1992

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Catherine I. Tsagarakis
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COMMUNICATION APPREHENSION: SELF-EFFICACY EXPECTANCIES AND EVALUATIVE THOUGHTS AS MODERATING VARIABLES

by

Catherine I. Tsagarakis

B.A. McGill University, 1990

A Thesis
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
in Partial Fulfillment of the
Requirements for the Degree
of Master of Arts at the
University of Windsor
Windsor, Ontario, Canada
1992

ISBN 0-315-78881-X

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ABSTRACT

The main purpose of the current study was to examine how self-efficacy expectancies and types of evaluative thoughts experienced in a public speaking situation are related to trait and general-context communication apprehension. More specifically, it was hypothesized that highly anxious speakers would have lower self-efficacy expectancies than less anxious speakers, and that highly anxious individuals would report more negative evaluations concerning the speaking event than less anxious speakers. Sixty-eight introductory psychology students completed the Personal Report of Communication Apprehension (trait communication apprehension measure) and a public speaking anxiety measure (general-context communication apprehension) prior to giving a short speech. Following their speech delivery, subjects completed the State Anxiety Inventory (state anxiety), the Perceptions of Speaking Ability measure (self-efficacy expectancies), and thought listing protocol. The results of the present study provide strong support for the major hypotheses. The secondary hypotheses were also supported, that is, there were significant correlations between measures of state, trait, and general-context communication apprehension. Contributions and implications of these findings are discussed.

ACKNOWLEDGEMENTS

I would like to thank the following individuals for their contributions towards the completion of this thesis: Dr. Cheryl Thomas, my chairperson, for providing invaluable assistance and advice at every stage of this study; Dr. Michael Kral and Dr. Patricia Taylor for serving as committee members; Alla Koren for helping with the scoring of tests; Jeff Malan, Steve Balz, Peter Anderson, Paul Pilon, David Laplante and Lina Murdaca for allowing me to recruit subjects from their classes; Doug MacDonald and Laura Magee who not only recruited subjects for me, but also scored the thought listing protocols; All my friends for providing emotional support during my many stressful moments. Finally, I would like to thank my family for their continued love, support, and encouragement throughout all my academic pursuits.

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CHAPTER I

INTRODUCTION

Communication apprehension is currently conceptualized as an "individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977, p.78). Communication apprehension is a widespread phenomenon; a recent university study revealed that more than 2 out of 3 students experience communication apprehension at some point in their lives, 12% of the student population experience it severely, and 38% experience it at least once a week (Bowers, 1986). Other researchers estimate the prevalence of severe communication apprehension at 20% (McCroskey, 1978). Surveys show that about 85% of Americans feel very anxious about speaking in public; speech anxiety is most frequently reported as a primary fear exceeding the reported incidence of other specific fears, e.g. snakes, heights, disease, or death (Motley, 1988).

Review of the Literature

Considering the prevalence of communication apprehension, it is not surprising that it has been the subject of over 300 published studies in the past 20 years. Topics of study have included testing theoretical hypotheses about the causes of communication apprehension, psychometric evaluation of measurement instruments, cross-cultural

differences, psychological correlates, effects, and treatment efficacy.

One of the first topics of concern was how high levels of communication apprehension affect everyday functioning. A commonly reported finding is that highly anxious individuals prefer to withdraw from or avoid communicative situations (Ayres, 1989; Bowers, 1986; Lederman, 1982). Research also indicates that individuals with high communication apprehension levels are perceived less positively by themselves and other people (i.e., Prisbell, 1988; Conner, 1987; Lederman, 1982; Richmond, 1978). High levels of communication apprehension can have a negative impact on individuals' economic, academic, and social lives. For example, communication apprehension is associated with lower grade point averages, reduced learning of material, negative attitudes toward school, and lower job satisfaction, job status and salaries (Rubin & Graham, 1988; Booth-Butterfield, 1988; Hurt & Preiss, 1978; McCroskey, 1977; Daly & McCroskey, 1975).

Some researchers have focused on studying classroom settings and the instructional practices that influence levels of communication apprehension (Gray, Buerkel-Rothfuss, & Yerby, 1986). Other researchers have examined whether the construct of communication apprehension can be generalized beyond the American culture from which it was developed and tested (Barraclough, Christophel, & McCroskey,

1988; Watson, Monroe, Fayer, & Aloise, 1988).

Communication apprehension has also been found to be associated with a variety of personality variables. For example, it is associated with introversion, low self-concept, low cognitive complexity, and is negatively correlated with self-acceptance, assertiveness, and self-esteem (Hansford & Hathe, 1987; Watson, 1985; Nealiap & Hazleton, 1985; McCroskey, Daly, Richmond, & Falcione, 1977; Defenbacker & Payne, 1978).

Since high communication apprehension is associated with a variety of negative consequences, several studies have focused on methods of alleviating the anxiety. Treatments that have high rates of success include visualization, systematic desensitization, rational emotive therapy, conversational skills (i.e., rhetoritherapy), and integrative methods (i.e., the method that combines sensory awareness, breathing and visualization techniques (Rossi & Seiler, 1990; Ayres & Hopf, 1987;1990; Allan, Hunter, & Donohue, 1989; Kelly, 1989; Glaser, Biglan, & Dow, 1983).

Research in the 1980's was marked by an interest in the relative contributions of situational and predispositional variables to communication apprehension and communicative behaviours (Booth-Butterfield & Booth-Butterfield, 1986). Variables like novelty, degree of formality, subordinate status, conspicuousness, characteristics of audience: size, unfamiliarity, dissimilarity, degree of attention from

others, amount of evaluation, and prior speaking history have been associated with state anxiety during a speech. However, more recent research has shown that some of these factors, (i.e., formality, conspicuousness, degree of evaluation, subordinate status) contain strong trait-like components (Beatty & Friedland, 1990; Beatty, Balfantz, & Kuwabara, 1989; Beatty, 1988; Booth-Butterfield & Booth-Butterfield, 1986; Daly & Buss, 1984).

Although some aspects of communication apprehension have received considerable attention, relatively few researchers have conducted studies that examine the cognitions underlying communication apprehension. The focus of the present study was to assess the ways in which cognitive variables, particularly self-efficacy expectancies and types of evaluative thoughts, relate to communication apprehension.

Theoretical Perspectives

The causes of communication apprehension have been of long-standing interest to researchers in this area. Numerous theoretical explanations have been proposed. In this section some of the most prominent theories will be reviewed.

Behavioural Models. A simple behavioural explanation of the development of communication apprehension is that it is a learned trait developed through the reinforcement contingencies children receive for their communication

attempts. Thus, if a child is rewarded for being silent and not reinforced for communicating, the probable outcome is a quiet child. Over time, the positive and negative consequences associated with communication become internally mediated, removing the necessity for external events to elicit a response (Daly & Stafford, 1984; McCroskey, 1977).

Another behavioural explanation for the development of communication apprehension is that it is a consequence of inadequate acquisition of performance skills, or the slow development of such skills. A third perspective holds that communication apprehension is acquired through modelling; children observe and imitate the communicative patterns of significant others, particularly their parents (Daly & Stafford, 1984).

