (Bandura, 1977).

Self-Efficacy Theory

While Bandura recognizes the possession of the skills necessary to perform and the presence of adequate incentives are primary determinants of behavior, he discusses the role of efficacy expectations as determinants of behavior independent of skill or incentives. Simply stated, a self-efficacy or personal efficacy expectation is the conviction that one can successfully execute the behavior required in a given situation to produce a successful

outcome (Bandura, 1977). Bandura differentiates efficacy expectations from outcome expectations as follows: an outcome expectation is a person's estimate that a given behavior will lead to certain outcomes (Bandura, 1977). Bandura has stated that psychological procedures or treatments achieve changes in behavior by altering the level and strength of an individual's self-efficacy expectations. Bandura hypothesized that self-efficacy expectations ✓ determine whether coping behavior will be initiated, the amount of effort that will be expended, and how long the individual will sustain the effort. He further proposed that persistence in activities that are subjectively threatening, but in fact safe, produces, via mastery experiences, further enhancement of self-efficacy as well as corresponding decreases in defensive behavior.

Expectancy of personal efficacy is derived from four sources: performance accomplishments; vicarious experience; verbal persuasion, such as suggestions from an informed/trusted person; and emotional arousal, e.g. awareness of hand tremors as an indicant of anxiety. Performance accomplishments are the most influential source of efficacy information because the efficacy expectations derived from them are based on personal mastery experiences in the feared situation. Vicarious experiences, such as seeing others perform threatening activities without adverse consequences, rely on social comparison and, therefore, are not as dependable a source of efficacy information as

performance accomplishments. Verbal persuasion or exhortation provides another source for strengthening efficacy expectations. Finally, emotional arousal, such as tremors or perspiration, which occurs in stressful or taxing situations has informative value concerning personal competency, and, hence, can also affect expectations of personal efficacy.

Bandura distinguishes between performing in a feared situation and performing at a mastery level in that feared situation. By saying that mastery experiences provide further enhancement of efficacy expectations, Bandura implies, and later states that mere performance in a feared situation, irrespective of degree of mastery, provides the individual with corrective experiences that reinforce personal efficacy.

Successful performance is inherent in Bandura's terms "performance accomplishment" and "mastery experience". So for an individual's actions or performance in a feared situation to be considered a performance accomplishment that individual's performance must be a mastery experience.

The concepts of self-assessed mastery and objectively assessed mastery are crucial to the explanation of how performances in a feared situation strengthen efficacy expectations. A self-assessed mastery experience is one which the individual considers to have been an effective performance resulting from self-possessed skill. The impact of performance attainments on self-efficacy depends upon

whether one's accomplishments are attributed to one's ability (Bandura, 1977). The objective assessment of mastery becomes a factor of interest when Bandura addresses the validity of self-assessed mastery. When an efficacy expectation is based on a valid self-assessment of mastery, the efficacy expectation is resistant to the possible disconfirming effect of a later failure experience. Bandura states that it is crucial to evaluate both self-assessed and objectively-assessed mastery if the relationship of both to self-efficacy expectations is to be investigated and understood. Bandura has incorporated objective and self-assessment of mastery in the provision of treatment and evaluation of treatment effectiveness in the experimental studies noted next.

To test the theory of self-efficacy Bandura, Adams and Beyer (1977) designed a study in which snake-phobic subjects, ranging in age from 18 to 50 were administered treatments based upon performance accomplishments or vicarious experiences. A third group received no treatment. Efficacy expectations and approach behavior toward differing threats were measured before and after treatment. As predicted, the performance-based treatment produced higher, stronger and more generalized efficacy expectations than did the treatment involving only vicarious experience. The authors' results confirmed the hypothesized relationship between self-efficacy and behavior change. Self-efficacy expectations were uniformly accurate predictors of

performance of tasks of varying difficulty, e.g. holding the snake in one's lap versus holding the snake's head 6 inches from one's face, and task performance with different threats, e.g. familiar snakes versus unfamiliar snakes, regardless of whether the changes in self-efficacy were produced through performance accomplishments or by vicarious experience alone.

In a second study analyzing self-efficacy theory of behavior change Bandura and Adams (1977) investigated the hypothesis that systematic desensitization effects changes in avoidance behavior by creating and strengthening expectations of personal efficacy. Again using snake phobic subjects, Bandura and Adams (1977) found that systematic desensitization did strengthen self-efficacy expectations and that post-treatment efficacy expectations were highly reliable predictors of subjects' approach toward similar and dissimilar threats. A similar threat was defined as the same snake used in pre- and post-test; a dissimilar threat was defined as a different snake used in pre- and post-test.

The present study employs performance-based treatments and assesses the effects of these treatment strategies on self-efficacy expectations and public speaking anxiety via self-assessed mastery and objectively-assessed mastery. A presentation of major types of treatments provides a foundation for the procedures of this study.

Phobic-Type Anxieties: Treatments and Outcomes

The salient feature of the behavioral treatments of phobic responses is inducing the client to face his/her fears, in real or imagined form, and react to them without distress, thus leading to increases in self-efficacy expectations. Broadly speaking there are two types of behavioral treatments. In one, clients are requested to directly confront the frightening event, either in a flooding experience or by gradual exposure. The therapist assists the client in performing in the feared situation via modeling, encouraging and praising the client's performance. In the second approach, non-performance-based treatments, the therapist focuses upon teaching the client a specific behavior which is incompatible with and will substitute for the phobic behavior. Hence, the new behavior reciprocally inhibits the anxiety response (Wolpe, 1958). Relaxation, sexual arousal and emotive imagery have all been used as reciprocal inhibitors of anxiety (Walen, Hauserman & Lavin, 1977). These strategies have been used effectively both alone and in combination with performance-based strategies to treat individuals with phobic anxieties.

Performance-Based Treatments

The more recent means of treating phobic responses, particularly speech anxiety, has been the use of skill and confidence-building components as well as teaching of anxiety-inhibitory responses. Of particular interest are

the few studies which have used in-vivo desensitization programs as treatment regimens for speech anxiety. The sparse use of this treatment approach to public speaking is somewhat surprising given the success of in-vivo methods in reducing anxiety associated with other fears such as claustrophobia (Leitenberg, Agras, Thomson & Wright, 1968), snake phobia (Bandura & Adams, 1977; Bandura, Adams & Beyer, 1977; Becker & Costello, 1975), and aquaphobia (Sherman, 1972).

Several studies have been performed which focus treatment efforts on skill-building via performance-based strategies alone or in combination with non-performance-based strategies. One study employing in-vivo desensitization was performed by Fremouw and Zitter (1978) in which the authors compared skills-training, which could also be conceptualized as performance accomplishment in self-efficacy theory terms, and cognitive restructuring/relaxation as treatment for public speaking anxiety. Both treatments led to improvements in performance as assessed by one subjective and two behavioral measures. The authors noted that for subjects high in social anxiety, fear of situations in which interpersonal communication is expected, the cognitive restructuring/relaxation treatment appeared more effective.

Gurman (1973), employing a single-subject design, demonstrated the effectiveness of graded in-vivo practice, performance accomplishment, and cue-controlled relaxation in

eliminating a client's fear of public speaking, but no standard criteria were used in measuring the magnitude of change. Follow-up at one and three months indicated maintenance of therapeutic gains, as well as some generalization to interpersonal situations not focused on in treatment.

Kirsch, Wolpin, and Knutson (1975) also used in-vivo methods, including successive approximation, flooding and implosive practice to effectively reduce speech anxiety. Kirsch et al. (1975) reported that these in-vivo treatment methods were more effective than a placebo control in reducing speech anxiety. Because of the loss of one of the two groups in the flooding treatment and because no measures of generalization or follow-up were employed in the study, conclusions as to the effectiveness of the in-vivo procedures require added clarification. Trussell (1978) designed a study to test for a predicted reduction in speech anxiety through the use of graduated behavioral rehearsal, i.e. performance accomplishment, feedback, i.e. verbal persuasion, and systematic desensitization, i.e. awareness of emotional arousal. Trussell demonstrated that the graduated behavioral rehearsal (GBR) and the GBR/systematic desensitization treatment groups showed significantly greater reductions in speech anxiety than the no-treatment controls as post-assessment and follow-up assessment.

All treated subjects in the present study received a performance-based strategy for overcoming speech anxiety,

namely performance experiences, gradual and non-gradual in nature. Subjects in the specialized treatment program for speech anxious students were exposed to this performance-based strategy in combination with several other treatment components which will be described later.

Non-Performance-Based Treatments

The literature is replete with studies that have shown that fear of public speaking can be remedied. Systematic desensitization (Wolpe, 1958) is an effective treatment for speech anxiety when administered individually (Paul, 1966) or in group format (McCroskey, 1972; Busch, 1978). Group discussion in combination with group systematic desensitization has also been demonstrated effective in reducing speech anxiety (Paul & Shannon, 1966). Insight methods, such as rational-emotive counseling (Ellis, 1958), have also resulted in reduced speech anxiety (Meichenbaum, Gilmore, & Fedoravicius, 1971; Trexler & Karst, 1972). Subjects in each of these studies received treatment focused on teaching a response mode which is incompatible with anxiety, rather than focusing on confidence-building or skill-building relevant to the feared situation.

Expanded emotive imagery (Gurman, 1970) is another non-performance based treatment. Expanded emotive imagery is a process wherein the therapist and client develop a pleasant scene description from the client's experience. This scene is then described aloud by the client at points

during systematic desensitization when the client feels particularly anxious. The client may not be able to imagine a hierarchy scene without experiencing debilitating anxiety, and expanded emotive imagery increases relaxation. At successive impasses in the client's hierarchy the client is asked to again describe the relaxation scene and to add one important detail of personal significance to the scene. The more details a client adds to the original scene, the greater the scene's positive affective meaning and also, the more potent its anxiety inhibiting power.

