Reducing Student Apprehension of Public Speaking: Evaluating Effectiveness of Group Tutoring Practices

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Building Strong Communication Skills: Evaluating Effectiveness of Interventional Strategies

Communication anxiety impacts individuals both emotionally and physiologically. Specifically, the fear of public speaking caused by "the threat of unsatisfactory evaluations from audiences" is cited as one of the chief apprehensions for Americans (Schlenker & Leary as cited in Bodie, 2010, p. 71). Individuals with communication anxiety may experience changes in blood pressure and heart rate as well as other symptoms such as sweaty palms, gastrointestinal issues, and numbness of body sensations (Bodie, 2010).

Research indicates that the fear of public speaking is an extraordinarily common phobia and that a significant portion of the population experiences some form of anxiety over public speaking. Earlier research on communication anxiety and apprehension from Richmond and McCroskey (1998) found at least 70% of all people

suffer while more recent examinations suggest that the number is closer to 61% (Dwyer & Davidson, 2012). Despite the difference in findings, the percentage of those who suffer with Communication Apprehension (CA) is significant. If these numbers are accurate, university professors are more likely to work with students who suffer with this fear but still need to build strong communication skills. Because strong communication skills are crucial to students' personal, academic, and professional success (Gunn, 2007; Morreale & Pearson, 2008; Rubin, Graham, & Mignerery, 1990), professors will need to integrate research-based strategies that can help students achieve success. Although there is a great deal of research available on the etiology of public speaking anxiety, Bodie (2010) finds that there is far less research available on interventional strategies to help these students succeed. Remarkably, Bodie's research appears to be the most recent to provide insight into this concern; therefore, it is essential to develop our understanding of CA by examining interventional strategies that may help sufferers. This study helps bridge this research gap by evaluating the effectiveness of interventional strategies embedded within a public speaking course.

Literature Review

Communication apprehension, instruction, and speech practice methods all influence students' ability to improve their public speaking skills. We will first explain CA and its impact on students in basic communication classes. Next, we will highlight attributes of effective communication instruction and its impact on students' success. Current speech practice methods and their application by instructors will be discussed. Finally, we will examine the value of speech tutoring strategies to improve students' attainment of oral communication proficiencies.

Communication Apprehension. Early on, those who were afraid of public speaking were often labeled with terms such as "stage fright." However, scholars as well as mental health professionals recognized that the apprehension and anxiety felt by sufferers extended beyond a simple case of nerves. CA is described as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons"

(McCroskey, 1977, p. 78). Groundbreaking avenues of understanding were opened in 1970, when McCroskey first developed the Personal Report of CA (PRCA), a 20-item scale measuring communication behaviors. The 1970 scale was revised in 1978 to a 24-point scale, the PRCA-24 (McCroskey, Beatty, Kearney, & Plax, 1985). These scales allowed users to measure the degree of apprehension that impacted "approach or avoidance behaviors across a variety of communication situations" including public speaking (Kearney & McCroskey, 1981, p. 153).

The reasons for the existence and depth of CA vary. Many scholars attribute such apprehension, at least in part, to heredity (Beatty, McCroskey, & Heise, 1998; Beatty & Valencic, 2000). Other scholars approached CA through a theoretical lens applying uncertainty reduction theory (Witt & Behnke, 2006). Uncertainty reduction theory "focuses on communicators' level of comfort speaking in unfamiliar or unpredictable contexts" (Roby, 2009, p. 608). Regardless of the reasons for the existence of CA, communication skills are accepted as directly associated with student learning and, therefore, are critical to student success (McCroskey, Richmond, & McCroskey, 2002). Therapists have experienced some level of success with using Cognitive Behavioral Therapy in groups to treat anxiety related to public speaking (Price & Anderson, 2012), but this is not a solution widely available to college students. However, communication instructors can apply similar principles to developing their courses and assisting their students.

Communication Instruction and Student Success. The importance of strong communication skills to personal, academic, and professional success is strongly supported by research, (Gunn, 2007; Morreale & Pearson, 2008; Rubin, Graham, & Mignerery, 1990). Unfortunately, students' academic achievement is negatively impacted by reduced opportunities to practice communication skills in the classroom (McCroskey, Richmond, & McCroskey, 2002). Cronin, Grice, and Palmerton's (2000) study on the effectiveness of oral communication across-the-curriculum programs found that many non-speech instructors are not equipped through training or do not possess foundational knowledge in communication theory and practice, which presents obstacles to implementing adequate across-

the-curriculum programs. Even in public speaking courses intended to directly develop communication skills, professors who encourage students to practice speeches do not necessarily detail the practice strategies or indicate the effective, research-based practice methods students should employ (Smith & Frymier, 2006). Professors' hesitancy to recommend practice strategies may be due to their lack of knowledge about particular strategies that are effective, which demonstrates a critical need to identify speech practice methods that provide the best opportunities for students to develop their communication skills.

To determine whether speech practice is effective, one must evaluate the final speech presentation; however, concretely measuring traits that constitute improvement and attainment of desired communication skills is challenging (Rubin, Rubin, & Jordan, 1997). Rubin, Rubin, and Jordan note that accurate measurement of the link between success and strong communication skills is extremely challenging due to the difficulty in measuring true attainment and retention of communication skills, improvement in student confidence levels, and in measuring what ultimately contributes to the student's success due to the innumerable factors that are difficult to isolate for attribution. A common theme through the existing body of literature indicates that learning outcomes can be utilized as evidence for determining students' improvement in achievement of competencies, even though methods for finitely measuring students' achievement is difficult. Thus, creating an appropriate framework to examine learning outcomes is needed so instructors can definitively recommend the most effective speech practice methods.

