

# Updating Relationships Between Communication Traits and Communication Competence

Jason J. Teven, Virginia P. Richmond,  
James C. McCroskey, & Lynda L. McCroskey

*This study examined the degree to which six self-perceived communication traits are related to self-perceived communication competence (SPCC), both individually and collectively. The results indicate communication apprehension and shyness were strongly and inversely related to SPCC, whereas willingness to communicate was strongly and positively associated with SPCC. When examined collectively, several communication traits were found to predict SPCC.*

*Keywords: Self-Perceived Communication Apprehension; Self-Perceived Communication Competence; Self-Perceived Compulsive Communication; Self-Perceived Machiavellianism; Self-Perceived Shyness; Self-Perceived Verbal Aggression; Self-Perceived Willingness to Communicate*

In the mid-1970s and the 1980s, two relatively new areas of research received attention from communication scholars. These were communication apprehension and communication competence. Although some researchers indicated interest in both areas, for the most part, scholars chose to work in either one or the other.

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Jason J. Teven (EdD, West Virginia University, 1998) is a professor in the Department of Human Communication Studies at California State University–Fullerton. Virginia P. Richmond (PhD, University of Nebraska, 1977) is a professor and chair in the Department of Communication Studies at the University of Alabama at Birmingham. James C. McCroskey (D Ed, Pennsylvania State University, 1966) is a Scholar in Residence in the Department of Communication Studies at the University of Alabama at Birmingham. Lynda L. McCroskey (PhD University of Oklahoma, 1985) is an associate professor of communication at California State University, Long Beach. *Correspondence:* Jason J. Teven, Department of Human Communication Studies, California State University–Fullerton, P.O. Box 6868, Fullerton, CA 92834-6868; E-mail: jteven@fullerton.edu

This study sought to address several questions regarding the relationships of several communication traits with communication competence. Essentially, these questions focus on the degree to which widely studied communication traits are predictive of an individual's perception of her or his communication competence.

### **Communication Competence**

By the late 1980s, many communication scholars had published articles presenting various views about the nature of communication competence. However, very few of these were accompanied by attempts to develop a measure of communication competence. In an effort to explain the confusion among the different conceptualizations, McCroskey and McCroskey (1988) advanced a broad view of the nature of communication competence. They argued that there are four ways to view communication competence: (1) objective observation; (2) subjective observation; (3) self-report; (4) receiver report.

In a perfect world, all four of these methodologies would produce the same results. Of course, we do not live in a perfect world, so the researcher must choose the method that he or she thinks would be most valid in a given context. McCroskey and McCroskey (1988) saw the self-report method as the most likely to be of use. Because people make communication choices based on their self-perceived communication competence (SPCC), such perceptions determine their communication behaviors. This idea underlies the current study.

Based on these assumptions, McCroskey and McCroskey (1988) created a measure of SPCC. The SPCC directly asks people to estimate (on a 0–100 scale) their competence in a variety of communication contexts. The measure has been found to be very reliable and to have excellent face validity (Dilbeck & McCroskey, 2009; McCroskey & McCroskey, 1988). Hence, it has been employed in several subsequent studies, as well as in this research.

Prior to the work relating to communication biology, Richmond, McCroskey, and McCroskey (1989) conducted a study to determine whether any of a number of personality-type variables were related to SPCC. These included the psychological variables of self-esteem, anomie, alienation, introversion, neuroticism, sociability, and shyness (from a psychological measure). Only shyness had a strong relationship with the SPCC. In this same investigation, the Personal Report of Communication Apprehension (PRCA) and a measure of argumentativeness (the Argumentativeness Scale) were also included. All of the psychological variables (except shyness) were found to be unrelated to the SPCC. However, the PRCA and the Argumentativeness Scale showed strong relationships with the SPCC. Essentially, these results indicated that one group of measures was representative of psychology constructs, and the other was indicative of communication constructs.