Another approach to the treatment of phobic-type responses which also focuses its efforts on learning an anxiety-inhibiting behavior is cue-controlled relaxation training, first described by Paul (1966). Cue-controlled relaxation training involves training clients in deep-muscle relaxation, pairing the relaxed state with a specific self-produced cue-word, such as "calm" or "relaxed", and reciting the cue-word simultaneously with breath exhalations while relaxed. Paul developed this mode of relaxation training in response to the need for a shorter, less time consuming treatment and the need for a more readily generalizable treatment of anxiety than Wolpe's (1958) systematic desensitization. Systematic desensitization requires teaching the client to relax, constructing a specific fear hierarchy, and pairing the relaxation response with successively more threatening scenes from the client's hierarchy. Cue-controlled relaxation training circumvents

the difficulties inherent in hierarchy construction and client inability to vividly visualize hierarchy scenes. Since Paul (1966) developed this mode of relaxation training, it has been applied to numerous anxiety-treatment settings and the efficacy of cue-controlled relaxation has been evaluated in many experimental and clinical settings. This form of relaxation training is used in the present study as one of several treatment components.

Russell, Miller and June (1974) applied group-administered relaxation training as a treatment for test anxiety. These researchers, using cue-controlled relaxation training, produced significant reductions in test anxiety as measured by two self-report instruments.

Frequently, self-reports of anxiety and physiological recordings of anxiety-evidencing muscle tension do not correlate highly. Several researchers have investigated the efficacy of cue-controlled relaxation training in reducing and maintaining low muscle tension. Ewing and Hughes (1978) evaluated the effectiveness of cue-controlled relaxation as a technique for anxiety relief. They found that in three single-subject case studies cue-controlled relaxation training was effective in reducing and maintaining low frontalis EMG.

Counts, Hollandsworth, and Alcorn (1978) studied the effect of using electromyographic (EMG) biofeedback to increase the efficacy of cue-controlled relaxation in the treatment of test anxiety. While they found that cue-controlled relaxation was effective in increasing test

performance for test-anxious subjects, they also found that EMG biofeedback did not contribute to the effectiveness of the cue-controlled relaxation training. So, while the two studies mentioned above present conflicting evidence regarding the degree of correlation between self-reports and physiological recordings of anxiety-evidencing muscle tension, the studies both support the use of cue-controlled relaxation training as a treatment for anxiety.

Other studies have been performed which evaluate the use of relaxation training strategies in alleviating public speaking anxiety. Gatchel (1977) investigated whether heart-rate biofeedback training was as effective as muscular relaxation training, in this case progressive relaxation, in reducing speech anxiety. A combined relaxation/biofeedback treatment group was also included in this study. All treatment groups were compared with a false-biofeedback placebo control group. Gatchel's investigation also assessed whether the degree of autonomic awareness, i.e. awareness of emotional arousal, significantly influenced the treatment process. Gatchel's results indicated that while all groups, including the false-biofeedback group, improved on the self-report of anxiety, the combined relaxation/biofeedback group demonstrated the most improvement on the heart-rate and skin conductance measures following treatment.

In an earlier study, Gatchel and Proctor (1976) investigated the effects of learned control of heart-rate

deceleration and therapeutic expectancy set in reducing speech anxiety in 36 speech-anxious undergraduates. Heart-rate-control training and no training conditions were each paired with high-therapeutic-expectancy and neutral expectancy instructions to assess the individual and combined effects of the two factors. Gatchel's and Proctor's results demonstrated that learning to control heart-rate deceleration led to a significant reduction in self-report, physiological recordings, i.e. heart-rate and skin-conductance level, and overt signs of anxiety, relative to the no-heart-rate-control condition. High-therapeutic-expectancy instructions also contributed to a reduction in self-reported anxiety.

Subjects in the present study received cue-conditioned relaxation training. They were told at the outset of relaxation training that such training had been shown to be effective as a strategy for coping with public speaking anxiety.

Sherman, Mulac and McCann (1974) found that a combined treatment of self-relaxation, i.e. awareness of emotional arousal, and rehearsal feedback, i.e. performance/verbal persuasion, was more effective in reducing subjective behavioral dimensions of public speaking anxiety than self-relaxation or rehearsal alone. These authors were interested in assessing the existence of independent, generalized, or synergistic effects of the treatments. Forty (40) males from a beginning college course received

one of four individually administered treatment conditions: self-relaxation, focusing on internal tension; rehearsal feedback, focusing on overt manifestations of anxiety while speaking; self-relaxation plus rehearsal feedback; or, no treatment. The independent treatments had no favorable effect on either subjective or behavioral speech anxiety as compared to the progress of the control group which resulted solely from the speech course in which the control subjects were enrolled. In contrast, the combined treatments promoted substantial improvement on self-report and behavioral dimensions and on measures of general anxiety. The researchers concluded that a synergistic effect of self-relaxation with rehearsal feedback may have resulted in the superiority of the combined treatment. However, since the subjects in the combined group received twice as much treatment as the groups that received self-relaxation treatment alone or rehearsal feedback alone, caution is necessary in accepting the synergistic hypothesis. The lack of significant difference between independent treatments and controls could be accounted for in self-efficacy theory terms by the fact that the control group subjects experienced the identical number of performances in the speech class as the subjects treated with any of the individual treatments. Consequently, the controls received a comparable amount of what Bandura (1977) theorized to be corrective experiences which reinforce personal efficacy.

The cue-controlled relaxation training employed in the present study involved five 45-minute sessions in which the subjects were first taught deep-muscle relaxation and then instructed to pair a cue-word with the exhalation of breaths once relaxed. Subjects were also instructed to practice relaxing with the use of the cue-word once per day for 10 minutes. Thus, like the studies noted above employing cue-controlled relaxation training, the technique does not involve anxiety hierarchies but is rather based on the subject's use of his/her own anxiety responses as discriminative stimuli for the application of the learned anxiety-inhibiting response, namely relaxation (Suinn & Richardson, 1971).

Videotaped Feedback as a Treatment Component

A treatment component used increasingly in performance-based treatment packages is that of videotaped playback of a client's performance, a treatment used in the present study. Hung and Rosenthal (1978) have provided a thorough review of the use of videotape recorded playback in a wide variety of treatment settings. They concluded that unspecified videotaped playback produces no independent effects but that in combination with other treatment components, videotaped playback can facilitate positive therapeutic change.

Several researchers have evaluated the worth of using videotaped playback as a treatment component for alleviating

speech anxiety (Blount & Pedersen, 1970; Curran & Gilbert, 1975; Fino, 1974). Videotaped playback had no effects when used alone (Blount & Pedersen, 1970; Fino, 1974) as a treatment for speech anxiety, but, when used in combination with self-ratings while viewing videotaped playback and self-monitoring, produced significant improvement in speech anxiety (Curran & Gilbert, 1975). Unfortunately none of these studies demonstrated the independent effectiveness of videotaped playback. Hung and Rosenthal (1978) concluded that although there is no evidence for its independent effects, videotape-recorded playback may be an effective component in behaviorally based programs.

The videotaped playback component used in the present study required that subjects self-monitor behavioral goals which they had set regarding their delivery of public speeches. An example of the behavioral goals which subjects monitored is seconds of eye-contact with the audience while speaking. Each time a subject received videotaped playback of a performance, s/he recorded the incidence of specific behaviors which s/he had targeted as goals in improving her/his delivery of public speeches. Hence, the use of videotaped playback in the present study was in the context of a behaviorally-based program.

Rationale for Current Research

Bandura's self-efficacy theory posits that performance accomplishments provide the most potent source of efficacy

information. If the theory is correct, we would expect a performance-based treatment program to significantly alter treated subjects' self-efficacy expectations. Two dimensions of self-efficacy expectations are: (1) level, the number of tasks an individual is confident of performing; and, (2) strength, the degree of confidence about performing tasks.

Bandura stated that (1977) enhancements in self-efficacy expectations are accompanied by corresponding decreases in defensive behavior. Defensive behavior in the present study was self-reported public speaking anxiety. If Bandura's theory is accurate, we would expect that increases in self-efficacy expectations would be accompanied by comparable decreases in self-reported public speaking anxiety.

Bandura (1977) noted that incentives are major determinants of human behavior. Bandura also stated that a mastery experience in a situation with unfamiliar threats provides a stronger influence on efficacy expectations and defensive behavior than mastery of familiar threats. Given the effect of incentives and mastery of unfamiliar threats, we would expect that increases in self-efficacy expectations and decreases in public speaking anxiety would be greatest immediately following performance of the first instructor-graded speech providing the individual deemed the performance a mastery experience.

Bandura noted that cognitive appraisals of the reasons for one's successful performance influence self-efficacy expectations. So, while an individual might perform effectively, that individual might credit the achievement to factors other than personal abilities. We would therefore expect that performances in which an individual masters a task and rates the performance as mastery will lead to greater increases in efficacy expectations than performances which an individual judges to be non-mastery.

While describing the function of performance accomplishments in modifying self-efficacy expectations, Bandura (1977) stated that the more varied the circumstances in which feared tasks are mastered independently, the more likely success experiences will strengthen personal efficacy expectations. We would expect that individuals who perform the first instructor-graded speech and who judge their performance to result from their own skill will evidence greater increases in self-efficacy expectations than individuals who had not yet performed the first-instructor graded speech.

Criticisms of Bandura's self-efficacy theory have included the statement that self-efficacy expectations may be solely contingent upon the possession of skills (Kazdin, 1978). Bandura believes efficacy expectations are independent of skill. If self-efficacy theory is valid, one would expect little difference in gains in self-efficacy expectations or decrements in public speaking anxiety

between individuals who are skilled versus those who are unskilled early in the treatment program.

Based on Bandura's self-efficacy theory the following hypotheses are posited.

1. Self-efficacy expectations regarding ability to perform public speaking tasks will increase more for speech anxious subjects in the specialized treatment program than speech anxious subjects in the standard speech class or student subjects in a control group.

2. There will be a significant negative correlation between self-efficacy expectations and self-reported public speaking anxiety throughout the treatment program for all subjects.

3. The most significant reductions in public speaking anxiety and increases in self-efficacy expectations will occur for all treated subjects, specialized and standard classes, following the first instructor-graded speech, providing the subject deems the performance a mastery experience.

4. For subjects in the specialized treatment program performances which are judged to be mastery experiences by both raters and subjects will lead to significantly greater increases in self-efficacy expectations than performances judged as mastery experiences by raters but not subjects.