Speech Practice Methods. Research on the effectiveness of different methods for practicing speech practices is difficult to ascertain (Smith & Frymier, 2006). Rubin et al. found that the use of exercises, both in and out of class, directed toward improving overall communication skills shows mixed results in terms of impact for students. However, other studies have revealed that practice does lead to improvement in students' overall speech delivery skills. Ayres, Schliesman, and Sonandre´ (1998) conducted research on the effectiveness of speech practices and found significant differences between groups of students who practiced and those who did not

practice their speeches in class. In their research, students completed a series of self-report assessments regarding communication competence and apprehension, which revealed that speech practice in front of peers "is associated with reduced apprehension and a higher degree of willingness to deliver speeches" (Ayres, Schliesman, and Sonandre´, 1998, p. 176). Although these results are promising indicators that affirm students' perceptions of competence and apprehension, stronger assessments that go beyond self-assessment are necessary for understanding how to reduce student comprehension and improve speech delivery.

Several years later, Smith and Frymier (2006) developed a more robust assessment on the effectiveness of students' speech practice methods that included an empirical measurement using students' self-report assessments. In their study, business and communication majors completed self-assessments of their speech practices before delivering their final in-class speech. On their self-assessment, students indicated the practice technique they employed: practicing aloud in front of a mirror, silently to oneself, aloud at a quiet/private place, in a videotaped or recorded performance, before a small audience (i.e. 1--3 members), and in front of a larger audience (i.e. 4+ members). Students' post-practice speeches were videotaped and evaluated by Smith and two research assistants who were public speaking instructors familiar with the speech assignment and evaluation criteria. Their results indicated that practicing in front of a mirror where one can view delivery performance without outside audience feedback was the most effective form of practice. Practicing in front of a larger audience was significantly more effective than practicing in front of a smaller audience, and the authors concluded that practicing before a larger audience provided a more realistic setting. However, the authors did not explore audience feedback after the speech to determine whether audience feedback from a larger group helped students make improvements. Video recorded sessions were the least effective, but only two participants practiced this method, which may not accurately represent this strategy. Finally, the number of times practiced did not positively correlate with higher evaluation scores. Smith and Frymier concluded that feedback from a listening audience needs further research, and future studies should

explore how students use and perceive audience for improving their speeches. The researchers also suggest using a large population of video recorded speeches to explore the effectiveness of this speech practice.

While studies may not clearly indicate the most effective methods of practicing speeches, they do indicate that improvements in communication skills can be linked to reductions in CA in general and toward public speaking. For instance, Hunter, Westwick, and Haleta (2014) address the ability to use public speaking courses in departmental assessment and discovered a link between students, most notably female students, who take public speaking courses and then self-report lowered CA. Yet, even though it appears that practice can make a difference in reducing CA, instructors may find it challenging to convince students to actually engage in speech practice. Simply sharing speech practice methods with students is not enough because, even though students might understand the importance of embracing these methods, they are often reluctant to do so. Students may find themselves in a quandary where they desire to do well in public speaking, but they feel quite odd and awkward watching themselves in a mirror while they practice. A venue where they feel comfortable practicing and can gain effective feedback to develop their oral communication skills is necessary. Instructors can help students build their skills by building practice activities within their course design. This is where tutoring strategies may begin to bridge the gap.

Tutoring Strategies

Tutoring is one solution to helping students improve their ability to deliver speeches. Not only can speech tutors provide support to instructors and students facing ever increasing class sizes and lack of face-to-face time, tutors can also bridge the relationship gap between faculty and students (Thompson, 2008). Students often find it easier to reach out to other students to ask for help. Moreover, building a support group in a tutoring situation may ease the discomfort of CA. Additionally, speech tutors can provide beneficial feedback that can help improve the quality of students' speeches.

Oral communication labs designed to improve public speaking often utilize one-on-one tutoring, group consultations,

and interactive workshops for large groups or classes across campus (Wilde, Cuny, and Vizzier, 2006). In the 1990s, research exploring the successes and challenges in developing and maintaining these early communication labs began to emerge (Burnett, 1997; Flores, 1997; Ganschow, 1997; Grice & Cronin, 1992; Hobgood, 1999; Sandin, 1997). Since then, the National Association of Communication Centers was created and research continues to be published in the communication discipline to help develop best practices in supporting students in communication labs (Bowdon & Carpenter, 2011; Dwyer & Davidson, 2012; Hobgood, 2014; LeFebvre & LeFebvre, 2014; McCracken, 2006; Ward & Schwartzman, 2009; Wilde, Cuny, & Vizzier, 2006). Yook and Atkins-Sayre (2012) have compiled the most extensive guide for building and directing communication labs and developing tutoring systems. Their book, Communication Centers and Oral Communication Programs in Higher Education: Advantages, Challenges, and New Directions, provides guidance in building an argument for the importance of communication centers to higher education, explains the effects of communication centers on retention, and gives strategies for building critical thinking in the center.

Strong communication skills are critical to students' personal, academic, and professional success (Gunn, 2007; McCroskey, Richmond, & McCroskey, 2002; Morreale & Pearson, 2008; Rubin, Graham, & Mignerery, 1990), and students' self-assessments indicate greater communication competence and reduced apprehension after practicing their speeches in class (Ayres, Schliesman, & Sonandré, 1998). However, allotting time for in-class speech practice is not always possible, leading instructors to encourage students to practice speeches outside of class. Although outside speech practice is encouraged, instructors may not specify how to practice as limited empirical evidence exists to verify the effectiveness of specific speech practice methods. As Smith and Frymier (2006) discovered, students who practiced in front of a mirror experienced the greatest benefits from practice because they saw what they needed to change, even without feedback. These researchers also found that students who practiced in front of larger audiences were more effective than students who practiced in front of a smaller audience;

however, their study did not indicate whether feedback had been offered to the speaker. Surprisingly, students who had their sessions recorded experienced a negative correlation, but since this subset was extremely small (1% of the total population), it is unclear whether these results would remain constant with a larger number of participants. Finally, Smith and Frymier's population was limited to business and communication majors, leading one to question whether results would be representative of all majors on a college campus such as those students taking a communication course to fill a general education requirement. Smith and Frymier suggest more research is needed on the impact of audience and the effectiveness of incorporating videotaping for speech practice.

