

The Association of Perceived Communication Apprehension, Shyness, and Verbal Aggression with Perceptions of Source Credibility and Affect in Organizational and Interpersonal Contexts

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This is a report of two studies that examined the association of receivers' perceptions of sources' levels of several communication traits (shyness, communication apprehension, verbal aggressiveness) with the receivers' reported levels of affect for the source (general affect and/or liking) and the receivers' perceptions of the sources' credibility (competence, trustworthiness, goodwill). Study 1 examined employees' perceptions of their supervisor's communication trait behaviors in the organizational context, while Study 2 examined the students' perceptions of their roommate's communication trait behaviors in an interpersonal context. As predicted on the basis of previous theory and research, both perceived communication apprehension and perceived verbal aggressiveness of the source were found to be substantially negatively correlated with credibility and affect and/or liking reported by the receiver. Contrary to our hypothesis, perceived behavioral shyness was not meaningfully associated with either credibility or affect. It is concluded that these results provide important information for distinguishing between the theoretical constructs of shyness and communication apprehension and theory in this area in general.

KEY CONCEPTS shyness, communication apprehension, verbal aggression, source credibility, affect, liking

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Communication apprehension, shyness, and verbal aggressiveness have been identified through extensive research as strong and stable traits which impact human communication. All have been presented theoretically as traits which

have negative impact on the source of communication, the receiver of communication, or both. Considerable research employing self-report measures of these variables has pointed to the accuracy of these theories (Daly, 1977; McCroskey, 1977; Infante & Rancer, 1996). In sum, if communication sources report themselves as apprehensive, shy, or aggressive, the research generally finds negative outcomes to occur. Little research, however, has tested these theories in terms of what the observers see as a source's actual behavior (rather than sources' reports of their traits) and the outcomes of communication. It generally is assumed that if receivers are exposed to the source's negative trait behaviors (resulting from any of the three traits previously noted), such behavior will be associated with negative communication outcomes. The purpose of this research was to test these theories from the receiver's perspective.

The early research on Communication Apprehension (CA), defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977, p. 269), originated entirely from a trait-based perspective. Although the research has been broadened to include some state-like qualities, the dominant belief is that those states are a "manifestation of trait CA and other traits of the individual" (McCroskey & Beatty, 1998, p.217).

McCroskey (1997) noted that there are three common effects of high communication apprehension which might be observed in the individual's communication behavior. These are "communication avoidance, communication withdrawal, and communication disruption" (p. 101). All of these are potentially observable to the outsider because they may be manifested in certain behaviors—in not talking, talking less than most others, or having their speaking pattern disrupted by vocalized pauses, use of "you know," and similar disfluencies. Thus, it is argued, internalized communication apprehension may lead to shy behavior, which in turn is observed by others.

As Leary (1983) noted, it is important not to confuse the constructs of communication apprehension (referenced by Leary as "social anxiety") and shyness. One manifests itself in an internal experience (communication apprehension) while the other is manifest in overt behavior (shyness).

Shyness, as defined by McCroskey and Richmond (1982), is the behavior of not talking, representing an overt behavior on the part of the communicator (or in the case of the shy person, non-behavior). Shyness refers to the "actual frequency of a person talking, and thus represents a behavioral pattern, and not a person's preference toward communication or a person's anxiety about communication" (McCroskey & McCroskey, 2001, p. 21). Thus, when someone is referred to as shy, what is being referenced is the actual behavior of communicating or not communicating, and not the presumed causal foundation of the behavior. Shyness may be a manifestation of any number of state- or trait-like qualities, it may be a manifestation of overall individual temperament and genetic composition, or it may be the determination that not talking is in the person's best interest. What is important is that the person is exhibiting a pattern of behavior that is identifiable and recognizable, even though the cause of the behavior may not be identifiable. Research has indicated that self-report measures of communication apprehension and observer measures of shyness are correlated, but the correlation is not high enough ($r = .37$) to indicate that one is the sole product of the other (McCroskey & Richmond, 1982).

