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**EXPLORING THE IMPACT OF GROUP WORK ON COMMUNICATION  
APPREHENSION FOR BUSINESS STUDENTS**

by

Cynthia Leigh Vieth

A Dissertation

Submitted to the  
Department of Educational Leadership  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Doctor of Education  
at  
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February 24, 2015

Dissertation Chair: Michelle Kowalsky, Ed.D.

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## **Dedication**

I dedicate this dissertation to my family  
in appreciation for their patience and support  
during my doctoral studies.

## **Acknowledgements**

I would like to express appreciation to my dissertation committee. As my chair, Dr. Michelle Kowalsky helped and encouraged me through the process, proving to be a true academic mentor. Dr. Myra Gutin gave her time and expertise, serving as both a professional mentor and friend. Dr. Kenneth Albone shared his knowledge of statistics and subject expertise. I will forever be grateful to each of them for making the dissertation process a positive learning experience.

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Finally, I would like to acknowledge Sandy Griffin, Lynn Kraemer-Siracusa, Pam Brillante, and Noel Criscione-Naylor. Although we all started our doctoral program as fellow cohort members, I am happy to say that we ended the journey as friends. Without them, I would not have had the support that I needed to complete this degree. I look forward to sharing lifelong friendships and continuing to celebrate personal successes with each of them.

## **Abstract**

Cynthia Leigh Vieth  
EXPLORING THE IMPACT OF GROUP WORK ON COMMUNICATION  
APPREHENSION FOR BUSINESS STUDENTS  
2015

Michelle Kowalsky, Ed.D.  
Doctor of Education

Group work can have an impact on the experiences that students have in college. Specifically, working in groups can help students lower their level of public speaking anxiety. The purpose of this study was to determine how a group public speaking assignment can impact the overall level of public speaking anxiety experienced by business students in a required oral communication course. Two established and widely-used instruments, the Personal Report of Public Speaking Anxiety (PRPSA) and the Personal Report of Communication Apprehension (PRCA-24), were used to establish students' level of communication apprehension. In addition, two supplemental surveys were developed to collect both demographic information as well as students' perceptions about public speaking and group work. Crosstabulations identified significant relationships between certain PRCA-24 subcontext scores and both college semesters completed as well as perceived public speaking anxiety. Further research into the possibility of a causal link between group work and a reduction in communication apprehension is recommended.

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# Chapter 1

## Introduction to the Study

*“Individual commitment to a group effort is what makes a team work, a company work, a civilization work.” “The success of the individual is completely subjected to the satisfaction that he receives in being part of the successful whole.” (Lombardi, as cited in Phillips, 2001, p. 24)*

These words of the famous football coach Vince Lombardi provided the motivation needed for his team to work together toward winning a championship. Indeed such motivation has proven successful for Lombardi during his coaching career, but these words could also inspire college students to realize their potential, both personally and academically. Association with a group can have profound benefits for the individual student. A group working effectively together can produce a product that transcends the sum of its parts.

During their college years, students grow and mature individually, socially, and academically. I assert that educators can help college students achieve higher levels of personal, interpersonal, and scholastic growth simultaneously by facilitating their experience as members of effective groups. The basic human need for belongingness (Huitt, 2007) can be fulfilled through group membership. The need to be part of something bigger is fundamental to achieving higher levels of fulfillment. Maslow (1954) asserted that this sense of belongingness is necessary if one is to achieve self-actualization.

Group work can help students realize their abilities as social beings and learners (Pascarella & Terenzini, 1991). The college student is part of both a social and an academic environment when joining a campus. Students who gain confidence with their communication skills are better equipped to engage in this dual environment. Because group collaboration can contribute to students' persistence in college (Tinto, 1997), students who are comfortable in their environment may be inclined to continue their association with the college. Cooperative learning, which is the one objective of group work, can assist the individual student to realize higher-order educational levels (Summers & Svinicki, 2007) that can, by extension, help them become more confident learners.

To be adept at communication is the most valued skills of employees (Beebe & Mottet, 2013). Working in groups can help students hone their skills as communicators, problem solvers, conflict resolvers and time managers, which are all skills that their future employers will demand (Adler, Elmhorst, & Lucas, 2013). It is imperative that college graduates have these skills to be successful in the workplace.

With potential benefits such as these, one might assume that students would be enthusiastic about working in groups. Certainly one would think that educators, knowing the benefits that group work can have for their students, would be diligent and consistent in assigning group projects. However, students and educators often shun group work, claiming that it is difficult and unnecessary (Sutherland-Smith, 2013).

Regardless of their predisposition toward the learning method, experience with collaboration during college can help students gain necessary skills required to be effective in groups. Group work in college helps students gain valuable experience that

can benefit them in a variety of ways. If students learn to work effectively in groups during their college years, they can realize both personal and academic growth, and better prepare themselves for their professions.

### **Rationale for Research**

This study seeks to determine how students respond to communicating, both in individual public speeches and well as in group settings. After a general understanding of students' perceptions of group work as a learning technique was ascertained, the goal of the study was to determine if there was a relationship between group work and communication apprehension. Ultimately, I wanted to understand the possible role that group work can play in assisting the college student to become a more confident communicator.

As an instructor of public speaking for more than 15 years, I am personally motivated to incorporate exercises into my courses that help students gain comfort and confidence at the podium. It has been my experience that such exercises are beneficial for their self-development. In addition, my corporate training and development experience has made me keenly aware of the need for students to improve their understanding of how to work collaboratively in groups. In the interest of best practices, I assert that it is the responsibility of educators to develop interpersonal communication skills in our students while they are in college to best prepare them for their professional careers.

Rider University's Professional and Strategic Speech course (COM-290), a course that I have been teaching for 15 years, has proven to be an ideal environment to begin this training for business students. COM-290 is a required course, thus ensuring that all



business students are exposed to the public speaking experience. The course provides an opportunity for business majors at Rider University to step outside of their customary lecture-based format to expand their skills through experiential learning. I contend that a business communication course, when properly organized, has the potential to address a variety of students' needs. Therefore, I have formatted all of my assigned sections of COM-290 in such a way so as to address students' personal, academic, professional, and social development needs.

### **Personal Development Needs**

In his seminal work on human needs, Abraham Maslow asserts that individuals must first realize a sense of belonging in order to ultimately reach self-actualization (Maslow, 1943). This sense of belongingness can be achieved by sharing experiences with others. Group work can address one's need for personal connection with others and enhance one's sense of self (Walton et al., 2012).

The research on communication apprehension in the communication literature has been extensive in the last four decades. The topic has even found its way into the literature of other disciplines such as business and education. Educators can facilitate improvement of this challenge for students, thus helping them to become more confident individuals who possess higher levels of comfort when communicating.

### **Academic Development Needs**

Benjamin Bloom (1956), in his well-known taxonomy that addresses the learning process from a dimensional perspective, identifies educational goals from the basic, such as understanding and knowledge, to the more advanced skills, such as analysis and synthesis. Bloom asserts that analysis and synthesis are higher-order educational skills

which can effectively be taught. Working collaboratively in groups can help students to practice these skills with others, potentially enhancing their academic experience.

Cooperative learning, which is one objective of group work, can assist the individual student to realize these higher-order educational levels (Summers & Svinicki, 2007).

Practical studies, such as that conducted by Springer, Stanne, and Donovan (1999), support the assertion that students can benefit academically from group work. Through their research, the authors discovered that science students' grades increased an average of 20 percent when learning in small groups.

### **Professional Development Needs**

Blume et al., (2013) suggest that educators should pay more attention to group interpersonal communication skills. Not only is it important for their professional development to train students as public speakers, they must also be instructed in dyadic and small group communication. The authors state that “most graduates will spend much more time interacting in teams, meetings, and one-on-one conversations than in giving presentations” (p. 167).

