SITUATIONAL AND PREDISPOSITIONAL CORRELATES OF PUBLIC SPEAKING ANXIETY

Michael J. Beatty

The results of the present study indicate that situational factors such as perceived novelty, subordinate status, conspicuousness, dissimilarity and prior history correlate significantly with public speaking anxiety. A multiple regression equation accounted for 48.70% of the variance in public speaking anxiety scores with prior history, operationalized as CA scores, novelty and conspicuousness contributing to the prediction. Pedagocial implications include the importance of reducing students' perceptions of dissimilarity and producing and maintaining a noncritical, attentive classroom atmosphere during student performance.

In his classic work, De Oratore, Cicero wrote "I turn pale at the outset of a speech and quake in every limb and in all my soul" (p. XXVI). Although experienced speakers manage to direct the excessive energy into productive and purposive channels, it has been recognized that this sensation "may cause profound discomfort in young speakers who are without the stability to deal with their feelings" (Lomas, 1944, p. 479). This negative reaction, whether referred to as fear, stage fright, speech anxiety, audience anxiety or state anxiety, has negative consequences such as an immediate desire to avoid or withdraw from speaking (Beatty, Kruger & Springhorn, 1976; Greenleaf, 1952), low verbal output and nonfluency (Lerea, 1956), physical discomfort (Greenleaf, 1952), and trembling (Behnke, Beatty & Kitchens, 1978) just to name a few. The long term effect of experiencing anxiety in public speaking situations is the development of a predisposition to avoid communication (Beatty, Andriate & Payne, 1985; Beatty & Behnke, 1980; McCroskey & Beatty, 1984). On the other hand, public speaking experiences which are emotionally positive lead to increased confidence in speaking (Paulson, 1951), positive affect toward speech in general and better overall personal adjustment (Henrikson, 1943). Obviously, an understanding of the underlying mechanisms that trigger the anxiety experience would be valuable both in terms of theory development and classroom applications. While an infinite set of factors could be investigated, McCroskey's (1984, pp. 25-26) perspective that novelty, formality, subordinate status, conspicuousness, unfamiliarity, dissimilarity, degree of attention from others, degree of evaluation, and prior history constitute the major causal elements was selected as the point of departure in the present study. The problem of this research was to provide empirical data bearing on the relationship between public speaking anxiety and these supposed causal variables.

Michael J. Beatty (Ph.D., Ohio State University, 1976) is a Professor of Communication at Cleveland State University, Cleveland, OH, 44115. The author is indebted to Carol Senaga, Gary Balfantz, Michael Miller, and Carolyn DuPre for their assistance with this research.

THEORETICAL PERSPECTIVE

Public speaking anxiety as state anxiety

In contrast to trait anxieties such as communication apprehension (McCroskey, 1970) which represent general tendencies to respond, state anxiety is conceptualized as the anxiety experienced in a particular situation at a particular time and may be regarded as an actual reaction to a stimulus (Spielberger, 1966, p. 12). Accordingly, state anxiety functions as a transitory condition evoked during confrontation with a specific stimulus such as public speaking. Spielberger (1972) suggests that this reaction "may be conceptualized as consisting of unpleasant, consciously perceived feelings of tension and apprehension, with associated activation or arousal of the autonomic nervous system" (p. 29). While autonomic arousal is necessary for state anxiety reactions, this physiological activation also underlies emotional states such as rage and excitement (Cantril & Hunt, 1926-27; Landis & Hunt, 1932; Patrick, 1934: Schachter & Singer, 1962). Drawing from the research available at the time, Lomas (1937) postulated that public speaking anxiety "does not differ in chemical or visceral components from the strong emotional characteristics of vigorous and effective speech" (p. 41). Later studies demonstrated the accuracy of Lomas' theoretical claim. In general, these studies suggest that most speakers experience considerable arousal during public speaking whether or not they are fearful. However, this arousal engenders pressure to understand and label the sensation. It is how an individual labels this arousal that determines the emotion experienced. Accordingly, a person who perceives himself or herself to be a poor speaker would interpret increased heart rate during public speaking as fear or anxiety whereas a confident speaker might view the arousal as excitement and requisite to "vigorous and effective speech" (For a review of these studies see Beatty, 1984). Behnke and Beatty (1981), using changes in heart rate and the predisposition to avoid communication as predictors, accounted for 79.60% of the variance in self-reported public speaking anxiety scores. Since autonomic arousal is common to all strong emotions and therefore is not sufficient to produce public speaking anxiety, the speaker must cognitively experience anxiety in the speaking situation for the emotion to be considered public speaking anxiety.