Since that time, several new communication constructs and their attendant measures have been developed. They include shyness (from a communication view; McCroskey & Richmond, 1982), willingness to communicate (WTC; McCroskey, 1992; McCroskey & Richmond, 1987), compulsive communication

(McCroskey & Richmond, 1993, 1995), and verbal aggressiveness (VA; Infante & Wiggley, 1986). Also, an improved measure of Machiavellianism was advanced in psychology (Mudrack, & Mason, 1995). All of these indexes, as well as the primary measure of communication apprehension (PRCA-24), have continued to receive considerable attention from communication scholars (Daly, McCroskey, Ayres, Hopf, & Ayres, 2009). This research was designed to ascertain the degree to which each of the aforementioned constructs and measures can serve as predictors of SPCC. The research questions were as follows:

- RQ1: *To what degree can a person's communication apprehension predict his or her SPCC?*
- RQ2: *To what degree can a person's WTC predict his or her SPCC?*
- RQ3: *To what degree can a person's compulsive communication can predict his or her SPCC?*
- RQ4: *To what degree can a person's shyness can predict his or her SPCC?*
- RQ5: *To what degree can a person's VA predict his or her SPCC?*
- RQ6: *To what degree can a person's Machiavellianism predict his or her SPCC?*
- RQ7: *To what degree can the collective group of constructs and measures predict SPCC?*

The secondary purpose of this research was to determine the extent to which the predictors previously noted are correlated with each other.

## Method

### *Participants and Procedures*

Participants in the study were 140 undergraduate students (68 men and 72 women) enrolled in a variety of communication classes at a large Western university. The age of the respondents ranged from 18 to 38 years ( $M = 21.49$ ,  $SD = 3.98$ ). Sixty-two participants were first-year students, ten participants were sophomores, 26 participants were juniors, and 42 participants were seniors. Participation was voluntary and anonymous. Students received no extra credit for completing the questionnaire. To preserve anonymity of the participants, students were asked not to identify themselves. Data were collected during regularly scheduled classroom periods.

### *Measurement*

Seven variables were measured in this study. Relevant instruments are described.

*Communication apprehension.* The PRCA-24 (McCroskey, 1982) was used as the operationalization of communication apprehension. Four contexts are included in this instrument (public speaking, meetings, groups, and interpersonal dyads). In this study, the alpha estimate of reliability was .91 ( $M = 65.54$ ,  $SD = 15.10$ ).

*SPCC.* The SPCC Scale developed by McCroskey and McCroskey (1988) was used as the operationalization for SPCC. The SPCC Scale consists of 12 items. Four communication contexts are included (public speaking, meetings, groups, and dyads), as

well as three types of receivers (strangers, acquaintances, and friends). The alpha estimate of reliability for the scale in this study was .84 ( $M = 934.16$ ,  $SD = 182.07$ ).

*WTC.* The WTC Scale (McCroskey & Richmond, 1987) was employed as the operationalization of WTC. This is a 20-item instrument with 12 items composing the measure, with eight filler items. The measure asks participants to estimate what percentage of the time they would choose to communicate and how competent they would be on a scale from 0% to 100%. The alpha reliability of the scale in this investigation was .91 ( $M = 834.94$ ,  $SD = 201.48$ ).

*Shyness.* The Shyness Scale (SS; McCroskey & Richmond, 1982) was used as the operationalization of shyness. The 14-item scale is a 5-point Likert-type measure, with responses ranging from 5 (*strongly agree*) to 1 (*strongly disagree*). The alpha reliability for the SS in this study was .90 ( $M = 40.76$ ,  $SD = 11.044$ ).

*Compulsive communication.* The Talkaholic Scale (TS; McCroskey & Richmond, 1993) was used as the operationalization of compulsive communication. The TS is a 16-item instrument with ten items composing the measure, with six filler items. The ten-item scale is a 5-point Likert-type measure, with responses ranging from 5 (*strongly agree*) to 1 (*strongly disagree*). The alpha reliability for the TS in this study was .86 ( $M = 24.36$ ,  $SD = 7.39$ ).