If students experience benefits from watching themselves in a mirror, then video recording speeches may provide similar benefits. Additionally, video recording a speech in the presence of a larger audience (4+ members) could provide a more authentic setting for speech practice, and a trained speech tutor could provide valuable feedback to a speaker's speech. Nevertheless, this strategy has not been empirically demonstrated, so understanding how digitally-recorded speeches affects a general population, and not a subset as in Smith and Frymier's sample, could demonstrate whether these method can be applicable to a broader spectrum of students. Results of this type of investigation may provide useful information for instructors' development of course designs, helping to inform them of strategies that can improve the quality of students' speeches and reduce their CA.

Current research demonstrates the importance of teaching public speaking skills and the benefits of out-of-class practice. However, previous studies based results solely on self-report measures. While self-reports are very useful, additional measurements can help determine whether video-recording strategies augmented with speech tutoring will improve tutoring student confidence and actual speech delivery. To further understand the impact of video-recording strategies and group tutoring's impact on quality of speech and perceived apprehension, this study sought to answer three questions:

RQ 1: Is there a significant difference between students' achievement of learning outcomes before attending group tutoring sessions and after attending group tutoring sessions?

RQ 2: Is there a significant difference in the pre-tutoring and post-tutoring ratings of communication anxiety experienced by students?

RQ 3: Will students perceive improvement in their proficiency in public speaking skills after tutoring sessions are completed?

These research questions guided the study as it sought to understand the correlation between tutoring and perceived confidence and actual improvement in public speaking experiences. Through examining students' pre- and post-tutoring perceptions of their personal CA as measured by the Personal Report of CA (PRCA-24) and comparing the quality of actual pre- and post-tutoring speeches, we can begin to understand the impact that speech tutoring may have on students. After examining the results of the study, we will then discuss the findings and the implications for instructors teaching public speaking skills.

Method

Participants

Participants in the study included students enrolled in Introduction to Human Communication Studies 100 (HCS 100) at a mid-sized comprehensive university located in the Mid-Atlantic region. HCS 100 is a traditional face-to-face communication course that involves four units: communication theory, interpersonal communication, group communication, and public speaking. HCS 100 is a general education course that first-year students take in their first or second semester at the university. Subjects for this study were enrolled in their first spring semester at the university. Using two HCS 100 sections, there were a total of 56 students from two classes between the ages of 18 and 20. Of the 56 students, 51 earned passing grades, 4 earned a failing grade, and 1 withdrew from the class. At the beginning of the semester, students were divided into eight teams of seven students, which were grouped together to work throughout the semester to provide support on their speeches. Each group was also assigned a class period for speech delivery. The classes met twice a week for two 75-minute classroom sessions. Because students self-

selected the HCS 100 course, it is believed that the sample represents the overall population at the college as all entering first-year students must take this general education course in their fall or spring semester.

Students received instruction focused on developing sensitivity and understanding of the importance of adapting one's communication style to varied environments and situations. Classroom instruction provided an overview of historical aspects and current models, and students were required to work in their assigned groups to complete projects and assignments requiring small group communication skills. Students learned about interpersonal communication and public speaking strategies to equip them for individual and small group speech presentations in their classes. Application of rhetorical strategies and nonverbal communication skills were assessed during public speeches.

Speech Tutor Training

Two speech tutors were crossed trained by the HCS instructor and the director of communication tutoring. The HCS instructor focused her training on reviewing the fundamentals of public speaking skills and explaining the basic requirements for students completing HCS 100. The tutoring director led trainings on incorporating group tutoring pedagogy, using technology in sessions, recording student visits, and implementing best practices in speech tutoring. Ongoing training of speech tutors was provided during monthly meetings with both the HCS instructor and the director of communication tutoring.

Before the semester began, the tutoring director and the HSC instructor met to discuss the tutoring initiative. The HCS instructor shared her syllabus, assessment rubrics, and course assignments and expectations for persuasive and informative speeches with the tutoring director and the two HCS tutors. The tutors learned the importance of their role as they would serve as an interested audience who would provide specific feedback that could help speakers improve their speeches. The researchers discussed how practicing alone is not as effective as working with a tutor because tutors provide feedback (Smith and Frymier, 2006) and how practice can help reduce students' CA (Ayers, Schliesman, & Sonandre´, 1998). Finally, the speech professor met with the speech tutor and

used videos to teach concepts about characteristics of good oral communication skills and how to help students develop these skills.

Tutor training was completed in a number of steps. All speech tutors are trained in writing tutoring since the foundation of a good oral presentation is a well-written speech. Speech tutors read the book, *The Bedford Guide to Writing Tutoring*, and attended six hours of tutor training, based on the College Reading and Learning Association's guidelines, that discussed tutoring pedagogy and provided simulated tutoring experiences. The training was spread out over three afternoons, with each 90 minute session focusing on methods for working with writing and speech students. Tutors participated in collaborative sessions that helped them learn how to identify speakers' areas of weaknesses, provide targeted feedback to help speakers improve their delivery, and develop strategies to reduce speakers' CA. The two-pronged training approach that incorporated both the HCS instructor and tutoring director helped tutors understand the importance of their work with speakers and feel like a vital contributor to the dual department collaboration.