Situational casual elements

Novelty, formality, subordinate status, conspicuousness, unfamiliarity, dissimilarity and degree of attention from others were originally posited as situational dimensions which produce shy behavior (Buss, 1980). McCroskey (1984, p. 26) adds degree of evaluation and prior history which were borrowed from the writing apprehension literature (Daly & Hailey, 1980).

A novel situation presents the communicator with substantial ambiguity about what to expect and how to respond. McCroskey (1984) points out that "For most people, giving a speech is a novel experience, not something they do every day" (p. 25). The uncertainty associated with novel situations presumably produces anxiety reactions. According to McCroskey (1984) "Formal situations tend to be associated with highly prescribed appropriate behaviors . . . Less formal situations have less rigid behavior rules" (p. 25). It is the narrow range of acceptable behavior which produces anxiety. Subordinate status refers to perceiving that "appropriate behavior is defined by the person holding higher status." Obviously, in classrooms where the teacher dictates the criteria for performance, students hold subordinate status. In a broader sense, however, subordinate status may be extended to the

speaker-audience relationship. If the speaker perceives the audience members as "critics" who are viewed by the speaker as superiors, anxiety is increased (Robinson, 1959). Since the formality and evaluation dimensions underlying the teacher's superior status should be usurped by those situational factors, it is probable that it is subordinate status with respect to classmates which contributes to anxiety across classroom situations.

Conspicuousness, standing out in one's environment, produces anxiety. Therefore, it is not surprising that "Giving a public speech is a prime example of being conspicuous" (McCroskey, 1984, p. 25). Unfamiliarity refers to how well the speaker knows the listener. It is suggested that most people feel more comfortable talking to people they know than people they don't know (McCroskey, 1984, p. 25). Dissimilarity refers to the amount of difference between speaker and audience. In general, people are presumed to feel more comfortable communicating with people who are similar to themselves than with people who are greatly different. However, it is also thought that people "are the most uncomfortable when communicating to similar peers, because they are more concerned with the evaluations such people make" (McCroskey, p. 26). Degree of attention refers to how much "people stare at us or totally ignore us when communicating" (McCroskey, 1984, p. 26). Either extreme is believed to produce the most anxiety.

McCroskey (1984, p. 26) advances the degree of evaluation as a potential cause of public speaking anxiety. He believes that "a student giving a talk in a public speaking class for a grade may be more apprehensive than the same student would be if he or she were giving the same talk to the same people at a meeting in the dorm" (p. 26). Prior history refers to an individual's previous communication experiences. Higher levels of public speaking anxiety would be expected for those with a history of negative experiences than for those with positive experiences (McCroskey, 1984, p. 26). Because prior history represents past experiences that are brought to the speaking situation by the individual, prior history is more accurately conceptualized as an individual difference variable rather than a situational factor.

METHOD

Measurement

The five item version of the STAI (A-State) anxiety scale (Spielberger, Gorsuch & Lushene, 1970) was selected as the state anxiety measure. This short version of the scale has demonstrated acceptable reliability (.86 to .93) and validity in general anxiety research (Leherissy, O'Neil, Heinrich & Hansen, 1973; O'Neil, 1972; O'Neil, Spielberger & Hansen, 1969). Moreover, the moderate correlations between the PRCA and this scale reported in previous public speaking research (Beatty, in press; Beatty, Forst & Stewart, 1986; McCroskey & Beatty, 1984) and in the present study (r - .63) indicates that the measure functions in a manner consistent with state-trait anxiety theory. In present study the alpha reliability for the scale was .83. The items were: I felt tense; I felt calm; I felt relaxed; I felt at ease; and I felt jittery.

Since (1) the effect of the situational variables is dependent upon the speakers' perceptions and (2) a literature review failed to uncover a measure of these variables, self-reported measures of each factor were developed and, at least, partially validated. Each situational variable, except for degree of evaluation and prior history, was assessed using two Likert-type items. The items were: Making a

presentation like this one was a new experience for me, and This experience was different from previous experiences as a communicator (novelty); I would describe the situation as formal, and The expectations for my behavior and performance were rigid and inflexible (formality); The other students in class seemed to be better at this type of presentation than I am, and The other students seem to know more about my topic than I do (subordinate status); I felt that I was the center of attention during my talk, and I felt conspicious during my presentation (conspicuousness); I am not familiar with many of the students in class, and Most of the students in class are strangers (unfamiliarity); The students in class seem very different from me, and I seem to have little in common with the students in this class (dissimilarity) and; The students were paying close attention to me during my talk and I felt that the students were watching and listening during my talk (degree of attention from others). Alpha reliabilities for the pairs of items ranged from .62 to .74.

