

THE RELATIONSHIPS OF SELF-DISCLOSURE AND DISCLOSIVENESS TO HIGH AND LOW COMMUNICATION APPREHENSION

LAWRENCE R. WHEELLESS
KATHRYN NESSER
JAMES C. McCROSKEY
West Virginia University

This study examined the relationship of high and low communication apprehension levels to multidimensional constructs of self-disclosure and disclosiveness. As expected, apprehension was found to be related primarily to the general disclosiveness of the individual and secondarily to reported self-disclosure levels. A fuller understanding of this relationship was provided by the expanded multivariate models.

This study expands our understanding of the relationships among communication apprehension, self-disclosure, and general disclosiveness. Wide-ranging effects and correlates of oral communication apprehension, of course, have been clearly demonstrated. Differences in oral communication, nonverbal behavior, achievement, aspirations, in a number of personality characteristics, and numerous other factors are related to varying apprehension levels (McCroskey, 1977; McCroskey, Daly, & Sorensen, 1976). The primary behavioral manifestations of this broadly based fear or anxiety about communicating are communication withdrawal and avoidance; apprehension about communicating generally outweighs projected gain for the highly apprehensive individual (McCroskey, 1970, Phillips, 1968). Likewise, the effects and correlates of self-disclosure appear to be equally extensive. Race, sex, culture, mental health, personality, attraction, liking, trust, and numerous other factors appear to be related to varying disclosure levels (Cozby, 1973; Pearce & Sharp, 1973). While few contemporary communication scholars question that communication apprehension and self-disclosure are related (Hamilton, 1972; McCroskey & Richmond, 1977), very little research has investigated the nature of this relationship. Moreover, no research has examined the role of general disclosiveness predispositions in this process. This paper, consequently, attempted partial replication and substantial extension this line of research.

Two previous studies in this area warrant consideration. Hamilton (1972)

Lawrence R. Wheelless is a full professor and associate chair of the Department of Communication Studies at West Virginia University, Morgantown, WV 26506. Kathryn Nesser completed a Master of Arts Degree in Speech Communication at West Virginia University. James C. McCroskey is a full professor and chair of the Department of Communication Studies at West Virginia University, Morgantown, WV 26506.

found a significant, negative correlation between communication apprehension (measured with PRCA, McCroskey, 1970) and self-disclosure. Self-disclosure was indicated by the proportion of self-references to total oral contributions by the individual in a small group setting. McCroskey and Richmond (1977) investigated the relationship of communication apprehension (PRCA) to five dimensions of reported self-disclosure measured by a preliminary version (Wheeless & Grotz, 1976) of revised self-disclosure scales (Wheeless, 1976). They reasoned that the tendency to withdraw and avoid communication, coupled with lower self-esteem, would affect the highly communicatively apprehensive's self-disclosure. Comparing high and low apprehensives (leveled at one standard deviation above and below the mean PRCA score), high apprehensives were observed to report a (1) lower amount of disclosure, (2) less consciously intended disclosure, (3) more negative disclosure, and (4) less honesty in disclosure. Curiously, no significant difference in depth of disclosure was discovered. The largest effects were for increased negativity and lower amount of self-disclosure. These results, of course, supported the notions of withdrawal and decreased self-esteem associated with high communication apprehension (McCroskey, 1970; McCroskey & Richmond, 1977; Phillips, 1968).

These results, however, may have been partially restricted by the assignment of disclosure targets to each subject (one target per subject). That is, while self-disclosure was referenced with a specific target (as a "state" condition), communication apprehension was referenced with people in general across a variety of settings (as a "trait" condition). Hence, the specific target assigned may have mediated the reported self-disclosure as much as the apprehension level, although this assignment procedure is appropriate for measuring self-disclosure.

In order to provide a refined test of the relationships between the two phenomena, reports of the generalized disclosive predisposition of the individual --general disclosiveness (Wheeless, 1976, 1979)--and reports of self-disclosure to specific targets are needed. We would expect the trait of the general disclosiveness of the individual to be more strongly associated with the general trait of communication apprehension. Recently, for example, Wheelless, Erickson, and Behrens (1986) found general disclosiveness to be associated with the locus of control trait.