Materials and Procedures

This quantitative study with a qualitative component analyzed three types of collected data that included the following: (a) a comparison between students' achievement of learning outcomes before attending group speech tutoring sessions and after attending group speech tutoring sessions, (b) a comparison between the CA scores of students before attending group tutoring sessions in public speaking and after attending group tutoring sessions, and (c) student perceptions of the effectiveness of group tutoring and the structure of this tutoring model.

Measurement instruments. Assessment of changes in students' actual public speaking skills were evaluated with an adapted version of the Oral Communication Rubric (OCR), a measure developed by the University of Southern Mississippi's Assessment Committee as a part of the university's Quality Enhancement Plan (QEP), (The University of Southern Mississippi, 2005). Accrediting agencies such as the Southern Association of Colleges and Schools (SACS) have developed requirements such as the QEP for educational institutions to demonstrate ongoing assessment

and achievement programs. The OCR is an eight-item measure that assesses typical public speaking assessment variables on a four-step scale (see Appendix A). According to J. Howdeshell (personal communication, May 31, 2012), this rubric has been successfully implemented for previous studies on assessment of students' speeches. Researchers at the University of Southern Mississippi tested the inter-rater reliability on the OCR [as defined by a zero or one point differential on a four point scale] and calculated 91% to 98% reliability on all categories, with the majority of categories attaining 95% inter-rater agreement. This high rate of inter-rater reliability and successful implementation of this rubric by researchers at the University of Southern Mississippi led the researchers in this current study to believe that assessment of learning outcomes could be reasonably and reliably measured. Students in HCS 100 were evaluated on the first seven Learning Outcomes on the QEP rubric (see Appendix A) as their assignment did not require incorporation of an audio-visual aid.

The Personal Report of CA (PRCA-24) was employed to measure the comprehension apprehension of students before and after speech tutoring to determine if students' apprehension about public speaking would decrease as a result of tutoring. Because the content validity of the PRCA-24 has been found to be highly predictive of measures of assertiveness (McCroskey et al, 1985), the researchers determined that this instrument could accurately measure changes in students' apprehension of public speaking.

Data on students' evaluations of group tutoring was collected at the end of the semester through self-reported measures using the HCS 100 Speech Survey developed by the researchers. This 12-question survey incorporated the Survey Monkey platform for its ease in distribution and collection of responses.

Research procedures. At the beginning of the spring semester, students completed a consent form to participate in the study and were divided into eight groups for group presentations. Students met twice in their groups outside of class for hour-long tutoring sessions and attended two workshops given by one of the two speech tutors. The first workshop, "Dealing with Communication Anxiety," was presented four weeks after classes began, and the

second workshop, "Preparing and Using Effective Speech Aids," was presented the week after the first workshop. The first hour-long group tutoring session helped students prepare for their presentations. Using the information provided by the HCS instructor, both tutors discussed assignment expectations and strategies for preparing for the written and oral portions of the assignment. After this first tutoring session, student groups, independent of their tutor, went to a multimedia production center to rehearse their presentations, which digitally recorded their sessions. Immediately following the recording of their presentations, students forwarded the electronic link to their speech tutors. The second tutoring session allowed tutors to provide feedback to speakers. When speech tutors met with students a second time, they viewed the recorded speeches and provided feedback on their presentations. Using the rubrics as a guide, both tutors discussed speakers' individual performance in each area and strategies for improving their speech delivery and content. Group members listened to the feedback, growing in their knowledge of oral communication skills and strategies, and also gave intermittent feedback. At the conclusion of students' second tutoring session, tutors directed students to take the online HCS 100 Speech Survey.

Evaluating the benefits of speech tutoring was difficult since the HCS professor did not have the available technology to digitally record students' presentations during class; thus, the only other alternative was to allow students to go back to the multimedia production center to record their second speech. After students attended both tutoring sessions, individual students, independent of their small groups, returned to the multimedia production center to digitally record their presentation a second time. The second recorded speech was used only for evaluation of tutoring sessions. Students received points for recording their speeches a second time, but the second recorded speech was not followed up with any speech tutoring sessions, and the speech, which was directed solely to the professor, was recorded in an empty room. Unfortunately, only 21 out of the original 46 students returned to the multimedia center to record their presentation. Finally, students completed the PRCA-24 a second time near the end of the semester.

Analysis of data. After the final speeches had been recorded, researchers collected all three sets of data that included the digitally recorded presentations before (N = 46) and after (N = 21) tutoring sessions, pre-tutoring and post-tutoring (N = 46) ratings of the PRCA-24, and the HCS 100 Speech Survey (N = 41). A quantitative analysis using paired samples t-tests was conducted from the two sets of PRCA-24 and Oral Communication Rubric (OCR) scores. The researchers conducted a qualitative and descriptive analysis of student perceptions from the HCS 100 Speech Survey. Only students who had completed both pre-tutoring and post-tutoring recorded speeches were evaluated on the QEP. Students who had not completed consent forms and both sets of the PRCA-24 were removed from the CA sample. Finally, only students who attended both tutoring sessions were analyzed for the speech survey.

To evaluate pre- and post-speech tutoring sessions, electronic links containing recorded speeches were coded to remove identifiers and randomly placed into a spreadsheet that was distributed to the speech evaluators, who were blind as to whether a speech was pre- or post-intervention. Prior to assessing the speeches in the current study, the speech evaluators had watched a small sample of speeches to establish inter-coder reliability. Sufficient inter-coder reliability was achieved (Krippendorff's $\alpha = .82$). The evaluators then each rated a separate half of the main sample and entered the scores into a spreadsheet. After the recorded scores were entered, one researcher who had not evaluated the speeches took the coded scores and placed the results into a new spreadsheet containing pre- and post-speech tutoring scores. To determine if significant differences occurred between the pre- and post-speech tutoring sessions, descriptive statistics and paired samples t-tests were calculated by using the tabulated scores.