In the organizational context, where communication and interaction with others

is a requirement, it could be assumed that a shy individual might not be viewed as effective as a leader as those whose level of shyness is not as high. This could be the result of a number of factors, including the need for information exchange, the numerous interpersonal interactions that go on in the workplace, and the need for communication in other job-related areas. Thus, we hypothesized that within the organizational communication context:

H₁: Shyness will be negatively correlated with the three dimensions of source credibility and overall attitude towards a supervisor.

Likewise, we also believed that higher levels of communication apprehension would be negatively related to evaluations of a supervisor.

H₂: Communication Apprehension will be negatively correlated with the three dimensions of source credibility and overall attitude towards a supervisor.

Verbal aggression is defined as a communication behavior designed to attack the intended source to inflict pain, and can generally be viewed as an anti-social behavior. (Infante & Rancer, 1996). Infante and Gordon (1991) have reported, as we would expect, that in their research employees were most satisfied with their employer when the supervisor was low in verbal aggression. Thus, we hypothesized that:

H₃: Verbal Aggression will be negatively correlated with the three dimensions of source credibility and overall affect towards supervisor.

METHODS AND PROCEDURES: STUDY ONE

Participants

This study was conducted at numerous organizational sites in the Mid-Atlantic region. Participants were 131 volunteers from master's level Corporate and Organizational Communication classes that were offered to fulfill coursework towards a master's degree. The courses were designed for students with little or no background in the field of communication but were employed at lower-to-middle level positions in corporate and/or government organizations throughout the region. The age of the participants ranged from 25 to 58, with most in their middle thirties. They were approximately 52% female and 48% male and all but two (African Americans) were Caucasians. The volunteers were provided with the questionnaires at the first class session and asked to complete them with regard to their immediate supervisor. The volunteers were given the option to participate, and were informed that failure to participate would have no bearing on their standing in the course. The participants were also informed that the results of their survey would remain anonymous and they were instructed to not put anything on the questionnaire which could be used to identify themselves. Later in the course the participants were debriefed on the study at a point where discussion of related subject matter made it appropriate.

Measures

The measures employed for the predictor variables in this study were, for shyness, the McCroskey Shyness Scale (McCroskey & Richmond, 1982), for communication

apprehension, the Personal Report of Communication Apprehension (PRCA-24; McCroskey, 1982), and for verbal aggressiveness, the 20-item Verbal Aggressiveness scale (Infante & Wigley, 1986). The first criterion variable measure was the three dimensional Measure of Source Credibility (including dimensions of competence, goodwill, and trustworthiness) developed by McCroskey (1966) and expanded by McCroskey and Teven, 1999). The second criterion measure, a measure of affect, was the General Attitude Scale (McCroskey & Richmond, 1989). This measure was employed to gauge employee attitude towards supervisor (McCroskey and Richmond, 1989). Means, standard deviations, ranges, and alpha reliabilities for all measures employed are displayed in Table 1. The data analyses involved computing simple correlations between the predictor and criterion variables. All 131 questionnaires returned were scored and included in the analyses. Because of the large number of statistical tests, the criterion for significance was set at $p < .01$.

TABLE 1
Basic Statistics for Measures Employed in Study One

Measure	N	Mean	SD	Range	Alpha
Shyness	129	38.55	10.15	17-66	.92
PRCA	128	54.28	17.02	24-95	.96
Verbal Agg.	121	45.49	14.87	22-89	.92
Competence	128	34.16	7.55	9-42	.92
Goodwill	129	29.91	9.28	6-42	.95
Trust	131	33.51	8.69	6-42	.93
Affect	130	32.39	9.29	6-42	.96

RESULTS: STUDY 1

Hypothesis 1 predicted that there would be a significant negative relationship between shyness and the three dimensions of source credibility and overall employee affect toward supervisor. This hypothesis was not confirmed for any of the dimensions of source credibility or for overall affect towards supervisor, as no correlation between any of the variables was observed to be statistically significant. The highest relationship which was observed was $r = -.12$, which even if it had been statistically significant, would only have indicated shyness accounting for one percent of the variance in the criterion variable. (All correlations obtained in Study 1 are reported in Table 2.)