Although most of the situational factors represent subjective reactions based on perceived environmental cues, it was possible to assess the validity of the formality, and conspicuousness and novelty scales. Based on the assumption that standing in front of a classroom and delivering a speech constitutes a somewhat more formal event than giving an oral report from one's desk to an audience seated in a circular arrangement, formality scores for these two activities were inspected. Results of this analysis indicated that participants speaking from the front of the room reported significantly higher levels of formality than did their seated counterparts (Standing, $n = 52, \bar{x} = 6.10, sd = 1.75$; Seated, $n = 24, \bar{x} = 5.46, sd = 2.02$; t = 2.49, p < .05). Further, it seemed reasonable to assume that speakers standing behind a lecturn should feel less conspicuous than those performing without such physical barriers. An analysis of the participants speaking from the front of the room indicated that those performing without the benefit of a lecturn felt significantly more conspicuous than did those speaking from behind a lecturn (No lecturn, n = 27, $\bar{x} = 8.07$, sd = 0.55; Lecturn, n = 25, $\bar{x} = 6.32$, sd = 0.63; t = 11.26, p < .05). An external validity check conducted in a performance-oriented speech course, in which only students with no previous public speaking experience were analyzed, indicated that novelty scores decreased significantly between the first and third persuasive speeches $(\bar{x} \text{ difference} = -3.07, t = -2.78, df = 13, p < .05)$. Thus, the three factors permitting a validity check against situational differences appear to be sensitive to the variables under investigation thereby providing at least partial validation of the instrument.

Degree of evaluation was measured in two ways. First, the percent of the final course grade attributable to the performance was employed (range – 2 to 20%). Second, two Likert-type items, I believe the students were forming an impression of me or evaluating my talk and What my classmates think of me will be influenced by the quality of my talk, were constructed. The alpha reliability for these scales was .79.

The public speaking component of McCroskey's (1982) PRCA-24 was employed as the measure of prior history because the results of several studies indicate that communication apprehension functions as a summary of previous affective communication-related experiences (e.g., Beatty, 1984; Beatty & Andriate, 1985; Beatty, Andriate & Payne, 1985; Beatty & Behnke, 1981; McCroskey & Beatty, 1984). There is also evidence, albeit limited, suggesting that a search of the affective memory is initiated when a public speaking task is anticipated and that this data is indicated by hypothalmic activation (for a review see Beatty, 1984). The public speaking

component consists of six Likert-type items, three reversed to avoid response bias, assessing apprehension in a public speaking context. These items were: I have no fear of giving a speech; Certain parts of my body feel very tense and rigid while giving a speech; I feel very relaxed while giving a speech; My thoughts become confused and jumbled when I am giving a speech; I face the prospect of giving a speech with confidence; and While giving a speech I get so nervous I forget facts I really know. The validity of this instrument has been demonstrated by studies utilizing the measure to predict avoidance and withdrawal behavior during public speaking (Beatty, in press; Beatty, Forst, & Stewart, 1986). In the present study, the alpha reliability coefficient was .80.

General procedure

The CA measure was administered to seventy-six undergraduates (males = 35; females - 41) enrolled in speech courses requiring oral peformance. To increase the variability in the situational factors, participants engaged in different types of performances served as participants. The specific performances in which participants were engaged included: (1) informal reports of a telephone survey delivered to classmates while the students were arranged in a circular seating arrangement, (2) informative speeches (topic selected by student) delivered from behind a lecturn positioned in the front of the room, (3) informative speeches (topic selected by student) delivered from the front of the classroom without any physical barriers between audience and speaker, (4) persuasive speeches (topic selected by teacher) delivered from the front of the classroom and behind a lecturn, (5) persuasive speeches (topic selected by teacher) delivered from the front of the classroom without such a barrier and (6) oral interpretation performances. Except for the informal report and the oral interpretation performance, the importance of the performance to final course grade varied across the situations (2 to 15 percent). The public speaking anxiety and the situational variable measures were administered immediately following the participant's performance.

