COMMUNICATION APPREHENSION AND ACCUMULATED COMMUNICATION STATE ANXIETY EXPERIENCES: A RESEARCH NOTE

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This study revealed that trait communication apprehension, as measured by the Personal Report of Communication Apprehension (PRCA-24), correlates significantly with state anxiety, as measured by the Spielberger state anxiety measure, in each of four contexts. The multiple correlation between PRCA and state anxiety across four situational contexts was .69. The results are interpreted as consistent with the theoretical relationships advanced and as supportive of the PRCA as a cross-situational predictive instrument.

COMMUNICATION apprehension (CA) currently is defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977, 1978, 1982a). While the original conceptualization of the CA construct did not make a distinction between *trait* and *state* CA (Spielberger, 1966), most of the early research viewed CA as a broadly based anxiety related to oral communication (McCroskey, 1970; McCroskey, Daly & Sorensen, 1979). More recently, CA as a state variable has been acknowledged and some research has been reported in this area (Beatty, Behnke & McCallum, 1978; Beatty & Behnke, 1980; Richmond, 1978). Generally, the trait orientation (commonly measured with the Personal Report of Communication Apprehension: PRCA, McCroskey, 1970, 1978, 1982b) operates from a predispositional orientation while the state orientation (commonly measured with a variation of Spielberger's state anxiety measure, 1966) operates from a situational orientation.

While considerable research has been reported which indicates the trait measure (PRCA) is predictive of a variety of communication-related behaviors (McCroskey, 1977, 1978), behavior is not the central criterion appropriate for determining the validity of an anxiety trait. Rather, behavior is the product of an interaction of predispositional traits and responses to aspects of a given situation in which the behavior is to be performed. What a trait anxiety measure should be able to predict, at least at a modest level, is the level of state anxiety the subject will experience in a given situation.

Our view of communication apprehension is based on assimilation theory (McReynolds, 1956, 1960, 1976), Mischel's (1973) perspective on traits, and Zuckerman's (1976) modification of trait-state anxiety theory. This view suggests that the construct of trait communication apprehension should function as a summary of an individual's communication state anxiety experiences as well as a predisposing trait. As Zuckerman (p. 136) warns, it is not reasonable to expect a trait and single measures of state anxiety to correlate to any large degree. For example, the inadequate preparation of a sales presentation which entails immense monetary consequences would doubtless evoke strong state anxiety in a salesperson. To the

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extent that the salesperson is able to identify inadequate preparation as one crucial source of the anxiety, only the unaccounted for negative reaction will be assimilated into the anxiety trait. If the sales representative is unable to sort out the causes, the entire reaction is likely to be attributed to the communication task. McCroskey (1982a) has referred to these conditions as rational and irrational respectively. It is the irrational anxiety which is assimilated into communication apprehension.

Despite the fact that large correlations between single observations of state and trait anxiety are not likely, Zuckerman (p. 136) posits two empirical expectations critical to the trait-state anxiety relationships implied by assimilation theory: (1) At least a low significant correlation between trait anxiety and a single measurement of state anxiety should be observed; and, (2) the combination of multiple state anxiety scores should account for a meaningful portion of variance in the trait anxiety scores. This position is similar to that adopted by Jaccard and Daly (1980) in predicting behaviors from personality traits. They argue that "On the simplist and most specific level, one can speak of a disposition to perform a specific behavior in a specific situation. This would correspond to a single-act, single observation behavioral measure and does not typify trait conceptualization. . . . Across a number of occasions (i.e., observations), however, individuals with greater degrees of the trait will be more likely to perform the behavior than individuals with lesser degrees of the trait" (pp. 373–374).