TABLE 2
Observed Correlations for Measures Employed in Study One

Measures	PRCA-24	Verbal Aggression	Competence	Goodwill	Trustworthiness	Affect
Shyness	.45*	-.03	-.12	-.02	.00	-.08
PRCA-24	—	.50*	-.66*	-.59*	-.52*	-.69*
Verb. Agg.	—	—	-.57*	-.71*	-.57*	-.65*
Competence	—	—	—	.71*	.77*	.81*
Goodwill	—	—	—	—	.73*	.83*
Trust	—	—	—	—	—	.84*

* Statistically significant, $p < .0001$. Other correlations NSD ($p > .05$).

Hypothesis 2 predicted that communication apprehension would be negatively correlated with the three dimensions of source credibility and overall affect toward supervisor. This hypothesis was confirmed, with large correlations between the variables under investigation. The range of the relationships observed between communication apprehension and the criterion variables was from $r = -.52$ to $r = -.69$. This represents a range of variance accounted for by communication apprehension ranging from 27% for trustworthiness to 48% for general affect.

Hypothesis 3 predicted that there would be significant negative relationships between verbal aggression and the three dimensions of source credibility and general employee affect towards supervisor. This hypothesis was also confirmed, with large negative relationships ranging from the relationship between perceived supervisor competence and perceived supervisor verbal aggression ($r = -.57$; 32% predicted variance) to the relationship between perceived supervisor goodwill and perceived supervisor verbal aggression ($r = -.71$; 50% predicted variance).

STUDY 1: DISCUSSION

The results of Study 1 are unequivocal. Extant theories relating to communication apprehension and verbal aggression have been supported. Supervisors who were seen as apprehensive or verbally aggressive were seen as far less credible than those who were less apprehensive or verbally aggressive. Similarly, affect was far more negative toward those supervisors perceived as apprehensive or verbally aggressive than for those that were perceived as neither. In contrast, the theory that shy people (in this case supervisors) will be perceived as less credible and generally less desirable was not supported. No meaningful association between shyness and any of the criterion measures was observed.

Our findings suggest that employee perceptions of supervisor communication behavior are far more nuanced than previously suggested in the research literature. Shyness, as demonstrated in this study, appears to be perceived in the organizational context as simply a behavior (lending validity to the conceptualization of the shyness construct), whereas withdrawal and avoidance behaviors produced by communication apprehension may be viewed as similar to those of indifferent or incompetent supervisors—not being around, not contributing to the subordinates' well being, not caring about the work or the subordinates' efforts. The presence of disrupted communication may be taken as an indication of general incompetence. In contrast, just being quiet does not appear to be seen in these ways.

One assumption from these results might be that employees recognize that some supervisors simply do not talk very much, for whatever reason, and they do not let this impact their perceptions of the individual's credibility. It simply appears to not have an impact on their overall affect towards their supervisor.

Communication apprehension, however, exhibited a far different relationship in this context. This leads us to believe that employees recognize a distinction between supervisor's choosing simply to not talk and supervisor's who are *afraid* to talk, for whatever reason. It may be that when a supervisor is deemed to be nervous, anxious, or exhibiting other physical symptoms of anxiety associated with communication (overt and recognizable behaviors associated with communication apprehension), employees react differently. Rather than determining that the supervisor simply chooses to not talk, the perception may be that the supervisor is afraid to talk, and is thereby evaluated as being less credible. It is important to reiterate that the only

conclusion that might be reached from the data in hand is that reduced evaluations of supervisor credibility are not related to an unwillingness to talk, but to an underlying fear or apprehension towards communication.

The rest of the observations are as one would expect them to be, as it is logically and conceptually consistent for increased use of verbally aggressive communication to be negatively associated with evaluations of supervisor competence, trustworthiness, and goodwill, as well as with a general affect towards supervisor. As stated earlier, the only unexpected relationship was that of no significant relationship between shyness and the evaluation variables.