Learned Helplessness Theory. In McCroskey's (1982a) learned helplessness theory of communication apprehension, reinforcement contingencies play an important role, but cognitive factors are also emphasized. McCroskey (1982) argues that communication apprehension is due to the expectancies people develop about the communication situation and the probable outcomes. From this perspective, highly anxious people are thought to form negative expectancies about the situation as a consequence of a history of punishment for their communication attempts. Such individuals come to believe that they do not possess behaviours which will lead to success, and thus tend to

avoid the communication situations. If participation is unavoidable, their negative expectancies regarding success lead to feelings of apprehension. Communication apprehension may also occur as a result of inconsistent expectancies for success in communication situations. Such inconsistent expectancies may be a function of inconsistent reinforcement (i.e., talking at dinner may be reinforced some days and punished on others) or the individuals' inability to distinguish between speaking conditions (i.e., praising students for volunteering a correct answer in class, but reprimanding them for talking to another student). If people cannot discern differences between speaking conditions a sense of helplessness will be learned and will be accompanied by severe anxiety (McCroskey, 1982a).

Action Assembly Theory. This model proposed by Greene and Sparkes (1983) attempts to specify the nature of the relevant cognitive structures underlying communication apprehension in conjunction with the mental processes that operate over these structures. They propose that communication apprehension is a response to a situation in which people have negative expectations concerning their communication outcomes because they are unable to evoke appropriate behaviours.

Greene and Sparkes (1983) particularly wanted to delineate the processes by which the relevant negative

outcome expectations are formed. Briefly, they propose that when individuals have certain interaction goals (i.e., to create favourable impressions) that cannot be accomplished through use of automatic behaviours, they will formulate and evaluate potential communicative behaviours that are aimed at accomplishing these goals (called the assembly process). If people cannot complete the assembly process, i.e., fail to produce a behaviour that will lead to the goal, communication apprehension will occur.

Empirical validation of this theory can be obtained by predicting the heightened physiological arousal that accompanies communication apprehension. There is some evidence that supports these predictions (Booth-Butterfield, 1987; Greene & Sparkes, 1983).

Assimilation Theory. Beatty and Behnke (1980) examined the stable and active properties of communication apprehension to explain the causal processes underlying communication apprehension. According to assimilation theory, communication apprehension is a stable trait, and fluctuations result from discrepancies between communication apprehension (trait) and state anxiety experiences. People compare the state anxiety they endured in speaking situations to their own personal level of communication apprehension. When discrepancies arise, the experienced state anxiety is assimilated into the individual's level of communication apprehension, thus altering the trait in the

direction of the discrepancy (i.e., a person about to propose a masters topic will experience a lot of anxiety which will be integrated into the anxiety trait, thus increasing trait anxiety levels). On the other hand, when state anxiety experiences are consistent with a person's anxiety trait, there is no change in communication apprehension levels.

Beatty and Behnke (1981) obtained evidence for this conceptualization by predicting post-treatment trait anxiety scores from initial trait scores and the trait-state anxiety discrepancy. Other evidence in support of this theory also exists (McCroskey & Beatty, 1984).

Cognitive-Physiological model. Schachter's and Singer's (1962) cognitive-physiological formulation of emotion suggests that a particular emotion is accompanied both by physiological arousal and a cognitive interpretation of the arousal appropriate to the person experiencing it. Behnke and Beatty (1981) extended this idea in order to explain speech anxiety. Public speaking is known to be associated with autonomic arousal, and the labelling of arousal as anxiety is contingent upon the person's predisposition to view speaking as a negative experience. According to this model, communication apprehension is conceptualized as a predisposition to label the arousal experienced during public speaking as anxiety. Therefore, people with high levels of communication apprehension label

arousal as speech anxiety, while individuals with low levels of communication apprehension might label the arousal as excitement or exhilaration and will not report speech anxiety. Empirical support of this theory was obtained by predicting speech state anxiety from heart rate and a measure of the predisposition to interpret arousal in communication settings as anxiety (Behnke & Beatty, 1981).

Self-Presentational Model. Schlenker's and Leary's (1982) self-presentational model of social anxiety is frequently used as a framework for understanding communication apprehension. They propose that social anxiety occurs in real or imagined social situations when people are motivated to make a particular impression on others, but doubt that they will be successful in doing so. Such doubts will be generated when people are uncertain of how to achieve their self-presentational goals and/or if their perceptions of the situation, of other people, and their own qualities and skills lead them to believe that they cannot achieve the goal. Therefore, some individuals are consistently more anxious than others either because they place great emphasis on making favourable impressions or because they consistently they are unable to make these impressions. Given this goal of impressing others, their experienced level of social anxiety will be inversely proportional to their estimate of making the desired impression.

Leary and Atherton (1986) borrowed two notions from self-efficacy theory (Bandura, 1977) to refine the self-presentational model of social anxiety. Briefly, self-efficacy theory asserts that two kinds of expectancies exert powerful and independent influences on behaviour. One is the outcome expectancy; that is, the belief that a certain behaviour will lead to a certain outcome. The other is the self-efficacy expectancy; that is, the belief that one can successfully perform the behaviour in question (Maddux, Sherer, & Rogers, 1982).

One new concept that Leary and Atherton (1986) have developed from self-efficacy theory is the "self-presentational outcome expectancy". According to these theorists, this is the individual's estimate of the probability of making a particular impression having performed the behaviour in question. For example, speakers may feel that they can deliver a speech in a competent manner, but may wonder if they can relay the impression of being effective speakers. Thus, people may believe that they can execute the requisite self-presentational behaviours, but believe that the behaviours will not make the desired impression (Leary & Atherton, 1986).

The second concept developed from self-efficacy theory was "self-presentational efficacy expectancy". This is the individual's estimate of the probability of behaving in a manner that successfully conveys a desired self-image to

others. For example, individuals about to give a speech may doubt whether they will be able to act in a way that will impress the audience that they are effective and powerful speakers (Leary & Atherton, 1986).

Social Comparison Model. Ayres' (1986) model of speech anxiety is similar to Schlenker & Leary's (1982) self-presentational model of social anxiety, particularly Leary's and Atherton's (1986) notion of "self-presentational efficacy expectancy". Ayres (1986) proposes that speech anxiety emerges through a social comparison process in which speakers perceive their speaking abilities as being inadequate vis a vis others' expectations. Therefore, as speakers' perceptions of their communication abilities fall below their perceptions of the audiences' expectations, their level of speech anxiety increases. Conversely, as their perceived speaking abilities exceed their perceptions of others' expectations, speakers will experience lower levels of speech anxiety (Ayres, 1986).

Ayres (1986) states that there are three other conditions necessary for the occurrence of speech anxiety. First, speech anxiety will be experienced only if people perceive a certain aspect of their speaking ability to be important in a given speaking situation. For example, a person with a heavy foreign accent may consider this deficiency insignificant, and therefore will not experience anxiety. Two other factors that contribute to speech

anxiety are the inability to withdraw from or avoid the speaking situation, and the expectations that the speakers' inadequacies, i.e., poor grammar or anxiety, will be revealed to others (Ayres, 1986).

