

1995


## Predictors of Behavioral Competence and Self-Esteem: A Study Assessing Impact in a Basic Public Speaking Course

Sherwyn P. Morreale  
*University of Colorado*

Michael Z. Hackman  
*University of Colorado - Colorado Springs*

Michael R. Neer  
*University of Missouri - Kansas City*

Follow this and additional works at: <http://ecommons.udayton.edu/bcca>

 Part of the [Higher Education Commons](#), [Interpersonal and Small Group Communication Commons](#), [Mass Communication Commons](#), [Other Communication Commons](#), and the [Speech and Rhetorical Studies Commons](#)

---

### Recommended Citation

Morreale, Sherwyn P.; Hackman, Michael Z.; and Neer, Michael R. (1995) "Predictors of Behavioral Competence and Self-Esteem: A Study Assessing Impact in a Basic Public Speaking Course," *Basic Communication Course Annual*: Vol. 7 , Article 11.  
Available at: <http://ecommons.udayton.edu/bcca/vol7/iss1/11>

This Article is brought to you for free and open access by the Department of Communication at eCommons. It has been accepted for inclusion in Basic Communication Course Annual by an authorized editor of eCommons. For more information, please contact [frice1@udayton.edu](mailto:frice1@udayton.edu), [mschlangen1@udayton.edu](mailto:mschlangen1@udayton.edu).

## **Predictors of Behavioral Competence and Self-Esteem: A Study Assessing Impact in a Basic Public Speaking Course**

---

*Sherwyn P. Mooreale  
Michael Z. Hackman  
Michael R. Neer*

In recent years, evaluation and accountability have been gaining in importance for educators and administrators in all academic disciplines. Within the field of communication, oral competency and its assessment have become increasingly important (Backlund, 1990; Littlejohn & Jabusch, 1982; McCroskey, 1982(A); Morreale & Backlund, in press; Pearson & Daniels, 1988; Rubin, 1990; Speech Communication Association, 1993; Spitzberg, 1983; Spitzberg & Cupach, 1989). That importance was highlighted recently by the convening of SCA's Summer Conference on "Assessing College Student Competency in Speech Communication" (Morreale, Berko, Brooks, & Cooke, 1994). The increase in concern for assessing communication may be related in part to institutional and administrative pressures to respond adequately to accreditation requirements (Cronin, 1992). A survey of regional requirements for oral communication in higher education indicated that many colleges and universities seeking accreditation must ensure that their students achieve competence as oral communicators (Chesebro, 1991). Issues of accreditation and assessment of oral communication remain in the forefront as an increasing number of regional and state

agencies include oral communication in their standards for academic institutions (Allison, 1994; Litterst, Van Rheenen, and Casmir, 1994).

Concomitant with the inclusion of oral communication in the curriculum is the necessity for satisfactory assessment methods, procedures, and instruments. According to McCroskey (1982), the development of accurate assessment methods is critical to the design of instructional and interventional techniques. The National Commission on Excellence in Education (1984) stated that the creative use of assessment by college faculty and administrators is key to improving the quality of higher education. Therefore, it is imperative that speech communication professionals devote attention to the assessment of the impact of courses in oral communication instruction on students. That necessity was resoundingly articulated in a resolution passed at the SCA 1994 Summer Conference. The resolution called attention to participants' serious concerns that the conference seemed too focused on departmental/program outcomes or individual assignment assessment rather assessing the basic course as part of the general education curriculum or as a college-wide service course. An example is the public speaking course, which serves as one of the basic courses for many communication departments. One recent study did explore assessment in a public speaking course, examining students' self perceptions of apprehension and competency and their perceptions of the teacher's immediacy behaviors (Ellis, 1995).

The present study describes an assessment process/program for the public speaking course that could be useful when the course functions as a general education requirement or service course. This study is intended to:

1. underscore the importance and possible uses of assessment data in a public speaking course;
2. explore the use of existing assessment tools for responding to the assessment challenge; and

3. provide an example of how those tools can be used and the kind of results they will generate in terms of assessment and accountability requirements.