QUESTIONS AND HYPOTHESES

If the accumulation of state anxiety perspective is applicable to communication apprehension, then: (1) At least low correlations between a measure of communication apprehension, such as the PRCA (McCroskey, 1982b), and a single assessment of state anxiety in a specific context such as public speaking should be expected; and, (2) the combination of anxiety scores obtained in a variety of communication settings (e.g., public speaking and interpersonal contexts) should account for a significant and meaningful portion of variance in PRCA scores. In the present study, the specific situations selected were public speaking, meetings, group, and dyadic contexts, which correspond to those supposedly measured by the PRCA-24. Two previous studies establish that PRCA scores correlate significantly with public speaking state anxiety scores (Beatty & Behnke, 1980; Behnke & Beatty, 1981). However, as McCroskey (1982a, p. 167) has pointed out, most criticism of the PRCA has focused upon its concentration on public speaking. Although, McCroskey's revised version of the PRCA has substantially expanded the measure to include meeting, group, and dyadic items, the power of the PRCA to correlate with state anxiety scores for these contexts remains speculative. The questions stemming from this analysis are: (1) Does the PRCA correlate with state anxiety responses to meeting, small group, dyadic, and public communication tasks? and (2) Does the combination of these state measures account for PRCA scores? The answers to these questions have compelling theoretical importance with respect to the conceptualization of communication apprehension. An affirmative answer to question one would suggest that communication apprehension applies to a broad range of communication situations. A negative answer would suggest that the "broad-based personality type" view of communication apprehension is incorrect.

Although the PRCA has occasionally failed to meet some theoretical expectations (Beatty, Behnke & McCallum, 1978; Porter, 1979), the overwhelming body of

literature supports the trait-like nature of this measure. Based on the preceding discussion, the following hypotheses were advanced:

H_1: *There will be a significant positive correlation between PRCA scores and public speaking state anxiety scores.*

H_2: *There will be a significant positive correlation between PRCA scores and meeting state anxiety scores.*

H_3: *There will be a significant positive correlation between PRCA scores and small group communication state anxiety scores.*

H_4: *There will be a significant positive correlation between PRCA scores and dyadic communication state anxiety scores.*

The answer to the second research question is central to the validity of the conceptualization of communication apprehension as an accumulation of communication state anxiety experiences. Such a conceptualization implies the following model:

$$CA = w\,S1 + w\,S2 \cdots w\,Sk$$

For this model, CA represents a given level of communication apprehension; S1, S2, and Sk represent particular state anxiety experiences related to various communication events; and w indicates the relative weight of each component. Based on the preceding analysis, the following hypothesis was advanced:

H_5: *The linear combination of public, meeting, group, and dyadic communication state anxiety scores should significantly predict PRCA scores.*

METHOD

Measures

Communication apprehension was operationalized as the subjects' scores on McCroskey's (1982b) new PRCA-24. This 24 item instrument employs the same instructions and response options as earlier versions of the PRCA. However, the PRCA-24 includes six items, three positively and three negatively worded to avoid response bias, assessing each of the four contexts: public speaking, meetings or classes, group discussions, and dyadic interactions. Factor analyses, based on over 10,000 subjects selected from various universities and colleges, indicate the instrument is unidimensional. In the present study the mean was 62.32 and the standard deviation was 15.21. An alpha reliability coefficient equalled .94.

Spielberger's (1969) STAI (A-State) anxiety scale was selected as the state anxiety measure because it is designed to assess anxiety associated with specific experiences. Moreover, this instrument has yielded results consistent with theoretical expectations as a measure of communication state anxiety (Beatty & Behnke, 1980; Behnke & Beatty, 1981; Behnke, Carlile & Lamb, 1974; Carlile, Behnke & Kitchens, 1977; Richmond, 1978). In the present study, the subjects were requested to respond to the scale in terms of how they felt while participating in each of the four communication activities which corresponded to the four contexts represented on the PRCA-24 immediately upon completion of the activity. The A-state scale performed as follows: public speaking, $\overline{X} = 43.28$, SD = 11.78; meeting or classes, $\overline{X} = 47.74$, SD = 12.63; group discussions, $\overline{X} = 34.13$, SD = 12.24; and dyadic interaction, $\overline{X} = 34.83$, SD = 10.93. Alpha reliabilities were .91, .89, .92 and .90 respectively.

Procedure

One hundred and twenty subjects participated in four activities; public speaking, class discussion, small group discussion, and dyadic interaction as part of the normal course requirements in the introductory course. Although the activities were varied randomly among the subjects to avoid ordering effects, these activities will be described in the order presented above. In the *public speaking* activity, each subject prepared and delivered a 3–5 minute informative speech. Subjects were given two days to prepare and were permitted to use note cards. The speeches were delivered to audiences consisting of 20 to 33 undergraduate students. This assignment is similar to those used in previous public speaking anxiety research.