Relevant Empirical Research

Ayres (1986) conducted a study to examine the major tenet of his social comparison theory of speech anxiety, that is, that speech anxiety occurs when individuals perceive that their speaking abilities are deficient in comparison to audience expectations. In the study, 600 students from a public speaking class completed a measure of public speaking anxiety prior to giving a speech. They then responded to a measure that assessed their perceptions of their speaking ability in comparison to their perceptions of audience expectations. Analyses showed that students with high levels of public speaking anxiety perceived their speaking ability to be below the standards held by the audience.

Other researchers have examined similar cognitive variables, such as speakers' self-evaluations, expectations, and self-efficacy expectancies underlying communication apprehension which can also be examined through the social comparison and self-presentational models. For example, Daly, Vangelisti, Neel, and Cavanaugh (1989) conducted one of the first studies that examined the cognitive schemes individuals hold about public speaking. Subjects (n = 210)

were asked to complete a measure of public speaking anxiety and a second questionnaire prior to delivering a speech. The second questionnaire consisted of a list of questions compiled by other students on the pre-performance concerns commonly held about public speaking. Participants were asked to rate these questions according to how important they viewed an answer to the question. The results showed that anxious individuals were more concerned with the actual performance, self-related issues (i.e., what should I do if I can't answer a question posed by the audience?) and the mode of evaluation (i.e., how will my performance be graded?) than non-anxious students. These results, particularly the concerns about evaluation, offer additional support for the self-presentational model of communication apprehension that suggests high levels of anxiety are associated with the perceived evaluative consequences of not making a particular impression (Schlenker & Leary, 1982).

In another similar study of 81 students, Daly et al. (1989) administered a measure of public speaking anxiety and an open-ended questionnaire that requested students write down their thoughts concerning public speaking. Student responses were analyzed into idea units and then categorized according to focus (preparation, performance, audience, environment, and self-focus) and affect (positive, negative, and neutral). The authors found that individuals with high public speaking anxiety held more negative constructs about

public speaking, particularly concerning themselves and their performance.

Ayres (1988) confirmed the findings of Daly, et al. (1989) and extended them by gathering data on thought processes that occurred during and after the speech performance. After completing a speech, 143 students from public speaking classes were asked to complete a measure of communication apprehension, and write down what they were thinking about immediately before the speech, during the introduction, during the body of the speech, and at the end of the speech. Ayres (1988) found a significant correlation between communication apprehension and the number of negative and positive thoughts students reported before and after a speech; that is, as communication apprehension levels increase, students report more negative and fewer positive thoughts.

In another study that examined negative thoughts, Miller (1987) tested the assumption that communication apprehension is related to negative expectations concerning speaking outcomes. One hundred and fifty-eight students completed three measures of communication apprehension and a measure of perceived skill where success or failure was operationalized in three different ways (self-rating, self-ranking, and predicted score). Using a combination of the measures to predict success in speaking situations, Miller found that as communication apprehension levels increased,

expectations of success in communication situations decreased. These results are consistent with Ayres' (1986) social comparison perspective and with Leary's and Atherton's (1986) notion of `self-presentational efficacy expectancies'; that is, high levels of communication apprehension are associated with low expectations of presenting a desired image of oneself to others (e.g., anxious individuals are more likely to believe they are not competent speakers).

Defenbacher and Payne (1978) studied the relationship between communication apprehension and fear of negative evaluation by giving 304 education majors a trait measure of communication apprehension and the Fear of Negative Evaluation scale. Their findings showed that students with high communication apprehension were more fearful of negative evaluations than students with low levels of apprehension.

In addition to examining the detrimental effects of high public speaking anxiety on performance, Daly, Vangelisti, and Lawrence (1989) examined the relationship between speech anxiety and speakers' evaluations of the particular speaking event. A large number of students completed a measure of public speaking anxiety. Two groups of students, one with high and one with low public speaking anxiety were selected for participation in the study and were asked to prepare and deliver a speech in the lab.

Afterwards, among other tasks, they were asked to give an oral account of their thoughts during the speech and to evaluate their performance. Results showed that anxious subjects recalled more negatively toned self-focused events and perceptions than did less anxious people. That is, they reported less successful performance, less enjoyment when speaking, and more negative perceptions of audience evaluations.

Methodological Problems:Conceptualization & Operationalization

A number of methodological problems have been identified in the research literature on communication apprehension. One problem encountered, related to methodological concerns, is the conceptualization of constructs and the inconsistent use of terminology. References are commonly made to constructs that are related to communication apprehension, such as reticence, unwillingness to communicate, shyness, and stage fright; these are often used interchangeably with communication apprehension. Some theorists believe that these constructs overlap to a great extent, that they are not discrete problems and should not be treated as such (Sypher, Sypher, & Haas, 1988; Kelly, 1982). However, other theorists believe that there are important conceptual distinctions among communication apprehension and related constructs. Some of these constructs are associated with anxiety, some

with lack of skill, and others with a combination of both anxiety and skill deficits. Although anxiety and socio-communicative behaviours may sometimes covary there is no necessary relationship between them (Leary, 1983b). Therefore, it is desirable that researchers acknowledge the fine distinctions between the constructs, provide clear operational definitions for constructs employed, and use them consistently. In this way, research in each of these distinct areas can progress, and better methods of assessing, explaining, and treating problems can be developed.

Despite the confusion in terminology there is a general consensus on the broad conceptualization of communication apprehension, it can be viewed as a continuum ranging from a trait to a state pole. Four points along this continuum can be identified with each one representing a distinct type of communication apprehension: a) traitlike communication apprehension is relatively enduring personality type orientation towards communicating across a wide variety of settings (i.e., apprehension about oral communication, or apprehension about writing), b) general-context communication apprehension is a relatively enduring orientation towards communicating in a given type of context (i.e., apprehension about public speaking, or apprehension about speaking up in small group discussions), c) person-group communication apprehension is a relatively enduring

orientation towards communication with a given person or people (i.e., a student may experience no anxiety while talking with a group of peers, but may be highly apprehensive when talking to her or his professor), d) situational/interpersonal communication apprehension is a temporary orientation towards communicating with a given person or group of people (i.e., a student may normally experience little anxiety when conversing with a professor, but may become extremely anxious if the professor makes an appointment to see her or him after class). In general, people with communication apprehension are predisposed to avoid communication or may suffer anxiety as a consequence of communicating (McCroskey, 1982a; Beatty, Behnke, & McCallum, 1978).

There have also been difficulties with measures of communication apprehension. The Personal Report of Communication Apprehension is the most psychometrically sound of the communication apprehension measures; its validity and reliability as a cross-situational predictive instrument has been well documented (Levine & McCroskey, 1990; McCroskey & Beatty, 1984; McCroskey, 1978). Scores obtained from this instrument are usually used to operationally define the construct. However, items on the original scale were overrepresented by public speaking situations to the near exclusion of other settings. Thus, in earlier studies general context communication

apprehension (i.e., public speaking anxiety) rather than trait communication apprehension was studied. McCroskey (1982b) revised the scale to correct the situation. Thus the new version assesses a wider variety of communicative settings, such as public speaking, dyadic conversation, meetings, and small groups. This version is currently most predominant in communication apprehension literature.

