A Study of the Relationship between Oral Communication Apprehension and Cognitive Restructuring in High School Speech Class

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A STUDY OF THE RELATIONSHIP BETWEEN ORAL COMMUNICATION APPREHENSION AND COGNITIVE RESTRUCTURING IN HIGH SCHOOL SPEECH CLASS

by

Lolita Fox Balch

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
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Western Michigan University
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The purpose of this study was to determine the effectiveness of a cognitive restructuring unit in the reduction of oral communication apprehension (CA) and the enhancement of semester grades in high school speech class. The unit was designed to raise self-acceptance, and thereby, self-confidence, especially in oral communication.

The experimental treatment method, cognitive restructuring (plus skills training), was compared with the skills training only traditional speech class method. Both treatment methods were reviewed, as well as inappropriate treatment methods for classroom and clinic.

Subjects registered in four different speech courses were randomly assigned by computer to classes which were then selected as clusters for the experimental conditions. An introspective self-report instrument, McCroskey's Personal Report of Communication Apprehension (PRCA-24), was employed. Attempts were made to control a number of extraneous variables in this quasi-experimental design.
Subscores and total scores were tallied for each subject on pretest and posttest measures, and gain scores were computed from these scores. These gain scores were submitted to a two-way analysis of variance statistical technique. Where significant differences were found, the Scheffe post hoc treatment was performed. Gain scores were also compared with semester grades, using the same statistical tests.

Significant differences were noted between scores in the four types of courses on the public speaking sub-measure and total scores and between scores of students receiving B's and those earning grades below B. Specifically, the cognitive restructuring treatment method, combined with skills training, seemed to have a positive effect on student self-confidence in public speaking situations, as reflected in the significant changes in the level of CA registered in pretest to posttest gain scores.

Based on the findings reported, teachers were encouraged to use cognitive restructuring (plus skills training) as a communication apprehension reduction technique in speech classes, especially for public speaking improvement. Also, it is recommended that skills training plus cognitive restructuring be employed especially with those students experiencing high levels of oral CA and grades below B.
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Lolita Fox Balch
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CHAPTER I

INTRODUCTION

The ability to speak confidently is highly valued in our society in both social and commercial discourse. This skill heavily influences the quality of human relationships and endeavors. Speech proficiency can enhance our progress in life's arenas; the lack of it can hinder us in areas ranging from economic opportunity through attempts at intimacy. Because of the almost certain necessity of human interaction, it is important for people to develop the highest possible level of communication confidence for the highest possible level of success.

The Problem

Individuals wishing to gain greater speech proficiency frequently encounter barriers to the realization of that goal. Shyness, reticence, concern, uncertainty, constriction of emotions, overcompensation, extreme fear, inadequate self-concept, and low self-confidence can all inhibit or diminish speaking ability and reduce or eliminate successful communication of ideas or emotions.

The occasion of speaking to individuals of higher authority and/or power can compound the anxiety. A negative communication experience can become a barrier
to feelings of self-worth, which in turn can affect major life choices, such as occupation. Unfortunately, the anxiety is self-perpetuating and usually requires some type of intervention for alleviation.

The problem addressed in this study is the effect of oral communication apprehension (CA) on high school speech students and how best to alleviate it in the educational environment. CA is understood in this study as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1981, p. 192).

The Purpose of the Study

In 1976 Burgoon established the need for more research on the alleviation of oral communication apprehension. In the present study, this researcher has attempted to address this need. This study also provides information on both the identification and treatment of oral communication apprehension (CA).

The purpose of this study was to investigate the relationship of oral communication apprehension and cognitive restructuring in high school speech class, within the framework of the following questions:

1. Is there a relationship between the level of oral communication apprehension and cognitive restructuring?
2. Is there a difference between communication
apprehension scores before and after cognitive restructuring treatment in students of different speech class formats?

3. Is there a relationship between student pretest and posttest gain scores and semester grades?

Previous Studies

Oral communication apprehension, without remedial intervention, has widespread effects on human behavior. For example, the literature includes the following subjects: social withdrawal (McCroskey & Anderson, 1976); negative attitudes (McCroskey & Sheahan, 1978); preference for occupations with low levels of oral communication involvement (Daly & McCroskey, 1975); choice of housing areas with low oral communication interaction (McCroskey & Leppard, 1975); and low voting participation (Sheahan, 1976).

From the perception of many others, persons manifesting oral communication apprehension seem unassertive and unresponsive (Merrill, 1974), relatively unattractive, and incompetent socially and sexually (McCroskey, Richmond, & Cox, 1975). Furthermore, high oral communication apprehensives appear to demonstrate general anxiety, low self-control, emotional immaturity, low adventurousness, low surgency, and low tolerance for ambiguity (McCroskey, Daly, & Sorensen, 1976).
Communicative apprehensives are persons who experience greater emotional arousal about communicating than either the risk or the reward of the situation warrants (McCroskey et al., 1976; G. Phillips, 1968). The cognitive and behavioral implications of communication apprehension were summarized by Daly (1977):

The highly communicative apprehensive person is one who attaches high levels of punishment or non-reward to communication encounters. This individual is fearful of communicating orally. He or she seldom enjoys talking, will go to extreme lengths to avoid communication situations and when, if by chance or the necessity, placed in them, will feel uncomfortable, tense, embarrassed and shy. (p. 10)

Communication apprehension is a learned condition. It is usually the result of negative reinforcement. In theory, when, after a number of reinforced trials, a stimulus is perceived as receiving a response, a cause and effect relationship may be said to be established. Those behaviors that are positively rewarded are repeated and those which are negatively reinforced are avoided (Skinner, 1969). If the stimulus, communication, realizes consistently negative results, communication transactions will be avoided out of apprehension.

Unfortunately, the "self-fulfilling prophecy" aspect of communication apprehension tends to affect the individual in an increasingly more debilitating manner (Rosenthal & Jacobsen, 1968). When past interactions are unsuccessful, present attempts are fraught with fears of failure and
avoidance of communication results. This syndrome can negatively affect one's self-image.

High communication apprehensives (persons with high levels of CA) were found to experience lower levels of self-esteem than their low communication apprehensive counterparts (McCroskey, Daly, Richmond & Falcione, 1977; McCroskey & Richmond, 1980). Low & Sheets (1951) suggested that communication apprehensives often negate their own ideas. Low and Sheets (1951) and G. Phillips (1968) posited that communication apprehensives feel isolated and alienated. Heston and Andersen (1972) and Watson and Friend (1969) contended that communication apprehensives find it difficult to discuss personal problems with others.

Difficulties also exist in group-oriented communication efforts of high communication apprehensive individuals. Their rate of participation in oral communication in groups is at a lower level than that of low communication apprehensives (Sorensen & McCroskey, 1977). High communication apprehensives have a negative effect on listeners (Freimuth, 1976). They also are less likely to be perceived as opinion leaders than others (Hurt & Joseph, 1975; McCroskey & Richmond, 1976) and are less likely to be considered as group leaders (Crowell, Katcher & Miyamato, 1955; McCroskey & Richmond, 1976). Oral communication apprehensive students also were found to be
undesirable conversation partners by their peers (Hurt & Preiss, 1978).

Oral communication apprehension also can be related to the level of success in academic areas. Andersen (1978) found that affected students have lower grade point averages and lower levels of achievement in testing than their more confident peers. Freimuth (1976) found them to have less rewarding communication experiences than others.

Communication apprehensive students frequently develop a negative attitude toward school (Hurt, Preiss & Davis, 1976). Specifically, they often drop out of classes that require them to communicate frequently (McCroskey, Ralph & Barrick, 1970). If they remain, they attempt to choose seating where the need to speak is minimal (McCroskey & Leppard, 1975; McCroskey & McVetta, 1978; McCroskey & Sheahan, 1976). Teachers, in turn, form negative expectations for these students (McCroskey & Daly, 1976).

Success in the occupational world beyond school is not probable for individuals affected by oral communication apprehension. They tend to prefer jobs that require a low level of communication (Daly & McCroskey, 1975; Scott, McCroskey & Sheahan, 1978). Daly and Leth (1976) reported that communication apprehensive job applicants were negatively evaluated by interviewers, even if their other qualifications were considered adequate.

Because of these deleterious effects, fear in oral
communication has been the subject of considerable attention in the educational and behavioral sciences for many years. Various labels have been applied to this handicap: speech anxiety, stage fright, reticence, shyness, and oral communication apprehension. The latter has even been identified as America's foremost fear (Bruskin, 1973).

The effects of oral communication apprehension are well demonstrated in the classroom. Those students who experience extreme anxiety tend to be quiet, unresponsive, and isolated from other students. Even those with mild anxieties almost never raise their hands to respond to teacher-initiated exchange. Their more vocal classmates are content not to have to compete orally with these individuals and, therefore, do not make attempts to help them. Furthermore, instructors often are too busy handling the more vociferous students to take action on behalf of their more reticent ones.

Teachers are in an ideal position to assist students with oral communication apprehension, however. The speech teacher, especially, can act as a remediator, leading the afflicted student to experience self-confidence. But increased awareness of CA and its therapeutic solutions and a desire to help are necessary in order to effect change.

Self-confidence, an element of personality, has been the subject of much research. It is widely understood in the speech field that unless methods to increase speaker
confidence have been established in the beginning speech curriculum, demonstrable progress probably will not be realized by students.

Successful communication experience is highly important to the development of the self-concept. G. Phillips (1968) frequently observed that high communication apprehensive individuals evidenced a lack of self-esteem and self-acceptance. G. Phillips's extensive case history research, which led to the formulation of the communication apprehension construct, included other variables related to oral communication apprehension, including introversion and verbal reticence.

A construct is "a nonobservable inference from observed behavior" (Borg & Gall, 1983, p. 32). Constructs can be defined constitutively or operationally. A variable, such as scores on a measuring instrument, can be conceived of as a quantitative expression of a construct.

Oral communication apprehension theory is not fully developed. Five major theoretical propositions concerning oral communication apprehension were posited by McCroskey (1978) and much research has been conducted to investigate them.

Proposition 1. People vary in the degree to which they are apprehensive about oral communication with other people.

Proposition 2. People with high oral communication apprehension seek to avoid oral communication.

Proposition 3. People with high oral communication
apprehension engage in less oral communication than do less orally apprehensive people.

Proposition 4. When people with high oral communication apprehension do communicate, their oral communication behaviors differ from those of people who are less apprehensive.

Proposition 5. As a result of their oral communication behavior, high oral communication apprehensives are perceived less positively by others than are less apprehensive people. (p. 193)

Numerous studies support the theory that communication apprehension is a problem for many people. The energies expended in attempts to cope with the initial and ensuing anxieties lead the CA individual away from threatening oral situations. The use of avoidance tactics to salvage his or her self-image drains time and energy. Beatty and Beatty (1976) observed that as self-esteem diminishes, further anxiety, reticence, and avoidance increase, thus perpetuating the cycle.

The Solution

Two general approaches to addressing the problem of CA, according to Beatty and Beatty (1976), are prevention and cure. Implementing the latter approach is possible for educational institutions. One remedial method is a speech training program incorporating cognitive modification treatment and speech skills, as in the present study.

Speech Training Program

This research study, designed to test the effects of
cognitive restructuring on oral communication apprehension, was conducted in a suburban high school serving approximately 2,200 students in Grades 9 through 12. At the time of the study, all non-special-education students in the district were required to elect one semester of speech to fulfill a graduation requirement. The resulting half-credit was usually earned in the sophomore year.

Among the traditional skills practiced in speech class was oral communication confidence, as demonstrated by (a) appropriate gesturing, (b) eye contact, (c) relaxed body language, (d) adequate volume, and (e) modulated inflection. These behaviors all indicate relative freedom from anxiety during speaking performance. However, merely giving a speech does not guarantee the alleviation of oral CA. Yet speech class can provide successful methods of treatment for oral communication apprehension. Cognitive restructuring is one of those methods.

Cognitive restructuring is a behavior modification method which includes: understanding of the rationale for the treatment; identifying negative, inhibiting patterns; substituting positive, coping behavior; and practicing these new mechanisms for success (Fremouw and Scott, 1979).
Cognitive Restructuring

A relationship between speech and personality has been observed. Speech behavior can both represent and influence personality (Furr, 1970). Research suggests that the raising of self-acceptance in the communicatively apprehensive individual is related to the improvement of communication skills.

Fearful speakers tend to display more low self-esteem than confident speakers. Fortunately, there are methods which can assist anxious individuals to secure more self-confidence in oral communication. For example, Ellis (1962) posited rational emotive therapy (RET), upon which cognitive restructuring is based, as beneficial.

Rational emotive therapy (RET) is one of several cognitive-behavioral treatments developed to alter communication-related anxiety (Fremouw, 1984). RET therapists presume that cognitive factors, such as irrational beliefs or expectations, directly mediate change in the physiological and motoric response channels.

One of RET's major components is self-acceptance. This trait is also a central concept in Rogers's (1951) theory of personality. Rogers asserted that the person who accepted himself or herself would have smoother relationships with others.

Unconditionally accepting oneself may be one means to the alleviation of oral communication apprehension.
McCroskey et al. (1976) reported that the level of one's self-acceptance tended to be an important aspect in the effectiveness of oral communication. Coons and McEachern (1967) noted that successful communication transactions were closely related to acceptance of self and others.

Rogers (1951) believed that self-concept and self-acceptance were relatively stable characteristics of personality (traits); however, other researchers have found evidence to indicate that these elements may be subject to change (i.e., personality states, rather than traits). Thorne (1954) suggested that self-acceptance could be influenced by environmental factors, while Coons and McEachern (1967) indicated that it may be modified by verbal conditioning. Oziel and Berwick (1974) found evidence that self-acceptance could be affected by self-reinforcement; Walter and Miles (1974) advocated that introspective analysis and awareness of the impact of one's behavior on others could positively influence self-acceptance.

As a result of these and similar findings, some speech educators have begun to develop and/or emphasize programs designed to address personality elements (Watson, 1983). Previously, most speech education involved only surface acknowledgement of these elements. For example, Weirich (1970) indicated that students should develop the ability to speak fluently with poise and confidence but...
did not mention how to achieve this goal. Henning (1960) and Kenner (1960) concurred, but again, their approach did not address remediation.

The traditional speech class guide or textbook has dealt with self-confidence on a superficial level only. Text objectives have involved the development of positive mental attitudes, confidence, poise, voice modulation, organization, eye contact, and expression of ideas. But again, the methods proposed have assumed that the student would learn to achieve well simply by experiencing the process outlined. They do not purport to affect the behavior in greater depth, as does cognitive restructuring, the method applied in this study.

Specific Problems Inherent in the Study

Numerous researchers have attempted to find, clarify, and synthesize different dimensions, characteristics, and etiologies of oral communication apprehension. Unfortunately, classroom application of these research findings has not materialized to any meaningful extent (Burgoon, 1976). Too large a percentage of students still evinces inhibiting oral communication anxiety (McCroskey, 1970).

One complex problem which blocks the development of appropriate measures for alleviation of oral communication apprehension is the difficulty of agreement on both definition and description of oral communication
apprehension. Another problem is the difference of opinion as to effective treatment. One school of thought advocates cognitive modification (Fremouw & Scott, 1979), while another adheres to systematic desensitization (McCroskey, 1972).

To reiterate, cognitive modification (restructuring) is a behavior modification method which involves: understanding of the rationale for the treatment; identifying negative, inhibiting behavior patterns; substituting positive, coping behavior; and practicing these new mechanisms for oral communication success (Fremouw & Scott, 1979).

Systematic desensitization is a behavior modification technique designed to alleviate anxiety responses by the use of relaxation. The anxiety is elicited through either fantasy or reality. The relaxation technique is then applied to counter the apprehension. In this way, coping responses which lead to higher confidence are learned.

The most successful treatment for oral communication apprehension may be a method which changes both attitudes and behaviors. Systematic desensitization appears to be effective in reducing anxiety related to speech situations only (Fremouw & Zitter, 1978). Cognitive restructuring, however, is reputed to be effective with subjects manifesting general communication anxiety (Meichenbaum, Gilmore, & Fedoravicius, 1971).
Discussion of Terms

The Communication Apprehension Construct

Various labels have been applied to the anxiety experienced in oral communication. Also, CA has been researched as both a cross-situational (personality) trait and an emotional state (Freimuth, 1976). Common terms referring to CA as a state include: stage fright (Clevenger, 1959), reticence (G. Phillips, 1968), shyness (Zimbardo, 1977a), audience sensitivity (Pavio, 1964), lack of confidence (Gilkenson, 1942), unwillingness to communicate (Burgoon, 1976), and communication apprehension (CA) (McCroskey, 1970).

Communication apprehension was chosen as the construct to be investigated in this study for three reasons. First, this construct (CA) has received considerable scholarly attention within a variety of disciplines (psychology, language arts, general education, and business administration, among others) and has been the most frequently studied construct in communication research. Second, the CA construct has been employed in recent research to encompass the spectrum of related constructs and behaviors, such as shyness (McCroskey, 1977, 1981). Third, the CA construct was recently reconceptualized by McCroskey (1981), making it more comprehensive.
Modifications to the Original Communication Apprehension Construct

In his original work, McCroskey (1970) assumed that his use of the term "communication apprehension" would be understood to cover speaking situations only, since he viewed CA as "a broadly based anxiety related to oral communication" (p. 269). However, two related research aspects evolved. In 1975 Daly and Miller posited "writing apprehension" as a construct and developed an instrument to measure one's desire to approach or avoid written communication. In 1978 Andersen, Andersen, and Garrison collected data on "singing apprehension" and developed an instrument to measure approach/avoidance toward singing.

Research supported the differences between these three constructs (Andersen et al., 1978; McCroskey, 1977, 1981) and culminated in a comprehensive definition of communication apprehension: "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1981, p. 192).

Trait Conceptualization of Communication Apprehension

Originally, the communication apprehension construct was viewed from a trait (personality) orientation (McCroskey, 1981), as evidenced by most of the research. In 1977 the CA construct was expanded to encompass both
trait and state manifestations (McCroskey, 1981). However, other studies (Beatty, Behnke, & McCallum, 1978; Parks, 1980) provided strong evidence that only "states" (situations) of communication apprehension exist.

In summary, while the CA construct was originally restricted to a trait orientation, it is now viewed as representing both personality and situational manifestations. McCroskey's (1981) recent reconceptualization of the construct makes the theoretical distinctions between the two behavioral domains clearer.

Related Concepts

CA is currently viewed by McCroskey (1981) as "a person's level of fear or anxiety associated with any form of communication with other people, experienced either as a trait-like, personality-type response or as a response to the situational constraints of a given communication transaction" (p. 3). Several other constructs have been advanced which are similar to CA. Stage fright and reticence predate the conceptualization of CA. The others—unwillingness to communicate, predispositions toward verbal behavior, shyness, and audience anxiety—were more recently posited by researchers. A discussion intended for the description and clarification of the above constructs ensues.
The term "stage fright" was the first label applied to the fear individuals experience in the process of public speaking or oral performance. However, the term lacked a satisfactory operational definition. Greenleaf (1947) defined it as follows: "Social speech fright is an evaluative disability, occurring in social speech situations, and characterized by anticipatory negative reactions of fear, avoidance, and various internal and overt manifestations of tension and behavioral maladjustment" (p. 6). Greenleaf applied the label to those who rated themselves high on an instrument designed to measure speech fright.

Similarly, Low (1950) defined stage fright as:

the emotional disturbance of the physical and mental behavior of the public speaker as it is manifest by the observable characteristics: poor eye contact, nervous hand movements, restless shifting of feet, awkward posture, body quiver, timid voice, embarrassment and other physical and vocal cues empathetically perceived. (p. 10)

While Greenleaf defined stage fright via self-reports, Low observed its overt behavioral manifestations. However, both researchers depended on an operational index for their definitions.

Even in light of the problems inherent in defining stage fright, some conclusions can be drawn regarding the construct. First, it has a relatively narrow domain, usually applying only to situations in which a rather
formal speech must be presented to an audience. Secondly, the negative reaction has to be considered relatively severe in order to qualify. In essence, stage fright can be viewed as CA in the public speaking context (McCroskey, 1981).