5. Subjects in the specialized treatment program who perform their first instructor-graded speeches, subsequently rated as mastery experiences by those subjects, will

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evidence greater increases in self-efficacy expectations than subjects who had not yet performed their first instructor-graded speeches.

6. There will be no difference in decreases in anxiety or increases in self-efficacy expectations between specialized-treated subjects judged to be skilled and those judged not to be skilled in public speaking early (week 3) in the treatment program.

CHAPTER II

METHOD

Subjects

The subjects in this study were 105 undergraduate students enrolled in courses at The University of Tennessee. The subjects belonged to three distinct groups. Group I subjects were 39 undergraduate students enrolled in a special section of the public speaking course designated for speech-anxious students. Availability of this special section was announced in the normal list of course offerings during preregistration and registration for Winter Quarter 1981. A required screening interview for this section was conducted by the instructor, who was the director of the speech anxiety program. The purpose of this interview was to determine which students were most anxious and in greatest need of such a course. Students were excluded from participation in this study on the basis of three criteria. First, students had to have sufficiently high scores on the Personal Report of Public Speaking Anxiety (PRPSA), one-half standard deviation above the mean or more. The second criterion was that students who evidenced obvious indications of psychopathology other than public speaking anxiety/social phobia were excluded as subjects. This assessment was made by the experimenter in consultation with a liscensed psychologist at the university counseling center. Thirdly, international students were excluded from

this study, but not from the class, since previous research had shown that such students consistently underrate their own speech anxiety (Busch, 1978).

Group II subjects were students in the standard section of the introductory public speaking course who scored at least one-half standard deviation ($S.D.=28,1/2$ $S.D.=14$) above the mean (96) on the PRPSA. The PRPSA was administered to 219 students in the standard sections of the introductory public speaking course who were willing to participate in this study. From this population, 33 individuals were selected as subjects based upon their PRPSA scores.

The third group of 33 subjects, Group III, was selected from 193 students enrolled in university classes in which there was minimal or no requirement of public speaking or in-class presentation. All the students in such classes who were willing to participate in this study were administered the PRPSA. The 34 students scoring one-half standard deviation above the mean were selected as no-treatment control group subjects.

Both Groups I and II received treatment which focused on performing public speeches. Also, subjects in both treated groups received instructor and peer feedback on performances.

The treatments received by Groups I and II differed in several ways. First, Group I subjects self-selected for participation in the speech anxious class and this study,

while Group II subjects agreed to participate in this study, but were not aware that their data were used in the study. Group I subjects received cue-controlled relaxation training, a graduated approach to speeches, and a goal analysis procedure. Finally, Group I subjects performed eight public speeches, all of which were videotaped for later feedback, compared with five non-videotaped speeches for Group II subjects.

The most critical aspect of the treatments received by both Groups I and II relative to self-efficacy theory was the performance of speeches, which provided the opportunity for performance accomplishments. Since performance alone provides corrective feedback which reinforces personal efficacy, and Group I subjects performed three more times than Group II subjects, Group I subjects were afforded the opportunity to receive more corrective feedback.

Due to class absences and logistical problems scores on dependent measures for every subject in each of the three treatment groups were not available. Hence, complete data on all subjects in all groups was not present with which to test every hypothesis.

Procedures

The procedures for the treatment administered to each of the three groups are described in Appendix A.

Apparatus

The cue-conditioned relaxation training, described in Appendix B, took place in two different rooms in the university counseling center. These rooms were carpeted and relatively quiet and free from distractions. The remaining treatment components, including performance of speeches, videotaped playback of speeches, lectures, instructor and peer feedback and observation of peer-subjects giving speeches were conducted in classrooms in the humanities building or in the same rooms in the counseling mentioned above.

Dependent Variables and Instrumentation

Dependent Variables. Three self-report measures and one behavioral measure yielded data on the dependent variables as follows: 1) self-efficacy - level of self-efficacy was operationally defined as a subject's score for level on the Personal Report of Public Speaking Self-Efficacy (PRPSSE); strength of self-efficacy was operationally defined as a subject's score for strength on the PRPSSE; 2) public speaking anxiety - operationally defined as a subject's score on the Personal Report of Public Speaking Anxiety (PRPSA); 3) self-assessed mastery - operationally defined as a subject's score on the Self-Assessment of Mastery of Public Speaking (SAMPS); 4) behaviorally-assessed mastery - operationally defined as a subject's score on the Behavioral Assessment of Public

Speaking Mastery (BAPSM). Copies of all dependent measures appear in Appendix C.

Instrumentation. PRPSA: The Personal Report of Public Speaking Anxiety (McCroskey, 1970) was administered on a repeated measures basis to all groups of subjects in this study. The PRPSA was developed by McCroskey and modeled after Gilkinson's (1942) earlier instrument. The PRPSA consists of 34 Likert-scale items each of which is rated by subjects from 1, strongly agree, to 5, strongly disagree. The PRPSA yields scores from 34 to 170, with a hypothetical neutral position of 102. McCroskey reported the PRPSA as having a mean of 114.6 and a standard deviation of 17.2 for students at Michigan State University in 1970. The mean and standard deviation for the norm group (N=463) used in the present study were a mean of 96 and a standard deviation of 28.1. McCroskey (1970) reported a test-retest reliability of .84 over a ten-day period. An internal reliability estimate was reported at .94. McCroskey reported that an item analysis and factor analysis of the PRPSA with an N of 769 indicated that all items were discriminating and loaded on a single factor.

PRPSSE: The Personal Report of Public Speaking Self-Efficacy was designed by the author of this study to assess level and strength of efficacy expectations of subjects. It consists of 35 items, each of which describes an activity that could be performed while preparing for or presenting a public speech. Thirteen of the items relate to

preparation of a public speech and 22 of the items relate to presentation of a public speech. Subjects respond to each item by rating it "Can Do" if they think they can perform the task named or by leaving the item blank if they cannot perform the task named. The number of items rated "Can Do" is the subject's level of efficacy expectations. To items rated "Can Do", subjects rate the strength of their beliefs that they can perform the task. Subjects indicate the strength of their beliefs on a Likert scale with a range of 10 to 100: 10 being "quite uncertain" and 100 being "certain". A subject's score for strength of efficacy expectations is computed by dividing the total of the strengths indicated by the level of efficacy expectations. This measure was piloted on 85 subjects and was found to reflect changes in self-efficacy during a 10-week speech class identical to the standard public speaking class offered to subjects in Group II of the present study. Efforts were made in the item creation to include a sampling of preparation and performance behaviors thought to be commensurate with the performance criteria of the public speaking course. Using Cronbach's alpha procedure (Nie, et al., 1980), the reliabilities of test items were assessed using pilot study data and were found to range from .60 to .89.

BAPSM: The Behavioral Assessment of Public Speaking Mastery was designed by the experimenter to assess the degree of mastery of the task of public speaking that

subjects perform. While the bulk of the literature employing behavioral measures of public speaking ability and public speaking anxiety has focused on negative behaviors (Busch, 1978; Mulac & Sherman, 1974; Paul, 1966), the behavioral measure in this study monitored positive or competency-evidencing behaviors in public speeches. The BAPSM isolates five behaviors which are generally accepted as evidencing mastery of public speaking. These behaviors are use of "I"-language, eye-contact with the audience, the absense of vocalized pauses, clauses or independent responses, and hand and arm gestures. Texts used in public speaking classes (Walter & Scott, 1979; Munroe & Ehninger, 1978; Reid, 1977) stress the importance of the conversational nature of effective public speaking as evidenced by the speaker making personal contact with the audience by using the word "I". Hence, this item was created for the behavioral assessment used in this study. The same texts noted above stress the importance of eye-contact with one's audience and, consequently, an item regarding eye-contact was included on the BAPSM. The inclusion of the clause or independent response on the BAPSM follows from the work of Cook (1979) and that of Mahl (1956). Cook defined a clause as a string of words with one and only one verb. Mahl noted that the more clauses or independent responses that an individual spoke, the more information s/he would pass to listeners. Mahl saw silence or lack of speech as evidence of anxiety. In public

speaking the speaker who states clauses communicates meaning to the audience while the silent or disfluent speaker communicates little meaning and much anxiety to the audience. The BAPSM monitors the number of clauses spoken, with more clauses evidencing higher mastery of public speaking. Vocalized pauses, such as the words "um", "er", and "ah" were monitored by Paul (1966) and Mulac & Sherman (1974) as evidence of public speaking anxiety. Hence, the degree of absence of these vocalizations is included in the BAPSM as an indicant of mastery of public speaking. Finally, hand and arm gestures to emphasize meaning are noted by Walter & Scott (1978) as worthy of inclusion in one's delivery of public speeches. Hence, hand and arm gestures are included on the BAPSM as behaviors which demonstrate public speaking ability.

One 15-second segment of videotaped public speaking was drawn from each minute of subjects' speeches. Group I subjects performed speeches of 1, 3, 5, and 7 minutes in length from which raters evaluated 1, 3, 5, and 7 15-second speech segments to provide objective mastery ratings for this study.

The BAPSM score for a rated 15-second segment of public speech was arrived at by summing the frequency of each of the five behaviors and dividing this total by the number of segments rated. The mean BAPSM score for Group I subjects was 28.35 with one-half standard deviation above the mean considered as mastery. One standard deviation on the BAPSM

was 4.8, and 1/2 standard deviation was 2.4. See Appendix C for a copy of the BAPSM rating sheet.

The raters of speeches in this study were two graduate students trained by the author to count the behaviors on the BAPSM. The written instructions given to raters appear in Appendix D. A videotaped version of the written training instructions was employed to train raters. The inter-rater reliability for the five behaviors assessed by the BAPSM ranged from .92 to .96.

SAMPS: The Self-Assessment of Mastery of Public Speaking is a 13-item self-report measure designed by this author to assess the degree to which subjects judge their public speaking performances to be mastery experiences. The 13 items are rated by the subject on a Likert-scale basis from 1 to 9 (1=not performed to 9=consistently performed). The items were designed to assess five factors: 1) voice quality; 2) fluency of delivery; 3) facial expression; 4) hand and arm movement; and, 5) gross body movement. These factors were assessed by Busch (1978) in his study of speech anxiety. The last item on the SAMPS assesses the overall rating of ability to give an effective public speech. The SAMPS scores for subjects in this study have a mean of 71.85 and a standard deviation of 15.66. A score 1/2 S.D. above the mean, i.e. >79.68 being considered self-assessed mastery of public speaking. A copy of the SAMPS appears in Appendix C.