Another difficulty is the manner in which instruments that assess communication apprehension are utilized. Some researchers (e.g. Ayres, 1986), adapt trait measures of communication apprehension (which refer to typical attitudes about speaking) to identify state anxiety (which is anxiety experienced in a particular situation). As a result, previous research may have underestimated the effects of experimental manipulations. Several excellent state anxiety measures (e.g., Spielberger's State Anxiety Inventory) exist and should be employed appropriately.

Rationale for the Present Study

For purposes of the current study, Leary and Atherton's (1986) and particularly Ayres's (1986) theoretical frameworks were selected for the formulation of the research questions. These models adopt a socio-psychological perspective in explaining their respective constructs, discuss the relationship between cognitions and anxiety, and propose that the experience of anxiety is rooted in the social interaction process. Ayres's (1986) theory in

particular emphasizes the important role of communication ability in the development of communication apprehension. In a communicative context (e.g., public speaking), people speak for indefinite periods of time which enhances awareness of their communicative process and places speaking ability at the centre of the social comparison process.

Communication apprehension is conceptualized by some theorists under the broader construct of social anxiety, which by definition is anxiety resulting from the prospect of interpersonal evaluation in a real or imagined social setting (Schlenker & Leary, 1982). In view of the fact that the literature review seemed to reveal that fear of negative evaluations, fear of failing to attain standards held by others, and other kinds of pessimistic thoughts are integral to communication apprehension, the self-presentational and social comparison models, which focus on the evaluative and social aspects of the experienced anxiety, may best account for differences in communication apprehension levels.

Based upon the review of the literature and the choice of theoretical models, the variables selected for study are self-efficacy expectancies and evaluative thoughts. Individuals with high communication apprehension appear to have more negative expectations and negative self-evaluations concerning the speaking event than do low anxious individuals and believe that their speaking abilities were below the standards they perceive others hold

(Daly, Vangelisti, & Lawrence, 1989; Daly, Vangelisti, Neel, & Cavanaugh, 1989; Ayres, 1988; 1986; Miller, 1987). Thus in this present study it was expected that:

1) Highly anxious speakers will have lower self-efficacy expectancies than less anxious speakers
2) Highly anxious individuals will report more negative evaluations concerning the speaking event than less anxious speakers

According to McCroskey's (1982a) conceptualization of communication apprehension there is a clear relationship between state communication apprehension, trait communication apprehension, and general context communication apprehension (i.e., public speaking anxiety); trait and general context communication apprehension function as predisposing factors which increase the probability of an heightened state response. Thus, a major assumption underlying the current study is that individuals with high trait and high general context communication apprehension will experience higher levels of anxiety in a particular communicative situation. Several studies have shown moderate positive correlations between trait and general-context measures of communication apprehension and state anxiety, suggesting that trait communication apprehension may be the best predictor of state communication apprehension (Beatty, Dobos, Balfanz & Kuwabara, 1991; Beatty & Friedland, 1990; Beatty, 1988;

Booth-Butterfield & Booth-Butterfield, 1986; Booth-Butterfield & Gould, 1986). Hence, in the present study it was expected that:

3) General context communication apprehension will be positively correlated with state communication apprehension
4) Trait communication apprehension will be positively correlated with state communication apprehension
5) There will be a moderate correlation between measures of trait and general context communication apprehension

CHAPTER II

METHOD

Subjects

Sixty-eight undergraduate students (43 female, 25 male) were recruited from introductory psychology classes at the University of Windsor to participate in the current study. First year students were selected because they were readily available as a subject pool and it was easier to control for prior history of speech giving. All participants received experimental credit for their participation and were treated according to ethical standards for research with human subjects (American Psychological Association, 1982).

Measures

Personal Report of Communication Apprehension-24. The total score on this measure was used to operationally define trait communication apprehension. This version of the instrument consists of four 6-item scales, each designed to assess anxiety in a variety of communication situations: public speaking, meetings, small group discussions, and interpersonal conversations (see Appendix A). The measure has consistently exhibited high internal reliabilities (above r=.90 in most studies) (Miller, 1987; McCroskey & Beatty, 1984). The construct validity of the instrument has also been demonstrated; the Personal Report of Communication Apprehension predicts behaviour that is theoretically

consistent with the construct of communication apprehension, measures a stable characteristic of an individual, and correlates with personality variables that are theoretically related to the communication apprehension construct (McCroskey, 1978). In the current study the alpha coefficient was calculated to be .93.

Public speaking anxiety measure. This measure was used to operationally define general-context communication apprehension. This 10-item instrument assesses anxiety specific to public speaking situations and was developed from available measures (see Appendix B). The instrument has strong face validity, and internal reliability ranges from $\underline{r}$=.89 to $\underline{r}$=.95 (Daly, Vangelisti & Lawrence, 1989; Daly, Vangelisti, Neel & Cavanaugh, 1989). Scores on the measure correlate very well with other measures of public speaking anxiety (i.e. with the public speaking items on the Personal Report of Communication Apprehension; (Daly, Vangelisti, Neel, & Cavanaugh, 1989). In the present study the internal reliability was computed to be .90.

Spielberger's State Anxiety Inventory. (Spielberger, Gorsuch, & Luchene, 1970). This instrument is the most commonly used measure of state anxiety in communication apprehension research. This measure was selected because it yields results that are consistent with theoretical expectations and previous research (Behnke, Sawyer, & King, 1987; McCroskey & Beatty, 1984; Behnke & Beatty, 1981).

Internal reliabilities range from r= .83 to r=0.94; excellent concurrent and construct validities have also been demonstrated (Spielberger, Gorsuch, & Lushene, 1970). In the present study alpha was .94.

Perceptions of Speaking Ability. Ayres (1986) constructed this instrument with reference to standard public speaking principles to examine speakers' perceptions of their speaking ability relative to their perceptions of audience expectations. This instrument consists of 12 Likert-type items concerning language, delivery, development, credibility, and organization of speeches (see Appendix C). A factor analysis revealed three factors: Delivery, Invention, and Credibility. Internal consistency was reported to be 0.89; in the present study it was .63.

Protocol analyses: Thought listing. Participants provided written self-statements describing the thoughts, feelings, and reactions they experienced during the public speaking event (see Appendix D). Thought listing is the most frequently used protocol analysis method in social anxiety research and interrater agreements are usually excellent (Arnoff & Glass, 1989). It has also been utilized successfully in communication apprehension research (Daly, Vangelisti, & Lawrence, 1989; Stafford & Daly, 1984). There was a question as to how to collect the thought listing data, i.e., written or oral. Some evidence shows that writing is more formal than speech and introduces structures

that limit the free flow of ideas, but that more information is acquired. Oral recall is more free-flowing, but tends to yields more redundant information (Stafford & Daly, 1984). In the current study the written mode was used in order to facilitate data collection (i.e., there was no need to transcribe tapes).