**Speech anxiety**

Communication-bound fear is also known by the broader term "speech anxiety," a label which was relatively popular in the 1960s and early 1970s (Behnke & Carlile, 1973; Blanchard, 1971; Friedrich, 1970; Lamb, 1972; McCroskey, 1970). The term includes anxiety experienced in both formal and informal situations. "Speech anxiety" includes cognitive, physiological, and observable avoidance behavior (Borkovec, 1976).

Speech anxiety is defined operationally by mode of measurement. Clevenger (1959) noted that "the measuring instrument in a stage fright experiment is not only the measurement of stage fright, it is the definition as well" (p. 135).

**Reticence**

"Communication-bound anxiety" is best discussed in relation to G. Phillips's (1968) concept of reticence: "avoidance of social, verbal interaction; unwillingness to communicate unless prodded; disposed to be silent; not
inclined to speak freely; reserved" (p. 40). This definition includes behavior rendering persons either unable or unwilling to speak (G. Phillips & Metzger, 1973).

G. Phillips (1968) originally conceived of reticence as quite phobic in nature. However, in 1973 he formally reconceptualized it. He had perceived a difference between situation-specific tensions (states) and the behaviors characteristic of the reticent (traits) (G. Phillips & Metzger, 1973). Because the term "phobic reaction" was commonly associated with a highly situation-specific state of anxiety, G. Phillips (1973) chose "reticent" to indicate a broader condition of avoidance.

Lamb (1972) illuminated communication-bound anxiety in the process of creating a comprehensive measuring instrument. He conceived of speech anxiety as a dichotomy:

Speech A-State may be defined as anxiety experienced in a speaking situation which is characterized by subjective, consciously perceived feelings of tension and apprehension and activation of the autonomic nervous system. Speech A-Trait, on the other hand, refers to relatively stable individual differences in the disposition or tendency to respond with elevations in A-State in a particular speaking situation. Speech A-Trait may also be regarded as reflecting individual differences in the frequency and intensity with which Speech A-States have been manifest in the past, and in the probability that such states will be experienced in the future. (p. 63)

Lamb (1972) also clarified the differences between
stage fright and reticence, which can be viewed as different focal points on a trait/state spectrum. Stage fright, or the fear of public speaking, is considered a state because it is situation-specific, it varies in intensity, and it fluctuates in time. Reticence can be considered a trait because it involves a personality syndrome which manifests in relatively stable individual differences in threatening oral communication situations.

**Unwillingness to communicate**

The construct "unwillingness to communicate" was posited by Burgoon (1976) to broaden investigation beyond CA and reticence. Cognitively based, unwillingness to communicate can be viewed as intermediary between CA and reticence. McCroskey (1981) simplified the comparison of the above three constructs:

Reticence is concerned with people who do not communicate effectively; unwillingness to communicate is concerned with one of the reasons why people may not do so (i.e., they do not want to); and CA is concerned with one of the reasons why people may be unwilling to communicate. (p. 5)

**Shyness**

There is no commonly-accepted definition of the shyness construct, as yet. Zimbardo (1977b) referred to it as a feeling of discomfort in a variety of communication situations, a cognitive orientation very similar to CA. Conversely, Pilkonis (1977) included
elements which would overlap into several conceptual
categories but not be restricted to any one. Buss (1980)
viewed shyness as "the relative absence of expected social
behaviors" (p. 184). His conceptualization is related to
both CA and reticence. McCroskey (1981) was led to
conclude, after much research, that "shyness does not
represent a single construct, but rather is a label that
has been applied to a variety of disparate constructs"
(pp. 6-7).

Audience anxiety

This is both the newest conceptualization related to
CA and the one most similar to stage fright. It was
viewed as "fear, tension, and disorganization in front of
an audience" by Buss (1980, p. 165). But unlike stage
fright, this construct includes anxiety related to
meetings. Buss's concept of shyness and audience anxiety
represent a two-part subdivision of CA.

In summary, (a) the most comprehensive of the above
constructs is reticence; (b) reticence partially encom-
passes unwillingness to communicate; (c) communication
apprehension is one of the elements leading to unwilling-
ness to communicate; (d) stage fright and audience anxiety
are viewed as subconstructs of CA; and (e) shyness, depend-
ing on the situation, can be used as an equivalent term for
the other constructs.
Reconceptualized Communication Apprehension Construct

Most of the communication-oriented research studies conducted in the past decade have dealt with "trait-like" communication apprehension: "a relatively enduring personality-type orientation toward a given mode of communication across a wide variety of contexts" (McCroskey, 1981, p. 10). This type of communication apprehension most closely resembles the original construct, which was viewed as having a strict "trait" orientation, rather than being "trait-like." McCroskey (1981) was explicit about the difference:

The term "trait-like" is used intentionally to indicate a distinction between this view of communication apprehension and one that would look at communication apprehension as a true trait. A true trait, as viewed here, is an invariant characteristic. . .such as eye color and height. No personality variable. . .meets this strict interpretation of "trait." (p. 10)

McCroskey (1981) also asserted that individuals can experience "generalized-context" communication apprehension in some situations only: "This view recognizes that people can be highly apprehensive about communicating in one type of context while having less or even no apprehension about communicating in another type of context" (p. 10).

McCroskey and Richmond (1980) specified four types of "generalized-context" communication apprehension: (a) speaking in meetings or classes, (b) speaking in small
group discussions, (c) speaking in dyadic interactions, (d) speaking before an audience. Each category was intended to delineate a context in which communication apprehensive individuals experience the greatest fear or anxiety. McCroskey's (1981) Personal Report of Communication Apprehension-24 (PRCA-24) utilizes these categories in its subgroupings.

McCroskey (1981) defined "situational" communication apprehension as "a transitory orientation toward communication with a given person or group of people" (p. 11). "Situational" CA is very specific in regard to time, communicant, location, or topic. "Person-group" communication apprehension, affected by length and depth of familiarity, tends to be a function of situational concerns, rather than an element of personality (trait).

The Self-Acceptance Construct

Self-acceptance has been postulated by this writer as the intended result of the employment of a cognitive modification unit in high school speech class. Berger (1952) characterized self-acceptance behaviorally as:

1. Relying primarily upon one's internalized values as a guide and motivator.
2. Believing in oneself to successfully handle life.
3. Assuming responsibility for and consequences of one's behavior.
4. Remaining objective about others' reactions to oneself.

5. Accepting one's thoughts, feelings, and actions without guilt.

6. Considering oneself equal to others.

7. Not anticipating rejection for any reason.

8. Regarding oneself the "same" as others.

9. Not being shy or self-conscious.

Unconditional (without any requirements or conditions) acceptance of self can be accomplished by merely choosing it (Ellis, 1962, 1972; Ellis & Grieger, 1977).

Definitions of Variables and Related Terms

The following terms are all relevant to the present study, either as variables or integral concepts.

Oral Communication Apprehension

Oral communication apprehension is defined by McCroskey (1978) as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (p. 192).

Cognitive Restructuring

Cognitive restructuring is a behavior modification approach which includes: understanding of the rationale for the treatment; identifying negative, inhibiting
patterns; substituting positive, coping behavior; and practicing these new mechanisms for success (Fremouw & Scott, 1979).

**Speech**

Speech is "the integration of spoken words, voice, and action for the purpose of effective and accurate communication of ideas and feelings" (Henning, 1960, p. 5).

**High School Speech Courses**

High school speech involves the following courses. These courses, as variables, are included under the term "type" in the statistical aspect of this study.

**Speech**

A course designed to enhance the speech skills of high school students by providing an opportunity to prepare, deliver and be evaluated on different types of speeches. The course was primarily molded to the needs of the college bound and/or academically motivated student. It transpired over one semester (approximately 20 weeks), as did the other courses.

**Speech Skills**

A course designed to meet the needs of the vocationally oriented student, the academically unmotivated, the
excessively shy person, and one who may have already attempted Speech and failed. These students feel safer in the group-work mode than in the traditional public speaking position, in front of the class.

**Debate**

A course which attracts the more outgoing student who is usually motivated scholastically and college-bound. Because of scheduled competition, the course appeals more to the aggressive individual than most of the other speech courses do.

**Theater Arts I/II**

Courses which may be taken only as electives. The classes are held in an environment with access to a stage, whereon skits, scenes, or plays are performed. Props, costumes, and make-up may be employed in the process.

**Self-Confidence**

Self-confidence includes extremely low fear levels and involves such personality elements as dominance, social adjustment, self-satisfaction, independence, emotional control, and personality integration. Self-confidence as a speaker is one's assurance of his or her abilities to engage in oral communication effectively.
Methods of Treatment

Methods of treatment for oral communication apprehension are varied. However, three major approaches are: (a) systematic desensitization; (b) skills training; (c) cognitive modification (restructuring). In the present study this researcher utilized the latter approach, combined with skills training. A discussion of this subject is developed in depth in Chapter II.

Although many researchers have investigated a relationship between low self-acceptance and high communication apprehension, few have attempted to develop a method to alleviate oral CA. Instruction to increase self-acceptance for this purpose is a relatively new idea (Watson, 1983).

Basic Assumptions

The basic assumptions of this study were as follows:

1. The school district would allow an experimental study of this nature to be attempted within the speech program. Allowance of this study required approval from the assistant principal and the individual speech teachers involved.

2. The difference in environmental factors during pretesting and posttesting would be so negligible that it would not significantly affect the outcome of the study. The physical factors—lighting, temperature, and
seating—were similar on both occasions, since the maintenance and funding systems of the facility did not change perceptibly during that time period.

3. Students would be assigned randomly to speech class periods by computer. This was the accepted practice among the administration and guidance counselors.

4. The self-assessment index employed (PRCA-24) was the best instrument available for measuring the level of oral communication apprehension. Its reliability and validity had been reported by McCroskey (1981), and it had been used extensively in similar research projects.

5. The findings would be generalizable to a larger population.

Significance

As was intended, the results of this study were relevant in the following ways:

1. The findings were pertinent to an important educational problem.

2. They supported existing theories in the literature.

3. The findings indicated a relationship between the variables.

4. They added knowledge to the field of study.

5. The results were of interest to the speech teachers involved.
6. They were of interest to the students involved.
7. The findings can be employed in the future to help identify students with relatively high levels of communication apprehension. In this way teachers can better assist these students to alleviate this problem.

Summary

In Chapter I this investigator has posited that oral communication apprehension (CA) is a major problem affecting many individuals who function in adaptive ways within their social and occupational environments. The study of CA has evolved from the narrow concern with stage fright within particular situations to the exploration of CA as a general personality trait or syndrome. The various constructs related to oral communication apprehension were discussed, and a rationale for the employment of that particular construct (CA) in this study was presented. In Chapter II the relationships between the variables in the study are reviewed.
CHAPTER II

REVIEW OF SELECTED LITERATURE

Presented in this chapter is a review of literature related to oral communication apprehension and its alleviation by the raising of self-acceptance. The primary focus is a discussion of cognitive restructuring as the preferred alleviation method for the purposes of this study.

The Importance of Effective Speech

The ability to speak effectively is among people's most important behaviors. If the human community is to master this art, people must be knowledgeable of the nature, structure, and function of speech, according to Wallace, Smith and Weaver (1963). Yeomans (1967) posited that approximately 30% of communication time is spent in talking. He further suggested that vital international factors, such as world peace, trade, and travel, depend heavily upon the effective use of the spoken word. In fact, this skill may even save mankind from annihilation in the future.

Today's society strongly emphasizes the ability to speak clearly, assertively, and interestingly. Wallace et al. (1963) noted that people are expected to be...
capable of speaking "in ways that resolve misunderstandings and that express clear preferences" (p. 332). A speaker should also be able to aid in adjusting "ideas to people and people to ideas" (p. 332).

One would assume that any comprehensive education curriculum would include at least fundamental speech instruction; this assumption, however, is basically unfounded. Wallace et al. (1963) observed that large numbers of secondary school and college graduates face a variety of situations requiring speech skills "with powers far under their abilities" (pp. 334-335).

In 1958 the results of a questionnaire developed and administered by Bailey revealed that personnel directors in business and industry and English department chairpersons in postgraduate schools felt that candidates for their interviews needed more formal speech training than they had been receiving. In the same year Bond (1958), in a study designed to discover the contrasts between superior and below-average teaching performances, showed a sufficiently close relationship between effective speech and teaching success. Bond suggested that educational institutions should better prepare all teachers in oral communication skills.

American educational systems tend to recognize the importance of speech instruction, yet even where it exists, no commonly-accepted speech curriculum format

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prevails. Therefore, curricula vary as to kind of speech class and amount of training either suggested or required.

In 1960 Kenner noted that the aim of a good speech program was "to help the student acquire the ability to stand before an audience with ease and confidence and to speak pleasingly, clearly, and confidently to them" (p. 34). Henning (1960) added the acquisition of "personal control" to the above purpose (p. 5).

In the 1970s the basic aims of the traditional speech program in the United States were beginning to be affected by behavior modification theory. Weirich (1970) asserted that all students must develop the ability to speak "fluently with poise and confidence" (p. 64), a traditional speech class approach. However, he further stressed that a speech course should develop practical skills that assist one's personal growth and maturity. In addition, Furr (1970) saw a close relationship between speech skills and the shaping of personality.

Christie (1971), in a survey of high school teachers and students, found evidence to support the inclusion of speech skills improvement methods in curriculum planning. The importance of self-confidence in speech began to be stressed by Herbold (1971). He stated that a speech course should aid a student in making a better adjustment to the speaking situation.
The value of combining traditional speech instruction with cognitively-based remedial treatment seems well supported in the current literature. This subject is addressed in depth in the section "Methods of Alleviation of Oral Communication Apprehension" in this chapter. However, the following discussion of the oral communication apprehension construct allows better focusing on the modern speech class issue of how best to alleviate anxiety in speech situations and concurrently raise self-acceptance.

Oral Communication Apprehension

Numerous researchers have suggested that communication apprehension (CA) is pervasive throughout the populace; it impacts on personality, social, and occupational behavior; it affects student attitude and achievement. Researchers since Lomas (1934) have studied this debilitating condition in its many aspects. Different methods for the alleviation of CA have been developed.

Cognitive modification (restructuring), systematic desensitization, and skills development are among the more common alleviation methods employed by modern researchers, reported Glaser (1981). Each type of treatment is reputed to work well with certain kinds and levels of CA. In this study the researcher has facilitated the utilization of cognitive modification for the
enhancement of self-acceptance; this effort, in turn, attempted to raise self-confidence, thereby lowering oral communication apprehension.

Definitions

Following are definitions and/or discussions of oral communication anxiety-related constructs. These constructs, all commonly employed by speech researchers, include oral communication apprehension, the anxiety-related construct investigated in this study.

Stage fright

Definitions of constructs related to oral communication apprehension are varied. The earliest in the literature is that of stage fright. For example, Greenleaf (1947) defined stage fright as "an evaluative disability, occurring in social speech situations, and characterized by anticipatory negative reactions of fear, avoidance, and various internal overt manifestations of tension and behavioral maladjustment" (p. 36).

Gilkinson (1942) observed listlessness and lack of eye contact among behaviors which he deemed symptoms of stage fright. Jones (1948) listed forgetting, confusion, weakness, pounding of the heart, fear of audience disapproval, fear of failure, and insecurity about speech materials as evidence for high levels of stage fright.
Low (1950) described emotional disturbance in the public speaker in terms of poor eye contact, body quiver, timid voice, and embarrassment, among physical and vocal cues.

Reticence

Speech anxiety has been viewed as one behavioral manifestation of the reticent individual. G. Phillips (1968) originally described the reticent person as "one for whom anxiety about participation in oral communication outweighs his projection of gain from the situation" (p. 40). Reticence is viewed as a learning and communication problem highly related to the individual's perception of self and of social situations. Therefore, reticence can be considered a syndrome involving a whole pattern of behaviors, a general learned orientation toward communication situations.

Speech anxiety

Borkovec (1976) included cognitive and physiological arousal, overt manifestations of arousal, and observable avoidance behavior in his definition of speech anxiety. This conceptualization requires the multiple measurement of three separate but related "response channels": the cognitive, the behavioral, and the physiological.

Two aspects of speech anxiety that can be viewed as learning-based are: (a) inadequate self-esteem which
leads to lack of security in communication situations, and (b) inadequate knowledge of appropriate responses or rules in communication situations (Giffin & Bradley, 1969). More recent definitions by G. Phillips (1980) have included causative agents (such as lack of skills development) which help to generate anxiety.

Unwillingness to communicate

Burgoon's (1976) definition of oral communication apprehension—an unwillingness to communicate—was similar to that of reticence; he noticed a global predisposition to avoid oral communication. Like G. Phillips (1980), Burgoon dealt with potential causative elements which could lead to alienation, apprehension, introversion, and low self-esteem.

Communication apprehension

Communication apprehension, as defined by McCroskey (1977), is "an individual's level of fear or anxiety about real or anticipated communication with another person or persons" (p. 76). CA may be considered a subconstruct of reticence and of unwillingness to communicate (McCroskey, 1981). It specifies only anxiety and/or fear as the causative agent.
State Versus Trait Controversy

The "state versus trait" controversy over oral communication apprehension has caused dissension among researchers. An understanding of its two schools of thought is vital in coming to terms with the most recent thinking on the subject.

In general, researchers with a trait orientation view oral communication anxiety as a personality component which is basically stable over various situations (cross-situational). Those researchers with a state-oriented view approach CA as a behavior which varies with the situation (situation-bound) (e.g., public speaking as opposed to dyadic exchange).

Giffin and Bradley addressed the issue in 1969:

The concept of general anxiety may be perceived as being related to the concept of general adjustment. Measures of general anxiety have not been entirely successful when anxiety was conceptualized as a personality dimension; it may be more profitable for researchers in this area to view general anxiety as a syndrome composed of a number of specific anxieties which are situation-bound, the degree of anxiety dependent upon the perceived importance of a given situation. Thus, speech anxiety may be conceptualized as a part of a larger pattern of general anxiety. (pp. 23-24)

Speilberger (1966) and Lamb (1972) have related state-oriented CA to a concern about performing in front of an audience or participating in a business interview. "Stage fright," as outlined by Gilkinson (1942) and Clevenger (1959), may be common to most people and
considered "normal," during public performances. Trait-oriented CA, however, is characterized by pervasive fear or anxiety toward many different types of oral communication situations and is considered more severe and debilitating.

Many research studies using various methods of treatment for CA have been related to public speaking rather than to cross-situational communication. Watson (1983) contended that public speaking anxiety may be more definitely categorized as state anxiety, while CA is cross-situational, involving more than one area of difficulty. The present study was directed more toward the alleviation of cross-situational anxiety, rather than state-oriented CA, such as that experienced in public speaking.

Causes of CA

Although the causes of oral communication apprehension are not conclusively specified by most of the sources, some studies purport that CA may be learned early in life through negative experiences. Daly and Friedrich (1981) posited that in the formative years there are three causes of specific communication behavior (such as CA)--(a) reinforcement, (b) modeling, and (c) skills acquisition--in two influential environments: (a) the home and (b) the school.

Reinforcement is the first causative factor. For
example, if a child is rewarded (positive reinforcement) for his or her oral communication performance, he or she is likely to continue that behavior. On the other hand, if the child is punished (negative reinforcement) or ignored, he or she will probably associate oral communication with unpleasant reactions from significant others and develop ways to avoid these experiences, such as remaining silent or saying what he or she believes others wish to hear.

Modeling is the second causative factor in the development of oral communication skills, according to Daly and Friedrich (1981). Talkative behavior or quiet behavior may develop through imitation.

The third causative factor is skills acquisition. If a child is taught oral communication skills, he or she may use them to his or her advantage. Conversely, the child who does not have this opportunity may avoid occasions where these skills are expected to be used.