Working in groups can force students to acknowledge their individual positions and potential biases (Oswal, 2002). These predispositions must be addressed before leaving college so that young professionals are equipped with the skills to navigate a diverse workforce. As members of an increasingly global workplace, students will encounter a variety of people, each with their own beliefs and customs. Group work is one small way to offer students exposure to individuals unlike themselves.

## **Social Development Needs**

A correlation exists between students' positive perception of group membership and university affiliation (France, Finney, & Swerdzewski, 2010). Ness and Sanderson (1977) studied the reasons why residential students leave their campuses on weekends. From their research, the authors determined that the reasons many students remained on campus through the weekend were to complete homework and/or to study. If assigned to work in groups, students might take the opportunity to use their time on weekends to work together on campus, thus requiring them to remain on campus. This could add a socioacademic element to their learning experience.

Socioacademic benefits of group work can also be realized by commuters. Jacoby (2000) asserted that commuters often experience a disconnection from their residential peers during their college experience. Group work can offer benefits for commuters seeking to enhance their social experience at college.

I elected to conduct this study at Rider University, a private mid-size college in New Jersey that is commonly referred to by its students as a *suitcase college*. This means that the large majority of residential students tend to leave the campus on weekends rather than remain in their assigned campus housing. The stigma of a suitcase campus can affect the college's appeal to potential students who are expecting a well-rounded college experience. Through teaching as well as through conducting research at a suitcase college, I have gained an understanding of the relationship between communication anxiety, group belongingness, and commitment to the larger social context. Group work can help the individual student establish a sense of confidence and

connection that just might enhance that sense of belongingness that Maslow identifies as instrumental in self-development.

If belongingness in groups aids in general communication confidence, it would suggest that there are benefits for all faculty to overcome the resistance to group work and incorporate socioacademic learning techniques into their courses. Rider University, and others like it, may consider such research valuable, as the institution can better understand why students exit the campus on the weekends and if these students are sensing a lack of belongingness and connectedness to their larger social context. Additionally, the socioacademic experience of group work may translate to improved connectivity for commuters of the college. In both cases, the connectivity to peers that evolves as the result of group work could potentially enhance the students' overall college experience.

### **Purpose of the Study**

Group work in college can be the beginning of a students' professional development. With coaching and experience, students can gain the valuable skills they need to perform effectively in small groups similar to those that they will likely encounter in their professions. By observing the effectiveness of the group experience with business communication students during my tenure, I have gained an understanding of what instructional methods are effective in limiting anxiety and furthering students' confidence and ability.

The motivation behind this study was to determine more about two phenomena that I have witnessed during my 15 years of teaching public speaking to business students: communication apprehension and resistance to group work. It has been my

experience that many students resist taking a communication course. When asked to identify the potential reasons for resistance, students often identify a fear of public speaking. Additionally, when I introduce a group project in my classes, students often respond with displeasure. When asked why they are not enthusiastic about such assignments, they often identify a preference to work alone due to their inability to control the outcome of group work. These strong dispositions intrigue me, prompting the interest in further exploring the reasons why my business students perceive group assignments negatively.

I am also motivated to help my students reduce their communication anxiety. I believe that I can address both issues by connecting public speaking and group work into one experience. The purpose of this study was to determine how students of a business communication course perceive group assignments, and to what extent their individual levels of apprehension to public speaking can change after exposure to such assignments. It was my intention to identify these variables so that faculty are better equipped with the information they need to enhance their students' personal and academic growth through experiential learning techniques.

### **Responding to Change**

Larmer and Mergendoller (2012) assert that, in an effort to effectively address the Common Core State Standards, students must be able to display speaking and presentation skills. Rather than do so individually, the authors suggest the use of project-based learning, the merits of which include “critical thinking, collaboration, and communication” (p. 75). Through their research Morreale and Pearson (2008) found “evidence of the centrality of communication in developing the whole person, improving

the educational enterprise, being a responsible social and cultural participant in the world, succeeding in one's career and in business, enhancing organizational processes and organizational life" (p. 224). In support of such an assertion, the National Communication Association (NCA) has been active in developing strategies for improving communication instruction for college students. Steve Beebe, former NCA president and the author of numerous publications on interpersonal and small group communication, commissioned two task forces to serve this purpose. Beebe stated that "The primary goal of this initiative is to strengthen the basic Communication course and, via the basic course, to enhance the profile of the Communication discipline in U.S. colleges" (NCA website, 2014). Most schools have responded to this call for action by incorporating communication across disciplines.

As a communication instructor for nearly 20 years, it is my belief that students are growing increasingly resistant to face-to-face interpersonal communication. There is much research on the topic of mediated communication methods, and the impact that these forms of virtual communication are having on personal communication skills. The Internet has been a staple in my students' lives. They have grown up with Facebook, Twitter and Instagram. According to a 2014 Pew Research Center study, 90 percent of respondents ages 18 to 29 report using social media. While social media usage have risen across all age groups, this age range represents the largest number of users overall. These channels of communication do not require users to interact in real time. When the communication process and environment change, there are profound implications for skill development.

Teaching students with a variety of majors, I have encountered students from nearly all disciplines offered at a number of collegiate settings. While my current research is specific to business students at Rider University, I have also taught students majoring in education, science, mathematics, performing arts, and liberal studies at both four-year and community colleges. Through my teaching career, I have noticed a decline in communication skills, particularly in my business students. In fact, it was this informal observation that prompted my personal interest in studying the phenomena further, thus resulting in this dissertation. Furthermore, I have consistently recognized a resistance to group work among my business students. I am motivated to understand why our future business professionals experience communication anxiety and why they seem to resist peer interaction in academic settings, even when they are informed that both communication confidence and group interaction are paramount to their development as budding professionals.

It has also been my experience that colleagues are often resistant to incorporating group assignments into their course requirements. Considering all the benefits of the learning platform, one would assume that communication instructors should necessarily incorporate a group component into their curriculum. However, this is not always the case. For example, my fellow colleagues scheduled to teach COM-290 during the fall, 2014 semester, when the data collection phase of this study occurred, were not employing group assignments in their courses.

I believe that changing practice in the classroom to include more collaborative exercises can strengthen students' communication skills and better prepare them for the demands of their future academic and professional demands. I propose that all educators,

not just communication instructors, should incorporate group activity into all of their courses. I assert that collaborative learning can be beneficial in any discipline when properly facilitated. With consistent application, students can gain comfort with group interaction, benefitting them personally, academically, professionally, and perhaps socially.

### **Theoretical Framework**

Abraham Maslow, in his seminal work on motivation, identified five needs that motivate humans to reach their highest potential. Known as Maslow's Hierarchy of Needs, the theory asserts that individuals are motivated to fulfill physiological, safety, social, esteem, and self-actualization (Maslow, 1954). These categories are commonly depicted graphically using a pyramid (see Figure 1). This version of the needs hierarchy is Maslow's second interpretation, which varied slightly from his original theory advanced in 1943. In the original version, social need was referred to as *belonging*, and esteem needs was referred to as *self-esteem*. Although the terminology changed slightly, the fundamental meaning of these needs essentially remained the same.



*Figure 1.* Maslow's hierarchy of needs



The bottom four levels of the pyramid represent physiological, safety, social, and esteem needs. These are regarded as deficiency needs. Physiological needs include “air, food, drink, shelter, warmth, sex, and sleep.” Safety needs include “protection from the elements, security, order, law, limits, stability, and freedom from fear.” Social needs include “belongingness, affection, and love from work groups, family, friends, and romantic relationships.” Esteem needs include “achievement, mastery, independence, status, dominance, prestige, self-respect, and respect from others.” (McLeod, 2014)

The top segment of the pyramid represents self-actualization, which is referred to as a growth need. Self-actualization is “realizing personal potential, self-fulfillment, seeking personal growth and peak experiences.” (McLeod, 2014). In addition to improved intellectual growth potential, students can also grow emotionally from collaborative experiences. When students meet with success, they feel better about themselves. This development can manifest in higher degrees of confidence and stronger relationships both professionally and personally.