This article briefly describes the theoretical base and design of a laboratory-supported, basic public speaking course and then discusses results regarding the impact of the course on undergraduates' behavioral competence and self-esteem as a function of their level of communication apprehension, gender, age, and ethnicity. The following research questions guided this study:

- RQ1:** What impact will communication apprehension, gender, age, and ethnicity have on changes in students' behavior?
- RQ2:** What impact will communication apprehension, gender, age, and ethnicity have on changes in students' level of self-esteem?

The predictor variables were selected for several reasons. For instance, communication apprehension has been found to impact on several communication outcomes, including self-esteem (McCroskey, 1977). The remaining predictors were examined in order to determine whether the laboratory-supported course described in the article impacted similarly on all students regardless of their biological sex, chronological age, or their ethnicity. Respondent age and ethnicity were particularly important to this study because the university where the data were collected enrolls a large percentage of non-traditional students.

## **THEORETICAL BASE AND COURSE DESIGN**

Previous research has shown that communication competence, in public speaking and other contexts, is necessary for

academic and professional success (Curtis, Winsor, & Stephens, 1989; Rubin & Graham, 1988; Rubin, Graham, & Mignerey, 1990; Vangelisti & Daly, 1989). To achieve that competence, the course described in this study is grounded in four domains of oral communication competency that emphasize cognition, affect, behaviors/performance, and ethics (Morreale & Hackman, 1994). Some of the literature on communication competency does suggest that a composite model of competence should focus on:

1. a cognitive domain subsuming knowledge and understanding of the communication process;
2. an affective domain subsuming the communicator's feelings, attitudes, motivation, and willingness to communicate;
3. a behavioral domain subsuming abilities possessed by the communicator and observable skills or behaviors; and
4. an ethical domain subsuming the communicator's ability and willingness to take responsibility for the outcome of the communication event (Littlejohn & Jabusch, 1982; McCroskey, 1982(B); Spitzberg, 1983).

Achievement for students in the course described here is centered in these four domains by the articulation of specific objectives and required activities related to each domain. The present report describes the results of assessment in the affective and behavioral domains. Achievement in the cognitive and ethical domains of competency are assessed in the course using traditional valuative methods such as speech outlines, paper and pencil tests, and other written assignments.

Instruction in the course detailed in this study is supported by a communication laboratory and the course is taught in a lecture/recitation format. One instructor delivers

all lectures in a large group setting and recitation/performance sections are conducted by graduate teaching assistants (TAs). All speeches are videotaped and students are required to immediately view and critique each speech in the communication laboratory adjacent to the recitation classroom. In addition, students are required to visit the laboratory for help with developing speech outlines and/or individual coaching prior to presenting speeches in class. Students are further required to participate in entrance (pretest) interviews at the beginning of the course and exit (posttest) interviews at its conclusion.

## METHOD

### *Research Design*

The concern for course-specific assessment procedures expressed at the SCA 1994 Summer Conference, suggests a need to explore the use of various methodological designs for conducting assessment in the basic course. Therefore, this study examines the use of a pre-posttest research design, despite the inherent threats to internal validity raised by the use of such a design. Alternatively, the use of a control or comparison group design would have spoken to some threats to internal validity such as history, selection, and maturation (Cook & Campbell, 1979; Reinhard, 1994). However, using a control or comparison group of students would have prohibited those students from the individual benefit of the self-assessment process. Therefore, the purposeful use of the pre/post design permits an evaluation of the impact of the course on all students.

The research questions related to changes in students' behavioral competence and self-esteem and were assessed with multiple regression. Predictor variables were communication apprehension, gender, age (17-23 = younger aged

students and 24-56 = older aged students), and ethnicity (Anglo, and non-Anglo). Measurement variables were communication competence and self-esteem.

## ***Subjects***

Subjects were 128 students (Female = 77, Male = 51; Anglo = 101, non-Anglo = 27; Mean Age = 26.62) enrolled in a lower division public speaking course at a mid-sized university in the western United States, from 1991-1995.