CHAPTER III

RESULTS

Data Analysis

Post-treatment levels and strengths of efficacy expectations for subjects in Groups I, II and III were compared by performing t-tests on gains. The second hypothesis was tested using Pearson product-moment correlations. Hypothesis 3 as stated was untestable, however, t-tests of gains were computed on changes in self-efficacy and anxiety regardless of self-assessed mastery. Hypothesis 4 proved untestable. The mean increase in efficacy expectations for speakers following the first instructor-graded speech was compared to the mean increase in efficacy expectations for subjects who had not yet performed the first instructor graded speech with the use of a t-test on gains. For Hypothesis 6 t-tests were employed to determine whether significantly differing changes in anxiety or self-efficacy expectations occurred during treatment for subjects judged skilled early in treatment versus subjects judged not to be skilled in speaking early in treatment.

Results

Regular t-tests of gains were performed to compare levels of efficacy expectations for Groups II and III ($t = -.09$, $df = 50$, $p > .05$), and strengths of efficacy

expectations for Groups II and III ($t=4.07, df=50, p>.05$), and Groups I and II ($t=-.58, df=40, p>.05$). Tests for homogeneity of variance indicated that the variance for other group comparisons were significantly different. Special t-tests of gains allowing for unequal variances were performed on levels of efficacy expectations between Groups I and II ($t=1.74, df=37.2, p>.05$) and Groups I and III ($t=2.04, df=28.8, p=.05$), and strength of efficacy expectations between Groups I and III ($t=2.54, df=34.7, p<.05$). Table 1 in Appendix E contains summaries for the t-tests regarding strengths and levels of efficacy expectations. Since only sparse significant differences were found between Group I and Groups II and III, Hypothesis 1 was rejected.

The results of testing Hypothesis 2 appear in Table 3 of Appendix E. Of the nine correlations of level of efficacy expectations and public speaking anxiety only one was a significant negative correlation. Of the nine correlations of strength of efficacy expectations and public speaking anxiety four were significant negative correlations. None of the significant correlations occurred for Group I subjects. Using a table of binomial probabilities it was determined that while one of the nine correlations could prove significant due to chance alone ($p>.05$), four of the nine correlations are unlikely to be significant correlations due to chance alone ($p<.05$). Since, in the main, there was not a significant inverse

relationship between self-efficacy expectations and anxiety, Hypothesis 2 was rejected.

Hypothesis 3 proved untestable. Only three subjects rated their first instructor-graded speech as a mastery experience. Only 2 of these 3 subjects were present on the day of the final administration of the measures of anxiety (PRPSA) and self-efficacy (PRPSSE). Since the author was still interested in knowing the point in the treatment program when the greater reductions in anxiety and increases in self-efficacy expectations occurred, Hypothesis 3 was tested irrespective of the subjects deeming their first instructor-graded speeches mastery experiences. To determine whether treated subjects made greater changes in efficacy expectations and anxiety prior to and including the first instructor-graded speech versus after that speech, t-tests on gains were employed. For subjects in the specialized treatment program significantly greater gains were made on two dependent measures in the first time period versus the second; strength of efficacy ($t=2.12$, $df=57$, $p<.05$), and anxiety reductions ($t=3.95$, $df=57$, $p<.05$). For subjects in the standard class significantly greater gains were made on two dependent measures in the first time period versus the second; strength of efficacy ($t=2.46$, $df=22$, $p<.05$) and anxiety reductions ($t=2.48$, $df=22$, $p<.05$). Levels of efficacy expectations were compared with t-tests allowing for unequal variances since the test for homogeneity of variances indicated that the variances were

significantly different. For subjects in the specialized section of the class significantly greater gains in level of efficacy expectations were made during the first time period ($t=2.09$, $df=35.7$, $p<.05$). For subjects in the standard class there was no significant difference in gains in level of efficacy expectations in the first versus the second time period ($t=-.25$, $df=14$, $p>.05$). Hence, as stated, Hypothesis 3 was rejected. The modified version of Hypothesis 3 was accepted. The means, standard deviations and calculated t-test results for Hypothesis 3 as tested appear in Table 4 of Appendix E.

Hypothesis 4 proved untestable because not enough speeches were rated as mastery performances by either raters or subjects. The numbers were too small to allow statistical tests to be performed.

Hypothesis 5 could not be statistically tested as stated. Since the author was still interested in the effects of performance, two separate t-tests on gains were performed comparing efficacy expectations of all those who had experienced the first instructor-graded speech with efficacy expectations of those who had not performed the speech. There was no significant difference between mean level of efficacy expectations between subjects who had and had not experienced the first instructor-graded speech ($t=-1.99$, $df=27$, $p>.05$). There was no significant difference in mean strength of efficacy expectations of subjects who experienced versus subjects who had not

experienced the first instructor-graded speech ($t=.24$, $df=27$, $p>.05$). Hence, Hypothesis 5 as modified was rejected. Table 5 in Appendix E shows the means, standard deviations and calculated t-test results for efficacy expectations without regard to self-assessed mastery.

There were no significant differences between subjects judged to be skilled and those judged not to be skilled on gains in level of of efficacy expectations ($t=.89$, $df=18$, $p>.05$), gains in strength of efficacy expectations ($t=-.62$, $df=18$, $p>.05$), or decrements of public speaking anxiety ($t=.71$, $df=18$, $p>.05$). The results of the t-tests on gains lead to acceptance of Hypothesis 6. These results appear in Table 5 of Appendix E.

CHAPTER IV

DISCUSSION

General Limitations

A focal point of self-efficacy theory is that performance accomplishments provide the strongest source of efficacy information. The results of this study do not permit comment on the differential influence of performance accomplishments versus the other sources of efficacy information.

Bandura (1977) posits that mastery has a positive influence on self-efficacy expectations. The results of this study did not provide information related to this hypothesized relationship. The author sought to probe the issue with Hypotheses 3, 4, and 5, using both objective and self-assessment mastery measures. Since few Group I subjects rated their first instructor-graded speech a mastery experience, and since objectively-assessed and self-assessed mastery coincided so few times, these hypotheses could not be tested.

Subject attrition and difficulties with data collection limited the sample sizes in this study. Subject attrition occurred through absence from class and decisions not to continue participating in the study. While subject attrition was less of a problem with Groups I and III, the Group II subject pool dropped nearly 50% during the 10-week treatment program. Some of this loss of subjects was caused

by subjects failing to record accurately anonymous identification numbers from one time of assessment to the next. Finally, since data from all subjects were entered into the Dec-System 10 computer files, keying errors also accounted for loss of data.

The scores on the between group comparisons of dependent measures used in this study could have been affected by the timing of data collection. Since this was a field study and depended upon classroom policies not amenable to experimental control, the timing of assessment could not be rigidly controlled. See Table 6. Since in order to test the theory it was hypothesized that the first instructor-graded speech was a pivotal performance experience, dependent measures were administered following that experience. The first instructor-graded speech occurred for Group I during week 7 of treatment, but during week 4 for Group II. The between group variance of amount of treatment received at points of assessment particularly limits the strength of conclusions regarding differences between treated-subject Groups I and II.

Finally, the author had little control over the implementation of treatments in this study. To accept that precisely the procedures described in Appendix A were exactly followed is to accept, what Horan (1980) refers to as, "the treatment deployment myth." Treatments offered subjects in this study were far from standardized. While the procedures for Group I were primarily administered by

one speech instructor, these subjects received the cue-controlled relaxation training from two different trainers. Group II subjects were selected from 8 different speech classes with 6 different instructors. Although the events of the study have practical relevance in designing components for undergraduate speech courses, variance in treatment deployment limits the strength of this study's conclusions regarding self-efficacy theory.

Implications

In spite of the limitations of this study several conclusions regarding self-efficacy theory can be drawn from this study. Self-efficacy theory received some support in that the performance-based treatments of this study did produce significant increases in strength of efficacy expectations regarding public speaking. Since required performance in the feared situation had such a positive influence on strength of self-efficacy expectations, the results of this study tend to support the use of performance-based treatment for public speaking anxiety.

Self-efficacy theory was not supported by the finding that performance-based treatments of this study yielded mixed significant effects on level of efficacy expectations. These mixed results are difficult to interpret. The concentration of treatment offered to Group I subjects may have been more directed toward the specific subtasks assessed in the PRPSSE than the treatment offered to Group

II subjects. In addition, the mixed results may have been a function of the design of the PRPSSE, see Appendix C. This instrument may have encouraged Group II and III subjects to indicate hastily that, "yes", they could perform many or all of the 35 tasks. This interpretation is based upon the author's observation of subjects while they completed the PRPSSE and observations, while entering data on the computer, of the unwavering response-styles of many subjects on the PRPSSE.

In spite of the limitations to between-group comparisons previously noted, the results of this study did provide comparisons worthy of interpretation. The strength of efficacy expectations of both Groups I and II were significantly affected by the ten weeks of treatment. Group I did not, contrary to Hypothesis 1, show significantly higher post-treatment strength of efficacy than Group II. This result was not anticipated since Group I received five sessions of cue-controlled relaxation training and performed eight times in the feared situation as compared with no relaxation training and five performances by Group II subjects. There are several ways to interpret this unexpected result. First, cue-controlled relaxation training in the context of a performance-based program may be superfluous treatment. Secondly, the more gradual exposure to public speaking which Group I subjects received may have no beneficial effect on strength of efficacy expectations. The more implosive approach of Group II may

have provided subjects with more direct confrontation of the feared situation. In Bandura's terms performing in the feared situation, regardless of mastery, provides corrective experience which reinforces efficacy expectations. Thirdly, at the point of final assessment, subjects in Group I and Group II had both completed three instructor-graded speeches. It is possible, as suggested by the theory, that instructor-graded speeches have a powerful equalizing influence on self-efficacy expectations, mitigating the effects of other treatments.