To stimulate a *meeting or class* context, a guest speaker from a large international brokerage firm delivered a 15-minute presentation on the topic of projected needs of the business community and how students could prepare to meet those needs. Each subject was called upon to comment on the presentation on two different occasions during the class period.

Group discussion was stimulated by dividing subjects into groups of five. The subjects were instructed to discuss the topic of grade inflation. A brief written introduction of the problem and some printed literature on the topic was provided to each group. Subjects were motivated to participate by using tokens. Each subject was given five tokens; subjects discarded one token each time they interacted with other group members. Subjects were informed that their grade would be reduced if all five tokens were not spent. Approximately 45 minutes was allotted to their activity. All subjects "spent" their five tokens during the assignment.

Finally, subjects were paired with each other in a getting acquainted exercise to produce *dyadic interaction*. They were instructed to learn as much about their partner as possible in a 45-minute period ostensibly for choosing partners for future exercises. Subjects were not paired with anyone they had met previously and were paired with a partner of the same sex. At the completion of all four activities, the PRCA-24 was administered to all subjects. Complete sets of PRCA-24 and state anxiety scores were available for 101 subjects.

RESULTS

Overall, the results of Pearson product moment correlations between PRCA-24 scores and state anxiety scores for each context confirmed Hypotheses 1 through 4 (PRCA with public speaking, $r = .54$, $p < .05$; PRCA with meeting, $r = .52$, $p < .05$; PRCA with group, $r = .28$, $p < .05$; and PRCA with dyadic, $r = .25$, $p < .05$).

A multiple regression equation accounted for 47.40% of the variance in PRCA-24 scores ($F = 21.62$; df $= 4/96$; $p < .05$; $MR = .69$) with state anxiety scores due to public speaking ($F = 10.32$; $p < .05$), group communication ($F = 19.94$; $p < .05$), meeting ($F = 19.17$; $p < .05$), and dyadic interaction ($F = 4.75$; $p < .05$) all contributing to the overall prediction. These results support Hypothesis 5.

DISCUSSION

The results of the present study suggest that communication apprehension meets expectations based on the conceptualization of personality traits as accumulations of state anxiety experiences. State anxiety responses correlated significantly with

communication apprehension scores based on the PRCA-24. The strongest correlations were observed between the PRCA-24 and public speaking and meeting anxiety. The smallest correlations were observed between PRCA-24 and the group and dyadic state anxiety. Although all correlations were within the magnitude expected under the accumulation of state anxiety perspective, *post hoc* analysis was conducted, largely due to previous concern about relationship of communication apprehension to nonperformance contexts, to insure that the smaller correlations for group and dyadic state anxiety and the PRCA-24 were not merely measurement artifact. Even when sets of composite scores consisting of the six PRCA-24 items pertaining to group and dyadic contexts were constructed and correlated with group and dyadic state scores the resulting coefficients were only .36 and .27 respectively. Moreover, since the PRCA-24 consists of an equal number of public speaking, meeting, group, and dyadic contexts items, these results are not likely due to context bias in the communication apprehension measure. Under the circumstances, the most tenable explanation is twofold: (1) The greater range and variabilities of other contingencies in interpersonal contexts such as group and dyadic situations lead to a less stereotyped response than do public forms of communication (both public speaking and the meeting activity were operationalized in the present study as a one-to-many communication environment), and (2) such public communication contexts, at least in the present study, have greater impact on the communication apprehension trait. Certainly, future research investigating the possible causes of this differential relationship between state experiences and traits would be worthwhile.

Most importantly, the linear combination of state anxiety scores extracted from four different communication contexts accounted for a substantial portion of the variance in communication apprehension scores. These findings support the conceptualization of communication apprehension as an accumulation of communication state anxiety experiences. Perhaps communication apprehension scores could be accounted for even more completely by multiple measures of state anxiety within as well as across contexts. Although the PRCA-24 may not always relate to single observations of specific behaviors, the present study demonstrated a statistically significant, and more importantly, a meaningful theoretical relationship to anxiety actually experienced in communication situations.

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