## ***Data Collection and Interview Process***

During the students' entrance and exit interviews, demographic and assessment data are gathered for advising and assessment purposes. The same assessment measures are administered in both interviews. The one-hour interviews are conducted by TAs who are trained to administer the selected assessment instruments to students. TAs attend pre-semester training and weekly meetings during the semester focusing on the administration and interpretation of the assessment tools. For purposes of consistency, the same TA conducts the pre- and post-interviews with each student. Pretest scores are used to indicate strengths and weaknesses the student should consider during the course. If any pretest score indicates the student has deficiencies in any area diagnosed, the TA coordinates a laboratory-based individual assistance program related to that problematic area. Individual assistance programs containing videos, cognitive information, and experiential exercises are conducted in the laboratory. The TA is trained to administer these standardized materials to students. Also, several non-labor-intensive, interactive modules can provide individual instruction to students. In the post-interview at the conclusion of the course, based on pre/post

differences in scores, progress and plans for the student's future development are discussed. Students also set two personal goals in the pre-interview and review their degree of goal attainment in the post-interview. A student's goal might relate to presenting a speech more confidently, using non-verbal behaviors more effectively, or presenting a speech before the student government or some other organization (Hackman, 1989).

### ***Measurement Instruments***

The following instruments are administered to students in both the pre- and post-interviews: the Personal Report of Communication Apprehension (PRCA-24; McCroskey, 1970), the Communication Competency Assessment Instrument (CCAI; Rubin, 1982), and the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). These three instruments were selected for use in the public speaking course for several reasons. First, they are recognized assessment tools that have been previously tested for their psychometric properties. Also, when used collaboratively in the course, they examine, in part, the two domains of competency in public speaking of interest in this study, affective and behavioral competence. These domains are what faculty teaching the course expect to impact. Finally, these three tools were selected given their demonstrated reliability as evidenced in other studies.

**Communication Apprehension.** Traitlike communication apprehension was measured with McCroskey's Personal Report of Communication Apprehension (PRCA-24). This 24-item, 5-step Likert-type scale has been used extensively in apprehension research and has consistently demonstrated high reliability and predictive validity (McCroskey, 1978, 1984). The PRCA-24 measures self-perceived levels of communication apprehension in four contexts: conversations,



group discussions, meetings, and public speeches. The PRCA yielded the following descriptive statistics (Mean = 66.47, SD = 15.49, Range = 25-111, Median = 64.00, Alpha = .89). The PRCA was recast as a range level variable (low, moderate, and high) based on mean deviation for the purpose of conducting analysis of variance tests.

**Behavioral Competence.** Observed performance of behavioral competence was measured using Rubin's (1982) Communication Competency Assessment Instrument. The CCAI is a 19-item behavioral assessment instrument that is administered individually to the student by a TA. It assesses the student's actual performance of public speaking, listening, and interpersonal communication skills, as opposed to their intentions to perform or their perceptions of self as a performer. The CCAI demonstrated reliability of .82 and .78 with pre- and post- measurement.

**Self-Esteem.** Self-report of esteem was measured with Rosenberg's Self-Esteem Scale (1965). This 10-item, 4-step Likert-type scale has been used extensively in psychological research. In this study, the RSE scale revealed an alpha coefficient of .73 with both the pre- and post- administration.

Speech performance grades and test scores were considered as candidates for dependent measures. However, the focus of this study rested with selecting standardized tests that may make the most persuasive case when demonstrating the impact of the basic course to university administrators. We do not wish to minimize the importance of these other course indicators, because they are central to a department's internal assessment. Our purpose in not offering course performance indicators as evidence to administrators is simply to avoid a potential counterargument on their part that performance indicators are subject to scoring variability when a course is instructed by several different instructors.