Pre- and post-tutoring scores from the PRCA-24 were entered into a spreadsheet and analyzed through the Statistical Package for the Social Sciences (SPSS). Descriptive statistics and paired samples t-tests were calculated to determine if significant differences in Comprehension Apprehension had occurred over the course of the semester. Results from the t-tests were compared with survey results to note common themes across both measures.

After the collection of data, the researchers examined both quantitative and qualitative measurements in the HCS 100 Speech Survey results. The researchers conducted a descriptive analysis of the quantitative questions and a qualitative analysis of students' written responses. Results from both measures were merged to determine common themes and student perceptions. Conclusions from these data were determined from the frequency of repeated themes and scores from the quantitative sections of the survey.

Results

Speech Tutoring Evaluations of Recorded Speeches

The first research question sought to determine if there was a significant difference between students' achievement of learning outcomes before and after attending group tutoring sessions. Fourteen females and seven males completed the pre- and post-tutoring recordings. Table 1 presents results of the evaluators' scoring of students' speeches.

Table 1

Paired Samples Test Comparing Students QEP Pre-Tutoring and Post-Tutoring Scores

	Paired Differences				
Learning Outcome	***M***	**SD**	**95% CI**	***t*(20)**	**Sig.**
Purpose and Content	0.48	0.93	[-0.90, -0.05]	2.25	0.03
Support for Reasoning	0.71	0.90	[-1.13, -0.30]	3.63	0.00
Structure	0.43	0.81	[-0.80, -0.06]	2.42	0.03
Language	0.43	0.18	[-0.80, -0.06]	2.43	0.03
Audience	0.33	0.91	[-0.75, 0.08]	1.67	0.11
Vocal Delivery	0.38	0.97	[-0.82, 0.06]	1.79	0.08
Nonverbal Delivery	0.06	0.9	[-0.52, 0.40]	-0.27	0.79

Note. *M*=Mean; *SD*=Standard Deviation; CI=Confidence Interval that includes the lower and upper limits; *t*(20)=paired samples *t*-test with 20 degrees of freedom; Sig.=Significance (two-tailed).

Results from the paired samples t-test with an alpha level set at .05 reveal significant differences between students' pre-tutoring and post-tutoring speeches in four areas: effective presentation of the central idea that is strongly supported by the content; strong evidence given for assertions; purposeful structure that aids in presenting material in an effective way; and concise language that strongly adds to understanding with few errors in vocabulary, grammar, and usage. Moderate improvement, though not a statistically significant difference, was revealed in students' ability to demonstrate a clear sense of the targeted audience and vocally deliver their speech in a way that enhances listener interest and understanding. Decreased proficiency was found in students' ability to employ eye contact, posture, gestures, movement, or facial expressions in a manner that enhances the presentation.

PRCA-24 Results

The second research question sought to determine whether speech tutoring would significantly reduce students' level of communication anxiety as measured by the PRCA-24. The research sample included 24 females and 22 males. Again, a paired samples t-test with an alpha level set at .05 was utilized to measure students' ratings of their communication anxiety before and after speech tutoring sessions. As illustrated in Table 2, the results indicate improvements in all areas, but significant differences were only discovered in the Meetings subtest and in their overall Total scores. The improved meeting score indicates students' increased proficiency and comfort level in working in small groups. It is interesting to note that students rated little change in their levels of apprehension in a group context, but significant improvement was shown in meetings. Meetings often involve more participation from selected individuals in attendance whereas group discussions require participation from all individuals in attendance. Further, group discussions are often seen as less formal speaking contexts. This may account for some degree of difference in apprehension regarding participation in meetings as opposed to group discussions. Excellent improvement was noted in Public Speaking, but it was not a significant difference. Perhaps more tutoring intervention and practice sessions are needed to reduce students' apprehension for Public Speaking. In sum,

students' overall apprehension was significantly improved between pre- and post-tutoring sessions.

Table 2

Paired Samples Test Comparing Students' PRCA-24 Pre-Tutoring and Post-Tutoring Scores

	Paired Differences				
Communication Context	***M***	**SD**	**95% CI**	***t*(45)**	**Sig.**
Group Discussion	0.22	3.85	[1.12, 1.17]	0.04	0.97
Meetings	2.17	3.64	[1.09, 3.25]	4.06	0.00
Interpersonal Conversations	0.97	3.41	[-0.06, 1.90]	1.90	0.06
Public Speaking	1.07	4.00	[-0.12, 2.25]	1.81	0.08
Total Score	4.22	10.05	[1.23, 7.20]	2.85	0.01

Note. M =Mean; *SD*=Standard Deviation; CI=Confidence Interval that includes the lower and upper limits; *t*(45)=paired samples t-test with 45 degrees of freedom; Sig.=Significance (two-tailed).

HCS 100 Speech Survey

The researchers sought to examine students' perceptions of the tutoring process and their perceived improvement in public speaking skills as a result of speech tutoring. Using results from the HCS 100 Survey, researchers conducted a descriptive analysis of student perceptions and a qualitative analysis from the written responses from the open-ended questions. Results from both measures were merged to determine common themes and student perceptions.