Maslow asserts that individuals are motivated to reach their human potential by progressing upward through the hierarchy. In order to do so, one must satisfy the deficiency needs in their journey toward self-actualization. Without fulfillment of the deficiency needs, self-actualization remains elusive. Based on life circumstances, there may be occasion for individuals to move back and forth in the hierarchy.

During the 1960s and 1970s, Maslow added more levels to the hierarchy. These included cognitive, aesthetic, and transcendence needs. Aside from transcendence, which supersedes self-actualization, these categories do not focus on interpersonal relationships.

Therefore, and since this study's main focus is group related, I will not elaborate on Maslow's more recent theoretical amendments.

With regard to this study, Maslow identifies a need for human connectivity, as reflected in social needs, to support his overall assertions. The theory originally equated belonging to love needs, which addressed the individual's need for deep relationships. However, Maslow did specifically reference one's need for group affiliation in this tier of the hierarchy. Maslow cites belonging as a foundational human need upon which an individual can develop and progress toward self-esteem. These needs must be fulfilled if one is to effectively progress toward self-actualization (Maslow, 1943, 1954). A sense of belonging can be achieved by sharing experiences with others.

#### **Connection of Theory to Study**

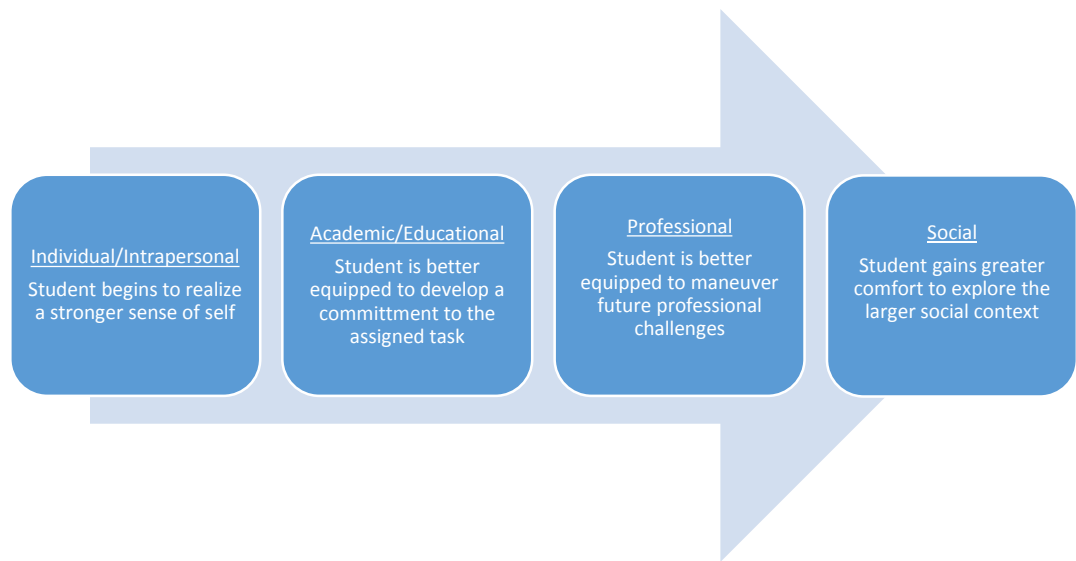
Group work can improve students' self-confidence, which could lead to reduced communication apprehension. Group work can address one's need for personal connection with others and enhance one's sense of self (Walton et al., 2012). Abraham Maslow's theory of self-actualization was used as the primary foundational theory for this study. This established theory has been applied in many disciplines, including education, communication, and business. Maslow's application to the three overlapping academic disciplines addressed in this research study provides a common thread by which to tie the study's main concepts together.

The National Communication Association (2007) identified motivation, along with knowledge and skill, as one of the three dimensions of personal communication competence. In their study, *Assessing Motivation to Communicate*, researchers found that it was not enough to have the understanding about or ability to communicate.

Competent individuals also displayed a willingness to communicate. That is, they were ready, willing, and able to engage with others.

A recent survey conducted by Hart Associates upon the request of the Association of American Colleges and Universities (2013), identified the characteristics employers sought in their employees. Employers indicated a need for employees who are “comfortable working with colleagues, customers, and/or clients from diverse cultural backgrounds.” “Teamwork skills and the ability to collaborate with others in diverse group settings” was determined to hold a high degree of importance by 67 percent of respondents (p. 8). Further, “the ability to effectively communicate orally” was emphasized by 80 percent of employers responding to the survey (p. 8).

If one realizes a sense of belonging through group work, that student is better equipped to develop a stronger sense of self. There is, therefore, a need to explore the impact of group work and its instrumental role in personal development. If one realizes a sense of belonging through group work, that student is better equipped to develop a commitment to the task assigned. This provides a strong reason for the exploration of group work and its impact on educational development. If one realizes a sense of belonging through group work, by extension that student is better equipped to maneuver the professional challenges that come from collaboration in the workplace. This justifies the reason to study the impact of group work on students’ professional development, especially in a business communication context. Finally, if one gains a sense of belonging through group work, there is a possibility that this connection may translate to improved relations in the larger social context. This is grounds for further study, particularly at a suitcase college or a campus with a large number of commuters.



*Figure 2.* Benefits of sense of belonging through group work

### **Definition of Terms**

The following terms may appear to be common and self-explanatory, however they hold very distinct meaning within the context of this study. It will benefit the reader to define these terms as they are frequently referenced throughout this paper.

#### **Apprehensives**

Those individuals who possess a high level of communication anxiety.

#### **Belongingness**

Because this study used Abraham Maslow’s hierarchy of needs as its theoretical framework, it is appropriate to use Maslow’s definition of belongingness as it applies to his theory. Maslow (1943) defined belongingness as a love need whereby the individual will “hunger for affectionate relations with people in general, namely, for a place in his group” (p. 381). Belongingness, for the purpose of this study, was intended to represent the social need to be an integral part of a larger group.

## **Group**

A group is a collection of three to four individuals collaborating on a common task. In the context of this study, a group is considered effective when its members complete the task to the satisfaction of their instructor.

## **Group Work**

Group work is the activity of a collection of individuals assigned to a common task. Within the context of this study, group work is synonymous with the term *collaborative learning*.

## **Communication Apprehension**

Much attention is given to the study of communication apprehension in the communications field. This research used two of James McCroskey's measurement tools, the Personal Report of Public Speaking Anxiety (PRPSA) and the Personal Report of Communication Apprehension (PRCA-24), for data collection. Both tools are designed to measure communication apprehension. It was, therefore, appropriate to use McCroskey's definition of communication apprehension. McCroskey (1978) defined communication apprehension as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (p. 78). For the purpose of this study, communication apprehension is synonymous with the term *communication anxiety*, and is often used interchangeably in this paper.

## **Chapter 2**

### **Literature Review**

The following review of the literature is meant to provide a foundation from which the reader can understand both the intrapersonal and the interpersonal benefits of group work for the individual. To begin, a compilation of the research addressing communication apprehension in general will be offered. Most communication apprehension research is focused on individual public speaking performance or interaction in groups. This is, of course, relevant to my study insofar as it supports the use of the PRPSA and the PRCA-24 as data collection instruments.

The scope of this review will also include literature addressing the benefits of group work for the individual. This section specifically focuses on how collaborative learning addresses the need for confidence, self-esteem, and belongingness. In addition, there is particular focus on how group work can potentially impact communication apprehension. The theoretical assertions of Maslow will be included in this portion of the review to further provide a foundation for the benefits of group work on the individual's self-development.