Consistent with previous use of this measure, in the current study, the thought listing protocol of each participant was broken down into idea units. Idea units were defined as the smallest units of meaning that have informational or affective value, and represent the gist of each thought expressed by the individual (Stafford & Daly, 1984). Each idea unit (i.e., I feel nervous, my speech is great) was then scored according to evaluative valence: positive, negative, or neutral. Positive thoughts expressed good feelings/expectations, while negative thoughts stressed bad feelings and expectations. Neutral thoughts were those that did not seem to contain an evaluative component (i.e. this room is cold).

A student, trained to code thought listing data gathered in a small pilot study, scored every protocol. Reliability for the coding was assessed by having a second student independently rate the protocols. In the present study the agreement values for each category were as follows: idea units, 91%, positive thoughts, 82%, negative thoughts, 86%, and neutral thoughts, 70%.

Statistical analyses of the thought listing data used proportions of idea units to control for individual differences in verbosity. Proportions were calculated by employing the number of positive, negative, or neutral idea units as the numerator and the total number of idea units as the denominator (Daly, Vangelisti, Neel, & Cavanaugh, 1989).

Procedure

The experimenter contacted each subject and scheduled a mutually convenient time for testing. Each subject then met with the experimenter in an office. The procedure was explained and written consent was obtained (see Appendix E). Participants completed the Personal Report of Communication Apprehension and the 10-item measure of public speaking anxiety (general-context communication apprehension).

Each subject was given a detailed outline of a speech (University of Windsor, 1990). This helped control for content familiarity and speech length; research shows that anxious speakers report less familiarity with the topic of their speeches (Daly, Vangelisti, Neel, & Cavanaugh, 1989). The topic was on the history of the University of Windsor and each person was given ten minutes to prepare a presentation based on the material (see Appendix F). After ten minutes the participants were taken to a lab in which a video-camera and recorder were positioned and were asked to give the speech.

The video-camera was set up in the centre of the room in lieu of an audience. To the researcher's knowledge this procedure had never been utilized. This innovative substitution for the audience was selected because of the difficulty in controlling for size and characteristics of an audience for the long period of time needed for completion of the study. The participants were told that the speech would be recorded and that there would be a possibility that it may be later reviewed by a group of twenty graduate students. By adding this evaluative element the artificiality of the situation is slightly reduced.

Upon conclusion of the speech, the participants completed the thought listing protocol, the State Anxiety Inventory, and the Perceptions of Speaking Ability measure. The measures were not presented in counterbalanced order, because the thought listing needed to be completed first in order to minimize interference in subsequent recall of the thoughts.

Upon completion of the questionnaires the subjects were debriefed; the purpose of the study was explained and questions were answered. The participants were also told that a summary of the results would be available upon request, once the study was completed. As well, a choice was given as to whether or not their speech was to be presented to the group of graduate students. This option was given so that participants who were excessively worried

about audience reaction to their performance could have some of their anxieties alleviated by choosing not to have their speech shown. Total testing time for each participant was approximately 30 minutes.

CHAPTER III

RESULTS

Sample and Preliminary Analyses

There were substantially more female than male participants in the current study. However, as can be seen in Table 1, there were no significant sex differences in any of the measures. Also, statistical tests of normality were performed on all the measures because an initial concern with the subject selection was that subjects who agreed to participate would not experience high degrees of communication apprehension; it seemed unlikely that highly anxious students would participate in a study that they knew would induce stress. However, the tests indicated normal distributions of scores on all the measures.

It should be noted that for the purposes of hypothesis testing the 0.01 level was chosen as the most liberal level for which a result was reported as being statistically significant. This level was selected because the researcher wanted to minimize as much as possible the probability that the obtained results would be due to chance.

A confirmatory factor analysis was performed on the Perceptions of Speaking Ability measure to determine whether Ayres's (1986) three factor solution could be replicated in current sample. A principal components factor analysis

Table 1

Means, Standard Deviations, and Differences between Measures According to Sex

	Females (n=43)		Males (n=26)			
Measures	Mean	SD	Mean	SD	F(1, 66)	p
Personal Report of Communication Apprehension (65.1;16.0)	67.5	16.2	60.9	15.1	2.80	.10
Public Speaking Anxiety (31.8;8.3)	33.3	9.0	29.2	6.4	4.71	.05
State Anxiety Inventory (47.6;12.5)	48.9	12.8	45.4	11.9	1.22	.27
Perceived Speaking Ability (36.4;6.2)	36.8	6.6	35.7	5.6	0.51	.5
Total Idea Units (8.4;3.5)	8.3	3.4	8.6	3.6	0.09	.77
Positive Thoughts (0.3;0.2)	0.3	0.2	0.3	0.2	0.00	.97
Negative Thoughts (0.06;0.02)	0.6	0.3	0.6	0.2	0.17	.68
Neutral Thoughts (0.1;0.2)	0.1	0.2	0.2	0.2	0.44	.51

Note. In parentheses are the means and standard deviations for the total sample; the 0.01 level of significance was used.

with a varimax rotation was employed and four factors were extracted using the scree criterion. Loadings of items on factors are shown in Table 2. Using Ayres's (1986) cut of .5 for inclusion of an item in the interpretation of a factor, Item #9 does not load on any factor. Factor 3 partly corresponds with the Delivery factor; the Factor 1 includes the Invention factor, but contains an item (#5) from the original Delivery scale. The final factor is poorly defined since only Item #2 loads highly on it. Only Ayres's Credibility factor (Items #10, #11, #12) was confirmed in the current sample. Therefore, for purposes of the current study the individual scales were not explored in any subsequent analyses; only the total score on the Perceptions of Speaking Ability measure was used.

Hypothesis #1

Highly anxious speakers will have lower self-efficacy expectancies than less anxious speakers. The hypothesis that anxious speakers have lower self-efficacy expectancies than less anxious speakers was tested by examining the correlation between scores on the Perceptions of Speaking Ability measure and the State Anxiety Inventory. The correlation was .46 which is significant beyond the .0001 level. A statistically significant relationship was also found between the Perceptions of Speaking Ability measure (self-efficacy expectancies) and the Personal Report of Communication Apprehension (r=.39, p< .001) and the

Table 2

Factor Loadings for Factor Analysis on Items of the Perceptions of Speaking Ability Measure.

Items	Factors 1	2	3	4
1. My speech was more emotional than this audience will expect (D)	-.05	.24	.68	.06
2. I used less eye contact than the audience will expect (D).	.13	.04	-.10	.90
3. I used more gestures than the audience will expect (D).	.05	.07	.77	-.09
4. I used less movement than the audience will expect (D).	-.02	.20	-.60	.04
5. My general pattern of delivery will be seen as appropriate (D).	.80	.19	.12	-.02
6. My speech was more organized than the audience will expect (I).	-.75	-.03	.22	-.06
7. My speech was less logical than the audience will expect (I).	.72	.34	.05	.00
8. My speech used less documentation than the audience will expect (I).	.73	.06	.14	.24
9. The audience will perceive my word usage to be below their level of sophistication (I).	.48	.46	.26	.15
10. Most audience members will find some problem with my voice (C).	.07	.81	-.04	.01
11. The audience will see me as trustworthy (C).	.41	.66	.03	-.23
12. The audience will see me as not very competent (C).	.20	.63	.08	.39

Note. In parentheses are the factors on which each item loaded in Ayres's (1986) sample. D=Delivery; I=Invention; C=Credibility.