The two environments in which the three causative factors of oral CA may develop are the home and the school. The home environment is the primary arena for the development of communication skills. Differences in attitudes toward roles and status in the family, levels of interpersonal communication interaction, and social habits and activities may determine the effectiveness of a child's oral communication. For example, G. Phillips
and Butt (1966) suggested that a disproportionately large number of college students from first and second generation ethnic families experience high levels of oral communication apprehension.

The school, too, provides situations for oral success or failure. The child who consistently volunteers correct answers and positive comments is usually rewarded. However, excessively quiet or orally disruptive children usually meet with less favor from teachers.

Correlates of CA

Appropriate measures and oral communication apprehension and methods of alleviation are difficult to develop without more exact identification of the construct. CA has been described as a personality-oriented variable, but commonly applied personality measures do not necessarily provide for the isolation of this construct. However, McCroskey and Richmond (1979) and Rosenfeld and Plax (1976) are known in the field for their landmark studies which have furthered the identification and understanding of previously isolated dimensions of personality related to CA.

McCroskey and Richmond (1979) attempted to correlate the oral communication apprehension construct with personality variables of 99 basic college speech students.
They employed a factorially-derived measure of 16 dimensions of personality (Cattel, Eber, & Tatsuoka, 1970) and McCroskey's (1970) Personal Report of Communication Apprehension (PRCA), a self-report of attitudes toward communication situations. In addition, 189 teachers were administered: (a) the PRCA; (b) measures of dogmatism, Machiavellianism, necessity for achievement, and tolerance for ambiguity; and (c) an index of internal-external locus of control.

The study revealed significant correlations between CA and 18 of the personality variables measured. CA was found to be positively correlated with anxiety, dogmatism, and external control, but negatively correlated with the other variables, such as confidence and need to achieve. Trustfulness and Machiavelliansism were also found to be related to CA. Ultimately, no one dimension was established as a CA dimension; the research results strongly support the theory that CA is broadly related to one's total personality.

Rosenfeld and Plax (1976) attempted to isolate the most discriminating aspects of reticence as a personality trait. The Phillips and Ericson "R" Scale (1964) and the Shutz Fundamental Interpersonal Relations Orientation-Behavior Test (1958) were administered to 219 basic speech undergraduates. Next, seven separate personality measuring instruments (indexing 53 variables) were used
in conjunction with 32 identified reticent communicators.

The results of the study identified reticent individuals as low on dominance, social self, nurturance, physical appearance, physical skills, affiliation, and socialization. In addition, the reticent subjects tested high on deference, relationship consistency, and achievement via conformance. The findings suggest that reticence belongs to a relatively specific personality configuration.

Other research added insight into certain personality variables. Huntley (1969) found evidence to support a positive correlation between CA and introversion. More importantly to the present study, Lustig (1974) found negative correlations between CA and self-acceptance. Several researchers have found a strong relationship between low self-esteem and high CA (Lustig, 1974; McCroskey et al., 1977; Snavely & Sullivan, 1976).

Effects of CA

The assumption that people vary in the degree of apprehension about oral communication has been supported in research cited by McCroskey (1978), among others. The effects of CA are known to be manifest in personality characteristics, social and demographic qualities, sex differentiations, educational attitudes, and achievement or failure.
McCroskey and Leppard (1975) found that high oral apprehensives chose housing in areas requiring little oral interaction, and Weiner (1973) found that high CAs selected seating requiring low oral exchange. Sheahan (1976) reported that high CA adversely affected subjects' willingness to register and vote.

McCroskey and Andersen (1976), Scott, Yates, and Wheeless (1975), and McCroskey and Sheahan (1976) all reported findings indicating that high communication apprehension influenced educational and social choices. Daly and McCroskey (1975) found a correlation between communication apprehension, occupational choices and job satisfaction.

McCroskey and Kretschmar (1977) discovered that communication apprehension affected dating and marriage choices. CAs interacted little with peer strangers and were more likely to engage in exclusive dating. Hamilton (1972) found that high oral communication apprehensives engaged in little self-disclosure, therefore lowering their chances of intimacy.

Wells and Lashbrook (1970) and Weiner (1973) observed that the comments of high communication apprehensives in interpersonal and group conversations were less relevant to the topic at hand than those of the other participants; Sorensen and McCroskey (1977) found that high CAs exhibited more tension than nonapprehensives did; Powers (1977)
indicated that CAs talked less in groups, included more rhetorical interrogatives (e.g., You know? Okay?), and indulged in less self-disclosure than non-CAs; and Jablin and Sussman (1978) noted that CAs produced fewer original ideas in brainstorming groups than their non-CA counterparts.

High oral communication apprehensives were also perceived as lacking in credibility and interpersonal attractiveness (Quiggins, 1972); leadership ability (Wenzlaff, 1972); leadership and friendship qualities (Hurt et al., 1976); and the ability to succeed in academics and business (Daly & Leth, 1976; McCroskey & Daly, 1976).

McCroskey's (1977) respondents rated communicative apprehensive subjects low in assertiveness and responsiveness, warmth, dependency, communicativeness, discipline, reason, familiarity, task orientation, and professionalism. Negative aspects cited by the participants indicated that they viewed CAs as less socially, communicatively, physically, and task attractive; less competent; and less composed than non-CAs.

A demographic study by Richmond and Robinson (1977) found that children raised in rural areas were more likely to realize high communication apprehension than their urban counterparts. They also had more difficulty in conforming to the communication norms of their schools than nonrural students (Grutzeck, 1970).
Communication apprehension is particularly relevant to academic accomplishment. Low and Sheets (1951), in their research on the relationship of psychometric factors to stage fright, found that high CAs exhibited low ability to manipulate verbal concepts and scored significantly lower on the linguistic portion of the test. Scott and Wheeless (1977) found noticeable differences between CAs and non-CAs in classroom achievement.

McCroskey and Andersen (1976) found that CA students were likely to gravitate toward large lecture classes to avoid teacher contact. Moreover, McCroskey (1977) observed that high CA subjects preferred jobs requiring little communication, even over occupations of higher status and remuneration.

Students affected by CA were found to have developed negative attitudes toward secondary school and college (McCroskey & Sheahan, 1978). Hurt et al. (1976) found CA to be significantly correlated with attitudes and grades in junior high school. In fact, negative attitudes increased and grades fell correspondingly with levels of CA.

**Measures of CA**

Instruments to measure communication apprehension and its related constructs have been developed by several different methods. However, the chief means of assessment

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of CA are observer rating scales, introspective measures and physiological measuring devices. In the findings of Dickens, Gibson, and Prall (1950) reliability of judges' rating techniques was found to be quite low, thus affecting the validity of that type of measurement. Clevenger (1959), too, found evidence that observer ratings lack accuracy.

Devices for measuring physiological changes during speaking were successfully employed by Porter (1973). However, these instruments are expensive and therefore impractical. Also, Porter experienced some difficulty in obtaining indices for all types of speech transactions. In any case, he recommended the continued use of physiological measuring devices in conjunction with other types of instruments.

More success in communication research has been attained via the self-report measure. This type of instrument is efficient to administer and analyze, and it has yielded relatively high validity.

The Personal Report of Communication Apprehension

The PRCA-24 was selected as the most appropriate measure for this study. It was developed by McCroskey (1981) through several revisions. Based on his research in conjunction with Friedrich (1970), McCroskey (1978) asserted that multidimensionality must be considered of
major import in developing a self-rating measure.

Several variations of his Personal Report of Communication Apprehension (PRCA) are available for the best fit with specific groups, but McCroskey (1981) recommends the relatively-new PRCA-24 (24 items) for general use.

The instrument is constructed of four 6-item sub-categories of communication situations: group, meeting, dyadic, and public speaking. The items vary in wording, rotating from positively- to negatively-worded statements to avoid response bias. The instrument yields both total and subscores.

One important issue which has frequently been addressed in the literature is the question of the validity of the Personal Report of Communication Apprehension. In 1970 McCroskey reported the development of the PRCA and its variations. While its validity was verified to his satisfaction, McCroskey suggested that future research was needed to test its reliability and unidimensionality.

In 1978 McCroskey published a review of the research, concluding that the PRCA was indeed reliable and valid. Daly (1978) supported him in that, of the 14 instruments he had assessed, the PRCA was the most encompassing.

In 1978 Beatty et al. challenged McCroskey's (1977) assumption that communication apprehension is a stable trait (not influenced by situational factors). In 1980
Parks asserted that no real evidence of the cross-situational consistency of communication apprehension had been verified. McCroskey et al. (1976) had admitted that while a great number of studies had used the PRCA, most had examined narrow situations of CA, such as public speaking. Few studies had examined the effects of communication apprehension in dyadic, intimate, or established relationships (McCroskey & Sheahan, 1978). However, Parks (1980) concluded that while the PRCA did not meet his qualifications for a measure of cross-situational consistency, efforts to design a cross-situationally consistent trait measure might be futile.

McCroskey's (1981) most recent stance is the advocacy of the expanded view of the communication apprehension construct to encompass both personality trait and emotional state:

No element of personality yet isolated by psychologists or others has been found to have universal predictability across all situations for all individuals. Similarly, no situation has yet been identified in which we can predict a universal behavior from all individuals.... Thus, it is important that we reject this false state-trait dichotomy and view the sources of CA on a continuum. (p. 9)

McCroskey's (1981) PRCA-24 is intended to be an improvement over his former PRCA's because it covers and identifies broader communication contexts. This new instrument better satisfies the demand for face validity, and McCroskey suggests that it replace the other versions.
Effective methods of alleviation of oral CA have been hampered by the confusion generated by the lack of agreement on both a definition and a means of addressing the problem (A. Watson, 1983). However, modern methods are finally being developed which seem to be more effective than the limited approaches formerly available to and practiced in the traditional speech class. Those traditional practices, such as coercing the anxious student to perform, have frequently compounded his or her fear, rather than alleviating it.

Two dominant schools of thought in the alleviation of oral communication apprehension coexist. First, the communication anxiety/behavior therapy school is advocated by McCroskey and his colleagues (McCroskey, 1977). These researchers hold that high oral anxiety is a primary cause of CA. Second, the speech-rhetoritherapy school, advanced by G. Phillips and his associates, focuses on dysfunction of rhetorical processes, rather than anxiety (G. Phillips & Solokoff, 1979).

Primary among the tenets of the anxiety-therapy school is the belief that anxiety is a learned response that may hamper one's effectiveness in communication situations (McCroskey, 1977). Behavior therapy methods designed to reduce this anxiety include systematic
desensitization (McCroskey, 1972), cognitive modification (restructuring) (Fremouw & Scott, 1979), and rational emotive therapy (Ellis, 1962; Karst & Trexler, 1970; Meichenbaum et al., 1971). Cognitive modification is based on RET (rational emotive therapy).

The following section of the literature review includes a discussion of the speech-rhetoritherapy school and proceeds to the literature more relevant to this study, that related to the communication anxiety/behavior therapy school of thought.

Speech-Rhetoritherapy School

The proponents of the speech-retticent rhetoritherapy (skills development) school purport that anxiety is not the cause of dysfunctional communication. Disfunctional communication presumes a medical model instead of an instructional one. In the view of the rhetoritherapy school, (a) minimal anxiety provides minimal motivation, and (b) treatment of severe anxiety belongs to psychiatry. Thus speech teachers should develop rhetoritherapy programs to address dysfunctional oral communication rather than programs to alleviate anxiety (Page, 1980; G. Phillips, 1977).

Speech skills training

Rhetoritherapy, or skills development, includes:
(a) a description of a student's behavior; (b) a description of others' reactions to him or her; (c) the setting of communication goals; and (d) the development of relevant speech skills training (G. Phillips; G. Phillips & Metzger, 1973). One behavior which has been addressed by researchers through skills training is dating anxiety.

**Dating anxiety**

Heterosexual-social, or dating, anxiety is generally conceptualized by researchers as having three basic components: (a) anxiety (L. Kelly, 1984); (b) skills deficit (Curran, 1977); (c) faulty cognitive-evaluative appraisal (Bander, Steinke, Allen, & Moser, 1975; Clark & Arkowitz, 1975). Dating anxiety can be alleviated by skills training.

**Skills training for dating anxiety**

Skills training for heterosexual-social anxiety has followed one of two approaches: the response-practice approach or the response-acquisition approach (Curran, 1977). The response-practice approach assumes that individuals have necessary social skills and simply need more practice. The response-acquisition approach presumes that individuals have inadequate behavioral repertoires. This deficit produces anxiety (Kanfer & Phillips, 1970) and avoidance. Curran and Gilbert (1975) found that

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dating skills training significantly improved interpersonal abilities by helping to alleviate dating anxiety. Another problem which can be helped by skills training is assertiveness deficit.

Assertiveness deficit

Many people lack the ability to obtain what they desire or to manage others in conflictual situations. Orally unassertive individuals fear rejection or retaliation. A skills training technique for the alleviation of assertiveness deficit is assertiveness training. Assertiveness training can provide speech skills to enhance self-confidence.

Assertiveness training

Broad conceptualizations of assertiveness have been proffered by Lazarus (1973) and Adler (1977). Lazarus divided assertiveness into specific response patterns, which included the abilities to: (a) say "no"; (b) ask for favors or make requests; (c) express positive and negative feelings; and (d) initiate, continue and terminate general conversations.

To Adler (1977) assertiveness was the ability to communicate one's thoughts and emotions with confidence and skill. Adler attested that: (a) assertiveness is a skill, (b) one needs a wide repertoire of techniques for
expressing assertively, (c) the expressed thoughts and feelings can be either positive or negative, (d) confidence implies courage rather than fearlessness, and (e) assertion is not aggression.

Assertion can be learned through skills training (L. Kelly, 1984). This training includes behavior rehearsal (McFall & Lillesand, 1971; McFall & Marston, 1970); covert modeling (Kazdin, 1974); practice, modeling, and instructions (Hersen, Eisler, Miller, Johnson, & Pinkston, 1973); and behavior/cognitive therapy and consciousness raising in women (Wolpe & Fodor, 1977). The content of these skills training programs varies widely, and more research is necessary to address their weaknesses (L. Kelly, 1984).

Shyness

Zimbardo, Pilkonis, & Norwood (1975) conceived of shyness as "an attribute which spans a wide behavioral-emotional continuum" (p. 70). One who is shy lacks adequate social skills, fears negative evaluation, lacks self-confidence, has low self-esteem, and experiences anxiety. Shyness can be somewhat diminished by speech skills training.

Social skills deficit

One has a social communication problem if he or she
lacks one or more of the social skills cited by J. Kelly (1982): (a) the facilitation of relationship development, (b) the occurrence of nonsocial reinforcement, (c) the prevention of the loss of current reinforcement, and (d) the ability to perform effectively in a variety of situations by adapting to the unique and normative characteristics of the situations.

L. Kelly (1984) stated that social incompetence could be due to inadequacies in one or more of Argyle's (1981) eight skill areas:

(1) the ability to perceive others accurately; (2) the ability to take the role of the other; (3) the ability to communicate one's attitudes and emotions nonverbally; (4) the ability to provide others with reinforcement and rewards; (5) the ability to plan goals and modify behavior as necessary while pursuing those goals; (6) the ability to send signals that accurately present one's role, status, and other aspects of identity; (7) the ability to analyze situations and their rules in order to adapt behavior; and (8) the ability to make utterances that fit into the orderly sequence of interaction. (pp. 192-193)

The lack of social communication skills can be somewhat ameliorated through speech skills training.

**Public speaking anxiety**

Research on the effectiveness of skills training as a treatment for public speaking difficulties has been extremely limited; therefore, it is not possible to draw any real conclusions yet (L. Kelly, 1984). However, the following studies are relevant.
Pilkonis (1977) posited that difficulty with public speaking was the result of internal anxiety-producing behavioral disruptions due to lack of skill. Another program initiated to help reticent speech students was that of G. Phillips and Metzger (1973) and G. Phillips (1977, 1982) at Pennsylvania State University. The program combined instruction, goal setting, behavioral rehearsal, in vivo assignments, and feedback. Students selected problem areas, set increasingly more difficult communication goals, engaged in classroom discussion, practiced behaviors, and attempted to complete goals outside the classroom. The method of treatment was based on research on reticence.

Reticence

Reticence is considered a communication problem strongly influenced by one's perception of self in social situations. G. Phillips (1977) conceptualized reticence as avoidance of and ineffectiveness in a variety of communication situations due to inadequate social skills. The skills he required for competent communication performance are very similar to those posited by Argyle (1981).

One of the major causes of reticence appears to be inadequate knowledge of appropriate communication responses or rules (Katz, 1979). This is demonstrated by
indecisiveness, among other behaviors. G. Phillips and Metzger (1973) made the following observations:

Indecisiveness appears to result, in most cases, either from not being aware of what the communication requirements are in a given situation, or from understanding the requirements but not knowing what behavior is needed at a given time and place. We could consider reticence to be the result of inadequate communication training in the home and in early school experiences, and declare that there might be some readiness point at which such training is most effective and what time it was not offered.

We could thus hypothesize that reticent people do not have appropriate orientations because they either have not learned any at all, or because they learned inappropriately. G. H. Mead's conception that we form our identities from the responses of others appears to be contingent on the idea that awareness of the behavior of others is crucial. The individual who does not have the ability to perceive or interpret the cues of others cannot use the cues of others as guides to his own behavior. This might well explain why so many reticent communicators see their problems as exclusive to themselves. If we accept this model, we would need to teach the reticent student what to look for in the behavior of others, as well as how to respond to it. Thus, training in perception would be an important element. (p. 225)

Treatment methods should attempt to shape expected and appropriate social behavior. Then the reticent student may succeed socially and enhance his or her self-esteem. If self-worth is to be learned in a social context, it must be a supportive one. One needs non-threatening feedback to improve in awareness of social expectations. This may be accomplished in a structured speech classroom (G. Phillips & Metzger, 1973).

Fawcett and Miller (1975) also demonstrated the social validity of skills training for public speaking.
Other researchers compared skills training and related methods of treatment. Wright (1976) compared two methods of social anxiety modification—systematic desensitization (SD) and social skills training—to help subjects more comfortably participate in class discussion. He found significant improvement reflected in self-report scores. Wright also found social skills training superior to SD and no-training (on observer ratings in a role-play simulation). A comprehensive review of the skills training technique and its specific applications was reported by Hersen and Eisler (1976).

Taugher (1981) tested the therapeutic use of poetry in the reduction of communication apprehension. He found that a skills training program significantly reduced CA levels (as registered on self-report and behavioral observation measures). Some researchers have focused on speech-anxious participants training each other (Fremouw & Harmatz, 1975) and oral reading (Zolten & Mino, 1981).

Several succeeding studies (e.g., Metzger, 1974) support the effectiveness of skills training programs as therapeutic for the reticent student. However, they have lacked sufficient methodological discipline and must therefore be accepted only tentatively (L. Kelly, 1984). In general, research on skills training has usually focused too broadly on the reduction of anxiety and too narrowly on its relationship to improving performance.
effectiveness (L. Kelly, 1984).

The Communication Anxiety/Behavior Therapy School

Speech-rhetoritherapy (skills development) can indeed effect some improvement in the alleviation of speech-related anxiety as demonstrated by the above discussion. However, skills training is more effective in treating situation-specific anxiety (a state) than cross-situational anxiety (a trait). McCroskey (1981) has identified CA as "trait-like" in nature, rather than state-like. The communication anxiety/behavior therapy school of thought in the alleviation of CA advocates two treatment methods which reputedly are more effective than skills training in addressing trait-like CA: systematic desensitization (SD) and cognitive modification. Weissberg and Lamb (1977) found that systematic desensitization and cognitive modification were effective in reducing anxiety levels.

Systematic desensitization

One of the most common means of remediation for oral communication apprehension is systematic desensitization (SD). McCroskey and Wheeless (1976) credit SD with an 85% success rate in reducing CA. Its effect appears to endure over time and can be achieved economically, compared to that of other treatments. The psychologist
Wolpe (1958) was one of the first to report the success of SD in treating oral communication anxiety.