The review will continue by addressing that research which acknowledges the educational value of group interaction. This section is intended to initiate the link between the personal benefits and the interpersonal benefits of group work. Specific studies illustrating group application within an educational setting will be provided.

A compilation of literature follows that addresses the practical application of group work in the workplace. Because this study's participants are business students, it is appropriate to identify the benefits that group communication skills will have for them as

professionals. The term *team* is frequently used in the literature to represent professional work groups, so the terms group and team are intended to be synonymous in this review.

Finally, that literature which identifies a relationship between group work and its impact on the college students' connection with their larger social context will be explored. While this connection will not be studied directly in this work, it is my intention to discuss the possibility that group work can be a means for socioacademic development in my final paper.

### **The Significance of Communication Apprehension**

Even the most reticent students would have difficulty denying the necessity of oral communication skills. A study by Malik and Gulnaz (2011) determined that students acknowledge the importance of oral presentation skills in enhancing their overall communication skills, including group skills. Nevertheless, even though the merits of communication competence are recognized, many students are still resistant to engage in self-development due to their challenges with communication apprehension.

Since the late 1960s, communication apprehension has been studied extensively by numerous researchers (McCroskey, 2009). The result of most research provides overwhelming evidence that this anxiety can have negative impact on the highly apprehensive individual. Teven et al. (2010) conducted a study to determine the degree to which communication apprehension, alone with five other traits, relate to self-perceived communication competence. Their research found that "people with higher communication apprehension see themselves as less competent communicators" (p. 267). Hawkins & Stewart (1990) suggest the analysis of those variables that lower

communication anxiety over time. Specifically, the characteristics of the small group can be analyzed for evidence of positive variables that reduce communication apprehension.

Beatty et al. (1991) assert that communication apprehension is partially due to the accumulation of anxiety-provoking experiences. In this way, individuals begin to view themselves as poor communicators, adopting this as a self-defining personality trait. This provides strong reasons to explore communication anxiety further and develop strategies to help students overcome this deficit.

Pate and Merker (1976) cite a variety of implications for highly apprehensive employees. These individuals are less likely to be accepted into task groups. Because of their reluctance to communicate orally, apprehensives are often perceived by others as less competent. The authors do not recommend public speaking courses as a treatment for communication apprehension, rather citing operant behavior modification as a better way to address the issue. However, since their work was published, many schools have added a required oral communication component to their curriculum. It is now necessary for students to face their fear of public speaking before they graduate in order to begin on a path of self-development.

Beatty et al. (1986) support such a curriculum requirement. The authors assert that, if positive communication experiences are the way to lower communication apprehension levels, educators must incorporate exercises into their instruction that provide opportunity for students to work through their fear. They acknowledge that, while the process will be slow, apprehensives must work through negative experiences to eventually realize positive progress. Perhaps a middle ground between the researchers can be found in Ayres (1998) work. He found that communication apprehension seemed



to be high when delivering speeches to instructors due to a lack of reinforcement.

Therefore, the author suggests that “students should be rewarded by teachers and others for engaging in communication behavior. This is especially true in public speaking settings.” (p. 82).

Beatty and Andriate (1985) assert that communication apprehension can be lowered when students are exposed over time to anxiety provoking experiences. Essentially, the student through accumulated experiences, becomes accustomed to the anxiety. Finn et al. (2009) further support the use of exposure as an effective technique to improve oral communication skills and reduce communication apprehension. Even though students will experience fear, the authors recommend that students be required to deliver presentations to experience the positive reinforcements. However, it is imperative that the audience is supportive of the speaker. With enough exposure, students will begin to replace negative emotions about public speaking with a more positive perception. Eventually their communication anxiety will decrease.

Impromptu speech exercises, for example, can significantly reduce communication apprehension (Rumbough, 1999). Using McCroskey’s PRCA-24, Rumbough studied trait communication apprehension in college students. The research showed that impromptu speaking assignments were instrumental in lowering speech anxiety. Unique to the impromptu assignment in this study was the elimination of evaluation and grading. When students knew that they were not being graded, students appeared to control their communication apprehension. Rumbough showed that speaking experience without the typical evaluation component can prove valuable in improving

overall speaking skills. It may benefit the public speaking instructor to include ungraded assignments to test the transferability of this theory.

In support of his findings, Rumbough references Robinson's (1997) assertion that educators should use regular class time to work on public speaking skills (as cited in Rumbough, 1999). Robinson suggests, when a classroom environment is positive and supportive, instructors can effectively improve skills training and reduce communication apprehension. While this is a valuable contribution to best practices in public speaking instruction, there is room for exploration into the benefits of practice outside of the classroom. Working on group based assignments after class hours extends the learning environment and increases the time that students are practicing communication skills.

Aly and Islam (2005) studied the relationship between communication apprehension and grade point average, gender, job status, and years of experiences using McCroskey's PRCA-24. All variables had an effect on communication apprehension in all communication settings measured by the PRCA-24 (dyadic, group, meeting, and public speaking). However, the least significant of these settings was the dyad, suggesting that communicators are less likely to be apprehensive in one-on-one encounters than they would be with multiple receivers. Practice with increasingly larger audiences, beginning with exposure to small groups, can help the apprehensive student gain experience communicating with others. This gradual exposure, the authors indicate, has proven successful in the treatment of communication apprehension both in academic as well as in professional settings.

## **Benefits of Group Work for the Individual**

Abraham Maslow (1943), identified self-esteem and belongingness as instrumental for self-development. The potential link between these two levels of Maslow's hierarchy are worth exploring. Students can grow emotionally from collaborative experiences. When students meet with success, they feel better about themselves. This development can manifest in higher degrees of confidence and stronger relationships both professionally and personally. Group work can afford the opportunity to experience belonging as well as to boost levels of self-esteem.

Unfortunately, there is a tendency for apprehensives to display unproductive behavior when faced with interpersonal encounters. The typical tendencies are to avoidance, withdrawal, and disruption (McCroskey, 1983). When given a choice to communicate, one is faced with the "fight or flight" option (p. 17). When one experiences high communication apprehension, the tendency is to avoid the situation altogether. If caught in an uncomfortable situation, the apprehensive tends to withdraw by removing himself physically or through reducing his participation in the interaction. Disruption takes place when one chooses verbal disfluencies or inappropriate nonverbal behaviors.

McCroskey and McCroskey (1988) reported that people make decisions about communication based upon the level of confidence that they perceive in themselves. If confidence predicts willingness to communicate, then it behooves the individual to work toward the mastering of communication confidence. Pearson et al. (2011), in their study self-esteem and communication apprehension, found that those subjects who reported high self-esteem also considered communication to be rewarding and were therefore

more willing to communicate than those subjects with low self-esteem. The authors recommend communication instructors determine ways to develop students' self-esteem in an effort to improve their willingness to communicate. The authors also suggest that overcoming communication apprehension in public speaking courses can prove valuable in other communication encounters.

In their study of undergraduates enrolled in a public speaking course, Vevea et al. (2009) determined that self-esteem was related to communication apprehension. That is, students with high levels of self-esteem reported lower levels of communication apprehension than their counterparts with low self-esteem. In addition, the authors found that females experienced higher levels of communication apprehension than males.

Intercultural communication apprehension has also been negatively connected with emotional intelligence. Fall et al. (2013) studied business students in a required public speaking course. The study found that students who reported a high level of apprehension with intercultural encounters scored lower on a test of emotional intelligence than did those who were less apprehensive about the interaction. Because of the increasingly diverse global marketplace, the authors recommend business students receive emotional intelligence training. Such training typically occurs in interpersonal settings.