Although the results of Study 1 are clear and interpretable, we did not feel comfortable with generalizing the results, given that the study employed only one context. Because Study 1 was completed within an organizational context, it was decided that additional research into the relationships of communication apprehension, shyness, and verbal aggressiveness with credibility and other affect variables, was needed—but from within a different context. It was determined that an interpersonal relationship context should be examined. We chose the context of college roommates. This sample was selected for two reasons, the most obvious of which was the ease of data collection. The second, and more compelling reason, for use of this sample was the fact that not all roommates are free to choose to live together. This was important, because it was generally assumed that roommates who choose to live together would be more inclined to provide blanket positive assessments of their living mates, as it is difficult to understand circumstances in which individuals who have lower perceptions of each other would choose to live together. The hypotheses and research questions posed were:

- H₁: Communication apprehension will be negatively correlated with the three dimensions of source credibility and overall affect towards roommate.
- H₂: Verbal Aggression will be negatively correlated with the three dimensions of source credibility and overall affect towards roommate.

Nothing in our review of literature suggested that these variables and their relationships would be any different when examined in an interpersonal context rather than an organizational context. As communication apprehension and verbal aggression are trait communication variables, the hypotheses remain virtually the same as in the first study, with our assumptions unchanged.

The results of the relationship between source credibility and shyness in the first study suggested that our initial assumptions regarding shyness, based on contemporary shyness theory, were not wholly accurate. Thus, a probative research question was deemed more appropriate in this follow-up study.

- RQ₁: What is the nature of the relationship of shyness with the three dimensions of source credibility and overall affect towards a roommate?

The final hypothesis predicted relationships of the predictor variables with an additional affect variable which was not included in the initial study, a measure of general liking for the roommate. Liking is a somewhat different affective response

than perceptions of credibility or general affect—it is more relational in nature.

H₃: Liking will be negatively correlated with shyness, communication apprehension, and verbal aggression.

METHODS AND PROCEDURES: STUDY TWO

Participants

This study was conducted at a large Mid-Atlantic university. The 251 participants were all undergraduate students (mean age 19.4, 51% female, 96% Caucasian) who were enrolled in a Freshman course in Communication Studies. The participants were given the option to participate for extra credit, and were informed that if they chose not to participate, it would not in any way affect their grade or their standing in the class. The participants were also informed that they would have other options with which they could earn extra-credit if they chose not to participate in this study. The participants were also informed that the results of their survey would remain anonymous, and were instructed not to put anything on their questionnaire that would serve to identify themselves.

Measures

All of the measures employed in Study 1 were included in Study 2. In addition, to measure liking, the Generalized Belief Measure (McCroskey & Richmond, 1996) was adapted in the manner first used by McCroskey and Teven (1999) to measure liking. This instrument is a five-item, bipolar scale which had demonstrated high reliability in previous uses and has excellent face and predictive validity. Means, standard deviations, ranges, and alpha reliabilities for all measures are reported in Table 3. As was the case in study one, the $p < .01$ was set for statistical significance.

TABLE 3
Basic Statistics for Measures Employed in Study Two

Measure	N	Mean	SD	Range	Alpha
Shyness	251	36.90	10.94	14-68	.90
PRCA	249	62.84	14.73	24-120	.91
V.A.	245	58.64	12.10	28-100	.87
Competence	247	30.70	7.01	6-42	.88
Trustworthiness	251	32.57	8.57	6-42	.88
Goodwill	248	29.52	9.41	6-42	.93
Affect	250	31.65	8.27	6-42	.93
Liking	251	27.07	7.54	5-35	.96

RESULTS: STUDY 2

Hypothesis 1 predicted a negative relationship between communication apprehension and reports of roommate credibility and overall affect, and this was confirmed for all relationships (See Table 4). The relationships ranged between $r = -.37$ for the goodwill dimension of source credibility to $r = -.42$ for general attitude. This represents a range of variance accounted for by communication apprehension from 14% to 18%.