In summary, there is a paucity of research on this topic. While research has established that communication apprehension and disclosure are related in general, understanding of the nature of the inherent multivariate relationships warrants further consideration. Note that previous research (McCroskey & Richmond, 1977) used only a single index of self-disclosure (Hamilton, 1972) or a less than desirable, preliminary version (Wheeless & Grotz, 1976) of Wheelless' (1976, 1978) revised disclosure scales. That previous version had fewer items with lower reliability for some of the important dimensions which, in turn, may have affected the relative magnitudes of relationships among self-disclosure dimensions and communication apprehension. Moreover, previous research models have ignored the relative role of general disclosiveness, as contrasted with self-disclosure.

Based upon the above research and rationale, therefore, multivariate analyses of the relationships between communication apprehension and reported self-disclosure, as well as general disclosiveness were conducted. The following general hypothesis, derived from the explication above, served as the basis for this investigation:

The mean of a linear combination of self-disclosure and disclosiveness factors is lower for high communication apprehensives than for low communication apprehensives.

Also, since this study was interested in the comparative results of self-disclosure and general disclosiveness models, the following research question was asked:

How do MANOVA models differ for self-disclosure and general disclosiveness factors with high and low apprehension as the classification variable?

METHOD

Sample, Procedures, and Measurement. Respondents for the study were 385 students enrolled in a multi-sectioned, beginning course in interpersonal communication at a major eastern university. On the first day of class respondents completed the 25-item version of the PRCA (McCroskey & Wheelless, 1976). Eight weeks later, respondents completed the 31-item version of the Revised Self-Disclosure Scale (Wheelless, 1976). In order to complete these scales, each respondent was randomly assigned to one of eighteen disclosure targets¹ to be referenced in filling out the scales. This procedure replicated previous research. Respondents also completed the General Disclosiveness Scale (Wheelless, 1978) using the same 31 items, but were instructed to "mark the following statements to reflect how you communicate with other people in general." The five factors measured in both sets of scales were the following: amount of disclosure, consciously intended disclosure, honesty of disclosure, positiveness-negativeness of disclosure, and control-of-depth of disclosure.

Measurement and Statistical Analysis. The self-disclosure scale and the disclosiveness scale were submitted to separate principle factors analyses with oblique rotation (Promax) calling for five factors justified on the basis of the guidelines of previous research (Wheelless, 1976, 1978; Wheelless, et al., 1986; Wheelless & Grotz, 1976). A factor was retained if 2 items loaded at .60 or above and the factor structure was consistent with the scree test. Remaining items were considered loaded on a factor if their primary loading was $\geq .40$. Reliability estimates, as suggested by Nunnally (1967, 193-194), were computed for each extracted factor.

Factor analysis of the general disclosiveness scales replicated the expected 5-factor solution. Thirty of the 31 scales loaded as expected on the dimensions according to the above criteria. Consistent with recent research (Wheelless, et al., 1986) the first intended disclosure item failed to load on the appropriate factor. Reliabilities for each dimension were as follows: (1) Positiveness-negativeness, .90; (2) Amount, .82; (3) Honesty-Accuracy, .84; (4) Control of depth, .78; (5) Consciously intended disclosure, .65. Likewise, factor analysis for the previously developed self-disclosure scales replicated the previous factor structure with only one item failing to meet the criteria (Again, the first intended disclosure item failed to load.) Reliabilities for each dimension were as follows: (1) Amount, .88; (2) Control of depth, .84; (3) Honesty-accuracy, .87; (4) Positiveness-negativeness, .91; (5) Consciously intended disclosure, .66. The unidimensional PRCA had a reliability of .91.

High communication apprehensives were classified as those with a score beyond a standard deviation above the mean of the sample; low communication apprehensives, a score beyond a standard deviation below the mean. Multivariate analyses of variance (with corresponding univariate tests)² were used to test the general hypothesis and explore the research question. The .05 level of significance was applied to all statistical tests.