According to the National Institute for Mental Health (n.d.), anxiety disorders affect more than 40 million American adults. Social phobia, or social anxiety disorder, is a reason why some students resist communicating with others. Public speaking or group work can heighten the phobic's anxiety level, with results ranging from poor communication performance to complete withdrawal. Beatty (1987) identified a positive

relationship between communication apprehension and communication avoidance.

However, students who withdraw due to apprehension realize a negative impact on both their academic and social success (Edwards & Walker, 2007). McCroskey and Richmond (1976) reported that students ascribe higher levels of credibility to those peers who are most engaged in communication. Because highly apprehensive students tend to avoid interpersonal interaction through complete withdrawal or by reducing the quantity of communication, they will be perceived by their counterparts as being less capable.

Although the instructor must be sensitive to each individual student's issues, strategies to help students overcome communication apprehension can be effectively taught, particularly in oral communication courses. Rolls (1998) uses a group collaboration activity to help students demystify the public speaking experience. The author has students break into groups to discuss those aspects of public speaking that make them most nervous. In doing so, students have the experience of expressing their fears about public speaking. Additionally, they are working in groups, which can help them further address their social anxiety.

### **Educational Value of Group Work**

In addition to improved emotional growth potential, students can also grow intellectually from collaborative experiences. As it applies to the educational setting, group work is a means of learning in collaboration with others by capitalizing on the strengths and compensating for the weaknesses of fellow members. Gabbart, Johnson, and Johnson (1986) have shown that cooperative learning produces higher levels of achievement than individual efforts. The intention of the socioacademic arrangement is

to gain a higher level of achievement collectively than might otherwise have realized individually.

In Benjamin Bloom's (1956) well-known taxonomy that addresses the learning process from a dimensional perspective, he identifies educational goals from the basic to the more advanced skills. Two categories identified in Bloom's model, analysis and synthesis, are educational objectives that develop the cognitive skills students need to effectively manage higher-order learning skills. Working collaboratively in groups provides students the opportunity to practice these skills with their collegiate peers. Many minds converging to analyze a problem can bring about a richer understanding of the issue. Synthesizing the variety of perspectives in a group allow members the chance to think critically.

C. Nelson, in a recent seminar at Rider University, addressed effective teaching and learning practices in higher education. He discussed how students who do well in college report having strong out-of-class academic support such as study groups. Students who do not fare as well tended to work in isolation (personal communication, March 23, 2013). Students who rate high in communication apprehension are not likely to pursue these socioacademic connections, thus potentially placing them at a scholastic disadvantage.

In their study of communication apprehension and exercise form, Blume et al. (2010) compared the difference between students engaging in leaderless group discussion and presentation. The authors discovered that students displaying high communication apprehension scored low in critical thinking skills demonstrated in group discussion. However, an interesting finding from this research shows those highly apprehensive

students did not have similarly low scores in presentation. The authors suggest that “those with higher CA may have been more meticulous during their preparation time for the speech” (p. 668).

Springer, Stanne, & Donovan (1999) provide practical evidence that group work benefits students academically. In their study, it was shown that science students’ grades increase an average of 20 percent when learning in small groups. Kim (2005) suggests that instructors can use properly composed groups, with an effective mix of academic levels and communication tendencies, to enhance the impact of cooperative learning.

Ashraf (2004) suggests that it is helpful to understand the assumptions that we make about the group development process as it applies to college students. Students may have reason to resist group collaboration. Students cite reasons why they prefer individual assignments over group work, including the preference to work alone due to differing work ethics between members as well as schedule constraints that prevent group members from meeting outside of their classroom. Personality differences among group members are also a deterrent for students. Because group work is an important part of students’ educational development, it serves the educator to fully understand the reasons why students prefer individual work to group collaboration.

The National Communication Association (2007) encourages the understanding of students’ communication apprehension as well as those factors that motivate them to interact with others. Toward this end, the Personal Report of Public Speaking Anxiety (McCroskey, 1970) is used to ascertain the level of communication apprehension with which students identify when public speaking. Another tool, also developed by McCroskey (1982), is the Personal Report of Communication Apprehension. This

instrument measures the feelings of respondents when communicating with others in groups, at meetings, during interpersonal conversations, and when speaking in public. Both measures can be used to advance the NCA's suggestion for greater understanding of student apprehension.

Morreale, Backlund, Hay, & Moore (2011) provide numerous examples of the importance of improving student communication assessment procedures. Through their review of the techniques used to assess students' oral communication from 1975 through 2009, the authors found that assessment was given much attention during the 1990s and early 2000s. This is not a surprise when one considers the increasing interest in assessment as part of the accreditation process in higher education during this same period. However this trend declined after the mid-2000s, causing the authors to call for more practical research from the department and program levels that address best practices in learning assessment of students' oral communication skills. Assessment, they claim, is appropriate "if each faculty member and each administrator is committed to student learning" (p. 267).

Lundquist et al. (2013) make an interesting discovery about assessment of oral communication. In a three-year study of more than 400 students, the authors learned that faculty tend to assess students' oral communication ability significantly higher than students rated themselves. As an instructor who uses self-assessment in her courses, this discovery did not come as a surprise. It has been my experience that students tend to perceive themselves less favorably than their instructors evaluations reflected. What is compelling about the authors' findings is that students assessed themselves higher in group speaking assignments than in individual assignments. This creates an argument for



increased employment of group work, particularly in oral communication assignments, as a way of improving student confidence.

Luo, Bippus, & Dunbar (2005), in comparing attribution theory and group communication assignments, discovered that students working in groups, when assessed positively, are enthusiastic about sharing the success equally with their group members. Negative assessment, however, tended to be unequally attributed amongst the group members. Specifically, when it came to their own personal ownership of performance, students attributed negative feedback about their group's performance to external factors such as the difficulty of the assignment or the teacher's high standards in assigning grades. However, with regard to the performance of their group members, the same students attributed negative feedback from the instructor to internal factors, such as the students' limited knowledge, poor organizational skills, or inferior communication skills. The authors' research, while admittedly illustrating some of the difficulties of working in groups, suggests that students have much to learn about collaboration skills, self-serving bias, and ownership of responsibility to a group effort. These are challenges that students will undoubtedly encounter as professionals.

With all the evidence that group work can have a positive impact on the performance of students, faculty often resist incorporating group work into their courses. Perhaps instructors lack the required time in their course schedules. Group assignments, when done correctly, tend to require more time than individual assignments. Burdett (2007) addresses the time and attention needed to effectively employ group work in the classroom. Educators cannot assume that students are well-versed in group technique, particularly in dispute resolution, nor should they leave group success to chance. Rather,

instructors should work in conjunction with student groups to assist them toward successful outcomes. “Academics must be able and willing to work alongside groups in helping them achieve outcomes that are positive, fair and equitable.” (p. 55).

The literature on group work in higher education largely addresses the various applications of group work in the classroom, with a focus on the academic benefits of such efforts. However, there is limited information, and thus a need for more exploration, on the impact of group work in the public speaking classroom. Perhaps this is because public speaking courses are primarily focused on individual performance. While there is evidence that team-based public speaking assignments are used (Bayless, 2004), more literature that addresses the use of group work as a learning strategy in the public speaking classroom is needed.

### **Group Work as Professional Preparation**

Group interaction has been a topic of study for researchers of many disciplines. Group work has been applied in many settings, including the classroom and the workplace. Although students, faculty, and even employers report mixed reactions to collaboration, the fact remains that the ability to work in groups is required in most professional settings (Adler, Elmhorst, & Lucas, 2013). It is important for students to improve their oral communication skills in preparation for their professions. In particular, business students are required to possess effective communication skills to be successful. While presentation skills are important, so too are less formal interactions. Crosling and Ward (2002) suggests that, although “employees may undertake some formal presentations, most of their workplace oral communication is informal in nature”

(p. 41). This supports the notion that working in groups with one's peers in the classroom can provide practical experience for the budding professional.