The relationship between enhancements of efficacy expectations and decreases in defensive behavior of subjects in this study implies greater independence of the constructs of self-efficacy and anxiety than Bandura hypothesized to exist. While self-efficacy expectations, and defensive behavior, defined in this study as self-reported public speaking anxiety, correlated most often in the hypothesized inverse manner, few of these correlations proved statistically significant. See Table 3. The correlations which were significant, one for level vs. anxiety and four for strength vs. anxiety, occurred only for subjects in Groups II and III. Significant correlations did not occur for Group I. On the one hand this finding supports the notion of independence of the self-efficacy and anxiety constructs for the following reasons: Subjects in Group I had to identify themselves as anxious about public speaking and seek out the specialized section of the class; and,

Group I subjects may have been more focused on anxiety about public speaking than Group II or Group III subjects, who did not self-select on the basis of anxiety for participation in this study. So, while Group I subjects' efficacy expectations were strengthened, their fear of public speaking did not change to the extent that a significant inverse relationship existed between efficacy expectations and public speaking.

A second interpretation of the sparsely occurring negative correlations centers upon the definition of defensive behavior. In this study defensive behavior was defined as self-reported public speaking anxiety. Self-reports of anxiety are but one form of defensive behavior. It could be that such self-reports are marginally accurate indicators of defensive behavior. In previous research (Busch, 1978) defensive behavior has been behaviorally assessed. Future research evaluating behaviorally-evidenced defensive behavior will provide further explanation of the efficacy expectation/defensive behavior relationship.

Two other possible explanations for the infrequent significant correlations between anxiety and self-efficacy concern the range of scores on the anxiety measure and the alpha level required for significance. The range of possible scores on the PRPSA is 34 to 170. To be included in the study, however, subjects had to score >109 on the PRPSA at the outset of treatment. Hence, the range of

possible scores at that point in time was 110 to 170, a relatively restricted range. Since the experimenter was interested in two correlations, level vs. anxiety and strength vs. anxiety, at each point in time, the alpha of .05 was divided by the number of correlations of interest, resulting in a required alpha level of .025. This statistically appropriate procedure also mitigated the chances for frequent significant correlations between anxiety and self-efficacy.

The results of this study support Bandura's contention that performance in a feared situation provides corrective experience which reinforces personal efficacy, irrespective of mastery. Subjects in both Groups I and II had performed half or more than half of their required speeches at the completion of the first instructor-graded speech. Greater changes in both level and strength of efficacy expectations and anxiety occurred, regardless of self-assessed mastery, in the time period up to and including the first instructor-graded speech than in the the time period following it. This result was not surprising since subjects had experienced nearly every potentially fear inducing aspect of public speaking in the first time period.

Caution should be taken in attributing the greater change in the first time period to the factor of performances alone. Additional efficacy information was available to all treated subjects in the forms of vicarious experience, e.g. watching peers speak, verbal persuasion,

instructor and peer feedback, and emotional arousal. The combined effects of these sources may well be as influential to efficacy expectations and anxiety reductions as the performances in the feared situation. Further investigation of the effect of mere performance of public speaking on efficacy expectations should begin with studies which control for the available source of efficacy information. Such a study could provide subjects with either performance experiences with no feedback or vicarious experience alone, or combined performance/vicarious experience. Until such research is done, the independent influence of any source of efficacy information on efficacy expectations regarding public speaking will not have been fully evaluated.

If, as Kazdin (1978) stated, efficacy expectations were contingent upon skill, significantly differing effects on efficacy and anxiety between skilled and unskilled subjects should have resulted from the treatment. Such effects were not found. The major liability in concluding from the results of this study that self-efficacy expectations are independent of possession of skill stems from the measurement of skill. The behavioral assessment instrument (BAPSM) employed to divide subjects into skill comparison groups was piloted and did discriminate public speaking skill level. If, however, the BAPSM did not reliably discriminate public speaking skill level in this study, Kazdin's (1978) rejoinder to Bandura would remain untested.

This study differs from those performed by Bandura (1977) to test self-efficacy theory. The most significant differences lie between the task of public speaking and the task of handling a snake. Handling a snake is a relatively specific task when compared to the component tasks of public speaking. Public speaking seems to be more of a cognitive task since the speaker must prepare and present the speech. In studying snake phobia, identification of the feared object as the snake is clear. However, when investigating public speaking anxiety, identification of the feared object/situation becomes more difficult, since individuals report widely varying circumstances as the aspect of public speaking they fear most, e.g. walking to the podium, speaking in an audible voice, or losing one's place.

Future research regarding self-efficacy and public speaking anxiety could focus on the specific aspect of public speaking an individual fears most. This could be accomplished via a subjective measure which required subjects to rate their degree of anxiety associated with many of the component tasks of public speaking. Since such a measure would yield data regarding the degree of anxiety a given individual ascribed to each of the component tasks, the subject attribute/treatment interaction could also be investigated.

Future research should be directed toward further investigation of the validity and reliability of the BAPSM. A study correlating BAPSM scores for speeches with expert

evaluations by speech instructors would provide insight into the value of the BAPSM as a measure of public speaking. Developing a behavioral assessment instrument which more validly and reliably measures public speaking skill might tap more behaviors. It might also include ratings more subjective in nature such as the degree of comfort the rater felt while watching the speaker perform. Such an instrument will permit more conclusive evidence regarding the independence of self-efficacy expectations from skill level.

General Conclusions

The major conclusions of this study can be summarized as follows:

1. Performance, regardless of self-assessed mastery, leads to increases strength of self-efficacy expectations.
2. In the presence of a performance-based treatment program cue-conditioned relaxation training provides no additional enhancement of efficacy expectations or reductions of self-reported public speaking anxiety.
3. No clear inverse relationship exists between self-efficacy expectations and self-reported public speaking anxiety.
4. Future research on self-efficacy theory might focus on controlling for sources of efficacy information which are available to anxious subjects. Greater control over the timing of data collection will also add to the rigor of conclusions regarding the theory. Future research efforts

could also be aimed at identifying the specific feared object/situation for speech anxious subjects. Finally, design of performance-based treatments such that mastery experiences occur will allow the mastery component of self-efficacy theory to be investigated.

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APPENDICES

APPENDIX A

Procedures

Procedures for Group I - Specialized Program: Students were informed of this study and their participation in it was requested. The PRPSA and PRPSSE, which are described in the METHODS section, were administered to subjects agreeing to participate and subjects signed consent forms noting their agreement to participate. All of the students in the specialized section of the speech class agreed to participate in this study. The instructor informed the subjects of the requirements of the course: 3 instructor-graded speeches (counting 50% of the grade); 5 ungraded speaking performances; completion of the goal analysis sheets on delivery goals (20% of the course grade); a active class participation (10-15% of the course grade); and, two take home exams/essays critiquing speeches on organization, relating to audience, use of supporting materials and delivery (15-20% of the course grade). The instructor then conducted a get-acquainted activity which was designed to familiarize subjects with each others' names. The subjects were asked to write a brief essay for the next class on their strengths and weaknesses as communicators and to indicate in this essay the goals they wished to work on in the course. During the second class period in this first week of treatment the subjects participated in another get acquainted activity and reviewed and discussed the essay they had written regarding their strengths and weaknesses and goals.

During week 2 of treatment the subjects received a lecture on developing appropriate self-talk. The instructor made the distinction between task relevant and task irrelevant self-talk and how each of these types of self-talk could aid or encumber one's public speaking performance. Subjects were asked to write a short paper for the next class on appropriate self-talk for themselves. During the smaller laboratory section of the class, the subjects received their first session of 5 sessions of cue-controlled relaxation training. In the second lecture class of week 2 of treatment subjects received a lecture on self-disclosure of thoughts to others. As a follow-up exercise to this lecture the subjects made a brief (1-2 minutes) speech in the class in which they self-disclosed their thoughts about an object and person important to them, a feeling they had and what they would do with a million dollars. Subjects were asked to listen to a 12

minute speech and to prepare a reaction speech to be presented before the video camera and 1/2 of the class the following week. During the laboratory section of the class subjects received their second session of cue-controlled relaxation training.

During week 3 of treatment the subjects received two more sessions of cue-controlled relaxation training in the laboratory section of the class and were lectured to regarding criteria for evaluating speeches. The criteria included delivery aspects such as voice, volume, tone and emphasis, organization of the speech, appropriateness of topic to audience and the use of supporting material. The subjects each performed a 2-3 videotaped speech critiquing the speech they had listened to the week prior. Behavioral ratings of this speech were used by the experimenter to assess initial skill level of subjects and to test Hypothesis 6. This speech was performed before 1/2 of the total of the 39 subjects in Group I.

During week 4 of treatment, subjects received a lecture on the organization of an effective public speech. This lecture covered the introduction, main point and conclusion of a speech. Following the lecture, the instructor and subjects discussed two speeches which the subjects had observed on videotape and audiotape outside of class. This discussion focused on the organizational strengths and weaknesses of the speeches the subjects had listened to, and the discussion served as a practice session at recognizing the parts of an effective speech. Subjects were assigned the task of preparing a 2-3 minute definition speech to be presented later in week 4 of treatment. Early in week 4 subjects received the fifth and final session of cue-controlled relaxation training in the laboratory section of the class. During the latter part of week 4 each subject presented a definition speech before 1/2 of the class. This speech was video-taped and subjects viewed their performances and received instructor and peer feedback on the videotaped speeches in the smaller laboratory section of the class. This procedure of viewing videotaped performances and receiving feedback was repeated for the remainder of the 10 weeks of treatment. Subjects were asked to write a short paper reacting to their own performances on the definition speech. Finally, during week 4 subjects were asked to listen to a tape recorded speech which had been performed by an individual who had been a member of the special section of the class in a previous academic quarter. This speech was referred to during week 5 of treatment when the instructor lectured on goal analysis and defining behavioral goals.