RESULTS

After exclusion of the moderately apprehensive respondents (high & low apprehensives remaining), correlations among the dependent variables (ten dimensions of disclosure and disclosiveness) were sufficiently high to meet assumptions underlying MANOVA. Multivariate analysis of variance revealed a significant difference in disclosure/disclosiveness levels (Rao's $F = 2.90$, d.f. = 10/100; Roy's $F = 31.59$, d.f. = 1/109; $n = 111$). The hypothesis was confirmed: High communication apprehensives had significantly lower levels of disclosure (canonical variable $M = 0.3020$, $n = 64$) than the low communication apprehensives (canonical variable $M = 0.4054$, $n = 47$). Dimensions of disclosure/disclosiveness were correlated with the canonical variable (representing a linear combination) at the following levels: Consciously intended disclosiveness ($r = .08$), amount of disclosiveness ($r = .55$), positiveness of disclosiveness ($r = .62$), depth of disclosiveness ($r = .53$), honesty of disclosiveness ($r = .35$), consciously

intended self-disclosure ($r = -.17$), amount of self-disclosure ($r = .51$), depth of self-disclosure ($r = .52$), positiveness of self-disclosure ($r = .04$), honesty of self-disclosure ($r = .31$). Only consciously intended disclosiveness and positiveness of self-disclosure were not significantly correlated with the canonical variable. However, most of the 22% of variance in disclosure/disclosiveness (canonical variable) accounted for by high and low apprehension levels could be attributed to disclosiveness dimensions concerned with positiveness, amount, and depth; and secondarily to self-disclosure amount and depth. The associated univariate tests were generally consistent with these results (See table 1 for statistical tests and raw means.).

TABLE 1
Disclosiveness/Disclosure Means and Univariate Statistics for
High and Low Levels of Communication Apprehension

Disclosiveness/ Disclosure Dimensions	Apprehension Means		F	t	variance accounted for
	High(n=64)	Low(n = 47)	(1/109 d.f.)	(109 d.f.)	
<u>Disclosiveness</u>					
Intent	15.67	15.96	0.20	0.45	---
Amount	25.84	30.30	9.58*	3.10**	8%
Positiveness	28.84	33.53	12.06*	3.47**	10%
Depth	15.23	18.34	9.02*	3.00**	8%
Honesty	36.95	40.06	3.85*	1.96**	3%
<u>Disclosure</u>					
Intent	17.14	16.55	0.89	0.94	---
Amount	24.73	30.28	8.20*	2.86**	7%
Depth	15.64	19.68	8.70*	2.95**	7%
Positiveness	32.67	33.00	0.05	0.22	---
Honesty	38.31	41.04	2.97	1.72**	3%

*Non-directionally significant, $p < .05$.

**Directionally significant, $p < .05$.

To examine the research questions, two subsequent MANOVA's were conducted separating self-disclosure dimensions from general disclosiveness dimensions. A significant difference in self-disclosure (canonical variable) was observed (Rao's $F = 2.70$, d.f. = 5/105; Roy's $F = 13.99$, d.f. = 1/109). High communication apprehensives displayed lower levels of self-disclosure (canonical $M = 0.2806$, $n = 64$) than low communication apprehensives (canonical $M = 0.3183$, $n = 47$). Each dimension of self-disclosure was associated with the canonical variable at the following levels: Intent ($r = -.25$), amount ($r = .77$), depth ($r = .79$), positiveness ($r = .06$), honesty ($r = .46$). Again amount and depth of self-disclosure were the primary contributors to the 11% of variance in self-disclosure (canonical variable) accounted for by high and low levels of apprehension.