Quantitative results. Eighty-two percent of students who completed the HCS 100 Survey indicated that they had attended both tutoring sessions, but only responses of those who completed two or more sessions are included in the table below (N=41). Of the remaining sample, 78.1% attended two sessions and 21.9% attended three or more sessions. When asked what type of group setting they would prefer to work in, students were split on their responses: 43.8% indicated individual tutoring sessions; 9.4% preferred small groups of two to four students; 37.5% wanted to work with their

entire group; and 6.3% preferred not to meet with a speech tutor at all. Students' perceptions on the impact of speech tutoring on their preparation, delivery, and confidence are provided in Table 3.

Table 3

Students' Perceptions of Speech Tutoring

Speech Tutoring had a:	**Sig. Neg. Impact**	**Slight Neg. Impact**	**No Impact**	**Slight Pos. Impact**	**Sig. Pos. Impact**
Question 1: Rate the impact of speech tutoring on your ability to prepare a speech over the course of the semester:	3.10%	3.1%	9.4%	68.8%	15.6%
Question 2: Rate the impact of speech tutoring on your ability to deliver a speech over the course of this semester.	0.0%	3.1%	12.5%	68.8%	15.6%
Question 3: Rate the impact of speech tutoring on your confidence regarding public speaking.	3.1%	6.3%.	25.0%	53.1%	12.5%

Note. N=41

Qualitative results

After coding of open-ended responses had been conducted, several themes surfaced, most of which regarded the group meetings. The majority of comments made for improving the tutoring

sessions concerned scheduling and logistics. Because each group was comprised of seven students, scheduling a mutually convenient time for recording their speeches and meeting with a speech tutor was challenging. Students commented that it was tough to find a universally agreeable time for group meeting recordings and speech tutoring sessions. Several suggestions were voiced for addressing this difficulty: allow for individual tutoring and recording sessions instead of mandatory group sessions; schedule tutoring appointments immediately after the recording sessions; or incorporate speech tutoring during class time. The remaining comments focused on tutoring or on the tutors: have tutors attend recording sessions to provide more guidance; give more feedback or provide more time for tutoring; provide more tutors; require groups to meet with both tutors; have more time to work on speech before attending tutoring sessions, and continue to have tutors meet with students for future classes.

Discussion

This study sought to employ an empirical research design to determine whether a group model for speech tutoring sessions helps students improve their oral communication abilities and reduce their level of CA. Additionally, researchers investigated student perceptions of speech tutoring sessions to provide further understanding of the results. From these findings, a viable framework for assisting students in engaging in appropriate speech practices was created that also served to help reduce students' CA.

As stated earlier, many studies rely solely on self-reported measures to determine whether student practice and tutoring improves actual speech delivery and student confidence. In contrast to focusing only on self-reported measures, this research model provided an empirical instrument that strengthens the premise that practice and tutoring sessions can improve students' ability to deliver speeches with significant improvement in students' proficiencies to provide support for their central ideas, give strong evidence for assertions, effectively structure their content, and use concise language and correct grammar. Interestingly, in both tutoring sessions, the speech tutors provided feedback on students' written and oral speeches to support classroom instruction in

speech development and delivery, which were the greatest areas of student improvement in this study. Skills demonstrating moderate improvement, which can be described as students' ability to direct their speech to a targeted audience and enhance listener interest and understanding were not focused on quite as heavily, and since students' second speech was solely directed to the instructor, their last speech lacked an authentic, listening audience. Given the absence of a live or perceived audience, it is understandable that students did not demonstrate improvement in their ability to employ eye contact, posture, gestures, movement, or facial expressions in a manner that enhances the presentation.

The importance of a live audience for practicing and presenting speeches cannot be underestimated. A solitary figure in the multimedia room with empty desks serving as an uninterested audience does not provide an engaging environment for speech delivery, which most likely explains why learning outcomes directly related to audience did not demonstrate significant improvement. These findings support Smith and Frymier's (2006) findings that practicing in front of audiences, like participants did for the first recording for the second tutoring session, can improve the speaker's evaluation scores. Students enjoyed a built-in audience format from their groups, which most likely impacted their first speech and both tutoring sessions. The group model for tutoring sessions provides a means for improving students' communication abilities by supplying an authentic audience and more sources of feedback on students' performance. Even though students may have only received a total of 15 minutes of individually-directed tutoring time (two hour-long tutoring sessions with seven students in each group allowed students 7-8 minutes of direct tutoring for each session), the impact of the group tutoring model positively impacted students' improvement in their learning outcomes. Despite the limited amount of individualized speech tutoring, students listened to the feedback given to peers in their group, which could have also helped them become more conscious of practices that could improve their speeches.

Students' improvement in speech delivery most likely contributed to their reduction in CA, supporting previous research (Ayres, Schliesman, & Sonandré, 1998; Smith & Frymier, 2006)

that links improvements in communication skills to reductions in CA. Although students' Total CA score revealed a significant improvement, the types of improvement made in the subtest scores reveal how speech tutoring impacted students' development. In Table 2, results from Meetings and Interpersonal Communication subtests indicate that students' CA decreased in these areas. This finding might indicate that speech tutoring sessions are more effective in improving communication with smaller groups rather than with larger ones.

Students' perceptions of the mandatory tutoring sessions revealed their overall consensus that speech tutoring helped them improve their speech preparation, speech delivery, and confidence in public speaking. These perceptions were moderately favorable toward the helpfulness of the tutoring sessions, yet it is unclear as to what other factors might have contributed to students' decreased levels of CA and their improvement in speech delivery scores. Given the large improvements in students' CA scores and their ability to deliver speeches and the modest positive evaluations on the HCS 100 Survey, there may be other factors that contributed to students' improvement in addition to their participation in tutoring sessions.