However, problems with communication apprehension do not end upon graduation. In their study of organizational orientations and communication apprehension, McCroskey et al. (2004) identified a strong relationship between professionals' with a positive disposition toward upward mobility and low levels of communication anxiety. Employees who exhibit high communication apprehension prefer to work alone (Dobos, 1996). However, group work is prevalent in organizations, and business students must learn collaboration skills to effectively navigate in their professions. Specifically, employees with high communication apprehension will have to learn to collaborate with others, manage interpersonal dynamics and conflicts to succeed (Russ, 2012). Luparelli (2010) asserts that business students often lack the confidence it requires to make business presentations in professional settings.

Educators and advisors must be aware of the research that informs their students' future employers. Meyer-Griffith et al. (2009) report that students with middle to high levels of communication anxiety had experienced increased confusion in deciding on a career. Further, these students tended to be more anxious about commitment to their career choice than those student with low levels of communication apprehension. McCroskey and Richmond (1979) caution employers of the potential pitfalls of hiring individuals with high communication apprehension. They assert the following:

For the individual with high CA prospects for employment, retention, and advancement are all significantly reduced. It is less likely that the person will develop good interpersonal relationships with employee peers. It is less likely the

individual will be satisfied with whatever employment he or she does obtain. (p. 117)

However, with patience and practice students can achieve the skills that they will need to grow academically and socially. Graduates can transfer those much-demanded, practical skills to their jobs, helping them to blend into their professional context. In their professional development training, students can enhance their professional skills, thereby making themselves more marketable, by engaging in group work (Burbach et al., 2010).

The literature on group work claims a variety of perspectives. There is abundant literature on the topic of groups (more commonly referred to as teams) in business settings, as it has been a relevant business topic for more than 40 years. Organizations espouse the value of group work skills for organizational success. Employers consistently identify communication skills and the ability to work in groups as two of their top priorities when searching for new recruits (Adler, Elmhorst, & Lucas, 2013).

Just as in their academic experience, discomfort with interpersonal communication can inhibit achievement in a student's professional life (Blume, Baldwin, & Ryan, 2013). Abigail & Cahn (2011) assert that college can be a training ground for learning to manage group interaction, including conflicts, before entering the workplace. The ability to engage confidently in group work is essential for professionals, yet the college student's acquisition of this skill is in question (Schullery & Gibson, 2001).

### **Group Work as a Means of Connection to the Larger Social Context**

McCroskey and Sheahan (1978) found that college students with high levels of communication apprehension are less likely than those individuals with low anxiety to interact with peer strangers. The authors assert that students with weak social

connections are less likely to persist to graduation. McCroskey, Booth-Butterfield, and Payne (1989), in recognizing the implications that interpersonal success can have in student persistence, suggest that communication professionals impress upon their colleagues in other disciplines the importance of addressing communication apprehension in their students. The authors suggest that this effort is of particular importance during the first two years of college.

It is vital to consider the connection between group interaction, regardless of discipline, and a sense of belongingness to one's larger social context. Belonging to a group, albeit temporary and assignment-specific, can lead to a boost in confidence and communication effectiveness. Myers (2012) studied the impact that self-selection of group members can have on relational satisfaction. France, Finney, and Swerdzewski (2010) identify a correlation between students' positive perception of group membership and their overall university affiliation. Contentment with the relationships developed in class may translate to connectivity outside of the classroom.

The implementation of learning communities has been widespread on college campuses in recent years. Learning communities seek to integrate the academic and social lives of students, particularly those who are new to campus living. These socioacademic arrangements have been reported to improve student retention and social connectivity. Edwards and Walker (2007) suggest the use of learning communities based on enrollment in public speaking courses. One benefit of such an arrangement is the reduction in communication apprehension. In their study, the authors compared the level of communication apprehension between classes of predominantly freshmen who were members of learning communities with those classes of non-members. The results

concluded a positive relationship between membership in learning communities and lower communication apprehension.

Ness and Sanderson (1977) studied the reasons why residential students leave campus on the weekends. Through their work, the authors determined that those students who did stay on campus cited school work and studying as the reasons. Understanding the relationship between group work and improved interpersonal communication comfort could provide insight into low weekend retention. Communication confidence that evolves from working with others in groups is a skill that can reach beyond the classroom and impact the students' connectivity to their larger social context. Further, commuters often experience a disconnection from their residential peers during the college experience (Jacoby, 2000). The socioacademic experience of group work could enhance the connectivity and overall college experience of this population as well.

Tinto (as cited in Swenson-Lepper, 2012) has provided compelling evidence of the merits of socioacademic arrangements for the college student. He asserts that:

Membership in the community of the classroom provides important linkages to membership in communities external to the classroom. For new students in particular, engagement in the community of the classroom becomes a gateway for subsequent involvement in the academic and social communities of the college generally (p. 170).

## **Chapter 3**

### **Methodology**

The intent of this study was to understand the extent to which group work affects the communication apprehension of the business student. Specifically, the association between group work and its impact on public speaking anxiety was explored. The study considered students' anxiety level with public speaking, their comfort level with working in groups, and the relationship between the two characteristics. Using James McCroskey's PRPSA and the PRCA-24, two reliable instruments that educators can use in their own classrooms to capture information about their own students' communication apprehension, the study captured students' anxiety level with public speaking at both the beginning and at the end of a required business communication course. The students' comfort level with group interaction was also surveyed both before and after engaging in a mandatory one-month group activity in the same course. The ultimate goal was to determine if there was a significant relationship between the students' experience with group work and their level of public speaking anxiety. This research was intended to serve as a basis to further explore the possibility of group work serving as a socioacademic exercise that, when employed across disciplines, can reduce students' communication apprehension, improve their academic achievement in the classroom, and potentially enhance their overall personal experience in college. The study was formatted as an explanatory, sequential study.

Most research on communication apprehension are quantitative in design. It is rare to find qualitative studies. Byrne, Flood, and Shanahan (2012) state that there is "little attention paid to exploring the phenomenon of CA [communication apprehension]

using qualitative methods and through the lived experiences of students themselves” (p. 566). This study employed a variety of data collection techniques to provide a unique dimension to the already saturated body of research on communication apprehension.

### **Research Questions**

The research questions that this study attempted to address were:

RQ1: What is the relationship between exposure to group work and public speaking anxiety for business students?

RQ2: What is the relationship between exposure to group work and overall communication apprehension for business students?

RQ3: Is there a relationship between the characteristics and past experiences of business students and their level of communication apprehension/public speaking anxiety?

Using two established instruments that are widely used tools in the field of communication, the Personal Report of Public Speaking Anxiety (McCroskey, 1970) and the Personal Report of Communication Apprehension (McCroskey, 1982), student data ascertained the following information:

1. What is the student’s reported level of public speaking anxiety at the beginning of a required business communication course? The PRPSA pre-test was used to determine anxiety level at the outset of a business communication course.
2. What is the student’s reported level of perceived comfort with working in a group? The PRCA-24 pre-test was used to determine communication comfort in groups at the outset of a group speech assignment in a business communication course.



3. What is the student's level of comfort with group work after group affiliation?

The PRCA-24 post-test was used to determine communication comfort with collaboration after exposure to the group speech assignment.

4. What is the student's level of public speaking anxiety after working with a

group? The PRPSA post-test was used to determine anxiety level after completing the required individual and group assignments of a business communication course.