Perceptions of Speaking Ability and public speaking anxiety measures ($r=.48$, $p< .0001$).

Hypothesis #2

Highly speech anxious participants will report more negative thoughts concerning the speaking event than less anxious speakers. Speech anxiety as measured by the State Anxiety Inventory scale was positively and significantly related to the proportion of negative evaluative thoughts ($r=.55$, $p< .0001$). Conversely, speech anxiety was negatively related to the proportion of positive evaluative thoughts ($r=-.40$, $p< .0008$) and neutral thoughts ($r=-.28$, $p< .02$). Personal Report of Communication Apprehension scores (trait communication apprehension) were significantly related to the proportion of negative evaluative thoughts ($r=.46$, $p< .0001$) and neutral thoughts ($r=-.41$, $p< .0004$) expressed by the participants. Public speaking anxiety scores (general-context communication apprehension) were also correlated with negative thoughts ($r=.49$, $p< .0001$) and neutral thoughts ($r=-.44$, $p<.0002$). Positive thoughts were marginally related to trait ($r=-.22$, $p< .07$) and general-context communication apprehension measures ($r=-.24$, $p< .05$).

Hypothesis #3

General context communication apprehension will be positively correlated with state communication apprehension. This relationship was examined by correlating scores on the public speaking anxiety measure and the State Anxiety Inventory. The correlation was statistically significant (r=.57, p< .0001), thus supporting the hypothesis.

Hypothesis #4

Trait communication apprehension will be positively correlated with state communication apprehension. This hypothesis was tested by examining the relationship between the Personal Report of Communication Apprehension scores and State Anxiety Inventory scores. The correlation was found to be statistically significant (r=.48, p< .0001).

Hypothesis #5

There will be a moderate correlation between measures of trait and general-context communication apprehension. There was a high positive correlation between the Personal Report of Communication Apprehension and the public speaking anxiety measures (r=.82, p< .0001). As can be seen in Table 3, the general-context communication apprehension measure also correlated highly with each of the four scales of the Personal Report of Communication Apprehension.

Table 3

Correlations Among Anxiety Variables

Measures & Scales	G	M	I	P	PSA-10	STAI
Personal Report of Communication Apprehension:	.80**	.92**	.77**	.87**	.82**	.48**
Group (G)	1.00	.74**	.41*	.52**	.54**	.33
Meetings (M)		1.00	.59**	.73**	.71**	.45**
Interpersonal (I)			1.00	.62**	.57**	.30
Public Speaking (P)				1.00	.91**	.51**
Public Speaking Anxiety (PSA-10)					1.00	.57**
State Anxiety Inventory (STAI)						1.00

Note. * p < .001; ** p <.0001

CHAPTER IV

DISCUSSION

The results of the present study provided strong support for the major hypotheses. First, the correlations between the anxiety questionnaires and the Perceptions of Speaking Ability measure were highly significant, thus indicating that self-efficacy expectancies are related to speaker anxiety levels.

Second, the correlations between the proportion of negative thoughts recalled and the anxiety measures were also significant, hence supporting the hypothesis that negative thoughts are related to speech anxiety. Also, the correlation between positive evaluative thoughts and the state anxiety measure was significant, indicating that anxious speakers are less likely to have positive thoughts during the speaking event. Interestingly, the correlations between the proportion of positive thoughts and trait and general-context communication apprehension measures were only marginally significant. However, this may reflect the fact that trait measures, like the Personal Report of Communication Apprehension, assess general attitudes about a topic, and thus are not very sensitive in evaluating a state experience.

The present results are consistent with previous findings (Ayres, 1986;1988; Daly, Vangelisti, & Lawrence,

1989; Daly, Vangelisti, Neel, & Cavanaugh, 1989; Miller, 1987) and provide additional support for the social comparison and self-presentational models of communication apprehension (Ayres, 1986; Leary & Atherton, 1986). Specifically, results of the present study indicate that individuals with high levels of communication apprehension view their speaking abilities as falling below others' expectations. As well, subjects reported more negative cognitions concerning the speaking event which also indirectly supports the theoretical models. That is, individuals who believe that they failed to meet audience standards will be expected to have more negative thoughts regarding their performance.

Trait and General-Context Communication Apprehension

Correlations between the public speaking anxiety measure and the State Anxiety Inventory and between the Personal Report of Communication Apprehension and the State Anxiety Inventory were positive and significant. Thus, it seems reasonable to infer that the results found in the current specific speaking situation also apply to more global predispositions of speech anxiety. In fact, as mentioned previously, significant relationships were found between trait and general-context communication apprehension measures and measures of self-efficacy expectancies and evaluative thoughts, lending additional support to this interpretation.

It was hypothesized that there would be a moderate positive correlation between measures of trait and general-context communication apprehension; however this was not the case. In fact, the Personal Report of Communication Apprehension and public speaking anxiety measure were very highly correlated. A positive correlation was anticipated in view of the fact that these measures are intended to assess enduring personality characteristics that only differ in degree of experienced communication apprehension. However, the high correlation obtained in the present study may also indicate that the instruments are measuring the same construct. Nonetheless, the two measures contain six identical items, and thus an inflated correlation is to be expected.

As well, the public speaking anxiety measure correlated highly with the public speaking component of the Personal Report of Communication Apprehension, a well-validated measure. This lends support to the suitability of the instrument as a measure of general-context communication apprehension. A high correlation, however, was not unexpected since, as mentioned above, all the public speaking items of the Personal Report of Communication Apprehension are included in the public speaking anxiety measure.

An original concern was that the magnitude of the responses on the trait and general-context anxiety

questionnaires might be influenced by situational anxiety, since both measures were administered a short while before the delivery of a speech. In fact, evidence has shown that people who anticipate that they will have to perform a speech score higher on the trait measure than those who are not given that information (Beatty, Behnke, & McCallum, 1978). However, even if this were the case, the procedure was uniformly presented to all participants and there was a normal distribution of scores on the measures.

Methodological Improvements

The present study made some methodological improvements over other similar studies. For example, a major problem with Ayres's (1986) study was the measure he used to assess general-context communication apprehension; The Personal Report of Confidence as a Speaker is a tridimensional measure that combines items dealing with anxiety and self-reports of behaviour (i.e., "I prefer to have my notes on the platform in case I forget my speech";(Leary, 1983b). This instrument is not, strictly speaking, a pure measure of speech anxiety, and is not appropriate when only a measure of speech anxiety is required. In the current study, a unidimensional measure of general-context communication apprehension that assessed self-reported subjective reactions was employed.