Week 5 of treatment began with a lecture on the goal analysis procedure. Covered in this lecture were the topics of how to set delivery goals and the importance of setting observable performance goals. Subjects were asked to prepare a goal analysis sheet, see Appendix C, for three separate behavioral delivery goals, such as "I will look at the audience for 1/2 of my speech." Subjects were told by the instructor that the attainment of delivery goals related to final grades in the following manner: 1 goal=C+; 2 goals=B-B+; 3 goals=B+ to A. During the laboratory section of the class the instructor and students discussed the goal analysis procedure and how they might have set goals for the speech they observed during the end of week 4 of treatment. Subjects were asked to prepare a 1-2 minute one-point speech, that is a speech expressing one primary point and supporting that point with supporting material. Subjects were also asked to prepare a goal analysis sheet to one main delivery goal they sought to achieve in their one-point speeches. During the next meeting of the lecture class in week 5 of treatment, subjects presented their one-point speeches to 3/4 of the class. Note, this is the first increase in audience size. Subjects were asked to prepare another speech called the "weirdo speech" to be presented during week 6 of treatment. Subjects were asked to interview someone different from themselves in attitude, behavior or values and to speak about this interview the following week of class. Finally, during the second laboratory session of week 5 of treatment subjects observed their own videotaped one-point speeches, received feedback and turned in their goal analysis work sheets regarding this speech.

Week 6 of treatment began with an instructor-presented lecture on relating to an audience. Topics covered in this lecture included understanding one's audience and being able to communicate to one's audience why the audience should be interested in a given speech topic. Following this lecture, subjects presented their "weirdo" speeches to the entire class of 38 other subjects. The speaking assignment for later in week 6 was to prepare a 3-5 minute concept speech, a short informing speech which had one or two main points. The concept speech was to be the first instructor-graded speech and subjects were to present this speech to the entire class. Subjects were given their first take home exam, which required that each subject listen to several speeches on audiotape and to critique these speeches regarding organization, supporting materials, relating to the audience and delivery. This exam was designed by the instructor in an effort to aid subjects in organizing and writing their own speeches. In the first

laboratory session of this 6th week of treatment subjects viewed videotaped playback of their "weirdo" speeches and received feedback before filling out a goal analysis work sheet regarding the delivery goals that they had chosen. Before the first instructor-graded concept speech the subjects drew numbers from a hat to determine the order in which they would present their instructor-graded speeches. Subjects with the lower numbers gave speeches before subjects with the higher numbers. Subjects with lower numbers served as performers for testing Hypothesis 5 and subjects with high numbers served as non-performers. From this point on each time the subjects performed a speech, they followed the same order of speaking as described above. At the second lecture class of week 6 of treatment the subjects who chose low numbers presented their concept speeches. Once the first half of the subjects performed this speech, all subjects were administered the PRPSA and PRPSSE, and subjects who had just spoken completed the SAMPS. This procedure allowed comparison between subjects with and without the performance experience of a specific speech. The same assessment procedure was followed for the two remaining instructor-graded speeches. During the laboratory section of the class, only those subjects who had presented concept speeches attended, watched their performances on videotape, received instructor and peer feedback, and filled out a goal analysis work sheet.

At the start of week 7 of treatment, the second half of the class presented concept speeches. Once the second half of the subjects had given their speeches, all subjects were again administered the PRPSA and PRPSSE. The SAMPS was administered only to subjects from the second half of the class who had just presented their concept speeches. By administering the SAMPS to subjects immediately following their performance of speeches, the experimenter was able to compare subjects' ratings with objective ratings of mastery on the BAPSM, thereby allowing Hypothesis 4 to be tested. All subjects turned in their take home exams at the start of week 7 and all subjects were assigned the next speaking task, a 5-7 minute informative speech. This speech, somewhat longer than the concept speech, was to have 2-3 main points and was to be presented before the entire class. At the first laboratory session of week 7 those subjects from the second half of the class who gave their concept speeches at the start of week 7 viewed videotaped playback of their speeches and received feedback before filling out the goal analysis results sheet. During the second lecture class of week 7 subjects who had drawn low numbers for order of presentation presented

their informative speeches. Since these speeches were 5-7 minutes in length, not all the first half of the subjects were able to speak due to the length of the class period. Those who were able to speak attended the laboratory section of the class, received feedback and filled out the goal analysis worksheet.

At the start of week 8 the remainder of the subjects from the first half of the subjects presented their informative speeches. As soon as the first half had spoken the assessment procedures previously described were conducted. There was time for some subjects from the second half of the entire group to give their informative speeches during the first lecture class of the week and several subjects did perform informative speeches. The laboratory section of the class was attended by subjects who spoke in the first lecture class of week 8. These subjects received the customary feedback on performances and completed the goal analysis worksheet. At the second lecture class of week 8 the remaining subjects presented their informative speeches, after which the assessment procedures were implemented. Subjects who spoke at this second lecture class attended the laboratory class, received feedback on videotaped informative speeches and completed the goal analysis results sheet. All subjects were assigned the task of preparing a 7-10 minute persuasive speech to be performed during weeks 9 and 10 of treatment. Subjects were asked to take a position on an issue on which they, as speakers, would be at odds with the audience. The persuasive speech, like the two previous speeches, was to be presented to the entire class and was to be instructor-graded.

During the first lecture class of week 9 of treatment a portion of the subjects who had drawn low numbers presented their persuasive speeches. These same subjects attended the first laboratory session of week 9 for feedback and to fill out the goal analysis work sheet. At the second lecture class of week 9 the remainder of the subjects who had drawn low numbers during week 6 presented their persuasive speeches. Immediately following the speech of the last subject from the first half of the class, all subjects completed the dependent measures. Those subjects who had presented speeches attended the laboratory class for feedback and to fill out the goal analysis worksheet. All subjects were given the second take-home exam which required that they attend a public speaking contest and write an essay critiquing the best speech regarding delivery, organization, use of supporting material, and relating to the audience. At the second lecture class of week 9 some of the subjects from the second half of the subject group presented their persuasive speeches. These subjects attended the

laboratory section of class following their speeches and received feedback and filled out the goal analysis results sheet.

During the first lecture class of week 10 the subjects who had not yet performed persuasive speeches did so. After these performances the dependent measures were administered. Those subjects who spoke during week 10 attended the laboratory sections of class and received feedback and completed the goal analysis results sheet following observation of their own performance on videotape. All students turned in the take-home exam during week 10 as well as a short paper evaluating the course components and assessing their own progress in the class.

In summation, subjects in Group I were administered the dependent measures (PRPSA, PRPSSE, and SAMPS) following each instructor-graded speech as well at the outset of the class (PRPSA and PRPSSE only). Table 7 presents the timing of assessment for Group I.

Procedures for Group II - Standard Speech Class: During the first week of classes students in the standard section of the public speaking class were informed of this study and their participation was requested. All students agreeing to participate were administered the PRPSA and PRPSSE. Students who agreed to take part in the study were asked to assign themselves a code number with which to identify themselves and preserve their anonymity. Subjects who scored one-half standard deviation above the mean on the PRPSA served as treated controls to test Hypotheses 1, 2, 3, and 5. To avoid potentially deleterious attention to this group of speech anxious subjects, all members of the speech class were administered the all dependent measures at the other two points of assessment during the 10-week treatment program. A text, Thinking and Speaking (Walter & Scott, 1979) and a university published manual or packet of course materials were required materials for subjects in Group II. This subject group received three classes of instruction/treatment per week divided into one lecture for 50 minutes per week, and two laboratory classes for 75 minutes each per week. The lecture portion of the treatment was prerecorded on videotape by the professor in charge of the standard sections of the public speaking classes. The laboratory portion of the course was taught by masters-level teaching assistants.

During week 1 of treatment the lecture class involved an introduction to the public speaking course which stressed the advantages of the course and covered the works of several classical rhetoricians, such as Plato and Aristotle. Subjects were asked to prepare

the self-analysis inventory concerning public speaking and communication skill prior to the next class meeting. Subjects were also required to prepare their first speaking assignment, a one-point speech, for the second week of treatment. During the laboratory sessions of week 1, subjects met the laboratory instructor and were informed of the requirements of the course: two examinations, three instructor-graded speeches, and one critique of a speech, each requirement weighted 1/7th of the subject's. Subjects in Group II were required to hand in an outline of each speaking assignment 24 hours prior to presenting the speech.

During week 2 of treatment the lecture portion of the class focused on the organization of a speech. In the laboratory sessions subjects presented one-point introductory speeches, 2-4 minutes in length and before the entire laboratory class (20-25 subjects). This speaking task was followed by instructor and peer feedback to each subject regarding his/her performance. Subjects were assigned the task of preparing a one-point persuasive speech on a significant social problem. Subjects were asked to choose one idea about which to speak and to support that idea with supporting material. Subjects were required to read two chapters from the text (Walter & Scott, 1978) on forming ideas and supporting ideas. Each subject was required to hand in a manuscript 24 hours prior to performing the one-point persuasive speech.

In week 3 subjects were assigned text reading covering the following topics: Adjusting ideas to one's audience and developing confidence. Subjects also read the "Guidelines" in the course materials packet. The assignment for the following week was to prepare a 6-8 minute problem speech which was to have more than 3 main points and required some library research. During the lecture portion of the class subjects were presented information about speaker preparation, such as information regarding outlining of one's speech. In the laboratory sessions of week 3 subjects presented their persuasive speeches and received instructor and peer feedback.

During week 4 subjects took an in-class examination covering the readings and lectures. This exam took place at the lecture meeting time. Subjects presented their problem speeches during the laboratory sessions and received instructor and peer feedback, as well as a grade for the problem speech. Subjects were assigned readings in the text concerning thinking and speaking about causes and were assigned the task of preparing a causation speech of 6-8 minutes in length to be performed during week 6 of treatment. During week 4 and prior to the second instructor-graded speech

subjects in Group II were administered the three dependent measures: PRPSA, PRPSSE, and SAMPS.

The lecture in week 5 focused on non-verbal factors of public speaking, such as eye contact, gestures and movement. Subjects were asked to prepare an outline of their causation speeches and they were assigned text reading concerning delivering ideas. In the laboratory sessions of the class subjects finished performing their problem speeches and received feedback and grades on their speeches.

During week 6 of treatment the lecture class did not meet. However, the subjects did attend the laboratory sessions of class in which they presented their 6-8 minute causation speeches. Subjects received peer and instructor feedback as well as the instructor's grade on their speeches. Subjects were assigned the task of preparing the next speech, a solution speech, a 6-8 minute speech with several main points expressing a solution to a problem. A reading assignment in the text concerning speaking about solutions was also required of subjects during this 6th week of treatment.