Likewise, a significant difference in general disclosiveness (canonical variable) was observed (Rao's $F = 4.60$, d.f. = 5/105; Roy's $F = 23.88$, d.f. = 1/109). High communication apprehensives displayed lower levels of disclosiveness (canonical $M = .5498$, $n = 64$) than low communication apprehensives (canonical $M = 0.6397$, $n = 47$). Each dimension of disclosiveness was associated with the canonical variable at the following levels: Intent ($r = .09$), amount ($r = .63$), positiveness ($r = .71$), depth ($r = .61$), honesty ($r = .40$). Again amount, positiveness, and depth of disclosiveness were the primary contributors to the 18% of variance in disclosiveness (canonical variable) attributable to high and low levels of apprehension.

DISCUSSION

Results of this study shared some consistency with the two studies conducted previously in this area. High and low levels of communication apprehension were found to be related to disclosiveness/disclosure. The mean of a linear combination of disclosiveness and self-disclosure dimensions was lower for high communication apprehensives than for low communication apprehensives according to both multivariate and corresponding univariate analyses (See table 1.). This result appeared to hold true for all dimensions except positiveness of self-disclosure and the intent dimensions of self-disclosure and general disclosiveness. Low reliabilities of the intent dimensions probably contributed to the related results; however, such was not the case regarding positiveness of self-disclosure. Note that in previous research (McCroskey & Richmond, 1977) positiveness of self-disclosure was the primary variable associated (negatively) with communication apprehension. While positiveness was the dominant dimension of general disclosiveness related (negatively) to apprehension, positiveness of self-disclosure was not significantly related in this study. The other, primary general disclosiveness and self-disclosure dimensions in this study that were found to be related (negatively) to communication apprehension were amount and depth. In previous research (McCroskey & Richmond, 1977), comparable results were obtained for amount of self-disclosure, but communication apprehension and depth of self-disclosure were not found to be significantly related. Refined and expanded measurement in this study probably facilitated the observation of this intuitively sensible link between communication apprehension and depth of self-disclosure, as well as depth of general disclosiveness.

Nevertheless, obtained results generally supported the overall claim of previous research and the rationale out of which the hypothesis for this study was drawn. Since high communication apprehensives tend to withdraw and avoid communication in general, then a lesser amount, as well as depth, of disclosure/disclosiveness appear to be a logical consequence. Likewise, since high communication apprehensives have lower self-esteem, then less positive disclosiveness proclivities and less honest disclosure tendencies appear to be related to communication apprehension. Tendencies or predispositions toward general disclosiveness are clearly reflected in the self-report-type measures. In regard to self-disclosure, comparison with actual behavior may be needed in future research; however, some dimensions of self-disclosure (e.g., intent, honesty) are not easily observable.

Moreover, the comparative results of general disclosiveness and self-disclosure revealed that the predisposition toward disclosure to others -- general disclosiveness -- was more closely related (18% of variance) to high and low communication apprehension levels than was reported self-disclosure to specific targets (11%). Again, since general disclosiveness and apprehension both tend to be "trait-like," we expected the relationship between the two to be somewhat greater. Certainly, the conceptual link between the trait-like concepts of general disclosiveness and communication apprehension warrants further consideration. Finally, combining both disclosiveness and disclosure in the model we developed produced the strongest relationship with communication apprehension (22% of shared variance). This model, of course, was advocated earlier in this paper as the soundest conceptual approach.

NOTES

1. Self-disclosure target persons were the following: best male friend, best female friend, spouse, boyfriend/girlfriend, father, mother, brother/sister, neighbor, co-worker/classmate, barber/hairdresser, boss, instructor/professor, doctor, minister/priest/rabbi, disliked person, subordinate, psychologist/guidance counselor, roommate.
2. Persons scoring in the moderate range of communication apprehension were not included in these MANOVA'S for two reasons: (1) Correlated dependent variables (DV's) are needed for use of MANOVA. Since many of the DV's were,

indeed, low, correlations among the DV's were not sufficient without exclusion of the moderates. Correlations of the DV's was made possible by this procedure. (2) As with most trait-like variables and/or personality variables, only the more extreme ranges (highs, lows) of communication apprehension are predictive of differential behaviors. Consistent with the hypothesis, moderate communication apprehension scores (68% of sample) should not be expected to be predictive.

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