Another problem with research in the area is one characteristic of field studies; that is, the lack of

experimental control over certain environmental conditions. Many communication apprehension studies are conducted in regular classroom settings where students deliver speeches as part of course requirements. However, variables, such as length and content of the speech, and member characteristics, which have been implicated in communication apprehension, are not controlled (Seta, Seta, Crisson & Wans, 1989; Daly & Buss, 1984).

The present study was conducted in a lab because it was considered important to control as many aspects of the public speaking situation as possible in order to establish a clear and definitive relationship between communication apprehension and the cognitive variables. One area of control was the size and composition of the audience. In view of the fact that it seemed impossible to expect the same number of people to assemble in the lab and listen to the same speech over the several month interval required for completion of the study, a video-camera was employed as an audience substitute. To the researcher's knowledge this procedure has never been utilized in the communication apprehension field. An anticipated concern was that the manipulation would not be very powerful, that is, participants' anxiety levels would not be as high as if an actual audience were present. This concern was reinforced throughout the course of the study as several participants mentioned they would not have participated in the study if

actual people had been present. However, the means and standard deviations of the anxiety measures in the present study were comparable to results reported by other researchers who employed the same measures (Daly, Vangelisti, & Lawrence, 1989; Daly, Vangelisti, Neel & Cavanaugh, 1989; Miller, 1987; Beatty, Behnke, & McCallum, 1978).

Thus, the video-camera manipulation seemed to be as effective as an audience in inducing anxiety. However, it is difficult to determine whether or not the anxiety responses that were assessed were in fact due to general-context or trait communication apprehension. For example, it was necessary during the videotaping of the speech for the researcher to remain in the lab. Therefore, it is possible that the participants were responding to the presence of one person, the researcher, as opposed to the future audience. Also, the participants were requested to give the speech while standing up and looking at the videocamera that was prominently set up in the centre of the lab. It is very likely that this manipulation increased self-consciousness, which has been implicated as a dimension that produces anxiety (Beatty, 1988). It is feasible that this construct inflated state anxiety scores in the present study. However, since a measure of this construct was not included in the current study the extent of its influence will remain unknown. Additional research is required to

confirm the effectiveness of the videocamera as a potential audience substitute.

Perceptions of Speaking Ability Measure

In view of the fact that Ayres's (1986) Perceptions of Speaking Ability measure was selected for operationalizing self-efficacy expectancies, the differences found in the current and original study pertaining to the measure should be further explored. One such finding was the disparity in the internal consistency scores. Ayres reported an alpha coefficient of .89, while in the current sample it was only .63. A possible explanation for this variance is the subject sample: Ayres recruited communication students, while in the current study used introductory psychology students. Another possible explanation for the lower alpha coefficient is the difference in sample size. Ayres recruited 600 subjects while the current study employed 68, thus there is wider margin of error in computing reliability estimates in the smaller sample.

The finding of a smaller alpha coefficient, however, is not necessarily a negative result. Anastasi (1988) states that high interitem consistency depends on the homogeneity of the criterion the measure is trying to predict. However, when predicting a heterogenous criterion, like self-efficacy expectancies, the heterogeneity of the items, as reflected by a low alpha coefficient, does not necessarily depict error variance. Since the Perceptions of Speaking Ability

instrument is a measure of a complex construct, the current results may reflect the diversity of the items.

Another difference between the current findings and Ayres's (1986) findings was the results of the factor analysis of the Perceptions of Speaking Ability items. Ayres found three factors whereas the researcher, employing the same procedure, found four factors. The most obvious explanation for the differences is the sample size. Kerlinger (1986) states that for item factor analysis a large sample is necessary because item intercorrelations are lower and less reliable than test intercorrelations. The factor analysis should be replicated with a larger sample to assess the "reality" of Ayres's factors.

Contributions and Implications

The findings of the present study support and extend earlier research and add to the current body of knowledge on communication apprehension. As mentioned previously, the present study made some methodological improvements over previous studies in the field (i.e., Ayres, 1986). That is, a state anxiety measure was used, in antithesis to the common practice of adapting a trait measure to detect a state experience. Also, an innovative procedure, a videocamera, was introduced to control for audience size, composition, and reations.

The results of the present study may also be potentially useful for treatment purposes. For example,

cognitive modification programs, such as cognitive restructuring and visualization have been demonstrated to be effective in treating individuals with communication apprehension (Ayres & Hopf, 1987). Cognitive restructuring is based on the premise that individuals have learned negative cognitions about themselves and their communication, hence a person is taught to identify these negative self-statements and replace them with positive statements (Kelly, 1982). However, the mechanisms underlying the change process and the specific negative cognitions associated with speech anxiety have not been clearly delineated (Daly, Vangelisti, Neel, & Cavanaugh, 1989; Ayres, 1988). The present study provided information that may be incorporated into the design of these programs. For example, the thought listing data could be scored along clinically useful dimensions (i.e., such as whether or not idea units reflect rational or irrational thoughts (Maultsby, 1980). Also, a content analysis could be performed. Such an analysis was beyond the scope of the current study; however, a glance at the raw data showed certain salient themes, such as attributing perceived poor performance to the external environment. Hence, a clinician can probe a client's self-statements via the thought listing method and learn the specific self-statements that are causing distress and thus more constructively effect change.

In summary, the results of the present study provide strong support for the major hypotheses, that is, trait, state, and general context communication apprehension are associated with low self-efficacy expectancies and negative evaluative thinking. The underlying assumption that individuals with high trait and general context communication apprehension experience greater anxiety in a specific speaking situation was also supported.

APPENDIX A

PERSONAL REPORT OF COMMUNICATION APPREHENSION-24

Directions: 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.

1 2 3 4 5 (1). I dislike participating in group discussions.

1 2 3 4 5 (2). Generally, I am comfortable while participating in group discussion.

1 2 3 4 5 (3). I am tense and nervous while participating in group discussions.

1 2 3 4 5 (4). I like to get involved in group discussions.

1 2 3 4 5 (5). Engaging in group discussion with new people makes me tense and nervous.

1 2 3 4 5 (6). I am calm and relaxed while participating in group discussions.

1 2 3 4 5 (7). Generally, I am nervous when I have to participate in a meeting.

1 2 3 4 5 (8). Usually I am calm and relaxed while participating in meetings.

1 2 3 4 5 (9). I am very calm and relaxed when I am called upon to express an opinion at a meeting.

1 2 3 4 5 (10). I am afraid to express myself at meetings.

1 2 3 4 5 (11). Communicating at meetings makes me uncomfortable.

1 2 3 4 5 (12). I am very relaxed when answering questions at a meeting.

1 2 3 4 5 (13). When participating in a conversation with a new acquaintance, I feel very nervous.

1 2 3 4 5 (14). I have no fear of speaking up in conversations.

1 2 3 4 5 (15). Ordinarily I am very tense and nervous in conversations.

1 2 3 4 5 (16). Ordinarily I am very calm and relaxed in conversations.

1 2 3 4 5 (17). While conversing with a new acquaintance, I feel very relaxed.