### **Setting**

The study took place at Rider University, a private, coeducational institution in western New Jersey that was established in 1865 as Trenton Business College. Rider is located just a few miles away from Trenton, New Jersey's capital, and is within a short distance of both Philadelphia and New York City. Although close in proximity to these cities, Rider maintains two campuses that are situated on 280 acres of land in suburban Lawrenceville and Princeton, New Jersey. This study took place solely on the Lawrenceville campus. The Princeton campus is typically attended by fine arts majors, and this study's focus was on students majoring in business. Although students attending the Princeton campus are permitted to attend classes in Lawrenceville, it is unlikely that they would enroll in the course being studied as it is only open to business students.

### **Participants**

Professional and Strategic Speech (COM-290) is a communication course required of all Rider University students declaring a major in business. Business majors at Rider choose from concentrations in accounting, business administration, sports business, computer information systems, economics, entrepreneurial studies, finance,

global supply chain management, health administration, human resources management, international business, management/leadership, and marketing/advertising. The university's College of Business, in collaboration with the communication department, has determined that COM-290 is a required general education course for all business students, regardless of their area of concentration. COM-290 also serves to fulfill the requirements for Association to Advance Collegiate Schools of Business (AACSB) accreditation. Because it is a general education course, COM-290 is not customized to fit each student's specific concentration. Students must successfully complete the course with a grade of C or better to graduate. Freshmen are not permitted to enroll in the course. Typically sophomores and juniors take COM-290, however it is not unusual for seniors to enroll as well.

Syllabi of those professors teaching COM-290 during the fall, 2014 semester were reviewed for evidence of group assignments. Although there were five sections of COM-290 offered during the fall semester, three of the sections did not intend to employ group work as a learning strategy. That is, the total population of students enrolled in COM-290 for the fall, 2014 semester engaged in public speaking, but only a portion of the total population were assigned a group speech project. For this reason, only two sections of students participated in the study.

Of the four professors who taught COM-290 during the fall, 2014 semester, only one instructor intended to incorporate group work in her classroom. In the best interest of transparency, it should be noted that this instructor, scheduled to teach two sections of COM-290 during the fall, 2014 semester, is also the author of this dissertation. The

group assignment was conducted midway through the semester. The assignment required students to be exposed to the group process for approximately six weeks.

Students enrolled in each of the two sections of COM-290 that did employ group work were surveyed for their level of public speaking anxiety and their impressions of communication, with particular focus on group discussions, meetings, and interpersonal interaction. In addition, demographic information was collected from each participant. These variables were analyzed to determine if there were any significant relationships between them.

Rider University is informally referred to by its students as a *suitcase college*. A campus is identified informally as a suitcase college when the majority of residential students tend to leave the campus on weekends rather than live in campus housing. Oftentimes this has to do with the large number of students whose primary residences are local, as is the case at Rider. Although there are 4,400 undergraduate students from 41 states, three United States territories, and 77 countries, the majority of these students are New Jersey residents. Although not within the scope of this study, it might be valuable for this institution to better understand if its students are sensing a lack of belongingness and connectedness to their larger social context, which causes them to exit the campus on the weekends.

### **Data Collection**

Time was allotted in four regularly scheduled class periods throughout the semester for data collection, including distribution of the PRPSA at the beginning and end of the semester, and distribution of the PRCA-24 at the introduction and conclusion of group work. On each of the documents numerical codes were assigned to ensure

students' anonymity. The codes allowed both unbiased comparison as well as organization of data.

On the first day of the semester, students were informed of the research study, the results of which would be used to improve teaching and learning at Rider University. They were offered the opportunity to participate, while being reminded that they would not receive extra credit, nor would their grade for the course be impacted in any way by their participation. Students were made aware of their option to opt out of participating in the study. An informed consent form addressed these points in writing and provided the students a place to either commit to or opt out of participating in the study. (See appendix E). Those students choosing to participate were encouraged to provide honest and thorough information in an effort to enhance the richness of the data.

### **Personal Report of Public Speaking Anxiety (PRPSA)**

All participants were asked to complete James McCroskey's (1970) Personal Report of Public Speaking Anxiety (PRPSA). This instrument measures the level of communication anxiety experienced by students of public speaking. It is widely respected and commonly used by instructors of communication, serving as universal standard in the field. Approval outside of the Rider University Communication department was therefore not required. The instrument was distributed at the beginning and at the end of the semester as a means to measure any change in the students' level of anxiety with public speaking during the course of the semester. A brief survey requesting basic demographic information accompanied the PRPSA.

According to the Measurement Instrument Database for the Social Sciences (MIDSS), the PRPSA is considered a reliable instrument with alpha estimates  $>.90$

(MIDSS, 2013). The survey was distributed at the beginning of the semester to ascertain a baseline level of communication anxiety for each student. Students also received a duplicate copy of the PRPSA at the end of the semester for comparative purposes. The two distributions of the PRPSA served to identify if there was a change in the self-reported anxiety level for the business communication students from the beginning to the end of the fall, 2014 semester. In addition, attached to the PRPSA was a supplemental survey requesting general demographic information about each respondent, including gender, age, college semesters completed, current credit load, residence, number of roommates, the reason for choosing their section of COM-290, and the number of extracurricular activities for which the student has to speak to people. In addition, subjects were asked to identify any prior course experience they had with public speaking, their level of anxiety with public speaking, and how frequently they are required to deliver a speech in college. Students were instructed to write a pre-assigned code number on both copies of their PRPSAs as well as on their supplemental survey to allow for anonymity.

#### **Personal Report of Communication Apprehension (PRCA-24)**

Before the participants split into groups, McCroskey's (1982) Personal Report of Communication Apprehension (PRSA-24) was distributed. This instrument served to acquire a students' baseline comfort level with four types of interpersonal communication. A portion of the PRSA-24 is used to measure communication apprehension more generally than the PRPSA. Specifically, six of the 24 items on the PRCA-24 address public speaking anxiety as compared to the 34 items on the PRPSA. In addition to this public speaking component, the PRCA-24 also addresses subjects'

feelings about group discussion, meetings, and interpersonal (dyadic) conversations.

This instrument served to determine the students' level of communication apprehension in the four aforementioned settings.

The PRSA-24 was distributed at both the introduction and the culmination of the group work assignment for comparative purposes. Specifically, the two distributions of the PRCA-24 were intended to measure the change in comfort with interpersonal communication. Attached to the initial distribution of the PRCA-24 was a supplemental survey asking students to identify how frequently they are required to work in groups in college, if they like working in groups, their biggest obstacle when working in groups and whether they anticipate a positive experience with the group assignment in COM-290. Students continued to use the same codes that they were assigned with the PRPSA to ensure anonymity and help organize data.

All students were also given the PRCA-24 to measure the level of comfort students possess when faced with communication in groups, meetings, dyads, and public speaking. The first two components of this instrument (i.e. groups and meetings) were analyzed for the purpose of this study. The tool was distributed at the outset of a group assignment, and then again when the group assignments were completed.

Both the PRPSA and the PRCA-24 have been commonly used to measure students' perception of communication for many years. These instruments have been validated (MIDSS, 2013) and are therefore considered to be reliable. All instruments were distributed before any speech evaluations or grades were distributed. In this way, students could not allow their instructor's feedback to influence their responses. This

provided the subjects an opportunity for pure reflection about their experiences with public speaking and group interaction.