Although the majority of students indicated tutors' positive impact in this tutoring model, diverse opinions were expressed about the composition of the groups and the tutoring procedures. Students were split on their preference for the size of their groups: 41% preferred individual tutoring sessions; 10.3% desired small groups of 2-4 students; and 35.8% wanted to keep the group setting. Scheduling group meetings was very challenging for students, which may be why some students preferred working with smaller groups. Others indicated a desire to have speech tutors more involved in the recording process and to have more time to meet with tutors. Overall, the notion of mandatory tutoring sessions was perceived positively by students as they expressed a desire for more interaction and time with the tutors.

These results corroborate Thompson's (2008) findings that tutors can bridge the gap between students and faculty by integrating a support system for students to access. An overwhelming majority of students positively rated their tutoring sessions as helpful in

speech preparation, speech delivery, and building confidence. Despite obvious difficulties with balancing all group members' schedules, students made significant improvement in their achievement of learning outcomes to improve their public speaking abilities and reduce their apprehension in giving speeches, even though the actual time spent with speech tutors was relatively brief. This model was more successful than methods implemented in prior semesters, when students were given an option to individually attend tutoring sessions, as few students took advantage of the speech tutoring provided by the Learning Center. The group tutoring model also dually supported students' improvement through a built-in accountability system as well as a support structure for fellow members.

Limitations

The results of this study are restricted to the population of students enrolled in the HCS 100 courses at the university at which this study was conducted. While the results of this study are useful, accurate, and important for this university, the findings may not be generalized to all university settings. Additionally, HCS 100 courses at this particular university are part of a requirement for all students within the general education curriculum. Thus, most of the students enrolled in the class are first year students who may have limited experience in delivering in-class presentations and/or working in group settings. This may suggest that they could have levels of communication anxiety that are higher than students in their junior and senior years. Despite that possibility, the results of this study may apply to institutions with similar human communication programs, learning center support, and multimedia centers that are available for student recordings of presentations. Due to the small number of students, broad generalizations to multiple settings cannot be supported.

Directions for Future Research

In order to determine if this model is a worthwhile practice for human communication instructors, replication of this practice should take place across multiple settings that incorporate student samples from a variety of colleges and universities across different

geographical regions. Considering that this student sample was primarily comprised of first year students, additional studies comparing the differences in anxiety levels between students in the early stages of their college experience with anxiety levels for their final years could help measure any long-term effects from early interventions. Additionally, after these embedded strategies are implemented, studies could also determine if differences in anxiety levels exist between students who choose to take public speaking courses and those, like ours, who are required to take a course in communication as part of the general education requirement.

Furthermore, improved understanding of the impact of this model could be better understood by using control groups to compare improvement in speech delivery and CA with speech tutoring samples. Additionally, this model could be improved by intentionally embedding the post-tutoring recording in a way that encourages all students to do a pre-and post-tutoring video. Finding viable methods for digitally recording all students' first and last speeches as the speeches are presented in front of peers would be the ideal research context. Implementation of a post-tutoring video paired with a writing assignment that prompts students to compose a reflective essay comparing the improvement from their first recording to their final recording could proactively engage students in deeper cognitive processes, helping them to evaluate their skills, determine their strengths, and identify areas that need more concerted development. If the second recording is delivered in front of an interested audience, this assignment can serve several purposes: help students project their speech to a targeted audience, enlarge samples for future research, and encourage students to purposely reflect more on strategies that can improve their public speaking abilities, thus improving students' ability to more fully achieve learning outcomes for a course.

To further understand what students perceive as contributing factors to their ability to prepare and deliver their speeches as well as improve their confidence in public speaking, more open ended questions that explore students' perceptions could be investigated. For instance, future researchers should follow up students' ratings of tutoring sessions with questions such as "What factors positively

impacted your ability to prepare and deliver speeches?" and "What factors positively contributed to your improvement in confidence to engage in public speaking?" Lastly, capping class sizes and reducing the group size to four or five students can ease students' frustrations in scheduling meetings and provide more tutoring time for each group member.

Conclusions

Incorporating speech practice methods that allow students to work on improving communication skills can be a challenging task. This study demonstrated that mandatory tutoring sessions embedded within an instructor's course can and does work. Of primary importance, students acknowledged improvement of their public speaking abilities and increased level of confidence, which strongly supports the empirical findings of their growth. Nonetheless, drawbacks for implementing this model can discourage practitioners from adopting this embedded design. Full execution of this model took a great deal of time and energy to manage and promote. Not only was the HCS 100 professor involved in managing the project, but the director of communication tutoring, a graduate assistant, and two speech tutors also assisted with the project. For instructors, this model needs to be embedded in the course with a requirement of attending tutoring and recording sessions because our past experience has shown that most students will not seek speech tutoring on their own. Mandatory tutoring sessions were not viewed as punitive, and students clearly admitted that they gained much from the experience. If we want students to experience success, we have to provide a clear structure and maintain our energy to drive this model. Nevertheless, these frameworks can help students achieve greater proficiency and confidence in their ability to effectively communicate ideas in front of a live audience. Ultimately, if decreased CA and group practice can help students improve public speaking skills, the lessons gleaned from this study may help students achieve the success at the heart of the academic institution.