## RESULTS

### *Overview of Findings*

Findings in this study generally confirmed the instructional value of a laboratory-supported basic course in raising both the level of behavioral competence and level of self-esteem of students. Behavioral competence, as measured by the CCAI, revealed a significant mean difference of nearly 10 points (Paired  $t$ -value =  $-13.36$ ,  $df = 135$ ,  $p < .01$ ,  $r = .56$ ) from the pretest (Mean =  $71.94$ ,  $SD = 9.35$ ) to the posttest administration (Mean =  $81.42$ ,  $SD = 7.15$ ). Significant mean differences (Paired  $t$ -value =  $-6.76$ ,  $df = 135$ ,  $p < .01$ ,  $r = .64$ ) also were observed between the pretest administration (Mean =  $32.05$ ,  $SD = 4.78$ ) and the posttest administration (Mean =  $34.26$ ,  $SD = 3.96$ ) of the self-esteem scale.

### *Test of Research Questions*

The research questions were examined with stepwise multiple regression. Regression models were run with the four predictors entered as either raw score composites (communication apprehension and age) or dummy-coded dichotomous variables (gender and ethnicity). Multiple regression was considered an appropriate test since multicollinearity was not observed among the predictors. Two regression models were defined as tests of the research questions. One model regressed the four predictors against self-esteem and the other model regressed the same predictors against the CCAI.

Findings for RQ1 revealed that the CCAI gain score (i.e., pretest minus posttest) was singularly predicted by respondent gender (zero-order correlation =  $-.20$ ,  $df = 1.126$ ,  $F = 5.37$ ,  $p < .02$ ). Regression demonstrated that female respon-

dents scored a larger gain in communication competence than male respondents. RQ2 examined which of the predictors would best impact on gains in self-esteem. Regression revealed that ethnicity functioned as the single predictor of gains in esteem. That is, non-Anglo respondents reported larger gain in esteem than Anglo students (zero-order correlation = .18,  $df = 1.126$ ,  $F = 4.26$ ,  $p < .04$ ).

Failure to observe significant findings with all four predictors should not be interpreted as an indicator that significant increases did not occur in the dependent measures. Table 1 reports pretest and posttest scores for the two measurement variables with all four predictors. Mean scores indicate that all four predictors resulted in significant within-group gain

Table 1  
Mean Scores for Self-Esteem and Communication  
Competence

	SELF-ESTEEM		CCAI	
	Pre	Post	Pre	Post
<b>PRCA</b>				
Low	33.21	35.65	69.69	80.65
Medium	32.52	34.57	73.39	81.73
High	29.53	32.11	69.25	81.11
<b>AGE</b>				
Younger	31.43	33.96	72.38	81.72
Older	32.58	34.51	71.58	81.17
<b>SEX</b>				
Male	33.14	34.78	74.50	82.03
Female	31.21	33.91	70.21	81.01
<b>ETHNICITY</b>				
Anglo	33.14	33.71	68.33	79.52
Non-Anglo	31.86	34.36	72.60	81.77

scores. For instance, both low and high apprehensives realized an average increase in CCAI scores of approximately 10 points while registering an average increase in self-esteem of just over 2.0 points. Thus, gain scores only indicate that within-group increases among the four predictors were approximately the same, thereby nullifying significant between-group scores.

### ***Relationship Among Test Variables***

A final set of correlations investigated the relationships among all six test variables. The analysis was conducted to

Table 2  
Correlation Among Test Variables

	A	G	E	P	E1	GE	C1	GC
A	—	.07	-.11	.06	.02	.04	-.06	.01
S	—	—	—	.15	-.20	-.13	-.22	-.20
E	—	—	—	-.05	-.10	-.18	.18	.10
P	—	—	—	—	-.34	-.04	.04	-.01
E1	—	—	—	—	—	.60	.05	.13
GE	—	—	—	—	—	—	.07	.14
C1	—	—	—	—	—	—	—	.68
GC	—	—	—	—	—	—	—	—

Keys: A = Age  
S = Gender  
E = Ethnicity  
P = PRCA  
E1 = Pre-Esteem  
GE := Gain/Esteem  
C1 = Pre-CCAI  
GC = Gain CCAI

Notes: Correlations above .18 ( $p < .05$ ) and Correlations above .34 ( $p < .01$ )

determine the relationship between the dependent measures and whether entrance level of self-esteem and behavioral competence influenced exit levels of esteem and competence. The correlation matrix reported in Table 2 provides a fuller understanding of the process leading to gains in esteem and competence. Two sets of correlations are most instructive. One, communication apprehension initially impacts negatively on self-esteem but by the end of the semester yields a negligible correlation with self-esteem. And two, both behavioral competence and self-esteem function as their own best predictors over the course of the semester. That is, initial level of self-esteem best explains gains in esteem while initial level of behavioral competence best explains gains in competence.