RESULTS

The means and standard deviations for all variables is reported in Table 1. The correlations among those variables are presented in Table 2. As indicated, only novelty, subordinate status, conspicuousness, dissimilarity and prior history scores correlated significantly with public speaking anxiety at the .05 level of confidence. A

TABLE 1
MEANS AND STANDARD DEVIATIONS FOR ALL VARIABLES

Variable	x	SD
Public Speaking Anxiety	17.83	4,51
Prior History (CA)	20.64	5.36
Novelty	5.87	2.44
Formality	5.89	1.85
Subordinate Status	5.75	1.67
Conspicuousness	7.38	1.20
Unfamiliarity	5.21	2.11
Dissimilarity	4.95	1.70
Attention	7.50	1.25
Percent of Grade	6.61	5.85
Evaluation	7.76	1.31

TABLE 2						
CORRELATIONS	AMONG	ALL	VARIABLES			

Variables	(CA)	(N)	(F)	(S)	(C)	(U)	(D)	(A)	(PG)	(E)
Public Speaking Anxiety	64*	32*	21	45°	42*	22	26*		-03	05
Prior History (CA)	_	15	20	47*	41*	06	43*	-07	-10	13
Novelty (N)		_	40*	30*	05	22*	28*	-27 *	-15	-02
Formality (F)			_	31*	-19	19	39*	03	02	25*
Subordinate (S) Status				_	31*	10	31*	09	02	06
Conspicuousness (C)					_	22	24*	06	16	33*
Unfamiliarity (U)						_	36*	09	13	-09
Dissimilarity (D)								-06	-04	04
Attention (A)								_	-11	15
Percent of Grade (PG)									_	-10
Evaluation (E)							_			

p < .05, two tailed.

full regression equation, employing R^2 improvement as the criterion for terminating the analysis, accounted for 48.70% of the variance in public speaking anxiety scores (F = 22.72; df = 3.72; p < .0001; R = .70) with prior history (F = 31.44, p < .0001), novelty (F = 7.42, p < .008) and consciousness (F = 4.24, p < .043) contributing to the prediction.

As mentioned, degree of attention is supposed to produce anxiety reactions at extreme levels and the lowest amount of anxiety should be experienced under conditions of moderate attention. Mindful that the preceding analyses assume linearity, the failure of the attention factor could be due to a violation of this statistical assumption. However, (1) the mean anxiety scores ($\bar{x} = 15.00$; sd = 6.35) for the eight subjects scoring eight or higher on the attention variable (indicating that they, on average, agree that the audience was highly attentive) was in fact lower (t = -1.87, p < .10) than the anxiety scores for the twelve subjects scoring six (i.e., the theoretical mean) on the attention scale (public speaking anxiety; $\bar{x} = 18.92$; sd = 3.20) and (2) a plot of the attention-public speaking anxiety scores was illustrative of a slight linear relationship.

In a similar manner, it is possible that the effect of evaluation is dependent of prior history. The writing apprehension literature suggests that good writers perform better under evaluative conditions and poor writers do worse (Daly & Hailey, 1980). However, the seven low CA (positive prior history) low evaluation (percent of grade less than 5%) participants reported lower levels of public speaking anxiety ($\bar{x} = 11.75$, sd = 3.62) than their low CA -low evaluation (percent of grade more than 15%) counterparts ($\bar{x} = 15.26$, sd = 4.57, t = -1.49, p < .20). Although the number of participants available for the analysis of the attention and evaluation variables was too small to justify theoretical interpretation, the directionality observed tends to indicate that the low magnitude of their respective relationships with public speaking anxiety is probably not due to violation of statistical assumptions.

DISCUSSION

The results of the present study have both important theoretical and classroom implications. First, public speaking anxiety and certain situational factors appear to

be related. The correlation between anxiety and novelty indicates that as the situation is perceived as more novel, anxiety increases. This finding is consistent with published studies indicating that public speaking anxiety is in part a function of experience and training (Henrikson, 1943; Low & Sheets, 1951). The low magnitude of the correlation, however, suggest that the relationship is not a strong one and merely increasing students' amount of experience will have a minimal impact on public speaking anxiety, especially if those experiences are not positive ones.