The 7th week of treatment required that those subjects who had not done so at this point deliver their causation speeches. Subjects read a text chapter concerning listening analytically and were lectured on attention and interest factors in presenting a public speech. Subjects who spoke during this week of treatment received the usual peer and instructor feedback and instructor grade.

The 8th week of treatment involved presentation of the 6-8 minute solution speeches in the laboratory sessions of the class and a lecture on legal and ethical factors in public speaking, such as when one is entitled to speak in public and to what extent one is protected by First Amendment rights. Subjects were assigned text reading concerning thinking and speaking about values, and were asked to begin preparation of the last instructor-graded speech assignment, a 6-8 minute value speech defining a value.

In the laboratory sessions of week 9 of treatment, subjects completed presenting their solution speeches and took the second in-class examination. Also during week 9 of treatment subjects completed the dependent measures for the last time (PRPSA, PRPSSE, and SAMPS).

During the 10th and final week of treatment, most subjects completed the final instructor-graded speech, the value speech, attended a speech contest outside of class, and wrote a critical review of one of the speeches they observed at the speech contest. During the week following week 10 of treatment, subjects who had not presented their value speeches did so and received peer and instructor feedback and an instructor

grade. It should be noted that subjects in Group II were assessed with the dependent measures following their third instructor-graded speech during week 9 of treatment. This procedure was followed so as to compare Groups I and II after the completion of 3 instructor-graded speeches. Also, it was not logistically possible to administer the dependent measures later than week 9 of treatment to Group II subjects.

In summation, subjects in Group II were administered the dependent measures (PRPSA, PRPSSE, and SAMPS) at the start of the treatment program, following their first, and following their third instructor-graded speeches. Table 8 presents the timing of assessment for Group II subjects.

Procedures for Group III - Minimal/No Performance Control Group: Students in undergraduate courses, wherein minimal or no performance of public speaking was required, were informed of this study and their participation was requested. Students willing to participate assigned themselves identification numbers with which identified themselves on the dependent measures. During the first two weeks of the 10-week academic quarter these subjects were administered the PRPSA and PRPSSE, and those scoring one-half standard deviation above the mean of the PRPSA were selected as subjects in this study. All subjects were re-administered the dependent measures again at the middle and end of the 10-week treatment program which ran concurrently for subjects in Groups I and II. Hence, the subjects in Group III received no treatment for public speaking anxiety and were assessed with the dependent measures (PRPSA and PRPSSE) initially, at the middle, and at the end of the 10-week treatment period. Table 9 shows the timing of assessment for Group III subjects.

APPENDIX B

Procedures for Cue-Controlled Relaxation Training

The relaxation training provided to the subjects from Group I, specialized treatment class, was identical to that described by Paul (1966) and was administered by psychologists from the University Counseling Center.

Session 1: During the first session the trainer described deep muscle relaxation to the subjects, explaining how the subjects could expect to profit from the training and conducted a short session of relaxation. At the close of the relaxation session the trainer asked each subject to describe a relaxing scene and to write down the description prior to the next session.

Session 2: Continued training in deep muscle relaxation and the pairing of the relaxation response with exhalation of breath were accomplished during the second session. Subjects' relaxation scenes were reviewed and subjects were asked to choose cue-words from their scene descriptions to be used in the training.

Session 3: The relaxation training in this session included the pairing of cue-words with exhalation and the relaxation response. Trainers initially asked subjects to pair such cue-words as

"relaxed" and "calm" with their exhalation of breath.

Session 4: During this session of training subjects began pairing the cue-words from their own relaxation scenes with exhalation of breath and the relaxation response. Trainers encouraged subjects to practice relaxing using the cue-words.

Session 5: During this final session of training subjects relaxed using their cue-words and shared their experiences of relaxing in other situations with the group. Trainers provided suggestion to subjects regarding continued practice of the skill of relaxation and decreasing anxiety. pointers such as using awareness of heightened anxiety as a discriminating stimulus for the initiation of relaxed breathing and repeating of the cue-word, thus enhancing relaxation and decreasing anxiety.

APPENDIX C

NAME _____ DATE _____

GOAL ANALYSIS SHEET

1. State the goal in behavioral terms.
2. List the performance which, if achieved, would cause you to agree that the goal is achieved and, thus, you are successful. (What kinds of specific behaviors would you have to perform to be successful?)
3. What is the minimal level result you will be satisfied with? (This may be the same as 2 above, or it may be only a portion of 2 above.)
4. How will you be able to tell when this minimal level result is achieved? (Will you be able to do so by simply observing the video-tape of the speech? How much of the tape must you observe? Will it require someone in the audience to monitor your behaviors?)

5. List each activity you will need to go through to accomplish your stated goal.

PRPSA

6-digit I.D. _____ Class _____ Instructor _____

Sex _____ Classification _____ Major _____

Date _____

This instrument is composed of 34 statements concerning feelings about communicating with other people. Indicate the degree to which the statements apply to you by marking whether you (1) strongly agree, (2) agree, (3) are undecided, (4) disagree, or (5) strongly disagree with each statement. Work quickly, just record your first impression.

- ___ 1. While preparing for giving a speech I feel tense and nervous.
- ___ 2. I feel tense when I see the words "speech" and "public speech" on a course outline when studying.
- ___ 3. My thoughts become confused and jumbled when I am giving a speech.
- ___ 4. Right after giving a speech I feel that I have had a pleasant experience.
- ___ 5. I get anxious when I think about a speech coming up.
- ___ 6. I have no fear of giving a speech.
- ___ 7. Although I am nervous just before starting a speech, I soon settle down after starting and feel calm and comfortable.
- ___ 8. I look forward to giving a speech.

- ___ 9. When the instructor announces a speaking assignment in class I can feel myself getting tense.
- ___ 10. My hands tremble when I am giving a speech.
- ___ 11. I feel relaxed while giving a speech.
- ___ 12. I enjoy preparing for a speech.
- ___ 13. I am in constant fear of forgetting what I am prepared to say.
- ___ 14. I get anxious if someone asks me something about my topic that I do not know.
- ___ 15. I face the prospect of giving a speech with confidence.
- ___ 16. I feel that I am in complete possession of myself while giving a speech.
- ___ 17. My mind is clear when giving a speech.
- ___ 18. I do not dread giving a speech.
- ___ 19. I perspire just before starting a speech.
- ___ 20. My heart beats very fast just as I start a speech.
- ___ 21. I experience considerable anxiety while sitting in the room just before my speech starts.
- ___ 22. Certain parts of my body feel tense and rigid while giving a speech.
- ___ 23. Realizing that only a little remains in a speech makes me very tense and anxious.
- ___ 24. While giving a speech I know I can control my feelings of tension and stress.

- ___ 25. I breathe faster just before starting a speech.
- ___ 26. I feel comfortable and relaxed in the hour or so just before giving a speech.
- ___ 27. I do poorer on speeches because I am anxious.
- ___ 28. I feel anxious when the teacher announces the date of a speaking assignment.
- ___ 29. When I make a mistake while giving a speech, I find it hard to concentrate on the parts that follow.
- ___ 30. During an important speech I experience a feeling of helplessness building up inside of me.
- ___ 31. I have trouble falling asleep the night before a speech.
- ___ 32. My heart beats very fast while I present a speech.
- ___ 33. I feel anxious while waiting to give my speech.
- ___ 34. While giving a speech I get so nervous I forget facts I really know.

$$A + 132 - B = \text{score}$$

___	___			
A	B	___	+ 132 -	___ = ___

Date _____

I.D. _____

PRPSSE

This form describes activities that could be performed while preparing for and giving a public speech. Under the column Can Do check () the tasks you expect you could do if you were asked to perform them now.

For the tasks you check under Can Do, indicate in the column Confidence how confident you are that you could do them. Rate your degree of confidence by recording a number from 10 to 100 using the scale given below:

10	20	30	40	50	60	70	80	90	100
quite				moderately					certain
uncertain				certain					

For example, if you were absolutely certain that you could introduce yourself to a teacher if you were asked to do it right now, you would place a check () in the Can Do column and the number 100 in the Confidence column. (See example below).

Can Do Confidence

I can introduce myself to a teacher. _____

Now, for each task, place a check () and a confidence rating in the appropriate columns for the tasks you could do if you were asked to do them right now.

<u>Preparation of a speech:</u>	<u>Can Do</u>	<u>Confidence</u>
Choose a suitable topic to speak about	_____	_____
Select aspects of my general topic that my audience will find interesting	_____	_____
Find resource materials about my topic	_____	_____
Select information from resource materials	_____	_____
Write a rough draft/outline of my speech	_____	_____
Write an organized final draft/outline of my speech that my audience can follow	_____	_____
Prepare an effective set of notes to aid in my presentation	_____	_____
Rehearse my speech alone and out loud with notes	_____	_____
Rehearse my speech alone and out loud without notes	_____	_____

Rehearse my speech out loud before
friends with notes

Rehearse my speech out loud before
friends without notes

Prepare a speech that meets the
time requirements

Make a thesis statement which
conveys the main point

Presentation of a speech:

Speak in a voice that my audience
can hear

Speak at a speed that my audience
can follow

Speak with vocal variation so as to
emphasize points

Allow for appropriate pauses between
sentences

Speak in a flowing manner (without
stammering or hunting for words)

Look at members of my audience as I
speak

Have a relaxed facial expression
(rather than tense) as I speak

Express emotion with my face as I
speak

Gesture naturally with my hands and
arms

Have relaxed hands and arms as I speak	_____	_____
Present a calm but attentive posture	_____	_____
Present my speech in an organized manner with notes	_____	_____
Present my speech in an organized manner without notes	_____	_____
Use the podium effectively rather than being tied to the podium	_____	_____
Quote/cite a source so as to make it believable to my audience	_____	_____
Make a point with the use of supporting material	_____	_____
Speak before a small group (6-10)	_____	_____
Speak before a medium sized group (11-20)	_____	_____
Speak before a large group (21 or more)	_____	_____
Give a speech 3 minutes in length	_____	_____
Give a speech 10 minutes in length	_____	_____
Give a speech 15 minutes in length	_____	_____

Date _/_/_

I.D.# _____

SAMPS

Please consider the speech you most recently presented in this class and rate yourself on the thirteen items listed below. For the activity noted in each item, use the rating scale below to indicate how frequently you think you displayed that activity during your speech. For example, if for item #1, "I spoke with a steady and relaxed voice," you think you did speak that way throughout your speech, you might rate yourself with "8" (indicating that you consistently spoke with a steady and relaxed voice). Now complete each of the items below by rating how often you think you performed that activity during your most recent speech.