Hypothesis 2 predicted a negative relationship between verbal aggression and reports of roommate credibility and overall affect, and this was confirmed for all relationships. The smallest correlation was $r = -.21$ for the competence dimension of

TABLE 4
Observed Correlations for Measures Employed in Study Two

Measures	VerbAgg	PRCA-24	Comp.	Trust	Goodwill	Affect	Liking
Shyness	-.07	.64***	-.12	-.14	-.15	-.13	-.13
Verbal Agg.	—	.18*	-.21**	-.41***	-.56***	-.49***	-.46***
PRCA24	—	—	-.41***	-.35***	-.37***	-.42***	-.37***
Competence	—	—	—	.67***	.58***	.69***	.64***
Trustworthy.	—	—	—	—	.76***	.85***	.79***
Goodwill	—	—	—	—	—	.78***	.74***
Affect	—	—	—	—	—	—	.82***

* Statistically significant at $p < .01$. ** = $p < .001$. *** = $p < .0001$.

source credibility. The largest correlation observed was between verbal aggression and goodwill, $r = -.49$. The variance accounted for ranged from 4% to 24%.

Research Question 1 probed the nature of the relationship between shyness and the three dimensions of source credibility and overall attitude towards roommate. Small, and statistically non-significant, negative relationships were observed on all of the criterion variables. Hence, no meaningful relationship was observed.

Hypothesis 3 predicted that liking would be negatively associated with communication apprehension, shyness, and verbal aggression. This hypothesis was confirmed for both communication apprehension and verbal aggression. However, no significant relationship was established between shyness and liking.

DISCUSSION

As expected and predicted in the first and third hypotheses, we observed significant negative relationships of communication apprehension with source credibility, overall affect, and liking. This is consistent with extant research, as well as consistent with the findings in Study 1. It is no surprise, knowing what is known about the negative impact of communication apprehension, that this was the case.

It was neither surprising nor unexpected that individuals who engage in more use of verbally aggressive behavior are also given lower evaluations for source credibility, affect toward roommate, and liking. It is consistent with any logical inference that can be made regarding the construct of verbal aggressiveness that this would be the case, as well as consistent with the results of Study 1.

The non-significant and minuscule relationships of shyness with the competence, trustworthiness, and goodwill components of source credibility and for affective evaluations (general attitude, liking) were consistent with the non-significant minuscule findings for these relationships in Study 1.

CONCLUSIONS

Upon examination of the results of these two studies, there are several findings that are worthy of discussion and additional inquiry. The most intriguing of these findings is the relationship of employee perceptions of shyness in their supervisors to their perceptions and evaluations of them. In previous research self-reports of shyness have been found to be associated with negative evaluations of individuals (Daly et al., 1997). It seemed reasonable to extend the previous research results theoretically to predict the same would be true when subordinates or roommates perceived their supervisor or roommate to be shy. The results of this research clearly did not support

that theoretical extension.

When the findings on shyness are compared with those on communication apprehension in terms of both source credibility and affective evaluations in both studies, we have a stark contrast. Although scores on shyness and communication apprehension measures were positively correlated ($r = .45$) in Study 1 and in Study 2 ($r = .64$), their relationships with the criterion variables were dramatically different.

Verbal aggressiveness was not statistically significantly correlated with shyness in either study. Verbal aggressiveness was significantly positively correlated ($r = .50$) with communication apprehension in the first study but much less correlated ($r = .18$) in the second study. It would appear that the difference in context (organizational vs. interpersonal) is the most likely factor producing these results. However, precisely why that would be so remains to be determined in future research.

Clearly there are limitations to this study. We observed dramatic differences in the associations of shyness and communication apprehension with communication outcomes across two very different contexts. However, we cannot, as yet, conclude similar differences would be observed in different contexts. Clearly, however, the established theory that shyness produces negative results in organizational and interpersonal contexts needs to be modified. Although this theory may be correct for self-reported shyness as indicated in previous research (Daly, et al., 1997), it can not be accepted as true for all contexts where "other-reported" shyness is measured. The present research provides two very clear instances where it is not correct.

Future research needs to examine contexts other than those examined in the current research. In addition, it would be extremely valuable to study a context in which both self- and other-reports are available on the same individuals. A likely context for this type of research would be married couples.

The results of the present research indicate that the impact of self-perceived and other-perceived shyness is not the same, at least in the contexts studied. Exactly why this is the case is not established by the results of this study. Clearly, the general shyness theory which we tested in this research is in need of modification, but additional research is required in order to determine the actual modifications needed.

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