The correlation between perceived subordinate status and public speaking anxiety suggests that students engage in a form of social comparison at least in terms of public speaking ability. If the speaker perceives the audience as more competent than himself or herself, the result is increased anxiety. Unlike novelty, subordinate status also correlates with prior history defined as CA scores. Since the CA scores were collected prior to the performance, the implication is that those with a negative history of public speaking tend to perceive the audience as more competent than themselves. In this way, apprehensive communicators appear to enter public speaking with a self-imposed subordinate status which in turn heightens their performance anxiety. In a similar fashion, conspicuousness and dissimilarity correlated with both CA and public speaking anxiety. Within the context of the present study subordinate status, conspicuousness and dissimilarity are not situational factors independent of the speaker. In fact a multiple regression equation, using these three factors as independent variables, accounted for 36.53% of the variance in CA scores (F = 13.82; df = 3.72; p < .0001, R = .60). This is not to say that the three factors were not originally pure contributors to state anxiety in communication settings. However, it appears that these factors become part of the predisposing character of CA and function, in part, as a frame of reference which is imposed on communication situations. The notion that apprehensive communicators feel less competent, more conspicuous and different from others is consistent with research indicating that anxious speakers are self-conscious (Knower, 1938) are not socially well-adjusted (for a review see Clevenger, 1959; McCroskey, Daly & Sorensen, 1976) and are lower in self-esteem (McCroskey, Daly, Richmond & Falcione, 1977).

Although formality, unfamiliarity and degree of attention were not significantly correlated with public speaking at the .05 level for two tailed test, these variables were related to anxiety if a one-tailed test is assumed (attention was negatively correlated). Further, expanding the pool of items and including different communication activities might increase the magnitude of these low correlation coefficients. Thus, these factors should not be ignored in future research nor in the classroom.

A second implication of the present study concerns the role of prior history or CA in the prediction of public speaking anxiety. McCroskey (1984) appears to be correct when he advises that of the causal factors "prior history may be the most important of all" (p. 26). CA was selected as the independent variable for the best one variable model accounting for 40.42% of the variance in public speaking anxiety scores (F = 50.21; df = 1.74; p < .0001; R = .63). This finding underscores the importance of reducing CA as a first priority in treating public speaking anxiety. It should not be assumed, however, that a student never having given a public speech is without a pertinent prior history. Greenleaf (1952) observed that "speech fright" appeared to start early in life for many students (p. 330) and this problem restricts other forms of social and vocational activity later in life. Indeed, these conclusions are similar to those made by McCroskey (1977) based on a version of the PRCA

predominated by public speaking-related items. A handful of empirical studies have been published which suggest that negative reactions from significant others such as parents and teachers may contribute to the early development of CA (Beatty, Plax, & Payne, 1984; Beatty, Plax, & Karney, 1985; Daly & Friedrich, 1981; Plax, Beatty, & Payne, 1984). It has been theorized that apprehensive persons, as a consequence of previous experience, view all communication as performance, explaining the intercorrelation of the interpersonal and public speaking components of the PRCA-24 (Beatty & Andriate, 1985).

McCroskey (1984) also maintains that situational factors can engender anxiety reactions regardless of an individual's level of CA. A multiple regression equation, excluding CA, supports this contention (F = 5.56; df = 9.66; p < .0001; R = .66). The implication for the classroom teacher is that even when trait-like CA is reduced, situational factors may produce public speaking anxiety. As the results of published studies (Beatty & Andriate, 1985; Beatty, Andriate, & Payne, 1985; Beatty & Behnke, 1980) indicate, anxiety experienced during communication is processed and assimilated into predispositional traits thereby resulting in the development or redevelopment of trait-like CA. In the classroom, therefore, teachers should ensure that communication experiences are positive ones for students and all potential causes, situational and predispositional, must be addressed. The failure of some of the situational variables to contribute to the prediction of public speaking anxiety in the regression equation is probably a function of multi-colinearity among the predictors. It is possible that those variables which were suppressed are sufficient to produce increases in anxiety. Certainly, the correlations presented in Table 2 indicate that several combinations of variables may contribute to public speaking anxiety.

PRELIMINARY THEORETICAL MODEL

A causal model relating situational and predispositional factors to public speaking anxiety can be proposed based on a confluence of previous research and the results of the present study.