1	2	3	4	5	6	7	8	9
Not at - Rarely			Occasionally-Frequently			Consistently		
All Performed			Performed			Performed		

- | <u>Activity</u> | <u>Rating</u> |
|---|---------------|
| 1. I spoke with a steady and relaxed voice. | _____ |
| 2. I spoke at a speed that was comfortable
to follow (not too fast and not too slow). | _____ |
| 3. I spoke with variation of tone and emphasis. | _____ |
| 4. My pauses between sentences were silent rather
than vocalized (e.g. "And...uh or "you know...). | _____ |
| 5. I spoke with flowing speech without stammering,
hunting for words, halting of speech blocks. | _____ |
| 6. I had eye contact with my audience. | _____ |

7. My facial muscles were relaxed as I spoke. _____
8. I expressed facial emotion consistent with
my tone of voice. _____
9. My hands and arms were in a relaxed position. _____
10. I moved my hands and arms comfortably rather
in an agitated or jerky manner. _____
11. I moved my hands and arms as I spoke rather
than remaining still. _____
12. I stood with a calm posture without shifting
swaying or pacing. _____
13. Overall, my speech showed that I can give
an effective public speech. _____

BAPSM

Behavioral Assessment of Public Speaking Mastery

Subject# _____ Grp. _____ Total Sgmnts _____ Item Totals _____

Item #1 #2 #3 #4 #5

Segment 1 2 3 4 5 6 7 Total

#1 Use of "I" language _____ (#1)

#2 Eye contact (# of seconds) _____ (#2)

#3 Vocalized pauses (constant
15 - #observed) _____ (#3)

#4 Independent responses _____ (#4)

#5 Hand and Arm Gestures _____ (#5)

APPENDIX D

Instructions to Raters

Introduction

As a rater in this experimental study you are asked to view video tapes and to count the number of times that specific behaviors occur. The tapes you will be viewing are randomly selected portions or public speeches given by subjects in this experimental study. You will view 15-second segments from subjects' speeches and the number of segments you will view for any given subject will range from one to seven segments. You may view any segment as many times as you need to count the frequency of each behavior in each 15-second segment. Remember, the number of 15-second segments will vary from subject to subject. Once you have reviewed all the segments for a given subject, total the frequency of each behavior in the total column of the rating sheet.

Behaviors to be rated

"I"-language. First, you are to count the number of times that the subject uses the word "I" or any contraction of the word "I", such as "I'm", "I'd", "I've", or "I's". Watch each 15-second segment of the given subject's speech and record the number of times

the subject uses "I"-language. Occasionally, a subject will stammer with the word "I" at the beginning of a sentence. You are to count stammering with the word "I" as only one occurrence of the word "I".

Eye-Contact. For this item the behavioral assessment you are to record the amount of time that the subject has eye-contact with the audience. Using a stopwatch, time the parts as each 15-second segment during which the subject is looking at eye-level with the audience. This includes the time when the subject is scanning the audience. Whenever the subject looks down at his/her notes, at the floor, at the ceiling, or closes his/her eyes, stop your stopwatch until the subject again looks at the audience. At the end of the 15-segment round off the stopwatch reading to the nearest whole second and record that number or seconds on the rating sheet.

Vocalized Pauses. For this item of the behavioral assessment you are to count the frequency of the subject's use of several different distractor words. You are to count the number of times that the subject uses the words "um", "ah", and "er" or any combination of those words (um,ah). After you count the frequency of those words in a given 15-second segment of speech, subtract that number from the constant 15 and enter

that result on the rating sheet. For example, if you noted the subject used the word "um" four times during the 15-second segment, you would subtract four from fifteen ($15-4=11$) and enter eleven on the rating sheet for that segment.

Independent Responses. For this item of the behavioral assessment you will have to listen carefully to each 15-second segment and count the number of clauses that the subject speaks during the 15 seconds. A clause is a string of words with one and only one verb or predicate. The simplest way to count clauses is to listen for and count the verbs. For example, "While I was going," and "John went along too" would be rated as two (2) clauses ("While I was going," and "John went along too"). Another example - "Karen went to work, worked hard, left work at four and drove home." This would be rated as four (4) separate clauses or independent responses. Another example - "My friend John. He's going to school." This would be rated as one (1) clause since the first string of words "My friend John" has no verb. Listen carefully to each 15-second segment of speech and count the number of clauses. You may stop the tape during the 15 seconds if it will help you to count clauses. You may need to listen to the 15-second segment several times to arrive at the number of clauses the subject has spoken. Once

you have counted the number of clauses, enter that number on the rating sheet. If you rate more than one segment of speech for a given subject, total the number of clauses/ independent responses the subject spoke in all the segments in the total column on the rating sheet.

Hand and Arm Gestures. For this item of the behavioral assessment you are to count the number of times the subject gestures with his/her hand or arm to communicate to a stopping point as a gesture. If a subject extends or uses both hands or arms simultaneously, you are to count this as one gesture. Often the subject will be speaking from behind the podium and only when she/he reaches from behind the podium will you clearly be able to see and count his/her gesture. Only count gestures that you can clearly see.

APPENDIX E

Table 1

Summary of t-Tests on Gains in Strength and Level of Self-Efficacy

Group I				Group II			
	N	Mean	S.D.		N	Mean	S.D. t
Strength	24	17.67	19.77		18	20.80	12.95 -1.58 NS
Level	24	4.92	7.52		18	1.5	4.15 1.74 NS
Group I				Group III			
	N	Mean	S.D.		N	Mean	S.D. t
Strength	24	17.67	19.77		34	6.19	11.92 2.54*
Level	24	4.92	7.52		34	1.59	3.16 2.04*
Group II				Group III			
	N	Mean	S.D.		N	Mean	S.D. t
Strength	18	20.80	12.95		34	6.19	11.92 4.08*
Level	18	1.50	4.15		34	1.59	3.16 -1.09 NS

*p<.05

Table 2

Correlation Matrices of Efficacy, Level and Strength, and Anxiety

Group	Time 1		Time 2		Time 3	
I (N=39)		ANX		ANX		ANX
	LVL	-.20	(N=36) LVL	-.12	(N=33) LVL	-.08
	STR	-.20		STR -.37		STR -.38
II (N=33)		ANX		ANX		ANX
	LVL	-.26	(N=30) LVL	-.48*	(N=18) LVL	-.46
	STR	-.14		STR -.69*		STR -.56*
III (N=33)		ANX		ANX		ANX
	LVL	-.11	(N=28) LVL	.03	(N=18) LVL	.01
	STR	-.34*		STR -.17		STR -.64*

* ($p < .05$)

Table 3

Summary of t-Tests on Gains in Self-Efficacy and Anxiety
Decrements: Time 1 vs. Time 2

Time 1				Time 2			
Group	N	Mean	Standard Deviation	N	Mean	Standard Deviation	t
STRENGTH OF SELF-EFFICACY							
I	29	13.30	14.26	30	5.84	10.93	2.24*
II	12	14.58	10.77	12	5.30	7.39	2.46*
LEVEL OF EFFICACY EXPECTATIONS							
I	29	4.48	8.30	30	1.03	3.16	2.09*
II	12	0.25	5.36	12	0.67	2.01	-0.25
ANXIETY							
I	29	28.14	17.96	30	9.86	17.53	3.96*
II	12	20.42	16.22	12	6.83	9.88	2.48*

* ($p < .05$)

Table 4
Results of t-Tests for Performers vs. Non-Performers
of First Graded Speech

<u>Performers</u>			<u>Non-Performers</u>			
N	Mean	Standard Deviation	N	Mean	Standard Deviation	t
Gains in Level of Efficacy Expectations						
13	1.23	8.11	16	7.50	8.67	-1.99 NS
Gains in Strength of Efficacy Expectations						
13	11.51	14.75	16	10.37	10.18	.24 NS

Table 5

Results t-Tests for Skilled vs. Unskilled Speakers

<u>Skilled Speakers</u>			<u>Unskilled Speakers</u>			
N	Mean	Standard Deviation	N	Mean	Standard Deviation	t
Gains in Level of Efficacy Expectations						
12	6.41	9.35	8	3.38	5.80	.89 NS
Gains in Strength of Efficacy Expectations						
12	15.8	20.6	8	20.87	11.83	-.62 NS
Decrements in Public Speaking Anxiety						
12	39.08	17.42	8	32.86	21.56	.71 NS

Table 6

Timing of Assessment for Groups I, II, and III

Group I		1	2	3	4	5	6	7	8	9	10
Week											
dep. measures administered	*							*	*		*
Instructor-graded speech completed								1	2		3
Group II		1	2	3	4	5	6	7	8	9	10
Week											
dep. measures administered	*				*					*	
Instructor-graded speech completed					1			2		3	4
Group III		1	2	3	4	5	6	7	8	9	10
Week											
dep. measures administered	*					*				*	

VITA

Davis Clarke Tracy was born in Waterbury, Connecticut on January 13, 1948. He is the son of William M. Tracy and Jane D. Tracy and he has two brothers, Bill and Tom. Davis attended public schools in Meriden, Connecticut, and graduated from Platt High School in 1966. He attended Lehigh University and graduated with a B. A. degree in Social Psychology in 1970. Davis served a two-year tour of duty with the U. S. Army from 1970 to 1972. In September, 1972, he entered The University of Connecticut and in June, 1974, received a Master of Arts degree in Counseling. After four years of employment in community mental health centers in New Hampshire and Tennessee, Davis enrolled as a doctoral student in Counseling Psychology at The University of Tennessee in September, 1978. He completed an internship at The University of Tennessee Student Counseling Services Center in June, 1981, and received a Ph.D. in December, 1981.