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Appendix A

The University of Southern Mississippi— Course Code:_____
Quality Enhancement Program Presentation Code:

Oral Communication Assessment Rubric

Learning Outcome	1 – Unacceptable	2 – Minimally Acceptable	3 - Proficient	4 - Advanced	Score
Purpose and Content	Central idea/purpose is not present and/or content does not support purpose.	Central idea/ purpose is present and/ or content minimally supports purpose.	Central idea/purpose is clear and content supports purpose.	Central idea/ purpose is effectively presented and content strongly supports purpose.	1 ☐ 2 ☐ 3 ☐ 4 ☐
Support for Reasoning	Makes generalizations without support or cites irrelevant evidence.	Evidence is offered but is sometimes inadequate for assertions.	Credible evidence is provided but connection to assertion is not always made clear.	Strong evidence is provided for assertions.	1 ☐ 2 ☐ 3 ☐ 4 ☐
Structure	Little or no structure present, thus making the presentation confusing because of lack of organization.	Structure is present but inconsistently executed; some material is out of place.	Structure is present and consistently executed.	Structure is purposeful and aids in presenting material in an effective way.	1 ☐ 2 ☐ 3 ☐ 4 ☐

Language	Frequent problems with vocabulary, grammar, and usage confuse audience and detract from credibility.	Isolated problems with vocabulary, grammar, and/or usage sometimes detract from credibility.	Mostly free of serious problems in vocabulary, grammar, and usage. Language is mostly concise and adds to understanding.	Free of problems in vocabulary, grammar, and usage (with a few exceptions). Language is concise and strongly adds to understanding.	1 ☐ 2 ☐ 3 ☐ 4 ☐
Audience	Content and/or style of presentation are inappropriate for the audience.	Content and/or style of presentation are occasionally inappropriate for audience.	Content and/or style of presentation are appropriate for audience.	Content and/or style of presentation reflects a clear sense of the targeted audience.	1 ☐ 2 ☐ 3 ☐ 4 ☐
Vocal Delivery	Vocal delivery is too soft to hear, rate is too fast to under-stand, tone distracts from message, and/or speech disruptions (repetitions; filled pauses, e.g., "um") are inappropriate and significantly distracting.	Vocal delivery is audible. Rate, volume, tone, or speech disruptions are only occasionally distracting.	Vocal delivery is clear and distinct. Rate, volume, and tone facilitate audience comprehension. Speech disruptions are rare.	Vocal delivery is varied and dynamic. Speech rate, volume, and tone significantly enhance listener interest and understanding. Practically no speech disruptions.	1 ☐ 2 ☐ 3 ☐ 4 ☐
Nonverbal Delivery	Eye contact, posture, attire, gestures, movement, and/or facial expressions are inappropriate & significantly distracting.	Eye contact, posture, attire, gestures, movement, and facial expressions are only occasionally distracting.	Eye contact, posture, attire, gestures, movement or facial expressions facilitate audience comprehension.	Eye contact, posture, attire, gestures, movement or facial expressions significantly enhance the presentation.	1 ☐ 2 ☐ 3 ☐ 4 ☐

Appendix B

Name _____ (results are confidential)

Personal Report of Communication Apprehension (PRCA-24)*

DIRECTIONS: This instrument is composed of twenty-four statements concerning feelings about communicating with other people. Please indicate the degree to which each statement applies to you by marking whether you (1) strongly agree, (2) agree, (3) are undecided, (4) disagree, or (5) strongly disagree. Work quickly; record your first impression.

_____ 1. I dislike participating in group discussions.
_____ 2. Generally, I am comfortable while participating in group discussions.
_____ 3. I am tense and nervous while participating in group discussions.
_____ 4. I like to get involved in group discussions.
_____ 5. Engaging in a group discussion with new people makes me tense and nervous.
_____ 6. I am calm and relaxed while participating in group discussions.
_____ 7. Generally, I am nervous when I have to participate in a meeting.
_____ 8. Usually I am calm and relaxed while participating in meetings.
_____ 9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.
_____ 10. I am afraid to express myself at meetings.
_____ 11. Communicating at meetings usually makes me uncomfortable.
_____ 12. I am very relaxed when answering questions at a meeting.
_____ 13. While participating in a conversation with a new acquaintance, I feel very nervous.
_____ 14. I have no fear of speaking up in conversations.

_____ 15. Ordinarily I am very tense and nervous in conversations.
_____ 16. Ordinarily I am very calm and relaxed in conversations.
_____ 17. While conversing with a new acquaintance, I feel very relaxed.
_____ 18. I'm afraid to speak up in conversations.
_____ 19. I have no fear of giving a speech.
_____ 20.Certain parts of my body feel very tense and rigid while giving a speech.
_____ 21. I feel relaxed while giving a speech.
_____ 22. My thoughts become confused and jumbled when I am giving a speech.
_____ 23. I face the prospect of giving a speech with confidence.
_____ 24. While giving a speech, I get so nervous I forget facts I really know.

SCORING:
The PRCA permits computation of one total score and four sub scores. The sub scores are related to communication apprehension in each of four common communication contexts: group discussions, meetings, interpersonal conversations, and public speaking. To compute your scores merely add or subtract your scores for each item as indicated below.

Sub score Desired Scoring Formula

Group discussion 18 + scores for items 2, 4, and 6;
- scores for items 1, 3, and 5.

Meetings 18 + scores for items 8, 9, and 12;
- scores for items 7, 10, and 11.

Interpersonal conversations 18 + scores for items 14, 16, and 17;
- scores for items 13, 15, and 18.

Public speaking 18 + scores for items 19, 21, and 23;
- scores for items 20, 22, and 24.

To obtain your total score for the PRCA, simply add your four sub scores together. Your score should range between 24 and 120. If your score is below 24 or above 120, you have made a mistake in computing the score.

Scores on the four contexts (groups, meetings, interpersonal conversations, and public speaking) can range from a low of 6 to a high of 30. Any score above 18 indicates some degree of apprehension. If your score is above 18 for the public speaking context, you are like the overwhelming majority of Americans.

NORMS FOR PRCA 24

	MEAN	STANDARD DEVIATION
FOR TOTAL SCORE	65.6	15.3
GROUP	15.4	4.8
MEETING	16.4	4.8
DYAD	14.5	4.2
PUBLIC	19.3	5.1