Communication anxiety is believed to begin when an individual is subjected to a negative reaction from his or her environment. CA is reinforced by further negative responses until conditioning occurs. Thus a communicatively apprehensive person will feel anxious communicating in threatening (self-perceived) situations (Ickes, 1971). The anxiety manifests in psychological/behavioral reactions contributing to deficient oral performance.

Underlying the use of SD as a treatment is the assumption that an anxiety response can be alleviated by the introduction of relaxation. In SD the anxiety-provoking condition is deliberately elicited through either fantasy or actual performance. This process is based on reciprocal inhibition, developed by Wolpe in 1958.

Wolpe's (1958) SD technique included: (a) training in deep muscle relaxation; (b) construction of hierarchies of anxiety-eliciting stimuli; and (c) the pairing, through imagery, of these stimuli with relaxation. Variations are possible within each of the three stages. Wolpe's SD therapy effectively reduced speech-related tensions in specific situations.

Other SD therapists soon flooded the literature with case histories. These reports stimulated copious research
in the 1960s (Friedrich & Goss, 1984). One of the earliest investigations was a classic experiment by Paul (1966). Using speech-anxious subjects in an introductory college speech class, Paul first explored their symptoms, then rationalized a course of treatment. Paul next had his subjects construct one of the major aspects of his treatment:

A basic speech-anxiety hierarchy consisting of 12 items, from "reading about speeches alone in room, two weeks before a presentation" to "presenting a speech before an audience," was, with minor variations, suitable for most subjects. The actual hierarchies contained 8 to 20 items, with some items from the basic hierarchy either dropped or subdivided to meet the needs of individual subjects. (p. 20)

Paul (1966) then taught his subjects deep muscle relaxation for counter-conditioning. Through fantasy and deep relaxation, the subjects gradually become desensitized to previously fearful situations.

Paul's (1966) findings demonstrated the effectiveness of SD at reducing speech anxiety. Paul and Shannon (1966) supported these findings even further in follow-up studies. McCroskey et al. (1970) also reported a significant treatment effect for SD. McCroskey (1972) soon provided guidelines for the implementation of large-scale programs for reducing CA.

Woy and Effran (1972) partially replicated Paul's (1966) study and thus supported the effectiveness of SD to treat stage fright. However, the results suggested
that subjects with positive expectations would improve more than those with neutral expectations.

With modifications by T. Clark (1979), the five major procedures of the modern SD program are designated thusly:

1. Exploration of history and current status of symptoms.
2. Explanation of rationale.
3. Construction of the anxiety hierarchy.
4. Training in progressive relaxation.
5. Desensitization process.

These steps can be accomplished in four to seven sessions, depending on the degree of affliction and the nature of the anxiety.

One problem within Stage 5, however, is that the same anxiety-provoking situation can be created by different stimuli in different subjects. Since the stimuli hierarchy's structure depends on which fear is actually causing the anxiety, that factor must be determined by the particular subject in each case. Also, if any item in the hierarchy differs too greatly from the next item, the subject may find it too threatening to progress beyond that particular step. In fact, a stimulus that produces too great an anxiety response may actually increase the individual's anxiety, even in the relaxed condition. In that case, the process would
sensitize the subject to the anxiety, rather than accomplish the desensitization desired. Therefore, the process needs continual monitoring during the therapy.

Although much research supports the effectiveness of systematic desensitization as a treatment for reducing anxiety, evidence of its limitations also exists. For instance, G. Phillips and Metzger (1973) cite Kleinsasser (1968) in that SD proved to be effective in only a small proportion of cases within the Pennsylvania State University Reticence Program. This was one reason that SD was not the treatment selected to be investigated in the present study.

Another reason for SD's inappropriateness for the present study was the difficulty in adapting the physical environment of the high school classroom to the relaxation environment necessary to accommodate the process. Also, SD requires total compliance of the subjects, a difficult goal to achieve with high school students.

In any case, SD has thrived as a treatment measure to the point that the following current variations in delivery system exist (Friedrich & Goss, 1984): SD in groups, automated SD, massed SD, in vivo hierarchy, vicarious SD, trainer variations, and expectancy instructions.

But no matter which variation an SD program utilizes, nearly all are based on the assumption that
communication apprehension is not a natural state but is learned through negative experiences (Friedrich & Goss, 1984). The problem can be traced back to early experiences at home and at school (Daly & Friedrich, 1981). If people observe that speaking can lead to psychological and/or physical discomfort, they will develop avoidance patterns. Therefore, students who have suffered CA will not willingly participate in speech classes.

Avoidance patterns eventually become habits as feelings of aversion are reinforced. Communication apprehension thus becomes a cycle difficult to break (Friedrich & Goss, 1984). Encouragement is the key to minimizing communication apprehension. Conversely, the more that children are corrected for "inappropriate" speech, the more communication apprehension they will develop.

Effective results for the treatment of oral CA can thus be realized through the application of the previously discussed methods, skills training and systematic desensitization (SD). However, for several reasons another communication anxiety/behavioral therapy method—cognitive restructuring—was the favored treatment for the present study.

Rational emotive therapy

Rational emotive therapy (RET) is one of several
cognitive-behavioral treatments developed to alter the
cognitive channel of communication-related anxiety
(Fremouw, 1984). Therapists presume that cognitive
factors such as irrational beliefs mediate change in
human physiological and motoric response channels.

Strategies for cognitive-behavioral intervention are
based on Ellis's (1962) seminal writing on RET. Ellis
identified 11 irrational beliefs as underlying all
emotional problems. Among the most common of the ir-
rational beliefs are: (a) everyone must love me all of
the time or I am a bad person; (b) I must be competent or
successful in all situations or I am a bad person; and
(c) when life is not the way I want it to be, it is awful
and upsetting.

When dealing with a client suffering from oral
anxiety, the RET therapist first identifies the irra-
tional themes leading to avoidance of communication.
Next, he or she challenges, questions, and logically
analyzes these thoughts with the subject and attempts to
replace them with more rational ones: "Although I would
prefer most people to like me, it is impossible to please
everyone all the time. Therefore, I will not try to focus
on others when I am talking, but on what I want to say"
(Fremouw, 1984, p. 211). Ellis (1957), Karst and Trexler
(1970) and Trexler and Karst (1972) found RET to be
effective in psychological treatment.
Cognitive restructuring (modification)

An extension of RET, cognitive restructuring (modification) has produced favorable results (Meichenbaum, 1976) in the reduction of speech anxiety. Cognitive modification has been found to be at least as effective as public speaking skills training (Fremouw & Zitter, 1978) and systematic desensitization (SD) (Meichenbaum et al., 1971).

Cognitive modification (or restructuring) is a generic term encompassing several procedures which focus on the important effects of thoughts (cognitions) on feelings and behaviors. It is based on rational emotive therapy (RET) (Grieger & Byrd, 1980). A primary assumption of cognitive restructuring (and RET) is that subjects will be able to return to a state of rational behavior if irrational perceptions are changed.

Cognitive restructuring is accomplished by repeating verbalizations of negatively-perceived stimuli and positive feedback. The therapist encourages the subject to scrutinize the incompatibility of his or her feelings and the actual experience (Meichenbaum et al., 1971). Meichenbaum et al. concluded that their version of cognitive modification—insight training—reduced communication apprehension as effectively as SD did.

Giffin and Bradley (1969) proposed an interpersonal
approach to treating speech anxiety. They combined group counseling and cognitive modification, observing:

Severe speech anxiety is, in large part, unreasonable. It may be that such fear of communication settings is a result of having been inhibited in the expression of feelings and emotions earlier in life. It is the task of the group counseling situations, then, to supply and reinforce new influences to which the individual group member will respond. (p. 26)

Weissberg (1974) assessed a number of treatments for speech anxiety. He concluded that cognitive modification was the most effective one. Weissberg and Lamb (1977) also found a decrease of anxiety by using cognitive modification.

Meichenbaum (1976) developed a three-stage cognitive modification process: (a) teaching clients to become good observers of their thoughts, feelings, and behavior; (b) generating adaptive cognitions and behaviors, based on self-observation; (c) altering the content of internal dialogue through practice, such as role playing and coping statements.

Glogower (1977) assessed separate components of a cognitive restructuring technique with groups. He found that the group using a combination of insight into negative self-statement and rehearsal of incompatible coping statements showed the greatest improvement. He concluded that coping statements were of primary importance in the transformation process. To Glogower, Fremouw, and
McCroskey (1978), the major therapeutic component of cognitive modification was the coping statement.

Fremouw and Scott's (1979) major cognitive restructuring steps are:

Step 1—Introduction: Providing subjects with a thorough rationale for the training. Explaining that communication apprehension is a learned, reactionary set of behaviors that can be modified.

Step 2—Identifying Negative Self-Statements: Identifying thoughts that inhibit communication, such as "I'll sound stupid." Listing and rationally discussing statements as to how each affects communication and social behavior. Discussing common errors in thinking, such as generalizations—"I never speak well"—or self-fulfilling prophecies—"I won't be liked."

Step 3—Learning Coping Statements: Generating appropriate coping statements, such as, "Speak slowly"; "So far, so good." Substituting adaptive coping statements for negative self-statements.

Step 4—Practicing: Rehearsing coping statements through role playing. Discussing topics of increasing controversy while practicing coping statements in groups. Keeping a diary, noting stressful situations and the coping statements used to deal with them.

Another method of cognitive modification was applied to communication apprehension reduction by McCroskey and
Richmond (1980). First, the subject was informed as to how he or she had become communicatively apprehensive. He or she was then told that his or her communication responses were a result of impaired communication abilities. The subject next was instructed to identify negative behaviors and replace them with positive ones.

In the second phase of the program, the subject made a list of negative self-statements, such as "Nobody wants to listen to me." Step 3 involved replacing those statements with positive ones, such as "This is easier than I thought." In the fourth phase, subjects practiced coping statements in actual communication situations. By this method, communication apprehension was reduced effectively.

In several other studies (e.g., Elder, Edelstein, & Fremouw, 1981) cognitive restructuring was found to lead to reductions in behavioral anxiety. In fact, cognitive modification techniques have produced significant improvements in many types of communication problems, including public speaking anxiety (Fremouw & Zitter, 1978), communication apprehension (Glogower et al., 1978), and dating anxiety (Glass, Gottman, & Shmurak, 1976).

Cognitive modification procedures appear better suited for treating cross-situational (trait) apprehension and avoidance of oral communication anxiety than for treating situation-specific (state) public

There may be a relationship between type of student and effectiveness of treatment (A. Watson, 1983). Research suggests that skills training is effective for both high and low anxious subjects, while cognitive restructuring seems to be more effectual for those with high anxiety only. Systematic desensitization is more efficacious with subjects suffering from speech anxiety alone and not general social distress. Cognitive restructuring appears to be more effective than SD on subjects with more generalized, cross-situational speech anxiety (Glaser, 1981).

Systematic desensitization and cognitive modification were found by Weissberg and Lamb (1977) to be the most effective methods of reducing general anxiety levels. Fremouw and Zitter (1978) indicated that skills training and cognitive modification were both effective treatments in reducing overall anxiety. Cognitive modification appeared to be the more effective method for subjects experiencing only high social anxiety, however.

A number of other researchers (Craddock, Colter, & Jason, 1978; Karst & Trèxler, 1970; Rhem & Marston, 1968) have reported that cognitive therapy produces
self-reported cognitive change but no congruent alteration in behavior. Craddock et al. (1978) have attributed the persistence of public speaking anxiety to a skills deficit.

Skills Training/Behavior Therapy Combined

A combination of skills training and cognitive therapy can be most effective, also (A. Watson, 1983). Therefore, some researchers have chosen to merge the two schools of thought (rhetorotherapy and behavior therapy) to combine skills training with cognitive modification. Sherman, Mulac and McCann (1974) tested a number of treatments combining skills training and cognitive restructuring on speech anxiety sufferers. They concluded that the combined treatments promoted substantial improvement. Fremouw and Harmatz (1975) supported the combination treatment as an effective method of speech anxiety reduction.

Conclusion

As discussed in this literature review, researchers have tested various theories and methods in their attempts to alleviate oral communication apprehension. Continued efforts to isolate components of CA which may be reduced by instruction are noticeable in the literature. It is also apparent that certain
characteristics in the communicatively-apprehensive personality indicate a negative self-image, an inferiority complex (McCroskey et al., 1976), low self-esteem (Lustig, 1974), and low self-acceptance (Lustig, 1974; A. Watson, 1981).

Among treatment methods, cognitive restructuring has proven beneficial in helping the CA sufferer to substitute negative self-thoughts with positive ones for success in oral communication transactions. Self-acceptance, a component of cognitive restructuring, results. Research suggests that as self-acceptance increases, communication apprehension decreases.

A unit using cognitive restructuring techniques was developed and applied in the present study in an attempt to treat cross-situational speech anxiety. The unit was employed in tandem with speech skills training to raise self-confidence in students afflicted with oral CA.

Personality and Speech Performance

Numerous researchers have investigated and reported on the relationship between speech attitudes and experiences. Many of these researchers agreed that a positive relationship exists between personality and speaking performance.

The goal of Knower's (1938) early landmark study was to develop a set of scales by which the relationship of
some characteristics of personality to the effectiveness of speaking might be evaluated. Findings suggested that personality characteristics have an influence upon speech performance.

The development of Knower's (1938) instrument finally afforded speech educators the opportunity to accurately assess the relationship between speaking and personality. Thence some academic attention was trained upon personality, self-concept, self-confidence, self-esteem, and self-image. A simpler, shorter version of Knower's Speech Attitude Scale superseded it in 1942—Gilkinson's Personal Report on Confidence as a Speaker, which has realized wide usage.

In 1943 Gilkinson measured self-confidence in college students. Fearful speakers showed relatively low preference for activities and vocations involving public speaking. They also displayed more generalized low self-evaluation and more anxieties about social relationships than confident speakers did. Gilkinson concluded that a generalized sense of inferiority was a primary cause of emotional disturbance in public speaking.

In his study at Stanford University, Jones (1948) discovered that fearful beginning speech students were more neurotic and introverted, and less dominant than confident students. Ainsworth's (1950) findings revealed that subjects exhibiting extreme stage fright strongly
tended toward shyness, seclusiveness, and withdrawal from social situations. These individuals were more depressed than their more confident counterparts and experienced frequent feelings of guilt, unworthiness, worry, uncertainty, embarrassment, emotional instability, inadequacy, inferiority, distraction, annoyance, and shyness.

Iverson (1953) discovered that the manner of resolution (not the number or severity) of emotional conflicts and problems provided the contrast between the fearful and confident groups. Schinske (1960) observed that fearful speakers rationalized more than confident speakers when discussing political positions.

Miyamoto, Crowell, and Katcher (1956) compared basic college speech students' scores with those of introductory philosophy students to assess changes in self-concept. While no significant differences were observed, students with high self-concepts and greater self-confidence outperformed those with low self-concepts in speaking situations. These findings support the idea that "self-confidence is a necessary prerequisite to good speaking performance" (p. 73).

In secondary school research, Turner (1957) reported that effective ninth grade speakers were better adjusted than poor speakers and had better reading comprehension and command of the language. Turner further concluded that good speakers outperformed poor speakers in a
variety of speech situations and had higher grade point averages than poor speakers.

Crowell et al. (1955) studied the personality characteristics of college psychology students in discussion groups. Significant positive relationships were noted between self-descriptions of the speakers' skills and their performance in group discussion. The highest correlations involved leadership, contribution to group decisions, effort to succeed, and group guidance. Scheidel, Crowell, and Shepherd (1958), using basic college discussion class students, found significant relationships between independence, dominance, and self-confidence.

The above studies provide evidence that students with high self-confidence perform better than students with low self-confidence; that competent speakers are better adjusted than incompetent speakers; and that self-confident students demonstrate more self-satisfaction, self-acceptance, and personality integration than non-confident students. Therefore, the speech instructor who wishes to help his or her students to realize successful speaking experiences might be wise to address self-confidence in his or her methods.

Speech Instruction and Self-Confidence

Among the aims and goals of traditional instruction
is the belief that a speech course should enhance student self-confidence. Speech teachers commonly agree that the strengthening of verbal fluency and poise will assist students to better adjust to the challenge of speaking situations (Herbold, 1971).

In light of these common expectations, three early researchers assessed the relationship of speech instruction to those personality traits which appear to influence self-confidence. Moore (1935) found that 87% of his college speech experimental group showed an increase in self-sufficiency and dominance, while 84% showed a reduction in introversion and emotional stability.

In 1936 Murray reported that adjustment to speech situations depends on the speaker's attitudes and habits of thinking and feeling, which he saw as a direct outgrowth of speech experiences and influences. Murray highly recommended properly-directed speech training.

Borin (1950) used group discussion methods to help college speech students improve their confidence levels. Sufficient work procedures had a tendency to raise the student's confidence level, thus reinforcing the importance of organizational skills.

Paulson (1951) revealed that speech students at the University of Minnesota showed significant increases in confidence during 10 weeks of speech instruction. This new-found confidence tended to carry over to later speech
experiences, such as addressing audiences of strangers. Nelson's (1954) and Robinson's (1956) subjects realized similar gains in speaker confidence and effectiveness.

Self-Esteem and Speech Anxiety

Research has consistently demonstrated an inverse relationship between socio-communicative anxiety and self-esteem (Daly & Wilson, 1983). Inadequate self-esteem reflects a reduction of one's self-image below a level which he or she desires or expects (Katz, 1976). Self-image is formed from one's perception of self in interactions with others. However, others' perceptions of one's self are distorted, and that distortion is incorporated in the formation of the self-image. Pearce and Sharp (1973) relate this concept to previous work:

Sullivan's (1953, pp. 110-111) definition of personality, "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life," clearly demonstrates that a person is what he is in any given situation in part as a function of his relationship with other(s) in that situation. Toch and MacLean (1967, p. 56) concluded that every "human being" is a constantly changing product—of the situations through which he moves. (p. 413)

Giffin's (1966) theory of speech anxiety is based on an analysis of interpersonal relationships in communication processes. He stressed the importance of the individual's self-concept, his general anxiety tendencies, and his motivation to avoid failure. The relationship between self-image and speech anxiety is noted by Giffin
A person's self-image is dependent in part upon personal sensory perception and also upon what others tell him about himself; thus, a person needs to communicate with others in order to verify his own view of himself. It is especially important to note that one's view of oneself as a communicator necessarily requires feedback from other people. If the feedback is negative and indicates to a person that his social self is inadequate, he will fear and tend to avoid communication situations. Further, Heider's balance theory and Festinger's theory of cognitive dissonance lead one to suspect that such a person would accept information which confirms his low opinion of himself and reject information that would tend to raise it. Thus, communication situations would be feared and avoided whenever possible. (p. 23)

In speech class a reticent speaker needs to have a positive experience in order to raise his or her level of self-esteem.

Self-Acceptance and Rational Emotive Therapy

The concept of self-acceptance has been used by many practitioners and researchers (Crowne & Stephens, 1961). Yet its conceptualization is more current than that of self-esteem. In fact, behavioral scientists are still attempting to clarify it. As recently as 1979, research was conducted in an attempt to test the construct validity of self-acceptance (Shepard, 1979).

Beginning in the 1950s, psychologists gave considerable attention to the concepts of self in their personality theories. The research and writings resulting from these examinations demonstrated the relationship of
self-acceptance to the alleviation of communication apprehension.

Much of the research on self-acceptance is based on Rogers's (1951) theory of personality. Rogers considered "positive self-regard" a relatively stable characteristic. To Rogers, the client not only accepted himself or herself, but he or she came to like himself or herself, which afforded pleasure in being himself or herself.

Self-acceptance has no single definition, but Rogers's (1951) work tends to provide a common ground for the distinction of the variable. Influenced by Rogers, E. Phillips (1951) developed the Attitude Toward Self and Others Scale, supporting the theory that the concept measured by his instrument was indeed a personality variable.