1 2 3 4 5 (18). I'm afraid to speak up in conversations.

1 2 3 4 5 (19). I have no fear of giving a speech.

1 2 3 4 5 (20). Certain parts of my body feel very tense and rigid while giving a speech.

1 2 3 4 5 (21). I feel relaxed while giving a speech.

1 2 3 4 5 (22). My thoughts become confused and jumbled when I am giving a speech.

1 2 3 4 5 (23). I face the prospect of giving a speech with confidence.

1 2 3 4 5 (24). While giving a speech I get so nervous I forget facts I really know.

APPENDIX B

PUBLIC SPEAKING ANXIETY

Directions: This instrument is composed of 10 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. Work quickly, just record your first impression.

1 2 3 4 5 (1). I have no fear of giving a speech.

1 2 3 4 5 (2). I look forward to giving a speech.

1 2 3 4 5 (3). Certain parts of my body feel very tense and rigid while giving a speech.

1 2 3 4 5 (4). I feel relaxed while giving a speech.

1 2 3 4 5 (5). Giving a speech makes me anxious.

1 2 3 4 5 (6). My thoughts become confused and jumbled when I am giving a speech.

1 2 3 4 5 (7). I face the prospect of giving a speech with confidence.

1 2 3 4 5 (8). When giving a speech I get so nervous I forget facts I really know.

1 2 3 4 5 (9). Giving a speech really scares me.

1 2 3 4 5 (10). While giving a speech I know I can control my feelings of tension and stress.

APPENDIX C

PERCEPTIONS OF SPEAKING ABILITY

Directions: This instrument contains 12 items concerning the speech you have just completed. Indicate the degree to which the statements apply to you by marking whether you

Strongly Disagree 1 2 3 4 5 Strongly Agree

1 2 3 4 5	(1). My speech was more emotional than the audience will expect.
1 2 3 4 5	(2). I used less eye contact than the audience will expect.
1 2 3 4 5	(3). I used more gestures than the audience will expect.
1 2 3 4 5	(4). I used less movement than the audience will expect.
1 2 3 4 5	(5). My general pattern of delivery will be seen as appropriate.
1 2 3 4 5	(6). My speech was more organized than the audience will expect.
1 2 3 4 5	(7). My speech was less logical than the audience will expect.
1 2 3 4 5	(8). My speech used less documentation than the audience will expect.
1 2 3 4 5	(9). The audience will perceive my word usage to be below their level of sophistication.
1 2 3 4 5	(10). Most audience members will find some problems with my voice (e.g. too loud, too soft, too high pitched, etc.)
1 2 3 4 5	(11). The audience will see me as trustworthy.
1 2 3 4 5	(12). The audience will see me as not very competent.

APPENDIX D

THOUGHT LISTING PROTOCOL

What I want you to do now is to summarize your thoughts and feelings and immediate reactions to the speech. Your description may include reports of how you felt, perceptions of your effectiveness, anticipated reactions of the audience, things you did well or poorly, etc.

APPENDIX E

CONSENT FORM FOR PARTICIPATION IN RESEARCH

Conducted by: Catherine Tsagarakis, B.A.
Supervised by Cheryl Thomas, Ph.D.
Department of Psychology
University of Windsor

Public speaking anxiety is one of the most common fears of the American population. It is also prevalent in university settings with a reported 2 out of 3 students experiencing it at some point in their lives. The purpose of this study is to gain a better understanding of the cognitive differences between students with high and low levels of public speaking anxiety.

For the first phase of the study you will be asked to complete two questionnaires. You will then be given an outline of a short speech and will be given five minutes to prepare the material. You will present the speech in a lab and it will be videotaped. Subsequently, you will be asked questions concerning your thoughts and feelings about your speech. Your videotaped speech might be later viewed by a group of graduate students. The whole procedure will take about 30 to 40 minutes. You will receive 3 experimental points for your participation.

To confirm your consent for participation, please sign this form. This study has been approved by the Department of Psychology Ethics Committee. Should you have any concerns prior to or after signing this form, please feel free to contact any of the following persons:

Experimenter:	Catherine Tsagarakis, B.A.	256-8066
Supervisor:	Cheryl Thomas, Ph.D.	253-4232 ext. 2252
Ethics Committee:	Jim Porter, Ph.D.	253-4232 ext. 7012

- I understand that I may ask any questions concerning the study prior to or after signing this form.
- I understand that my data will remain confidential even though the results of the experiment may be published.
- I understand that participation is completely voluntary and that I have the right to withdraw from the study at any time.
- I understand that I can receive a summary of the research findings by contacting the experimenter at the end of the study.

I have carefully studied and understood this agreement, and therefore I freely consent to participate in this procedure.

_____ _____

Participant's name Date

APPENDIX F

OUTLINE OF SPEECH

This is an outline of the speech you are to soon present. If you wish, you may include other relevant information. You will have 10 minutes to prepare and organize the material.

- Assumption College was founded in 1857.
- M. Theodule Giradot was the first instructor.
- The college was successively governed by Basilians, Jesuits, Benedictines, and secular clergy until 1870 when the Basilians returned.
- The curriculum consisted of classical and commercial courses, primarily designed to prepare students for theological seminaries.
- In 1919, Assumption College affiliated with what is now known as the University of Western Ontario.
- Its curriculum was broadened to include courses leading to B.A., B.Sc. and M.A. degrees, and pre-engineering, pre-law, and pre-med programs.
- From 1934 to 1962, Assumption became co-ed with the inclusion of Holy Names College, directed by the Sisters of the Holy Names of Jesus and Mary.
- When the Sisters disbanded the college, Assumption took over its women's residence which was renamed Electa Hall.
- On July 1, 1953, Assumption College ended its affiliation with the University of Western Ontario, and obtained independent university status.
- In 1956 the college changed its name to Assumption University and accepted as an affiliate the non-denominational Essex College.
- Essex College assumed responsibility for the Faculty of Applied Science, the Schools of Business Administration and Nursing, and the Departments of Biology, Chemistry, Geology, Geography, Mathematics, and Physics.
- Holy Redeemer College, the national seminary of the Redemptionist Fathers, also affiliated.
- In 1957 Canterbury College became the first Anglican college in the world to affiliate with a Roman Catholic University.
- The University of Windsor was incorporated by the Ontario legislature on December 19, 1962, including Assumption as a federated member.
- During 1963 and 1964 affiliation agreements were made with Holy Redeemer College, Canterbury College, and the new Iona College.
- The University assumed control of the campus on July 1, 1963, and became a member of the International Association of Universities in June, 1964.

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VITA AUCTORIS

Catherine Irene Tsagarakis was born on May 21, 1968 in St. John's, Newfoundland. In June, 1986 she graduated from the Second High Scool, Rethymnon, Crete, Greece. In September, 1986 she enrolled in the philosophical and social studies programme at the University of Crete. Catherine transferred to McGill University, Montreal, Quebec in September, 1988 and graduated with the Bachelor of Arts degree (psychology) in June, 1990. Since September, 1990 she has been registered in the doctoral programme in adult clinical psychology at the University of Windsor.