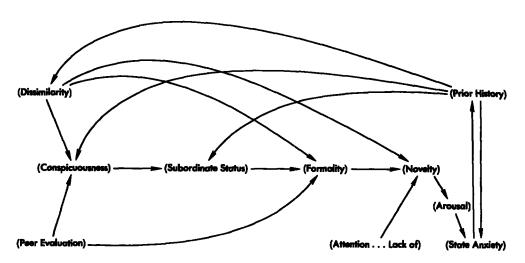


FIGURE 1
PRELIMINARY CAUSAL MODEL

Since this model includes various feedback loops it is not possible to verify it fully without collecting data over, at least, two separate time periods. However, many of the assumptions can be evaluated in light of the extant research literature. It is taken as axiomatic that people are different from one another and that the degree of difference varies widely among individuals. It is also assumed that people are evaluated by others. Clearly, the research in our field on impression formation. credibility and perceptions of apprehensive and shy individuals is common knowledge and supports this assumption. The model implies that being evaluated and feeling different, especially with a predisposition to feel conspicuous, leads to perceived conspicuousness. The correlations among these variables are shown in Table 2. The multiple correlation for these variables, with conspicuousness serving as the criterion was .42 (p < .05). Even when CA is eliminated from the analysis, the multiple correlation was .39 (p < .05). So conspicuousness may result from the situational variables at the outset but CA may be sufficient to produce perceived conspicuousness once the CA trait is developed and stabilized. Feeling conspicuous coupled with the predisposition to feel inferior as a communicator produces perceived subordinate status. The correlations in Table 2 support the empirical relationship between these variables. In addition, published studies relating CA to personality variables demonstrates the connection (McCroskey, Daly, Richmond & Falcione, 1977; McCroskey, Daly & Sorensen, 1976). Recent work investigating causal direction tends to suggest that CA influences general personality (Beatty, 1986). The multiple correlation, with subordinate status as the criterion, was .33 (p < .05).

The model further suggests that perceived formality is the consequence of subordinate status, dissimilarity and evaluation. This notion is consistent with the respective correlations for formality in Table 2. The multiple correlations, with formality as the criterion was .50 (p < .05). Novelty is presented as the effect of being ignored (negative correlation between attention and novelty) in a formal situation populated by people who are dissimilar. The multiple correlation was .42 (p < .05). Although physiological arousal was not included in the present study, the extant psycho-physiological literature holds that novelty produces arousal (Beatty, 1984; Behnke & Beatty, 1981). As mentioned, physiological arousal coupled with a predisposition to interpret arousal in communication situations as anxiety (CA) leads to anxiety reactions. Behnke & Beatty (1981) reported a multiple correlation, with public speaking anxiety as the criterion, of .89 (p < .05). Consistent with these findings, the multiple correlation using novelty and CA as predictors was .67 (p < .05). Several studies have demonstrated that CA levels fluctuate, in part, as a function of anxiety experienced in communication situations (Beatty & Andriate, 1985; Beatty, Andriate & Payne, 1985; Beatty & Behnke, 1980; McCroskey & Beatty, 1984). As the model suggests, increasing levels of CA produces increased perceptions of dissimilarity, conspicuousness and subordinate status thereby providing an explanation for how CA leaks into personality (Beatty, 1986) and produces motivations to avoid contact with others (McCroskey, 1977).

The preceding model is obviously in need of further research. However, the theoretical connections between the variables is consistent with contemporary and early anxiety research. The implied causal chain, put simply, is that dissimilarity and evaluation lead to conspicuousness which leads to subordinate status which in conjunction with dissimilarity and evaluation leads to perceived formality which combined with being ignored by dissimilar listeners produces a novel experience leading to arousal which, if interpreted as anxiety, leads to communication anxiety

which leads to trait-like CA which, in turns, heightens the communicators feeling of dissimilarity, conspicuousness and inferiority.

CLASSROOM IMPLICATIONS OF THE MODEL

The classroom implications of this model are specific, important and consistent with treatment approaches appearing in the CA literature. First, student feelings of dissimilarity must be reduced as much as possible. An informal survey of students enrolled in performance courses in the author's department revealed that apprehensive students felt that performance anxiety was much less of a problem for their classmates. Most apprehensive speakers perceived that they experiened the highest anxiety levels of all those enrolled in the course. Ironically, about one-third of those interviewed held such a belief. Aside from the fact that this view is statistically impossible, and therefore irrational, discussions that reveal the wide spread nature of public speaking anxiety seemed to reduce perceived dissimilarity somewhat, especially if the discussion included student disclosures about anxiety-related experiences. Furthermore, it was discovered that students equate overt behavioral manifestations with anxiety. Researchers have known for nearly thirty years that the correlations between self-reported anxiety and behavior is characteristically low in magnitude. However, most students seemed to believe that if speakers appeared confident they must be confident. Some of the perceived dissimilarity stems from comparing one's internal state to other speakers' external ones. Thus, the student forms a proposition that goes something like this, "You look confident, I feel nervous, therefore, we are dissimilar in this important way." Teachers interested in pursuing these types of classroom discussions are advised to see the treatment approach outlined by Giffin and Bradley (1969).