Basing his theories and procedures on the research of Sheerer (1949) and Rogers (1951), Berger (1952) described the self-accepting person as one who:

1. Relies primarily upon internalized values and standards rather than on external pressure as a guide for his behavior.

2. Has faith in his capacity to cope with life.

3. Assumes responsibility for and accepts the consequences of his own behavior.

4. Accepts praise or criticism from others objectively.

5. Does not attempt to deny or destroy any feelings, motives, abilities or favorable qualities which he sees in himself, but rather accepts all without self-condemnation.
6. Considers himself a person of worth on an equal plane with other persons.

7. Does not expect others to reject him whether he gives them any reason to do so or not.

8. Does not regard himself as totally different from others, queer, or generally abnormal in his reactions.

9. Is not shy or self-conscious. (pp. 778-779)

Berger's (1952) Expressed Acceptance of Self Scale reflects this verbal description of self-acceptance.

Self-acceptance was among personality variables found to correlate negatively with communication apprehension (Lustig, 1974). A. Watson (1981) found that the lower the self-acceptance, the higher the communication apprehension. Conversely, as self-acceptance improves, CA decreases.

Ellis formulated his rational emotive therapy (RET) in 1962. RET is based on the concept that people are affected more by their perception of an event than by the actual event itself. The interpretation of the occurrence, whether unconscious or conscious, is scientifically founded (Knaus, 1974). Ellis's (1962) method is a rational system for examining and understanding the influence of attitudes, beliefs, and values on feelings and perceptions.

Through RET, even children can learn to take more positive steps toward self-determination and self-acceptance (Knaus, 1974). In education, RET proponents
have comprehensively utilized emotive, behavioristic, and cognitive methods to defeat negative experience.

The cognitive RET process is as follows. First, an activating event occurs; in response, the individual becomes concerned or anxious. Next, he or she forms a belief about the event. Then the individual experiences the consequences of his or her emotions and resulting behaviors. At this point, the individual can be taught to refute the irrational beliefs and replace them with healthier, more appropriate and productive thoughts (Ellis, 1972).

At the core of RET lies the concept of unconditional positive self-regard (Rogers, 1961), or full, unconditional acceptance of self and others (Ellis, 1962). However, Ellis has discontinued the use of the term "positive self-regard" because he objects to the idea that the individual must rate or measure himself somehow. Instead, he prefers "self-acceptance" (Ellis & Abrams, 1978). The terms "self-confidence" and "self-esteem" are often used synonymously with "self-acceptance"; however, there are differences, and it is crucial to make a distinction between them for scientific purposes.

Self-acceptance implies the lack of conditions or requirements. Self-confidence and self-esteem are related to conditions and reasons—performance, for example. When failure occurs, self-confidence
diminishes. Self-acceptance, however, is an ongoing, nonfluctuating reality, not subject to other people's approval, based on the individual's decision to believe in himself or herself as worthy.

Self-acceptance is congruent with a refusal to compare one's own value to that of others. According to Ellis and Abrahms (1978), rating oneself leads to low self-esteem, whereas rating only one's behavior leads to self-acceptance.

Effects of Self-Acceptance on Personality

Based on a correlation between acceptance of self and acceptance of others, Rogers (1949) determined that self-rejection is operant in hostility toward others. Bills (1953) concluded that people who measure high in self-acceptance on Rorschach tests differ in personality traits from those who test low in self-acceptance.

Some researchers have found correlations between self-acceptance and other behavioral qualities. For example, Lustig (1974) and A. Watson (1981) noted a negative correlation between self-acceptance and communication apprehension. Rubin (1967) correlated it with prejudice, Gonzales-Tamago (1974) with dogmatism, and Suinn and Hill (1964) with anxiety. The fact that self-acceptance is significantly correlated with acceptance of father and teacher in some research suggests that
a subject's perceived similarity to a parent or authority figure may be a significant variable influencing self-acceptance (Suinn, 1961).

King, Payne, and McIntire (1973) suggested that most low self-accepting persons perceive themselves to have more negative traits than do outside observers of them. Secondly, they blame themselves for their unhappiness in life, based on their perceived weaknesses.

Omwake (1954) suggested that people who accept themselves tend to accept others. They also perceive others as accepting themselves. Those who reject themselves hold a correspondingly low opinion of others and also believe that others reject themselves. Finally, low self-accepting persons judge themselves more harshly than they judge others (Suinn & Hill, 1964).

Certain behaviors have been associated with low self-acceptance. For example, constant fault-finding can be a result of negative self-attitude. In contrast, people manifesting self-acceptance tend to be positive and less critical of others (E. Phillips, 1951). A tendency to disparage may be an overcompensation for a feeling of inferiority (Adler, 1921). The person who accepts himself or herself will probably have better interpersonal relationships (Rogers, 1951). Also, classroom performance may be attributed to attitude toward self and others (Bills, Vance, & McClean, 1951).
Evidence now exists that self-acceptance, formerly thought to be a relatively stable personality variable (Rogers, 1951), may be altered. Rubin (1967) indicated that an increase in self-acceptance can occur, but not spontaneously.

Certain studies demonstrate how self-acceptance has been increased by verbal conditioning (Coons & McEachern, 1967), self-reinforcement (Oziel & Berwick, 1974), and sensitivity training (King et al., 1973). Among factors involved in the increase of self-acceptance are: (a) cognitive restructuring through self-insight manipulation (Rubin, 1967); (b) interpersonal relations closely tied to attitudes toward self and acceptance of others (Coons & McEachern, 1967); (c) analysis and concern for the impact of one's behavior on others (Walter & Miles, 1974); (d) abundance of feedback about one's self made available to the individual (Walter & Miles, 1974); and (e) development of trust in groups, resulting from feedback (Rubin, 1967).

These findings might well be considered when developing instructional methods or models for enhancing self-acceptance.

Summary

The above literature review demonstrates that several effective treatments exist for reducing CA. Of these methods, cognitive restructuring, combined with speech
skills training, seemed the most appropriate for this study. Presented in Chapter III is a detailed discussion of the design and methodology of the study.

Hypotheses Tested

The following null hypotheses were tested in this study:

1. There is no significant difference between PRCA-24 pretest to posttest gain scores for students receiving cognitive restructuring and those not receiving cognitive restructuring.

2. There is no significant difference between PRCA-24 pretest and posttest gain scores for students in four types of speech classes.

3. There is no significant interaction between PRCA-24 pretest and posttest gain scores for those in various speech courses who receive cognitive restructuring and those who do not receive cognitive restructuring.

4. There is no significant difference in the PRCA-24 pretest and posttest gain scores for students who receive various grades in their speech courses.

5. There is no significant interaction between PRCA-24 pretest and posttest gain scores for students who receive different grades in their speech courses and cognitive restructuring and those who do not receive cognitive restructuring.
CHAPTER III

DESIGN AND METHODOLOGY

The review of selected literature in Chapter II included findings which indicated that self-accepting high school speech students are able to interact without the oral anxiety which is experienced by students who do not accept themselves unconditionally. That self-acceptance leads to confidence in communication situations, such as public speaking, was well supported in the literature. Presented in this chapter is a discussion of a research study designed to lower oral communication apprehension (CA) by raising self-acceptance.

Pilot Study: A Study of the Relationship Between CA and Grades

The discussion of the present study encompasses most of this chapter. However, it is prefaced by a brief description of the pilot study which predated the present study and influenced its development.

The relationship between oral communication apprehension (CA) and class grades had been investigated first in a pilot study. The study was conducted by this investigator in the first semester of the 1983-84 school year at the same high school as the present study. The
first quarter (10 weeks) grades were correlated with scores on McCroskey's Personal Report of Communication Apprehension-24. The relationship was analyzed statistically, using the Pearson product-moment correlation coefficient.

Instrumentation

The PRCA-24 (see Appendix A) consists of 24 Likert-type items administered in a 5-choice response format (from strongly agree to strongly disagree). The instrument was developed by McCroskey (1970), incorporating some items from Gilkinson (1942) with those of graduate speech students and his own. The reliability estimate is .94 for \( N = 24,822 \) and .75 for all subscores.

Administration Procedures

Only one speech teacher's students were involved in the pilot study. She was chosen because she had developed a self-acceptance raising unit, and this researcher was interested in assessing its effect on student speech anxiety. She had been assigned only two speech sections, one Speech and one Theater Arts class. Therefore, the whole population of this teacher's speech classes was surveyed in the pilot study. Her students had been scheduled by computer in the spring of 1983, although a few hand-scheduled changes occurred shortly
after the fall semester began.

The PRCA-24 was administered by the speech teacher approximately 1 week before first quarter (10 weeks) grades were recorded. Approximately 9 weeks of a 20-week class had elapsed at the time of the measurement. The students were told that the self-assessment was a measure of communication apprehension in a doctoral study and that there were no wrong answers. They were encouraged to respond as they would feel the majority of the time during communication situations.

Anonymity was not attempted because a knowledge of the scores could benefit both teacher and students. For the second half of the semester, special attention could be paid to those who received both high communication apprehension scores and low grades.

Before the PRCA-24 was administered, the following null hypotheses were stated:

1. There is no relationship between PRCA-24 scores and first quarter Speech class grades.

2. There is no relationship between PRCA-24 scores and first quarter Theater Arts class grades.

3. There is no difference between the correlation coefficients of the Speech and Theater Arts classes.

The findings of the study are listed in Table 1.
Table 1
Pilot Test PRCA-24 Results

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th>M</th>
<th>SD</th>
<th>r</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech</td>
<td>27</td>
<td>63.8</td>
<td>17.1</td>
<td>-.112</td>
<td>16.8</td>
<td>5.49</td>
<td>-.197</td>
<td>7.37</td>
<td>2.04</td>
</tr>
<tr>
<td>Th. Ar.</td>
<td>28</td>
<td>63.9</td>
<td>16.4</td>
<td>-.483</td>
<td>17.5</td>
<td>4.62</td>
<td>-.379</td>
<td>7.89</td>
<td>1.57</td>
</tr>
</tbody>
</table>

Analysis and Interpretation

An analysis of the findings involved comparing the correlation coefficients of Speech with those of Theater Arts. The numerical values of $r$ ranged from $-.112$ to $-.483$.

The import of this pilot study was in the discovery that there was a strong relationship between Speech vs. Theater Arts. Specifically, the Pearson $r$ for Speech overall $CA = -.112$, and this, when compared to Theater Arts overall $r$, $-.483$, indicated a proportionately stronger relationship between the variables. This result was also consistent when $r$ Speech $= -.197$ and $r$ Theater Arts $= -.379$ are compared for the public speaking subtotal. The means and standard deviations for both high school speech classes compare very favorably with McCroskey's (1981) norms ($N = 24,782$) for college students.
The findings of the pilot study did not strongly support the central hypothesis that there is a relationship between PRCA-24 scores and first quarter speech class grades. However, the alternative hypothesis, that there is a difference between the correlation coefficients of Speech and Theater Arts, had enough support to warrant the extension and expansion of the research into the present study, which is discussed in detail below.

Data Collection

Research reported in Chapter II indicated that communication apprehension (CA) has been addressed using a variety of alleviation methods. For example, Taugher (1981) attempted to determine which treatment—skills training, cognitive restructuring, or a combination of the two—was most effective when applied in the classroom.

Research Design

The present study followed a quasi-experimental approach in research design (Borg & Gall, 1983, p. 682). Each speech teacher involved in the plan had two sets of like classes:
In each set, one like class was used as the experimental group, while the other was considered the comparison (control) group. Both classes were administered the PRCA-24 pretest and posttest (McCroskey, 1981).

The design can be considered quasi-experimental for two reasons. First, of the four courses involved, Theater Arts was the only elective. The other courses may be taken to satisfy a graduation requirement (one-half credit of speech). Secondly, since there were six Speech classes, these students had more latitude in computer scheduling than the students in the other speech courses.

This research was conducted during the first semester of the 1984-85 school year. The pretest administration was accomplished during the first week (September, 1984). The posttesting was done during the last week of the semester (January, 1985). A self-acceptance raising unit was presented during the semester for all experimental groups.

The speech students were not informed that they were participating in a research study. In addressing the PRCA-24 pretest and posttest, they were told to register the responses that they would probably feel most of the
time. Ten minutes was the suggested time allotted for completing the instrument. This was adequate time in all instances. The instructors explicitly sanctioned participation, and there was full cooperation from the students in attendance during the testing.

This researcher had hypothesized that cognitive restructuring treatment (with emphasis on self-acceptance), combined with communication skills training, would better alleviate oral communication apprehension than would skills training only. The skills training in all groups included instructor lecture, class discussion, partner interviewing, group discussion, and public speaking.

**Hypotheses Restated**

The following null hypotheses were stated in Chapter II:

1. There is no significant difference between PRCA-24 pretest to posttest gain scores for students receiving cognitive restructuring and those not receiving cognitive restructuring.

2. There is no significant difference between PRCA-24 pretest and posttest gain scores for students in four types of speech classes.

3. There is no significant interaction between PRCA-24 pretest and posttest gain scores for those in
various speech courses who receive cognitive restructuring and those who do not receive cognitive restructuring.

4. There is no significant difference in the PRCA-24 pretest and posttest gain scores for students who receive various grades in their speech courses.

5. There is no significant interaction between PRCA-24 pretest and posttest gain scores for students who receive different grades in their speech courses and cognitive restructuring and those students who do not receive cognitive restructuring.

The above hypotheses were generated as a logical outcome of the following questions in Chapter I:

1. Is there a relationship between the level of oral communication apprehension and cognitive restructuring?

2. Is there a difference between communication apprehension scores before and after cognitive restructuring in students of different speech class formats?

3. Is there a relationship between student pretest and posttest gain scores and semester grades?

Cognitive Restructuring Treatment Unit

The focus in the cognitive restructuring treatment unit was on getting students acquainted, stimulating
discussion, facilitating the open admission of CA, and learning appropriate coping behavior in anxiety-provoking situations. The bulk of the time was spent in discussion and structured exercises promoting openness, acceptance, and involvement.

In the speech-skills-only comparison groups, the primary activities were (a) reading and discussing material concerning the preparation and presentation of speeches, (b) listening to lectures related to successful speech-making, and (c) listening to and presenting speeches of various kinds. Instruction involved basic speech concepts, including communication terms.

The experimental treatment consisted of exercises (see Appendix B) designed to foster greater self-acceptance and thereby lower oral communication anxiety. The exercises were interspersed with the speech skills curriculum or employed as a replacement for it in the experimental classes. The speech teachers incorporated the cognitive restructuring unit when and where they saw fit in their scheduling, mostly toward the end of the semester.

Inherent in the lessons for communication apprehensive students were the research concepts included in this study. For example, the literature supported the idea that self-acceptance can be increased by augmented self-insight and awareness, improvement of communication
skills, and development of interpersonal trust feelings.

Increased self-insight and awareness was attempted by helping the students to accomplish the following abilities: (a) to assess their thoughts about communication apprehension, (b) to understand how their communication apprehension may have been developed, and (c) to determine the irrationality of CA for themselves.

These activities were intended to encourage the students to accept themselves without conditions and to see the difference between the self and its behavior, especially that related to oral communication. When experiencing unconditional self-acceptance, the learner feels freer to attempt threatening (self-perceived) communication activities.

These lessons were intended to enable the students to internalize self-acceptance, become aware of personal communication inadequacies which are acceptable to others, and still realize the importance of improving communication skills. Self-acceptance—accepting self unconditionally and rating only one's behavior—correlates highly with acceptance of others.

The two-way ANOVA statistical technique was used to determine any significant difference between the pre- and posttest gain scores of the experimental and comparison groups. The findings aided in identifying any influence of the cognitive modification unit employed in this
study. The PRCA-24 pretest and posttest gain scores were compared with semester grades to essay any relationship. The Scheffe post hoc procedure was used to identify the locus of specific differences wherever statistical significance was found.

Skills Training Method

Speech skills training in the present study paralleled the general format described by G. Phillips (1977) as presented in the previous chapter. Skills training consisted primarily of lectures, discussions, behavioral rehearsal, live and videotaped presentations, and distribution and discussion of printed materials.

Behavioral rehearsal consisted of practicing with a partner, participating in both roles in an interview (interviewer/interviewee), introduction situations, and supportive behavior to reduce CA and upgrade oral skills. Direction for each of these tasks was provided by the instructors. Videotaped scenes were reviewed and critiqued for both positive skills and areas needing improvement.

Critiques of the videotaped presentations included discussions of the characteristics of effective delivery and the organization and development of the presentation. The discussion of delivery included such topics as eye contact, vocal quality, posture, gesturing, and
characterization. The discussion of organization and development included a review of organization methods and development of effective introductions, transitions, and conclusions.

Skills-oriented materials were distributed to the speech classes, also. Instructor explanation and class discussion followed. These instructional materials were provided so that students would have a clearer understanding of what was expected of them in oral presentations.

Cognitive Restructuring Treatment

The cognitive restructuring treatment employed in this study was designed to alleviate oral communication apprehension by raising self-acceptance. Researchers support the theory that cognitive restructuring (CR) can alter cognitive dimensions of anxiety (Fremouw & Scott, 1979; McCroskey & Richmond, 1980).

In the first step in this treatment plan, the speech teachers introduced the CR process and explained how it would proceed. The instructors informed the classes that communication apprehension was a learned response to communication experience.

It was further explained that many people form negative reaction patterns that can be mollified by CR. It was then stressed that this program's focus would be a
positive, rather than a negative, one with emphasis on
the solution, rather than the problem.

The next step involved the teachers instructing the
subjects to identify negative self-statements related to
communication inhibition. Some examples were: "Nobody
really wants to listen to me," "I don't want to look
foolish," and "I don't like everybody looking at me."
Lists of these types of statements were made and an
exercise was used to supplement student-generated state-
ments (see "Positive Support Techniques" in Appendix B).

Fremouw and Scott (1979) noted that negative
self-statements fell into one of four categories: (a)
generalizations about past or present situations, e.g.,
"Everyone is watching me" and "I never speak well"; (b)
arbitrary inferences without evidence to support the
student's conclusions, e.g., "They think I am dumb" and
"They know I have nothing to say"; (c) magnification of
the evaluation aspects of the situation, e.g., "People
are judging me" and "Their eyes look right through me";
or (d) self-fulfilling prophecies, e.g., "I won't enjoy
this class" and "I know I'm going to flunk." Students
discussed how these and other statements affected their
oral performance.

Once students had mastered this step, they were
trained to substitute more positive "coping" statements
in place of the negative responses. Fremouw and Scott
(1979) advocated this effort to lower CA and increase confidence for oral communication attempts. The conceived communication situations were divided into three temporal phases: (a) before speech; (b) during speech; and (c) after speech. Each phase required different coping statements. Students were instructed to generate three different types of coping statements to coincide with the different aspects of a communication event: (a) context; (b) task; and (c) self-evaluation.

Context coping statements were used to minimize the critical and therefore stressful aspects of the communication event. Examples suggested were: "Everybody is a student just like me," and "This will be easy because I know most everybody in the class pretty well--most of them are my friends."

Task coping statements were used for focusing on specific performance improvement behaviors. Examples included: "Keep using eye contact to maintain audience attention," and "Speak slowly so that the class will understand better."

Self-evaluation coping statements were used by students to identify both the successful aspects of their performances and the areas where improvement was needed. Examples of these types of statements included: "I didn't do as bad a job as I had thought I was going to do," and "I'm doing fine, just keep my enthusiasm level
up through the finish."

Lastly, instructors explained that coping statements were learned behavior and required continuous repetition in order to permanently alleviate CA. The practicing of coping statements was facilitated in small groups, classroom interaction, and in private, especially during oral communication assignments.

**Skills Training and Cognitive Restructuring Combined**

The experimental groups in this study were exposed to both cognitive restructuring and skills training combined. Conversely, the comparison groups were exposed to traditional speech skills training only. The experimental (combination) groups spent class time in rehearsal and group discussion for the enhancement of self-acceptance, as well as in discussion and practice of speaking skills only.

The four-step cognitive restructuring program advocated by Fremouw and Scott (1979) was varied for this study. Instead of the suggested 8-week period, the treatment was interspersed over the semester (approximately 20 weeks). Reinforcement by the instructor also was provided between treatment sessions.