*VA.* VA was measured using a ten-item version of Infante and Wiggley's (1986) VA Scale. The scale is a 5-point Likert-type measure, with responses ranging from 5 (*almost always true*) to 1 (*almost never true*). The alpha reliability for the VA measure in this study was .82 ( $M = 48.01$ ,  $SD = 10.18$ ).

*Machiavellianism.* The Machiavellianism Scale (Mudrack & Mason, 1995) is a self-report instrument composed of ten items. Respondents rate on a 7-point scale how each item applies to them. The responses range from 7 (*strongly agree*) to 1 (*strongly disagree*). Alpha reliability for this scale was .85 ( $M = 228.09$ ,  $SD = 10.35$ ).

### Data Analyses

The data analyses employed in this study included simple correlations to determine the predictive power of each communication trait with regard to SPCC. We used the same procedure for determining the relationships among the predictor variables. Partial correlations controlling for SPCC were also computed. A regression analysis was conducted to obtain the multiple correlation of the predictor variables with SPCC.

### Results

The correlations (both simple and partial) obtained in this study are presented in Table 1. Single correlations are all listed; however, correlations lower than  $r = .30$  were not considered to be meaningful because they could not account for more than 9% of the variance explained.

**Table 1** Simple and Partial Correlations Among Variables

CA	Shyness	WTC	CC	VA	Mach	
Shyness	.51* (.29*)					
WTC	-.51* (-.19)	-.48* (-.20)				
CC	-.05 (.04)	-.52* (-.54*)	.22 (.16)			
VA	.06 (-.05)	-.03 (-.15)	-.08 (.00)	.27 (.29)		
Mach	.03 (-.01)	.02 (-.04)	-.08 (-.02)	.10 (.10)	.51* (.47*)	
SPCC	-.62*	-.48*	.68*	.11	-.12	-.03

*Note.* Partial correlations controlling for self-perceived communication competence (SPCC) appear in parentheses. CA = communication apprehension; WTC = willingness to communicate; CC = compulsive communication; VA = verbal aggressiveness; Mach = Machiavellianism.

\* $p < .001$ .

RQ1 asked to what degree a person's communication apprehension can predict his or her SPCC. As noted in Table 1, communication apprehension is strongly and negatively correlated ( $r = -.62$ ,  $p < .001$ ) with SPCC. This indicates that people with higher communication apprehension see themselves as less competent communicators.

RQ2 inquired as to what degree a person's WTC can predict his or her SPCC. The results indicate that WTC is strongly and positively correlated ( $r = .68$ ,  $p < .001$ ) with SPCC. This indicates that people who are higher on WTC are also higher in their SPCC.

RQ3 examined whether a person's compulsive communication orientation can predict his or her SPCC. The results indicate that these variables have only a trivial correlation ( $r = .11$ ,  $p = .05$ ). Hence, it appears that they are not meaningfully related.

RQ4 asked to what extent a person's shyness can predict his or her SPCC. The results indicate that there is a strong, negative relationship ( $r = -.48$ ,  $p < .001$ ) between shyness and SPCC. This indicates that people who see themselves as shy are also likely to see themselves as less competent communicators.

RQ5 examined the degree to which a person's VA can predict his or her SPCC. The results indicate that these variables have only a trivial correlation ( $r = -.12$ ,  $p = .05$ ).

RQ6 explored whether a person's Machiavellianism can predict his or her SPCC. The results indicate that these variables are not correlated ( $r = -.03$ ,  $p = ns$ ) with each other.