Second, teachers and students should be supportive of student performance successes. As mentioned, if audience members are perceived as critics, anxiety reactions are probable. Every effort should be made to ensure that nonperforming classmates are present, attentive, responsive and supportive of student speakers. As the model suggests, successful control over these audience characteristics should result in students who feel less conspicuous and perceive the speaking experience as less formal and novel when compared to students in other performance settings.

Third, because of its predisposing character, CA should be reduced using treatment methods such as systematic desensitization or cognitive modification. As indicated by the model, students entering a performance course are predisposed to feel conspicuous and subordinate as well as dissimilar.

Fourth, if performance is required, speeches should be short and the performance criteria should be few. Communication educators, such as Robinson (1959), recommended that several short speech assignments focusing on modest improvement are more effective than long speeches with many criteria in the development of speaking and confidence. One approach is to require students to prepare and deliver only one part of their speech (e.g., introduction, conclusion, important section of the body) and work toward improvement on one or two criteria (e.g., eye contact, verbal fluency, facial expressiveness). A series of performance assignments takes students through the various parts of their speeches. The final performance consists of the full speech. In this way, students speak more frequently, for shorter periods of time and in a highly focused manner. Perhaps, as McCroskey has argued countless times, performance should not be required until the teacher is certain that the relevant predispositional and situational factors which produce anxiety are understood and

under control. Further research examining the model proposed here might further those aims.

REFERENCES

- Beatty, M. J. (1984). Physiological assessment. In J. A. Daly & J. C. McCroskey (Eds.), Avoiding communication: Shyness, reticence and communication apprehension, (pp. 95-106). Beverely Hills, CA: Sage Publications.
- Beatty, M. J. (1986). Communication apprehension and general anxiety, Journal of Social Behavior and Personality, 1, 209-212.
- Beatty, M. J. (in press). Communication apprehension as a determinant of avoidance, withdrawal and performance anxiety. Communication Quarterly.
- Beatty, M. J., & Andriate, G. S. (1985). Communication apprehension and general anxiety in the prediction of public speaking anxiety. Communication Quarterly 33, 174-184.
- Beatty, M. J., Andriate, G. S., & Payne, S. K. (1985). Does communication apprehension cause communication state anxiety?: A cross-lagged panel analysis. Communication Research Reports, 2, 29-35.
- Beatty, M. J., & Behnke, R. R. (1980). An assimilation theory perspective of communication apprehension. Human Communication Research, 6, 319-325.
- Beatty, M. J., Forst, E. C., & Stewart, R. A. (1986). Communication apprehension and motivation as predictors of public speaking duration. Communication Education, 35, 143-146.
- Beatty, M. J., Kruger, M. W., & Springhorn, R. G. (1976). Toward the development of cognitively experienced speech anxiety. Central States Speech Journal, 27, 181-185.
- Beatty, M. J., Plax, T. G., & Kearney, P. (1985). Reinforcement verses modeling in the development of communication apprehension. Communication Research Reports, 2, 80-85.
- Beatty, M. J., Plax, T. G., & Payne, S. K. (1984). Self-appraisal as a function of recollected parental appraisal. Psychological Reports, 54, 269-270.
- Behnke, R. R., & Beatty, M. J. (1981). A cognitive-physiological model of speech anxiety. Communication Monographs, 48, 158-163.
- Behnke, R. R., Beatty, M. J., & Kitchens, J. T. (1978). Cognitively experienced speech anxiety as a predictor of trembling. Western Journal of Speech Communication, 42, 270-275.
- Buss, A. H. (1980). Self-consciousness and social anxiety, San Francisco: W. H. Freeman.
- Cicero. (1942). De Oratore (Vol. 1). (E. W. Sutton, Trans.) Cambridge: Harvard University Press.
- Clevenger, T., Jr. (1959). A synthesis of experimental research in stage fright. Quarterly Journal of Speech, 45, 134-145.
- Daly, J. A., & Friedrich, G. (1981). The development of communication apprehension: A retrospective analysis of contributory correlates. Communication Quarterly, 29, 243-255.
- Daly, J. A., & Hailey, J. L. (1983). Putting the situation into writing research: Situation parameters of writing apprehension as disposition and state. In R. E. Beach & L. Bidwell (Eds.), New directions in composition research, (pp. 259-273). New York's Guilford Press.
- Giffin, K., & Bradley, K. (1969). Group counseling for speech anxiety: An approach and rationale. Journal of Communication, 18, 22-29.
- Greenleaf, F. I. (1952). An exploratory study of speech fright. Quarterly Journal of Speech, 38, 326-330.
- Henrikson, E. H. (1943). Some effects on stage fright of a course in speech. Quarterly fournal of Speech, 29, 490-491.
- Knower, F. H. (1938). A study of speech attitudes and adjustments. Speech Monographs, 5, 130-203.
- Landis, C., & Hunt, W. A. (1932). Adrenalin and emotion. Psychological Review, 39, 567-585.
- Leherissey, B. L., O'Neil, H. F., Jr., Heinrich, D., & Hansen, D. N. (1973). Effect of anxiety, response mode and subject matter familiarity in computer-assisted learning. Journal of Educational Psychology, 64, 310-324.
- Lerea, L. (1956). A preliminary study of verbal behavior of speech fright. Speech Monographs, 23, 229-233.
- Lomas, C. W. (1937). The psychology of stage fright. Quarterly Journal of Speech, 23 (1937), 35-44.
- Lomas, C. W. (1944). Stage fright. Quarterly Journal of Speech, 30, 479-485.
- Low, G. M., & Sheets, B. V. (1951). The relation of psychometric factors to stage fright. Speech Monographs, 18, 266-271.
- McCroskey, J. C. (1970). Measures of communication-bound anxiety. Speech Monographs, 37, 269-277.
- McCroskey, J. C. (1977). Oral communication apprehension: A summary of recent theory and research. Human Communication Research, 4, 78-96.
- McCroskey, J. C. (1982). Introduction to rhetorical Communication (4th ed.). New Brunswick, N.J.: Prentie Hall.
- McCroskey, J. C. (1984). The communication apprehension perspective. In J. A. Daly & J. C. McCroskey (Eds.) Avoiding communications: Shyness, reticence, and communication apprehension (pp. 13-38). Beverly Hills, CA: Sage Publications.
- McCroskey, J. C., & Beatty, M. J. (1984). Communication apprehension and accumulated communication state anxiety experiences: A research note. Communication Monographs, 51, 79-84.
- McCroskey, J. C., Daly, J. A., Richmond, V. A., & Falcione, R. M. (1977). Studies of the relationship between communication apprehension and self-esteem. *Human Communication Research*, 3, 269-277.
- McCroskey, J. C., Daly, J. A., & Sorenson, G. A. (1976). Personality correlates of communication apprehension. Human Communication Research, 2, 376-380.