Two other variations on Fremouw and Scott's (1979) approach were the number of subjects involved and the environment. Groups in the present study were far larger
than Fremouw and Scott's suggested 4 to 5 subjects. Also, the classroom setting was far different from their suggested laboratory environment. The conditions in the present study more closely resembled those advocated by McCroskey and Richmond (1980), presented in Chapter II.

Research Schedule

The purpose of this study was to determine whether a unit designed to raise the self-acceptance of speech students would be deemed successful on the basis of the research findings. The sequence of the investigation to accomplish this purpose was as follows:

1. A meeting was held with each speech teacher to explain the study and establish a schedule which would be feasible for all concerned.

2. Administration was apprised that research was proceeding beyond the pilot study level.

3. First semester speech students were administered a pretest during the first week of September, 1984, using McCroskey's Personal Report of Communication Apprehension-24.

4. A self-acceptance-raising cognitive modification unit was introduced and employed at intervals throughout the first semester in the experimental groups.

5. All first semester speech students were administered the PRCA-24 as a posttest in January of 1985 (at
the end of the first semester).

6. The Two-way ANOVA statistical technique was applied to test for a significance of differences between the pretest and posttest gain scores of the experimental and comparison groups.

7. The findings were compared with the students' first semester grades to determine any relationship between the variables.

Variables

Dependent Variable

The dependent variable was recognized as the mean gain score obtained by the experimental and comparison groups signifying the level of oral communication apprehension registered on the PRCA-24. Pretest and posttest scores were computed to determine the mean gain scores. Both total scores and subscores were tabulated.

Independent Variables

The independent variables involved were: (a) the cognitive restructuring treatment applied by the speech teachers to enable students to develop self-acceptance for the alleviation of oral communication apprehension (CA); (b) the four speech courses (type) in which the students were enrolled: (1) Debate, (2) Speech, (3) Speech Skills, and (4) Theater Arts; (c) semester
grades (A, B, and Below B) and (d) experimental or comparison group (condition).

Operational Measures of Speech Anxiety

Traditionally, four general approaches have been employed to measure oral communication apprehension: physiological assessment devices, clinical evaluation, behavioral observation (judge's rating of perceived stage fright), and self-reports (measuring cognitively-experienced stage fright) (Clevenger, 1959; Daly, 1977; Fried­rich, 1970; McCroskey, 1970). As Clevenger (1959) noted, "These measures do not appear to measure the same thing; the correlations between the various types of measures are typically very low" (p. 138). Therefore, each method must be separately evaluated for its relative usefulness as a measure of speech anxiety.

Physiological Measures

Physiological assessment attempts to isolate the effects of apprehension in oral communication by monitoring such bodily responses as heartbeat rate, skin conductance, blood pressure, and vocal tension. Physiological assessment requires trained personnel to operate complex, expensive measuring devices.

Behnke and Carlile (1971) gauged heartbeat rate as a variable in their research on oral communication anxiety.
Clevenger (1959) considered physiological instruments the most highly reliable measure of the three classes of stage fright measures: "Though test-retest and split-half coefficients cannot be performed on pulse-rate, psychogalvanometer, and sphygmomanometer readings, one may assume high reliability of such measurements" (pp. 136-137).

McCroskey (1970) focused more on the limitations of physiological measures in his observations. He considered them too expensive and difficult to access for most educational institutions. He also indicated that it would be difficult, if not impossible, to obtain physiological indexes during some communication transactions. McCroskey recognized that a variety of communication exchanges would be necessary to ascertain reliability. However, withdrawal responses could not be measured at all by such devices.

In addition, instruments intended to measure physiological changes may themselves effect extra responses in the subject. Also, because these measuring devices cannot be administered across a variety of communication situations, McCroskey (1970) considered them too limited to be acceptable. He viewed physiological instruments as applicable in measuring the transitory emotional state (A-State) anxiety of stage fright but not appropriate when assessing the more basic personality (A-Trait) anxiety. For the above reasons, a physiological measure was not
considered a feasible choice for this study.

Clinical Evaluation

The second method of assessment, clinical observation, is the most complex of the four. Highly-trained specialists are employed to determine types and degrees of CA. Considerable time is required to accomplish the measurement, and the fee for the necessary professionals is prohibitive. Therefore, this method, too, was eliminated as a method of evaluation in this study.

Observer Rating Scales

Behavioral observation is a third method of measuring oral communication apprehension. Various research studies have utilized trained observers to record speech-related behaviors, such as eye contact, hand gestures, and so on. Most of the research has been associated with stage fright (Paul, 1966).

Lists of behavior descriptions reflecting CA are used to compare the oral communication activities of the subjects. Like clinical observation, behavioral observation requires a considerable length of time and is prohibitive in cost. Trained observers are necessary for a large sample size. Also, instrumentation effects due to observer fatigue can occur.

Neither Clevenger (1959) nor McCroskey (1970)
approves of this method. For one thing, observer ratings are notably unreliable. Secondly, not all CA behaviors are possible to observe (e.g., those associated with withdrawal). "Even if this problem could be overcome, there would be a need to observe an individual in a number of communication contexts if an index of communication apprehension across contexts were to be obtained," McCroskey (1970, pp. 270-271) stated. Like physiological measures and clinical evaluation, observer ratings have certain limitations for this type of research. Hence, this method also was eliminated for the present study.

**Self-Report (Introspective) Measures**

The most widely-used measurement method in educational research is the introspective self-report (Katz, 1976), such as that employed in this study. Self-report measures are more advantageous than other communication apprehension measures for three reasons. First, they are inexpensive and relatively easy to administer and score. Second, they are adaptable to a variety of situations and purposes, and therefore more flexible than most other testing methods. Third, Likert-type scales have high reliability if they are properly developed (McCroskey, 1970).

CA self-assessment instruments are constructed to
evoke subjects' introspective responses to statements related to feelings about communicating orally. Most of these instruments have evolved from Gilkinson's (1942) Personal Report of Confidence as a Speaker (PRCS).

Gilkinson's (1942) PRCS is designed on a continuum (from confidence to fear) upon which attitudes toward speaking in class are rated. Paul (1966) constructed a shortened version, which has also become a viable tool.

In his work with speech students, McCroskey (1970) developed four measurement indexes prior to the PRCA-24: (a) the Personal Report of Communication Apprehension for College Students (PRCA-College); (b) the Personal Report of Communication Apprehension for Tenth Graders (PRCA-Ten); (c) the Personal Report of Communication Apprehension for Seventh Graders (PRCA-Seven); and (d) the Personal Report of Public Speaking Apprehension (PRPSA).

The college version of McCroskey's (1970) PRCA employs 30 items from Paul's (1966) version of Gilkinson's (1942) PRCS. McCroskey's scale is designed to measure broad-based speech anxiety. This construct is similar to G. Phillips's (1968) reticence; it refers to a broad-based general anxiety during oral communication, rather than to several types of communication-bound anxiety. The PRCS measures anxiety strictly in public speaking situations.

Several difficulties are associated with self-report
measures. Blanchard (1971) suggested that the validity of self-report measures is suspect. For one thing, they do not relate to overt behavior in any simple way, and therefore have low predictive value. For example, some people are unable to verbalize their feelings easily, even when using self-report measures. Others may exaggerate the levels of their feelings, indicating extreme differences from the "average" anxiety, even though they cope well with the apprehension.

Furthermore, instruments such as Gilkinson's (1942) PRCS address speech anxiety too narrowly--only in public speaking. This measure and McCroskey's (1970) previous instruments did not take account of the trait-state dichotomy referred to by Lamb (1972):

Some PRCS items, e.g., "I always avoid speaking in public if possible," ask for a general feeling about speaking, while an item such as "I feel confused while speaking" could be interpreted as either being specific to one speech or refer to a general feeling about speaking. As a result, it is difficult to know whether PRCS scores reflect feelings about a particular speech or a general proneness to experience anxiety in the speaking situation. (p. 63)

Finally, Gilkinson (1942) and McCroskey (1970) assumed that the phenomenon being measured was unidimensional, while the majority of researchers considered it multi-dimensional (Freidrich, 1970). McCroskey (1970), aware of the need for a new instrument to overcome this problem and that of the trait-state dichotomy, developed the PRCA-24, the validity of which
is an improvement over that of his previous measures.

The Personal Report of Communication Apprehension-24

The Personal Report of Communication Apprehension-24 (24 items) (McCroskey, 1981) is a Likert-type self-report scale with five possible answers for each item: (a) strongly agree, (b) agree, (c) undecided, (d) disagree, or (e) strongly disagree. Some examples of items are:

1. I dislike participating in group discussions.
2. I am afraid to express myself at meetings.
3. I feel relaxed while giving a speech.

The directions suggest that the student work quickly, recording the first response which comes to mind.

Reliability

This instrument has been developed by McCroskey (1981), incorporating some items from Gilkinson (1942) and graduate speech students. The reliability estimate is .94 for \( N = 24,822 \) and .75 for all subscores.

Validity

In developing the new version of the PRCA, McCroskey (1981) carefully avoided the two methodological problems which had caused the validity of the previous instruments to be questioned. First, he identified the communication contexts which he believed would provide a representative
cross-section of all communication situations. Those selected were public speaking, meetings, group discussions, and dyadic interaction. Second, he selected an equal number of items to reflect each of those contexts. Finally, he applied factor analysis to confirm expected dimensionality.

McCroskey (1981) included six items for each of the four communication contexts, three positively-worded and three negatively-worded to avoid response bias. The instrument can be used to generate both a general (total) score, representing trait-like CA, and four subscores, representing generalized-context, or state-like, CA in the four areas. The instrument has strong validity (McCroskey, 1981).

PRCA-24 Selection Criteria

The Personal Report of Communication Apprehension-24 (PRCA-24) was chosen for this study for four reasons. First, the instrument's high reliability has been established by McCroskey (1981). Second, McCroskey et al. (1976) demonstrated the validity of the PRCA-24 in administering it jointly with Cattell's 16 PF (Personality Factor) personality measure (Cattell, Eber, & Tatsuoka, 1970). The multiple correlation was .72. The third reason for choosing the Personal Report of Communication Apprehension-24 for the present study was that it is a
convenient length. Lastly, its items are clear statements developed to reflect easily-recognizable self-assessment reactions.

Daly (1978) evaluated 25 self-report instruments measuring CA or a related construct. He reported that the PRCA (McCroskey, 1970) had attained the highest average correlation with all other instruments. It also had the smallest range of scores and the most reliability. Therefore, it was the most encompassing of the 25 self-reports assessed.

The PRCA-24 (McCroskey, 1981) is even more refined, and therefore, more reliable than the original PRCA (1970). It allows accuracy and precision in the measurement of reconceptualized CA. Since it provides a separate subscore for each of the four different types of communication situations, its ability to measure is notably efficient.

Sampling Technique

Setting

This research study was conducted in a suburban middle-class high school in southeastern Michigan, housing approximately 2,200 students in Grades 9 through 12. Classes were held in three major subsettings: the East Center, the West Center, and the Fine Arts and Career
Center (FACC). Speech classes were taught in either of the first two buildings, but had access to the auditorium in the FACC for special occasions. Only one high school was chosen for this study in order to negate the problem of variation between schools.

Of the three speech teachers involved in this study, two were housed in the East Building and one was situated in the West Building. The three teachers were selected because each had a schedule which included two sets of like speech classes. This arrangement lent itself to the research design of the study.

Subjects

Most of the students fulfilling the half-credit speech graduation requirement were in the 10th grade. There was an equitable ratio of males to females in these speech classes.

During the 1984-85 school year, three speech teachers taught the speech student load in 24 sections (two semesters) of approximately 25 students each, accounting for around 600 pupils. Each teacher had two sets of like classes during the fall semester:

<table>
<thead>
<tr>
<th>Teacher 1</th>
<th>Debate</th>
<th>Speech</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Debate</td>
<td>Speech</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>Theater Arts</td>
<td>Speech</td>
</tr>
<tr>
<td></td>
<td>Theater Arts</td>
<td>Speech</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>Speech Skills</td>
<td>Speech</td>
</tr>
<tr>
<td></td>
<td>Speech Skills</td>
<td>Speech</td>
</tr>
</tbody>
</table>
For the purposes of this study, the students of these classes were used—one like class as the experimental group and one as the comparison (control) group.

In the spring of 1984 these students had chosen the fall (1984) speech course which they felt would be the most appropriate for them. A computer then assigned them randomly to the section in which they were enrolled at the time of the study.

The speech students had levels of CA ranging from very low to very high, as reflected in their PRCA-24 scores. Those considered to have very high CA experienced severe anxiety when confronted with an oral communication interaction, especially public speaking.

All of the speech students except those electing Theater Arts were fulfilling a requirement previously established by the English Department. This graduation requirement (one-half credit of speech) resulted in speech class enrollment of a cross-sectional nature. These classes met 5 times per "normal" week (5 days), once per "normal" school day (6 hours).

The samples drawn from the high school speech population were intact groups (classes). Since the groups were randomly formed by computer based on course selection by the student, the students had a relatively equal chance of being selected for the section in which they were enrolled.
Each of the sections used was of relatively normal size and composition for its kind, typically encompassing between 15 and 30 students per section. Student grade classifications ranged from freshmen to seniors, with the heaviest enrollment among sophomores.

Data Collection Description

The PRCA-24 was administered by each speech teacher on the first or second day of class of the 1984-85 first semester (September). Anonymity was not desired, since the pretest and posttest scores and class grades were to be compared.

The three participating speech teachers were instructed in writing regarding the procedure for administering the PRCA-24 in the most objective manner possible (see Appendix C). First, they were asked not to tell the students that they were subjects in a research study. Next, they were requested to read the instrument directions orally with their students and to answer any questions before the students began responding to the CA measure in writing. The directions on the PRCA-24 (McCroskey, 1981) are as follows:

This instrument is composed of 24 statements concerning your feelings about communication with other people. Please indicate in the space provided the degree to which each statement applies to you by marking whether you (1) Strongly Agree, (2) Agree, (3) Are Undecided, (4) Disagree, or (5) Strongly Disagree with each statement. There are no right
or wrong answers. Many of the statements are similar to other statements. Do not be concerned about this. Work quickly, just record your first impression.

Next, the teachers were informed that the PRCA-24 is structured in four groups of six statements each:

- Statements 1 through 6 relate to oral communication in groups.
- Statements 7 through 12 relate to oral communication in meetings (or classes).
- Statements 13 through 18 relate to oral communication in dyads (couples).
- Statements 19 through 24 relate to oral communication in public speaking.

In being cognizant of this constructional aspect of the PRCA-24, the teachers could answer any related questions.

The speech instructors were asked not to inform their students that they would be taking the same test again at the end of the semester (January, 1985) or that anyone else would be seeing their scores. In this way, it was hoped that testing and other bias could be minimized.

The teachers were asked to tell their students that the purpose of the testing was to inform them (speech instructors) of their students' levels of oral communication anxiety. With this prior knowledge teachers could better assist their students before the students were required to perform or interact orally with their
peers.

During the semester students in the experimental groups were exposed to cognitive restructuring in addition to the skills training. At the end of the semester all of the speech classes involved in the study were administered the PRCA-24 as a posttest.

Students were informed about the comparison of scores only after they had completed the posttest. They were then told that the purpose for repeating the test was so that the two sets of scores might be compared to assess any self-perceived progress made during the semester. The students were not informed that the gain scores would be compared with their semester grades, however.

Computerization Processes

The Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) program for computing analyses of variance was used to test all hypotheses. The Scheffe post hoc procedure (Glass & Stanley, 1970, pp. 443-445) was applied to identify the locus of specific differences wherever statistical significance was found. A family alpha level of .05 was used throughout the study.
Statistical Analysis Procedures

The two-way analysis of variance statistical technique was selected for analysis purposes for several reasons. First, the variables were considered continuous on an interval scale. Secondly, normal distribution was assumed. In addition, more than one independent variable was involved.

Six dependent variables were employed in the statistical analysis. The dependent measure (PRCA-24, McCroskey, 1981) involved a set of four subscores, totaled from responses elicited on the following speaking categories: (a) group experience, (b) interaction in meetings, (c) dyadic exchange, and (d) public speaking performance. Included, as well, was a total score. Pretest and posttest gain scores were compared with semester grades to assess any relationship.

The second set of analyses (grades vs. gain scores) was completed for descriptive purposes. The data had possibilities of interest from a cause and effect relationship standpoint.

Conclusion

The purpose of this chapter was to provide a discussion of the methodological processes inherent in this study. The purpose of the study was to assess the effect of a cognitive restructuring unit on the oral
communication apprehension of students in high school speech class. Presented in Chapter IV are the statistical results of the study and a brief identification of significant findings.
CHAPTER IV

FINDINGS

The purpose of this chapter is to report the data gathered in this study and to present a discussion of the statistical treatment of these data as they apply to the purpose of the study. The purpose of this study was to determine any effect/s of a cognitive modification unit developed to raise self-acceptance in high school speech students and thereby lower oral communication apprehension.

The population of the study consisted of approximately 2,200 high school students. That population yielded 288 speech students for the first semester of 1984-85. These students had been randomly assigned by computer to the classes which were drawn as cluster samples for the study. Experimental groups included 126 students. Comparison groups involved 162 students.

The level of student self-acceptance was reflected in the gain scores resulting from the pretests and posttests utilizing McCroskey's (1981) Personal Report of Communication Apprehension-24. Student response to positively- and negatively-worded statements on the PRCA-24 produced a total score and four subscores. The lower the score, the lower the level of oral communication apprehension.
apprehension; the higher the gain score, the higher the level of confidence gained.

Experimental groups and comparison groups of speech students were administered the same instrument (PRCA-24) to provide a means of comparison. The two-way analysis of variance (ANOVA) statistical technique was used to test for significance of differences between the pretest and posttest gain scores of both groups.

Statistical analyses of the data were computed to determine the tenability of the research hypotheses as introduced in null form in Chapter II and restated below. The data were run and analyzed by computer, using the Statistical Package for the Social Sciences (Nie et al., 1975). A family alpha level of .05 was established as the level of confidence required for statistical significance. The Scheffe post hoc procedure (Glass & Stanley, 1970, pp. 443-445) was employed to identify the specific locus of any implied differences.

Hypotheses Restated

The following null hypotheses were tested in the present study. The findings are presented in tables following the hypotheses. An identification of any significant difference is included.

Hypothesis 1: There is no significant difference between PRCA-24 pretest and posttest gain scores or
subtest scores for speech students who receive cognitive restructuring and those who do not.

Hypothesis 2: There is no significant difference between PRCA-24 pretest and posttest gain scores or subtest scores for students in four types of speech courses.

Hypothesis 3: There is no significant interaction between PRCA-24 pretest and posttest gain scores or subtest scores for students in various speech courses who receive cognitive restructuring and those who do not.

Hypothesis 4: There is no significant difference in the PRCA-24 pretest and posttest gain scores or subtest scores of students who receive various grades in their speech classes.

Hypothesis 5: There is no significant interaction between PRCA-24 pretest and posttest gain scores or subtest scores for students who receive different grades in their speech classes employing cognitive restructuring and those not employing cognitive restructuring.

Results of ANOVA: Condition and Type

The following two-way analysis of variance results are displayed in various tables. The subgroup gain score means tables and analyses are followed by the tables and analyses of the total gain score means. Significant aspects are noted. Post hoc procedures are identified.

Each of the 10 analyses addresses three factors:
(a) any significant difference between conditions scores
(experimental vs. comparison groups' scores); (b) any
significant difference between the scores of students in
the four different types of classes (Theater Arts, Speech
Skills, Debate, Speech); (c) any significant interaction.