RQ7 asked to what degree the collective group of constructs can predict an individual's SPCC. The results indicate that a combination of communication apprehension ( $\beta = -.29$ ),  $t(135) = -4.11$ ,  $p < .001$ ; WTC ( $\beta = .51$ ),  $t(134) = 7.42$ ,  $p < .001$ ; and shyness ( $\beta = -.12$ ),  $t(134) = -1.73$ ,  $p = .08$ , provide a very strong predictor of SPCC. The multiple correlation is .77, which accounts for 60% of the variance in the prediction. However, adding Machiavellianism, compulsive communication, or VA, either separately or together, does not increase the multiple correlation.

We also examined correlations among the predictors variables. The results are reported in Table 1. Communication apprehension was found to be significantly

correlated with both shyness ( $r = .51, p < .001$ ) and WTC ( $r = -.51, p < .001$ ). Shyness was also associated with compulsive communication ( $r = -.52, p < .001$ ). In addition, VA was found to be correlated with Machiavellianism ( $r = .51, p < .001$ ), but neither variable meaningfully correlated with anything else.

## Discussion

This study was designed to determine the degree to which select communication traits are related to SPCC, both individually and collectively. The results indicate that the communication traits of communication apprehension, WTC, and shyness are substantially related to SPCC. Collectively, these traits predicted 60% of the variance in SPCC.

Compulsive communication was found to be negatively related to shyness, but to no other communication trait or to SPCC. This result contradicts some previous speculations that compulsive communicators might just be people who have low communication apprehension (e.g., McCroskey & Richmond, 1995). It is clear that these communication traits are not related at all.

Neither VA nor Machiavellianism was predictive of SPCC. VA and Machiavellianism are considered antisocial forms of behavior; this suggests, perhaps not surprisingly, that individuals who are more verbally aggressive or Machiavellian may perceive themselves as being less communicatively competent. Aggressive people often use hostile, aggressive body language or other threatening behavior to bully and dominate people because they perceive themselves to be less successful in their communication with others (McCroskey, Daly, Martin, & Beatty, 1998). Horvath (1995) suggested that one's own confidence in communication may be substantially genetic based. According to the theory of argumentative skill deficiency (Infante, Chandler, & Rudd, 1989), when one feels less competent, he or she is more likely to attack the competence of others through verbally aggressive messages. The finding that VA and Machiavellianism are not predictive of SPCC has obvious implications for one's personal and professional relationships (Teven, McCroskey, & Richmond, 2006).

### *Limitations and Directions for Future Research*

Although the findings of this study provide valuable information for both scholars and practitioners, at least two limitations need to be noted. First, because this investigation was centered on correlational relationships, it is important to exercise caution in suggesting any direct causal links among the variables studied. It is quite possible, for example, that fear or anxiety could cause a person both to feel less competent and to behave in a less competent manner. In such an instance, SPCC would be correlated with observed communication competence, but may not be the sole causal agent. The second limitation stems from reliance on self-report data. People are not always accurate in their own perceptions and abilities. However, accurate or not, these perceptions are likely to drive individuals' choices of their own communication behavior.

The findings of this investigation reveal a great deal about the relationships of select communication traits with our perceptions or estimates of our own communication competence. Future research should also examine the extent to which the selected communication traits are predictive of a perceived other's (i.e., supervisor, spouse or partner, and teacher) communication competence.

Although the specific communication traits examined in this study, as well as the approach to communication competence employed here, are ones that have previously been subject to considerable research, they should not be considered the only ones worthy of study. Other communication traits need to be identified and studied, independently or in conjunction with the ones currently studied. For instance, individuals high in VA are more likely to perceive themselves as communicatively competent; hence, they are more likely to initiate arguments and less likely to back away from arguments than individuals low in VA and SPCC (Rancer & Infante, 1985). Also, the different approaches to communication competence need attention. SPCC, as noted by McCroskey and McCroskey (1988), is not the only valid approach to the study of communication competence. Researchers need to develop valid measures that can be employed for objective observation, subjective observation, and receiver report for studies of communication competence.

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