## **DISCUSSION**

The results of the present study suggest that students demonstrated significant positive changes related to the behavioral and affective domains of communication competency. These findings are generally consistent across levels of communication apprehension, gender, age, and ethnicity in the reported sample.

The results of this study are of value to communication educators seeking support for the impact of any basic public speaking course that is well structured and effectively taught. The assessment process, and its results, can be used to indicate the impact of the course on students when addressing departmental and institutional accountability. And, despite an acknowledged concern for the internal validity of a pre-posttest only design, significant improvements between pre- and posttest scores can present a strong argument for the impact of any good public speaking course on students.

The course described in this study was conceived to provide students with as much help as they may need both prior

to and after the required assignments they must complete. The ongoing interaction between student and teacher serves as the focus of the learning experience so that students learn how to use course concepts and principles under the watchful eye of the instructor. Students are not simply turned loose to view their videotaped speeches; they review and critique the speeches with the consultation of their instructor who first reassures students about the quality of their performance while also recommending how they may improve upon their performance in a spirit that does not arouse performance anxiety.

University administrators are less concerned with pedagogical design and more concerned with the big picture which convinces them that their dollars are well spent on a course that produces statistical documentation. However, as communication researchers, our ongoing concern rests with identifying factors that may impact the learning experience.

We therefore believe research is needed to examine other results of student participation in the public speaking course. For instance, over time, do students retain the degree of improvement evidenced at the conclusion of the course? Further studies might examine students' ability to retain exit levels of behavioral competence and increased self-esteem beyond the public speaking classroom. And, in an attempt to identify mediators of the learning experience, future research might satisfy the lack of rigor of the pretest-posttest design by controlling for the effects of videotaping. Beatty (1988) has previously shown that having high apprehensives view model speeches actually increases their speech anxiety. Thus, other researchers might retain the features inherent in the laboratory-assisted course but amend the design in this study by controlling for the effects of videotaping on high apprehensives' subsequent communication competence and self-esteem. This study opted not to control for the effects of videotaping because of the close, individualized attention provided to students in the form of instructor feedback and laboratory

activities that were designed to alleviate rather than elevate anxiety associated with videotaping of speeches. In addition to controlling for the effects of videotaping, future studies will need to directly assess the effects of the laboratory-supported basic course on state anxiety levels.

The results of the present study also have implications for communication in professional settings. The need for communication competence and related communication skills beyond the classroom is well documented. The Secretary of Labor's highly visible SCANS report (1993), along with several reports in the communication discipline (see for example: Curtis, Winsor and Stephens, 1989), have documented the need for communication training in oral competence in the workplace. The present study may have raised as many questions as it has answered; yet this study has demonstrated that the helping nature of a laboratory-assisted basic course can provide students with communication skills that can be useful in the workplace.

## REFERENCES

- Allison, T. (1994). The effects of regional standards on oral competency assessment. In R. Berko & S. Morreale (Eds.), *Proceedings of SCA's Summer Conference on Assessing Collegiate Communication Competency* (pp. 179-186). Annandale, VA: Speech Communication Association.
- Beatty, M.J. (1988) Public Speaking Apprehension, decision-making errors in the selection of speech introduction strategies and adherence to strategy. *Communication Education, 37*, 297-311.
- Backlund, P. (1990). *SCA Conference on Assessment of Communication Competency*. Denver, CO: University of Denver.