Table 2

<table>
<thead>
<tr>
<th>Group</th>
<th>Theater Arts</th>
<th>Speech Skills</th>
<th>Debate</th>
<th>Speech</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X  n</td>
<td>X  n</td>
<td>X  n</td>
<td>X  n</td>
<td>X  n</td>
</tr>
<tr>
<td>Exp.</td>
<td>-.83 23</td>
<td>1.79 19</td>
<td>-.30 20</td>
<td>.83 64</td>
<td>.49 126</td>
</tr>
<tr>
<td>Comp.</td>
<td>-1.87 31</td>
<td>1.79 24</td>
<td>-1.26 19</td>
<td>.75 88</td>
<td>.17 162</td>
</tr>
<tr>
<td>Total</td>
<td>-1.43 54</td>
<td>1.79 43</td>
<td>-.77 39</td>
<td>.78 152</td>
<td></td>
</tr>
</tbody>
</table>

Note. In Table 2 "Condition" refers to experimental or
comparison groups. "Group Measure" refers to the group
subtest section of the Personal Report of Communication
Apprehension-24 (McCroskey, 1981). (Tables 4, 6, and 8
are constructed similarly, while addressing different
subtests. The results displayed in Table 10 reflect the
students' total scores, under which the four subscores
are subsumed.)
Table 3
Analysis of Variance Comparing Treatment and Class Type
Pretest and Posttest Gain Scores: Group Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>9.613</td>
<td>1</td>
<td>9.613</td>
<td>.457</td>
<td>.500</td>
</tr>
<tr>
<td>Type</td>
<td>338.527</td>
<td>3</td>
<td>112.842</td>
<td>5.365</td>
<td>.001*</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>14.067</td>
<td>3</td>
<td>4.689</td>
<td>.223</td>
<td>.880</td>
</tr>
<tr>
<td>Residual</td>
<td>5889.398</td>
<td>280</td>
<td>21.034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6249.497</td>
<td>287</td>
<td>21.775</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

A significant difference in type of class is indicated *[F(3, 280) = .001, p < .05] in Table 3. Specifically, as shown by computing all possible pair-wise comparisons using the Sheffe post hoc method, significant differences found were between Theater Arts (-1.43) and Speech Skills (1.79) and Theater Arts (-1.43) and Speech (.78) on the group measure (Table 2). As reflected in the scores, Theater Arts students experienced the lowest gain in speaking confidence, especially when compared with those in Speech Skills, who realized the highest gain. While Speech students also reported a significant gain in speaking confidence, their communication apprehension level was not reduced as much as that of the Speech Skills students.
Table 4
PRCA-24 Gain Score Means and Sample Sizes: Condition and Class Type Groups—Meeting Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>Theater Arts</th>
<th>Speech Skills</th>
<th>Debate</th>
<th>Speech</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>n</td>
<td>X</td>
<td>n</td>
<td>X</td>
</tr>
<tr>
<td>Exp.</td>
<td>-1.74</td>
<td>23</td>
<td>1.37</td>
<td>19</td>
<td>1.70</td>
</tr>
<tr>
<td>Comp.</td>
<td>- .55</td>
<td>31</td>
<td>2.63</td>
<td>24</td>
<td>- .68</td>
</tr>
<tr>
<td>Total</td>
<td>-1.06</td>
<td>54</td>
<td>2.07</td>
<td>43</td>
<td>.54</td>
</tr>
</tbody>
</table>

Table 5
Analysis of Variance Comparing Treatment and Class Type Pretest and Posttest Gain Scores: Meeting Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>4.930</td>
<td>1</td>
<td>4.930</td>
<td>.242</td>
<td>.623</td>
</tr>
<tr>
<td>Type</td>
<td>278.281</td>
<td>3</td>
<td>92.760</td>
<td>4.545</td>
<td>.004*</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>102.088</td>
<td>3</td>
<td>34.029</td>
<td>1.667</td>
<td>.174</td>
</tr>
<tr>
<td>Residual</td>
<td>5715.187</td>
<td>280</td>
<td>20.411</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6100.319</td>
<td>287</td>
<td>21.255</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

A significant difference was indicated between type of class *[F(3,280) = .004, p < .05] in Table 5. Thus, a Scheffe post hoc procedure was employed, and Theater Arts
(-1.06) was found to be significantly different from Speech Skills (2.07) and Speech (1.16) on the meeting measure (Table 4). Theater Arts students experienced the lowest gain in speaking confidence as reflected in the above gain scores analysis, especially when compared with Speech Skills students, those with the highest gain. While Speech students also reported a significant gain in speaking confidence, their communication apprehension level, as reflected in the PRCA-24 Meeting Measure scores, was not reduced as much as that of the Speech Skills students.

Table 6

PRCA-24 Gain Score Means and Sample Sizes: Condition and Class Type Groups—Dyadic Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>Theater Arts</th>
<th>Speech Skills</th>
<th>Debate</th>
<th>Speech</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X n</td>
<td>X n</td>
<td>X n</td>
<td>X n</td>
<td>X n</td>
</tr>
<tr>
<td>Exp.</td>
<td>-1.70 23</td>
<td>.74 19</td>
<td>1.05 20</td>
<td>.83 64</td>
<td>.39 126</td>
</tr>
<tr>
<td>Comp.</td>
<td>-1.03 31</td>
<td>2.42 24</td>
<td>1.47 19</td>
<td>.88 88</td>
<td>.81 162</td>
</tr>
<tr>
<td>Total</td>
<td>-1.31 54</td>
<td>1.67 43</td>
<td>1.26 39</td>
<td>.86 152</td>
<td></td>
</tr>
</tbody>
</table>
Table 7

Analysis of Variance Comparing Treatment and Class Type
Pretest and Posttest Gain Scores: Dyadic Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>14.903</td>
<td>1</td>
<td>14.903</td>
<td>.792</td>
<td>.374</td>
</tr>
<tr>
<td>Type</td>
<td>276.574</td>
<td>3</td>
<td>92.191</td>
<td>4.897</td>
<td>.002*</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>22.662</td>
<td>3</td>
<td>7.554</td>
<td>.401</td>
<td>.752</td>
</tr>
<tr>
<td>Residual</td>
<td>5271.776</td>
<td>280</td>
<td>18.828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5583.500</td>
<td>287</td>
<td>19.455</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

As in the other two cases, the significance of F result for type of class *$[F(3, 280) = .002, p < .05]$ (Table 7) indicated that a Scheffe post hoc test was in order. It was subsequently determined that Theater Arts ($-1.31$) was significantly different from all three other groups on the dyadic measure (Speech Skills = 1.67; Debate = 1.26; Speech = .86) (Table 6). Again, Speech Skills students experienced the highest gain. Debate students reported the next highest improvement, while Speech students reflected the lowest gain.
Table 8

PRCA-24 Gain Score Means and Sample Sizes: Condition and Class Type Groups—Public Speaking Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>Theater Arts</th>
<th>Speech Skills</th>
<th>Debate</th>
<th>Speech</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X n</td>
<td>X n</td>
<td>X n</td>
<td>X n</td>
<td>X n</td>
</tr>
<tr>
<td>Exp.</td>
<td>4.26 23</td>
<td>3.84 19</td>
<td>3.80 20</td>
<td>5.05 64</td>
<td>4.52 126</td>
</tr>
<tr>
<td>Comp.</td>
<td>.26 31</td>
<td>6.54 24</td>
<td>2.58 19</td>
<td>4.93 88</td>
<td>4.00 162</td>
</tr>
<tr>
<td>Tot.</td>
<td>1.96 54</td>
<td>5.35 43</td>
<td>3.21 39</td>
<td>4.98 152</td>
<td></td>
</tr>
</tbody>
</table>

Table 9

Analysis of Variance Comparing Treatment and Class Type Pretest and Posttest Gain Scores: Public Speaking Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>23.099</td>
<td>1</td>
<td>23.099</td>
<td>.911</td>
<td>.341</td>
</tr>
<tr>
<td>Type</td>
<td>461.535</td>
<td>3</td>
<td>153.845</td>
<td>6.066</td>
<td>.001*</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>280.757</td>
<td>3</td>
<td>93.586</td>
<td>3.690</td>
<td>.012*</td>
</tr>
<tr>
<td>Residual</td>
<td>7101.137</td>
<td>280</td>
<td>25.361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7862.875</td>
<td>287</td>
<td>27.397</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

The significance of F result *[F(3,280) = .001, p < .05] (Table 9) indicated a significant difference between type of class. Speech Skills (5.35) reflected
a much higher gain than Theater Arts (1.96), for example. However, the test of type was superseded here by the test of interaction $[*F(3, 280) = 0.012, p < 0.05]$. The Scheffe post hoc procedure results showed significant interaction between the Theater Arts experimental (4.26) and control groups (.26) and Theater Arts (1.96) and Speech Skills (5.35) and Theater Arts (1.96) and Speech (4.98) on the public speaking measure (Table 8). However, it should be noted that those differences may have been extraneous, since there was an interaction between type and condition.

Table 10

<table>
<thead>
<tr>
<th>Group</th>
<th>Theater Arts</th>
<th>Speech Skills</th>
<th>Debate</th>
<th>Speech</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>$n$</td>
<td>$\bar{X}$</td>
<td>$n$</td>
<td>$\bar{X}$</td>
</tr>
<tr>
<td>Exp.</td>
<td>0.00</td>
<td>23</td>
<td>7.74</td>
<td>19</td>
<td>6.25</td>
</tr>
<tr>
<td>Com.</td>
<td>3.19</td>
<td>31</td>
<td>13.38</td>
<td>24</td>
<td>2.05</td>
</tr>
<tr>
<td>Tot.</td>
<td>1.83</td>
<td>54</td>
<td>10.88</td>
<td>43</td>
<td>4.21</td>
</tr>
</tbody>
</table>

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Table 11

Analysis of Variance Comparing Treatment and Class Type
Pretest and Posttest Gain Scores:
Total Scores Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>40.038</td>
<td>1</td>
<td>40.038</td>
<td>.227</td>
<td>.634</td>
</tr>
<tr>
<td>Type</td>
<td>4953.202</td>
<td>3</td>
<td>1651.067</td>
<td>9.373</td>
<td>.001*</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>627.514</td>
<td>3</td>
<td>209.171</td>
<td>1.187</td>
<td>.315</td>
</tr>
<tr>
<td>Residual</td>
<td>49320.561</td>
<td>280</td>
<td>176.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54935.500</td>
<td>287</td>
<td>191.413</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

The significance of F results *(F(3,280) = .001, p < .05)* in Table 11 indicated that a Scheffe post hoc procedure was needed to determine which types of classes were different from each other. The findings showed that Theater Arts (-1.83) was significantly different from Speech Skills (10.88) and Speech (7.78) on the total measure (Table 10). Theater Arts students experienced a much lower gain in confidence in speaking than the other students (as indicated by their gain scores), especially those in Speech Skills.

Based on the findings displayed in Tables 2 through 11, Hypothesis 1 must be rejected at the .05 level of significance for type of class. Hypothesis 1 was stated as: There is no significant difference between PRCA-24
pretest to posttest gain scores for students receiving
cognitive restructuring and those not receiving cognitive
restructuring.

Hypothesis 2 was stated as: There is no significant
difference between PRCA-24 pretest and posttest gain
scores for students in four types of speech classes.
It must be rejected at the .05 level of significance for
type of class, based on the findings displayed in Tables 2
through 11.

Hypothesis 3 was stated as: There is no significant
interaction between PRCA-24 pretest and posttest gain
scores for those in various speech courses who receive
cognitive restructuring and those who do not receive
cognitive restructuring. Hypothesis 3 must be rejected,
also; a significant interaction (.012) was found between
the Theater Arts experimental and comparison groups and
between Theater Arts and Speech Skills and between Theater
Arts and Speech on the public speaking measure.

Relationship of PRCA-24 Gain Scores and Grades

Hypotheses 4 and 5 addressed the relationship be-
tween PRCA-24 gain scores and semester grades for students
in the various types of speech classes. Hypothesis 5
dealt with any interaction involved in that relationship,
as demonstrated statistically through a two-way analysis.
Hypothesis 4 was stated as: There is no significant difference in the PRCA-24 pretest and posttest gain scores of students who receive various grades in their speech classes.

Hypothesis 5 was stated as: There is no significant interaction between PRCA-24 pretest and posttest gain scores for students who receive different grades in their speech courses employing cognitive restructuring and those not employing cognitive restructuring.

Results of ANOVA: Mean Gain Scores and Grades

The findings established in the two-way analysis of variance tests for the relationship between PRCA-24 gain scores and semester grades for types of classes are displayed in Tables 12 through 21. "Condition" refers to experimental or comparison groups and "grade type" refers to A's, B's, and below (other).
Table 12
PRCA-24 Gain Score Means and Sample Sizes:
Condition Group by Grade Type--
Group Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>A's ( \bar{X} ) n</th>
<th>B's ( \bar{X} ) n</th>
<th>Other ( \bar{X} ) n</th>
<th>Total ( \bar{X} ) n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exper.</td>
<td>-1.00 16</td>
<td>1.69 29</td>
<td>.36 81</td>
<td>.49 126</td>
</tr>
<tr>
<td>Compar.</td>
<td>- .66 29</td>
<td>.16 44</td>
<td>.44 89</td>
<td>.17 162</td>
</tr>
<tr>
<td>Total</td>
<td>- .78 45</td>
<td>.77 73</td>
<td>.40 170</td>
<td></td>
</tr>
</tbody>
</table>

Table 13
Analysis of Variance Comparing Condition Groups and
Class Grades: Pretest and Posttest Gain Scores--
Group Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>5.584</td>
<td>1</td>
<td>5.584</td>
<td>.257</td>
<td>.613</td>
</tr>
<tr>
<td>Grade</td>
<td>67.957</td>
<td>2</td>
<td>33.978</td>
<td>1.561</td>
<td>.212</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>36.863</td>
<td>2</td>
<td>18.431</td>
<td>.847</td>
<td>.430</td>
</tr>
<tr>
<td>Residual</td>
<td>6137.172</td>
<td>282</td>
<td>21.763</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6249.497</td>
<td>287</td>
<td>21.775</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No significant difference was noted in gain scores analysis results between groups and grades in Table 13. No significant interaction occurred, either, on the group measure.
Table 14
PRCA-24 Gain Score Means and Sample Sizes: Condition Group by Grade Type—Meeting Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>A's</th>
<th>B's</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$</td>
<td>$n$</td>
<td>$\bar{x}$</td>
<td>$n$</td>
</tr>
<tr>
<td>Exper.</td>
<td>.50</td>
<td>16</td>
<td>2.10</td>
<td>29</td>
</tr>
<tr>
<td>Compar.</td>
<td>.72</td>
<td>29</td>
<td>1.09</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>.64</td>
<td>45</td>
<td>1.49</td>
<td>73</td>
</tr>
</tbody>
</table>

Table 15
Analysis of Variance Comparing Condition Groups and Class Grades: Pretest and Posttest Gain Scores—Meeting Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>6.617</td>
<td>1</td>
<td>6.617</td>
<td>.309</td>
<td>.579</td>
</tr>
<tr>
<td>Grade</td>
<td>49.403</td>
<td>2</td>
<td>24.702</td>
<td>1.155</td>
<td>.317</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>12.718</td>
<td>2</td>
<td>6.359</td>
<td>.297</td>
<td>.743</td>
</tr>
<tr>
<td>Residual</td>
<td>6033.435</td>
<td>282</td>
<td>21.395</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6100.319</td>
<td>287</td>
<td>21.255</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No significant difference was noted in the meeting measure analysis (Table 15) between group gain scores and semester grades. Also, no significant interaction between the variables was evident for the meeting measure.
Table 16

PRCA-24 Gain Score Means and Sample Sizes:
Condition Group by Grade Type—
Dyadic Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>A's</th>
<th>B's</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>n</td>
<td>X</td>
<td>n</td>
</tr>
<tr>
<td>Exper.</td>
<td>.63</td>
<td>16</td>
<td>1.28</td>
<td>29</td>
</tr>
<tr>
<td>Compar.</td>
<td>-.17</td>
<td>29</td>
<td>.07</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>.11</td>
<td>45</td>
<td>.55</td>
<td>73</td>
</tr>
</tbody>
</table>

Table 17

Analysis of Variance Comparing Condition Groups and Class Grades: Pretest and Posttest Gain Scores—
Dyadic Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>15.506</td>
<td>1</td>
<td>15.506</td>
<td>.803</td>
<td>.371</td>
</tr>
<tr>
<td>Grade</td>
<td>20.197</td>
<td>2</td>
<td>10.099</td>
<td>.523</td>
<td>.593</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>108.141</td>
<td>2</td>
<td>54.070</td>
<td>2.802</td>
<td>.062</td>
</tr>
<tr>
<td>Residual</td>
<td>5442.674</td>
<td>282</td>
<td>19.300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5583.500</td>
<td>287</td>
<td>19.455</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. No significant difference or interaction was found between grades and gain scores in Table 17.
Table 18

PRCA-24 Gain Score Means and Sample Sizes: Condition Group by Grade Type—Public Speaking Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>A's</th>
<th>B's</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}$</td>
<td>n</td>
<td>$\bar{X}$</td>
<td>n</td>
</tr>
<tr>
<td>Exper.</td>
<td>5.31</td>
<td>16</td>
<td>6.59</td>
<td>29</td>
</tr>
<tr>
<td>Compar.</td>
<td>3.07</td>
<td>29</td>
<td>5.39</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>3.87</td>
<td>45</td>
<td>5.86</td>
<td>73</td>
</tr>
</tbody>
</table>

Table 19

Analysis of Variance Comparing Condition Groups and Class Grades: Pretest and Posttest Gain Scores—Public Speaking Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>28.337</td>
<td>1</td>
<td>28.337</td>
<td>1.062</td>
<td>.304</td>
</tr>
<tr>
<td>Grade</td>
<td>272.030</td>
<td>2</td>
<td>136.015</td>
<td>5.099</td>
<td>.007*</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>48.733</td>
<td>2</td>
<td>24.366</td>
<td>.913</td>
<td>.402</td>
</tr>
<tr>
<td>Residual</td>
<td>7522.666</td>
<td>282</td>
<td>26.676</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7862.875</td>
<td>287</td>
<td>27.397</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05.

Unlike the previous analyses of the group and grade relationship, Table 19 shows a significant difference across grades *[F(2, 282) = .007, p < .05]. Thus, a
The Sheffe post hoc procedure was applied to the data. A difference was noted between students who earned B's (5.86) and those graded below that level (other) (3.62) in the public speaking domain. This difference indicated that students earning grades in the B range gained more public speaking confidence than the other students did. Therefore, Hypothesis 4 was rejected at the .05 level of significance.

Hypothesis 4 stated: There is no significant difference in the PRCA-24 pretest and posttest gain scores for students who receive various grades in their speech courses.

Table 20
PRCA-24 Gain Score Means and Sample Sizes:
Condition Group by Grade Type—Total Measure

<table>
<thead>
<tr>
<th>Group</th>
<th>A's</th>
<th></th>
<th>B's</th>
<th></th>
<th>Other</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X n</td>
<td></td>
<td>X n</td>
<td></td>
<td>X n</td>
<td></td>
<td>X n</td>
<td></td>
</tr>
<tr>
<td>Exper.</td>
<td>5.44</td>
<td>16</td>
<td>11.66</td>
<td>29</td>
<td>4.63</td>
<td>81</td>
<td>6.35</td>
<td>126</td>
</tr>
<tr>
<td>Compar.</td>
<td>2.97</td>
<td>29</td>
<td>6.70</td>
<td>44</td>
<td>6.01</td>
<td>89</td>
<td>5.65</td>
<td>162</td>
</tr>
<tr>
<td>Total</td>
<td>3.84</td>
<td>45</td>
<td>8.67</td>
<td>73</td>
<td>5.35</td>
<td>170</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 21
Analysis of Variance Comparing Condition Groups and Class Grades: Pretest and Posttest Gain Scores—Total Measure

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>40.676</td>
<td>1</td>
<td>40.676</td>
<td>.214</td>
<td>.644</td>
</tr>
<tr>
<td>Grade</td>
<td>807.108</td>
<td>2</td>
<td>403.554</td>
<td>2.125</td>
<td>.121</td>
</tr>
<tr>
<td>2-Way interactions</td>
<td>531.677</td>
<td>2</td>
<td>265.839</td>
<td>1.400</td>
<td>.248</td>
</tr>
<tr>
<td>Residual</td>
<td>53562.491</td>
<td>282</td>
<td>189.938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54935.500</td>
<td>287</td>
<td>191.413</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As in most of the other analyses, the findings displayed in Tables 20 and 21 reveal no significant differences or interactions between the variables. Therefore, Hypothesis 5 can be accepted at the .05 level of significance.