- O'Neil, H. F., Jr. (1972, Sept.) Anxiety reduction and computer-assisted learning. Paper presented at the Annual meeting of the American Psychological Association, Honolulu.
- O'Neil, H. F., Jr., Spielberger, C. D., & Hansen, D. N. (1969). The effects of state anxiety and task difficulty on computer-assisted learning. Journal of Educational Psychology, 60, 343-350.
- Patrick, J. R. (1934). The effect of emotion and excitement on rational behavior in human subjects. Journal of Genetic Psychology, 18, 153-195.
- Paulson, S. F. (1951). Changes in confidence during a period of speech training: Transfer of training and comparison of improved and non improved groups on the Bell Adjusted Inventory. Speech Monographs, 18, 260-265.
- Plax, T. G., Beatty, M. J., & Payne, S. K. (1984). Influence of recollections of teachers' and peers' evaluations on student self-appraisal. Psychological Reports, 54, 474-476.
- Robinson, E. R. (1959). What can the speech teacher do about students' stage fright? Speech Teacher, 8, 8-14.
- Spielberger, C. D. (1966). Theory and research on anxiety. In C. D. Spielberger (Ed.), Anxiety and behavior (pp. 3-20). New York: Academic Press.
- Spielberger, C. D. (1972). Conceptual and methodological issues in anxiety research. In C. D. Spielberger (Ed.), Anxiety: Current trends in theory and research, (Vol. 2). Ipp. 481-494). New York: Academic Press.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). Manual for the state-trait anxiety inventory. Palo Alto, CA: Consulting Psychologists Press.
- Schachter, S., & Singer, J. F. (1962). Cognitive, social and psychological determinants of emotional state. Psychological Review, 69, 379-399.

Copyright © 2003 EBSCO Publishing