- Chesebro, J. (1991). Oral communication competency and assessment as a component of college and university accreditation. *The Carolinas Speech Communication Annual, 7*, 7-22.
- Cook, T.D. & Campbell, D.T. (1979). *Quasi-experimentation: Design & analysis issues for field settings*. Boston: Houghton Mifflin.
- Cronin, M. (1992, November). *Accreditation standards for oral communication competency*. Paper presented at the meeting of the Speech Communication Association. Chicago, IL.
- Curtis, D., Winsor, J., & Stephens, R. (1989). National preferences in business and communication education. *Communication Education, 38*, 6-14.
- Ellis, K. (1995). Apprehension, self-perceived competency, and teacher immediacy in the laboratory-supported public speaking course: Trends and relationships. *Communication Education, 44*, 64-78.
- Hackman, M.Z. (1989). The inner game of public speaking: Applying interpersonal communication processes in the public speaking course. *Carolinas Speech Communication Annual, 5*, 41-47.
- Littlejohn, S. W., & Jabusch, D. M. (1982). Communication competence: Model and application. *Journal of Applied Communication Research, 10*, 29-37.
- Litterst, J., Van Rheenen, D., & Casmir, M. (1994). The effects of state standards on oral competency assessment. In R. Berko & S. Morreale (Eds.). *Proceedings of SCA's Summer Conference on Assessing Collegiate Communication Competency* (pp. 187-216). Annandale, VA: Speech Communication Association.
- McCroskey, J.C. (1970). Measure 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. (1978). Validity of the PRCA as an index of oral communication apprehension. *Communication Monographs, 45*, 192-203.
- McCroskey, J. C. (1982). Communication competence and performance: A research and pedagogical perspective. *Communication Education, 13*, 2-7. (A)
- McCroskey, J.C. (1982). *An Introduction to Rhetorical Communication* (4th ed). Englewood Cliffs, NJ: Prentice-Hall. (B)
- McCroskey, J.C. (1984). The communication apprehension perspective. In J.A. Daly & J.C. McCroskey (Eds.). *Avoiding communication: Shyness, reticence, and communication apprehension*. Beverly Hills, CA: Sage.
- Morreale, S.P. and Backlund, P.A. (In press). *Large scale assessment in oral communication*. Annandale, VA: Speech Communication Association.
- Morreale, S., Berko, R., Brooks, & Cooke, C. (1994). *Proceedings of SCA's Summer Conference on Assessing Collegiate Communication Competency*. Annandale, VA: Speech Communication Association.
- Morreale, S.P. and Hackman, M.Z. (1994). A communication competency approach to public speaking instruction. *Journal of Instructional Psychology, 21*, 250-257.
- National Commission on Excellence in Education. (1984). *National excellence: A case for developing America's talent*. Office of Educational Research and Improvement, U.S. Department of Education. Washington, D.C.
- Pearson, J. C., & Daniels, T. D. (1988). Oh, what tangled webs we weave: Concerns about current conceptions of com-

- munication competence. *Communication Reports*, 1, 95-100.
- Reinard, J.C. (1994). *Introduction to communication research*. Madison, WI: Brown & Benchmark.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rubin, R. B. (1982). *Communication competency assessment instrument*. Annandale, VA: Speech Communication Association.
- Rubin, R.B. (1990). Communication competence. In G.M. Phillips & J.T. Wood (Eds.), *Speech communication: Essays to commemorate the 75th anniversary of the Speech Communication Association* (pp. 94-129). Carbondale, IL: Southern Illinois University Press.
- Rubin, R., & Graham, E. (1988). Correlates of college success. *Communication Education*, 37, 14-27.
- Rubin, R., Graham, E., & Mignerey, J. (1990). A longitudinal study of college students' communication competence. *Communication Education*, 39, 1-13.
- SCANS Report for America 2000 (1993). *What work requires of schools*. Washington, DC: U.S. Department of Labor.
- Speech Communication Association. (1993). *SCA criteria for the assessment of oral communication*. Annandale, VA: Speech Communication Association.
- Spitzberg, B.H. (1983). Communication competence as knowledge, skill, and impression. *Communication Education*, 32, 323-329.
- Spitzberg, B. H., & Cupach, W. R. (1989). *Handbook of interpersonal competence research*. New York: Springer-Verlag.
- Vangelisti, A., & Daly, J. (1989). Correlates of speaking skills in the United States: A national assessment. *Communication Education*, 38, 132-143.