Hypothesis 5 was stated as: There is no significant interaction between PRCA-24 pretest and posttest gain scores for students who receive different grades in their speech courses and cognitive restructuring and those who do not receive cognitive restructuring.

Conclusion

The purpose of this chapter was to report the data gathered in the research study and present the
statistical treatment of these data as they applied to the purpose of the study. Based on the findings, null Hypotheses 1 through 4 were rejected, while Hypothesis 5 was accepted. In Chapter V are presented appropriate interpretations, summaries, and recommendations based on the results cited in Chapter IV.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter was to summarize the findings reported in Chapter IV and to cite conclusions from those findings which may be applied to speech class practice. Following are specific suggestions for future research to investigate the alleviation of oral communication apprehension.

Summary and Discussion of Results

In this study pretest to posttest PRCA-24 mean gain scores were analyzed (representing reports of changes in subjects' oral communication apprehension levels) employing a two-way analysis of variance statistical technique to test for experimental and comparison group differences. Four subscores (group, dyadic, meeting, and public speaking) and a total score were employed in the process. Results revealed that significant differences existed primarily between Theater Arts gain scores and those of the other three types of classes (Speech, Debate, and Speech Skills), especially Speech Skills. Gain scores were then compared with semester grades to assess any relationship/s between the variables.

Specifically, the differences found as a result of

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applying the Sheffe post hoc statistical procedure where indicated were as follows:

1. Between Theater Arts and Speech Skills and between Theater Arts and Speech on the group measure (see Chapter IV, Tables 2 and 3).

2. Between Theater Arts and Speech Skills and Theater Arts and Speech on the meeting measure (see Tables 4 and 5).

3. Between Theater Arts and the other three types of classes—Speech Skills, Speech, and Debate—on the dyadic measure (see Tables 6 and 7).

4. Between Theater Arts and Speech Skills and Theater Arts and Speech on the total measure (see Tables 10 and 11).

5. Significant interaction between the Theater Arts experimental groups and comparison groups and between Theater Arts and Speech Skills and Theater Arts and Speech on the public speaking measure (see Tables 8 and 9).

6. Significant difference across grades for B students and below-B students in the public speaking domain (see Tables 18 and 19).

It had been assumed that any significant difference/s would be attributable to the independent variable "cognitive restructuring treatment." However, the fact that Theater Arts (the only elective of the four types of speech classes) students were different from the other
students impacted significantly on the results of the study.

General Conclusions

Some general conclusions were drawn from these results. First, the treatment being assessed, cognitive restructuring (plus skills training, as opposed to skills-training-only) did not appear to meaningfully reduce "trait-like" communication apprehension (McCroskey, 1981) for all measures (PRCA-24 subscores and total score). Statistically, the treatment had a significant influence on the dependent variable only in the domain revealed in Table 8, public speaking. However, since public speaking is the most dominant aspect of the typical speech course, a significant gain here is meaningful.

The difference between Theater Arts students and those in the other courses had a decided effect on the findings. Theater Arts students' gain score means differed significantly from those of the other students on several of the analyses of variance. Theater Arts was the only elective of the courses surveyed for data. Therefore, one can assume that at least some of these students had previously taken some other form of speech course (because of the English Department graduation requirement), and that they elected this particular course partially because they had low oral communication
apprehension and were therefore more comfortable speaking or performing in public.

This factor may explain the major differences in gain score means between Theater Arts students and those in the other courses. Theater Arts students may have had little to gain in confidence, already being more confident orally than the other students; by comparison, the gains in confidence of the other students differed significantly from those of the Theater Arts students on most measures. Therefore, students in Debate, Speech, and Speech Skills made significant gains in speaking confidence during the course of their speech classes, compared to the Theater Arts students, who registered mostly negative scores, indicating a reversal, rather than a gain.

The next lowest "gain" was realized by the Debate students. Debate involves oral competition and requires the ability to think quickly, make rapid decisions, re-organize thoughts, and speak spontaneously. One may assume by the nature of the course that like Theater Arts students, Debate students did not suffer from a high level of oral communication apprehension, or they would not have chosen the course in lieu of a "safer" one. Debate students' scores differed significantly from Theater Arts students' scores on the dyadic and public speaking measures.
Speech students, by far the largest group (n = 152), differed consistently from Theater Arts students (n = 54), the most confident group, as gauged by the PRCA-24. Most students selected Speech to fulfill their speech graduation requirement. In general, these students included the college-bound, the average student academically, and those with higher oral communication apprehension than Theater Arts or Debate students. Their higher gain in oral confidence was predictable because they had more oral CA to overcome, in most cases.

Speech Skills scores also consistently differed from Theater Arts scores. Speech Skills students were generally considered to have lower academic and social skills abilities. Therefore, it was expected that these students would also exhibit higher levels of oral communication apprehension initially and higher gains in confidence, ultimately.

While only one significant difference was noted between the experimental and control groups—on the public speaking measure in this study—a number of previous researchers had found significant results in communication apprehension reduction when the cognitive restructuring plus skills training or skills-training-only treatment methods were employed. One primary difference between the present study and certain previous studies, however, was the CA construct being measured,
including the instrumentation used to measure it.

Many previous research studies have examined the original "trait" communication apprehension construct (McCroskey, 1970). The current study examined the reconceptualized "trait-like" CA construct (with the original communication apprehension construct and the shyness construct, and the instruments used to measure each, subsumed within that construct). Therefore, the somewhat-conflicting findings between this study and the others may have been due to the use of the new reconceptualized CA construct and the modified instrument used to measure it.

The original communication apprehension construct measured something different—CA more as a state than a trait. This difference was empirically supported by Parks, Dindia, Adams, Berlin, and Larson (1980), Porter (1981), and McCroskey (1981), who suggested that his original Personal Report of Communication Apprehension (1970) overly represented items related to public speaking. Therefore, it was more oriented to the public speaking context, rather than being cross-situational and across time, as it had been purported to be (McCroskey, 1970). McCroskey (1981) concluded that the original PRCA appeared to be less valid for predicting CA in other than public speaking situations than the PRCA-24 (1981).

Another possible explanation for the difference in
the results of the present study and those of previous researchers is "grader influence." This effect consists of the impact of the instructor with legitimate power to issue grades when also acting as the facilitator of the experiment. This influence may have resulted in subjects attempting to enhance their academic standing by manipulating their self-reports in their own favor. Such a "transparency effort" (responding to self-reports in a self-perceived advantageous manner) would not have been difficult. This type of behavior has been documented by Daly and Street (1980).

A second possible explanation for the mostly nonsignificant differences between experimental and control groups in other than the public speaking domain is in "expectancy factors" for behavioral improvement, previously documented by Marcia, Rubin, and Efran (1969) and supported by Page (1980). Even when employing a placebo-type therapy, a significant reduction in subjects' levels of communication apprehension can occur when individuals are provided with positive personal attention and guidance and positive expectations for their success by authority figures.

Answers to Research Questions

The research questions in Chapter I are restated below and addressed individually in the following
section.

1. Is there a relationship between the level of oral communication apprehension and cognitive restructuring experiences?

2. Is there a difference between communication apprehension scores before and after cognitive restructuring in students of different speech class formats?

3. Is there a relationship between student pretest and posttest gain scores and semester grades?

**Question 1**

In response to the first question, the communication apprehension reduction unit tested in the present study, cognitive restructuring (combined with skills training), proved to be significantly more effective than skills-training-only in the reduction of trait-like CA for the public speaking domain. This conclusion was based on the findings reported in Chapter IV, Table 8, where an analysis of variance using group mean gain scores to account for pretest to posttest differences was performed. The subsequent Scheffe post hoc procedure indicated a significant interaction between the Theater Arts experimental and comparison groups.

There was a significant difference between the Theater Arts experimental group and comparison group
(condition). There was also a significant difference between Theater Arts and the other three types of courses (type). However, it should be noted that those differences may have been extraneous due to the interaction between type and condition. In any case, the interaction effect took precedence statistically.

If a significant difference did exist between the Theater Arts experimental group and comparison group, the experimental group gained significant confidence (4.26) over the comparison group (0.26). This gain is worthy of attention because this particular course attracted students who, in general, experience higher levels of confidence than the average speech student. For them to indicate such a high gain is impressive.

The major question which is not resolved by this study is whether the obtained results are indeed attributable to the cognitive restructuring treatment or whether they were contaminated by some other variable/s, such as instructor charisma. However, each instructor who participated in the study had both experimental and comparison (control) groups.

Question 2

In order to answer Question 2, a number of Scheffe post hoc procedures was necessary, indicated by the significance of $F$ ratio resulting from each particular
ANOVA procedure. In the first test Theater Arts differed significantly from Speech Skills and Speech on the group measure. These results were displayed in Tables 2 and 3 in Chapter IV.

A second Sheffe test revealed that Theater Arts differed significantly from Speech Skills and Speech on the meeting measure. These findings were based on the data in Tables 4 and 5. A third Scheffe procedure indicated that Theater Arts differed significantly from all three other types of courses for the dyadic measure. These data are shown in Tables 6 and 7.

In the next ANOVA procedure (Table 9), the test of type was superseded by the test of interaction. The Scheffe test results indicated that there was significant interaction between Theater Arts and Speech Skills and Theater Arts and Speech on the public speaking measure (the data in Table 8).

On the last Scheffe post hoc test for type of class, the findings revealed that Theater Arts was significantly different from Speech Skills and Speech on the total score measure. These results are apparent in Tables 10 and 11. The above evidence supports an affirmative answer to Question 2.

Question 3

The data displayed in Table 18 were the basis of a
Scheffe post hoc procedure indicated by the results of the ANOVA findings in Table 19. The Scheffe test showed a significant difference between B students and those earning grades below B on the public speaking measure. Therefore, Question 3 may also be answered affirmatively. In other words, there is a difference in the level of confidence gained by B students, compared to below-B students, in public speaking situations. Although one may not scientifically confirm that these students earned higher grades (B's) because of the cognitive restructuring treatment's effect on them, the findings point in that direction.

Limitations of the Study

Extraneous Variables

It is realistic to assume that in any quasi-experimental study using a pretest-treatment-posttest design, variables other than the independent one/s being tested may have had some impact on the dependent variable/s (in this study, level of communication apprehension, as reflected in gain scores). According to Campbell and Stanley (1963), extraneous variables are responsible for contaminating experimental designs, thus altering research results. The most common effects in this type of study include: maturation, testing, regression, selection, and mortality.
Maturation occurs between measures of the dependent variable in a pretest-posttest plan. It includes events that are related to the general changes and growth of the subjects as individuals. The longer the period of time between measurement, the greater the possibility of maturation affecting the results of the testing.

Because the present study was approximately 20 weeks in length (one semester), a maturation effect may have occurred. However, trait-like communication apprehension endures over time, according to McCroskey (1981), and therefore would be affected by maturation only minimally, if at all.

A testing effect can be said to occur if subjects score better on a posttest as a result of having prior exposure to the same instrument (pretest) (Campbell & Stanley, 1963). The subjects in that case may have manipulated their scores to coincide with their perception of the instrument's intended purpose.

A testing effect was quite unlikely in the present study. The pretest and posttest (although the same instrument) were administered approximately 20 weeks apart. Because the length of time between testing was considerable, it is assumed that any testing effect was negligible.

A regression effect can be said to occur when posttest results regress toward the mean, tending to be similar to those of the pretest. Kerlinger (1973) suggested
that the regression effect operates because of the imperfect correlation between pretest and posttest measures. If reliability between pretest and posttest scores were 1.00, there would be no regression effect. But because a reliability rating of 1.00 is virtually impossible in social science instrumentation, regression effects nearly always exist in research using statistical measures.

A regression effect was controlled for in this study by employing comparison (control) groups. Any real effect of the treatment would be determined over and above any effect/s occurring in the comparison group. If experimental manipulation had a real effect, it would exist beyond the regression effect, which presumably affected all groups in the study.

Selection biases refer to those extraneous variables involving placement of subjects into treatment groups. If subjects are chosen through some biased selection process, the results of the study are biased. Random sampling is the preferred method of avoiding selection bias.

Random sampling of individuals was not attempted in this study. Instead, classes (clusters) of randomly-assigned subjects were chosen. The principle of randomness was accounted for in computer assignment of subjects to classes. Extraneous variable contamination from selection biases, consequently, may have been a factor in this study.
Mortality—the dropping out of a study by subjects between the pretest and posttest—was minimal in the present study. The loss of 14 of the original 302 students brought the attrition rate to 4%. This number was not high enough to affect the study's validity. Nineteen students were still enrolled in the classes at the end of the semester but did not complete the posttest. This amounts to approximately 1.6 students per class, based on a class average of 24 students.

Four students were gained between the pretest and posttest, a rate of approximately 1%. These students were not included in the findings, however, because they were not present for the pretest.

One aspect of the design which was circumstantially unavoidable was the confounding of instructor and treatment conditions. A single instructor taught the two Debate classes, a different instructor taught the two Theater Arts classes, and a third instructor taught the two Speech Skills classes. However, each teacher also had two Speech classes. Therefore, even though the Speech course was considered one entity, confounding was inevitable because of the three different instructors.

Other Limitations

Over and above the extraneous variables cited above, the recognized limitations of this study are as follows:
1. Only one method of measurement was used to assess the development of self-confidence in the defined subjects.

2. Only one measuring device (a self-assessment instrument) was utilized.

3. The control of the pretest and posttesting was not completely verifiable, since the investigator was not present during measurement administration.

4. The control of the treatment was not verifiable for the same reason.

5. The design of the study was based on available research findings; however, no evidence was available which could guarantee that the approach used would increase self-acceptance.

6. The program of instruction was applied to a white suburban middle-class population. Variations in the effectiveness of the instruction may occur in other populations and environments.

7. The treatment procedure is classroom oriented and is not appropriate for a clinical setting.

8. The study was confined to one high school by design.

9. The study did not employ true random sampling in its design.

10. Different types of students may have dominated the four types of courses (e.g., most of the shy,
non-college-bound subjects were probably enrolled in Speech Skills).

These limitations on the design thus present unavoidable restrictions on the interpretation of any results, since one cannot definitely attribute obtained differences solely to the treatment. However, the limitations are characteristic of educational assessment research, and, in fact, of the entire enterprise of teaching. Even with the restrictions, though, the study provides a viable test of the cognitive restructuring unit employed in the alleviation of CA.

Implications for Practicing Instructors

Based on the findings reported in this study, speech instructors can derive some benefit from the use of cognitive restructuring as a treatment for reducing oral communication apprehension in conjunction with speech skills in classroom practice. The greatest improvement would be forthcoming in public speaking, which dominates most speech class formats. Students who experience significant gains in confidence due to cognitive restructuring could conceivably earn good grades for their improved public speaking skills.

The major implication of this study is to reaffirm and strengthen the reasoning advanced in Chapter II regarding the relationship of self-rejection feelings to
oral communication apprehension. Cognitive restructuring can alleviate those feelings of inadequacy and their debilitating effect on public speaking performance.

Suggestions for Future Research

Future research in treating oral communication apprehension in high school speech class should be conducted in both a theoretical and an applied vein. Theoretically, the reconceptualized CA construct should be further clarified. Refinement of instruments used to measure oral communication apprehension should also continue.

In a practical direction, future research should attempt to perfect treatments applicable to the high school speech class environment. In addition, specific elements of cognitive restructuring plus skills training methods should be tested to determine their effectiveness in the reduction of CA. It would also be valuable to modify other treatment methods for speech classroom use and test them for their efficacy in alleviating oral communication apprehension.

The results of this study should be considered by speech teachers to provide support for the development of responsible speech programs to enhance self-confidence in public speaking. A major question which is not resolved by this study, of course, is whether or not the obtained results are attributable to the cognitive-restructuring
treatment (employed in conjunction with speech skills training) or to some other effect. Continued investigation to help clarify this question should be considered a priority for further research.

Finally, the results reported herein need to be replicated to test their reliability because of the quasi-experimental design of the study. In light of the encouraging leads of the study, such further efforts would appear to merit the serious attention of those interested in the issue of oral communication apprehension and its alleviation.
Appendix A

Personal Report of Communication Apprehension (PRCA-24)

PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

APPENDIX A: 159-160

APPENDIX B: 162-202
Appendix B

Cognitive Restructuring Unit Designed To Raise Self-Acceptance in High School Speech Class
Appendix C

Instructional Communiques to Colleague Administrators of Self-assessment Instrument
DEAR COLLEAGUE:

Thank you so much for agreeing to administer the PRCA-24 self-assessment instrument to your speech students. Since it is important to the proposed research study to be as objective as possible, please try to follow the guidelines below as closely as possible (to eliminate as much bias as possible).

1. Do not tell your students that they are subjects in a doctoral research study.

2. Read the directions on the tests orally with the students and try to answer their random questions before they begin.

3. Notice that the questions are posed in groups:
   - Questions 1 through 6 relate to oral communication in GROUPS.
   - Questions 7 through 12 relate to oral communication in MEETINGS.
   - Questions 13 through 18 relate to oral communication BETWEEN TWO PEOPLE.
   - Questions 19 through 24 relate to oral communication in PUBLIC SPEAKING.

(In case there are any questions about that aspect of the pretest.)

4. Do not tell students that they will be taking the same test again at the end of the semester.

5. Do not reveal that anyone else will be seeing their scores.

6. Tell them that the purpose of the instrument is to inform you as accurately as possible of their level of anxiety in regard to the situations mentioned on the self-rating sheet so that you may be aware of it before they have to perform for you.
or interact with their peers on class assignments.

7. Ask students **not** to talk until **everyone** is finished.
   (You will decide when that goal has been reached. Please try to keep track of how many minutes it takes for each class to finish, if possible. I suggest ten minutes maximum.)

8. Try to eliminate as much bias as possible by remaining as objective as possible during the entire administration process.

THANK YOU!
DEAR COLLEAGUE:

That special time has finally arrived—the time to administer the PRCA-24 posttest to compare with the pretest taken in September for results of the effect (if any) of the "cognitive restructuring" unit upon your students in the "experimental groups" as contrasted with your "comparison groups." Whew! (In a dissertation, if all else fails, confuse them with double-talk!) But seriously, folks,... I really am excited about what the tabulations will reveal. And obviously, I need your help again.

Please consult the original direction sheet of 9/5/84 to refresh your memory on the rules for the experience so that you are again conscious of the need to keep the experiment as unbiased as possible. Anyone need new copies? Let me know. Also, please let me know if you need copies of the PRCA-24.

Tell students the purpose for repeating this "test" is to compare it with the one they took at the beginning of the semester so that you may determine their progress--BUT DON'T TELL THEM UNTIL AFTER THEY HAVE TAKEN IT--otherwise, they might bias their scores to give you the results they think you want, etc.

Again, the time devoted to this exercise should probably not exceed 10 minutes.

Tell students not to forget the items on the back of the sheet.

Please label the sets by class; make sure all names are on the papers.

THANKS IMMEASURABLY! SINCERELY, LEE BALCH (E-503)


Borin, L. (1950). The construction and evaluation of a group procedure designed to raise the confidence levels
of beginning students of speech. *Speech Monographs, 17, 317.*


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Taughker, C. (1982). A comparison of skills training plus cognitive restructuring, skills training only, cognitive restructuring only, and no systematic treatment in the reduction of "trait-like" communication apprehension in the classroom setting. Dissertation Abstracts International, 1982, 42, 5062A. (University Microfilms No. 82-05,289)


Thorne, R. (1954). The effects of experimentally induced


of cognitive modification, systematic desensitization, and speech preparation in the reduction of speech and general anxiety. Communication Monographs, 44, 27-36.