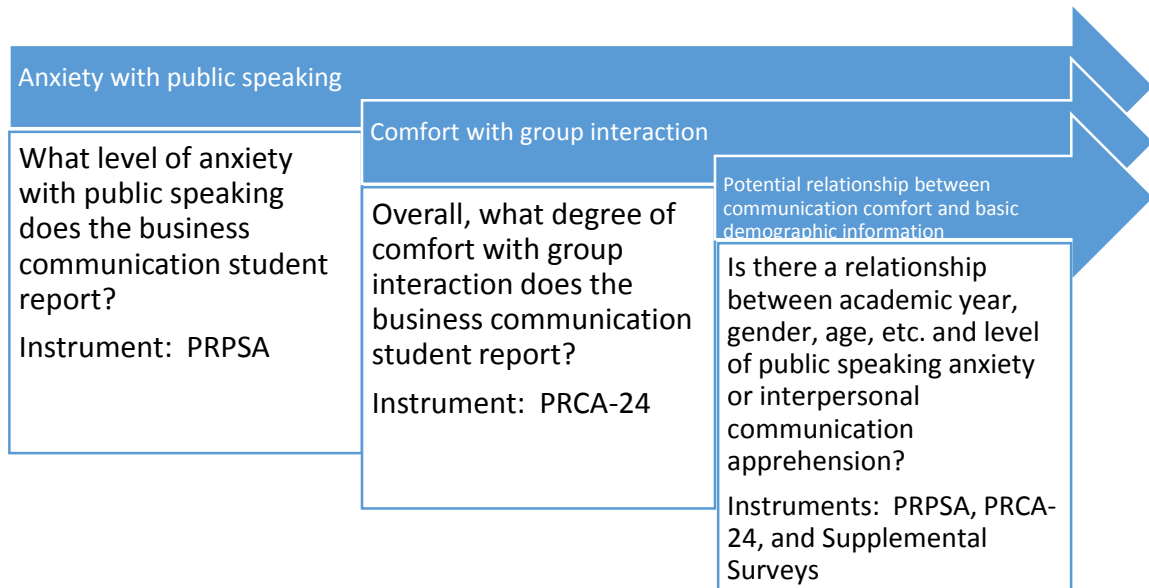


Figure 3. Focus of data collection instruments

### Data Analysis

A t-test was used to compare the data reported by all COM-290 students after completing the pre and post PRPSA and the pre and post PRCA-24. After gathering the data from each distribution of the PRPSA and the PRCA-24, a chi-square test was used to determine if there was a relationship between scores on these instruments and any other variable reported.

This work explored student-driven data to better understand if group work can help students realize reduced public speaking anxiety. Because I have taught COM-290 at Rider University for 15 years, it is important to acknowledge my potential bias in interpreting data. The participants in this study were students from two sections of COM-290 that I taught from September through December, 2014. Although the course is

a requirement for business students and there were five sections of COM-290 offered during the fall 2014 semester, my two assigned sections were the only two that employed group work. In the interest of transparency, I wish to acknowledge my use of this convenience sample.

This study was piloted during the spring, 2014 semester. The pilot was intended to identify any potential problems with the plan and to allow for adjustments as needed. Although the two instruments used were determined to be both valid and reliable (MIDSS, 2013), the field test was included in the research plan to ensure that the survey distribution schedule was appropriate for the overall study and to further verify the applicability of the instruments. The PRPSA and the PRCA-24 was distributed to 50 students in two sections of COM-290 during the pilot study. These tools are routinely used by instructors of public speaking and did not require approval outside of Rider University's Communication department when used as part of the pilot study.

I elicited comments about the instruments and the timing of their distribution from the COM-290 faculty in an effort to learn of possible improvements that might be integrated into the actual study. Data has been reviewed and adjustments are reflected in the final study. The proposal for this study was submitted to the institutional review boards (IRB) at both Rider and Rowan Universities in August, 2014 for final approval to deploy the data collection instruments at the start of the fall, 2014 semester.

At the beginning of the fall, 2014 semester, COM-290 students received the Personal Report of Public Speaking Anxiety (PRPSA) to measure students' level of public speaking anxiety (McCroskey, 1970). A supplemental survey to collect demographic information as well as personal perceptions of public speaking. At the end



of the semester, COM-290 students were given with PRPSA again to measure their comfort level with public speaking. A t-test was used to compare the results of the pre and post PRPSAs.

When group assignments commenced, students were given the PRCA-24 to measure students' level of communication apprehension with group discussion, meetings, interpersonal communication, and public speaking. A supplemental survey was distributed to gather data about students' perceptions of groups work. When group assignments were completed, students were given the PRCA-24 again to once again measure their communication levels in interpersonal contexts.

### **Limitations of the Study**

There were some limitations to acknowledge when designing this study. The following limitations are set forth at the introduction of this study so that the reader can appreciate the extent to which the research findings can apply. These limitations include the specific definition of communication apprehension that is relied upon throughout this paper, the limited subject population, the researcher's affiliation with the participants, the datedness of the measurement instruments, and the ability to make clear connections between positive group experience and socioacademic benefits.

### **Communication Apprehension**

Specifically, because *communication apprehension* is the "single most researched concept in the field of communication studies" (Wrench et al., 2008, p. 412) from 1977 to 1997, the literature related to communication apprehension was too numerous and widespread to be able to capture all references to the concept. For the purpose of this study, references to communication apprehension were limited to those that pertain to

individual self-development, public speaking, group work, and connectivity to one's larger social context.

### **Participant Selection**

The subjects used in this study were all students of Rider University, a private, mid-size college in New Jersey. COM-290 is a business communication course that is required of all students majoring in business at Rider. Therefore, a considerable number of students enroll in the course each semester. While this should create a substantial pool of participants for this study, further inquiry into the use of group work in COM-290 indicated that only two of five total course sections of Professional and Strategic Speech (COM-290) offered in the fall, 2014 semester were eligible to be included in the study. Therefore, the sample was limited to 49 potential participants. This eligibility was determined through a document analysis of course syllabi prepared by all those professors scheduled to teach Professional and Strategic Speech (COM-290) during the fall, 2014 semester. After looking for evidence of group work in each section, a follow-up e-mail to all COM-290 instructors determined that only two of the five sections of COM-290 were scheduled to include a group project in their curriculum that semester. Although it would have been helpful to have a larger pool of participants, a 49-subject sample size has provided sufficient data from which to draw conclusions.

### **Researcher's Relationship with Participants**

In the interest of transparency, it must be identified that I was the instructor for both sections of COM-290 included in this study. However, although the subject sample is limited to 49 students, and regardless of my affiliation with the participants, it is my

belief that this study's results can provide valuable insight into best practices for educators.

### **Age of Data Collection Instruments**

Subjects were studied to determine levels of public speaking anxiety, group communication comfort, and personal impressions of communication experiences. The PRPSA (McCroskey, 1970), the PRCA-24 (McCroskey, 1982), and supplemental surveys were used to capture data addressing these three topics. Although the PRPSA and the PRCA-24 may appear to be dated, they are still widely used and referenced in the communication field.

### **Assumptions about Socioacademic Benefits**

It should be noted that, although the data collected during this study does not directly address these social phenomena, I believe that it is worthwhile to discuss the implications that group work can have for college students' socioacademic development. The current study explores the relationship between group work and improved interpersonal communication comfort. There may be a possibility that this personal development could reach beyond the classroom and may impact students' connectivity to their larger social environment, but this is recognizably beyond the scope of the current project.

## **Chapter 4**

### **Findings**

The data collected were broken down into four major components: demographic information, PRPSA results, PRCA-24 results, and student impressions of public speaking and group work. Data were collected in a specific chronological order for a variety of reasons that will be explained below. No more than two data collection vehicles were distributed in one session so as not to inundate the student subjects with too much material at once.

A supplemental survey was distributed during the first class of the semester to collect basic demographic information such as gender, age, residence, and academic enrollment status, students were also asked to identify the reasons for choosing their particular section of COM-290. Further, students were asked to identify any extracurricular activities that they were involved in at Rider University that required them to speak to groups of ten people or more. This survey was distributed before the pre-PRPSA, during the same class period.

One month into the semester, students completed the pre-PRCA-24. This instrument was distributed at the beginning of a class period that was later dedicated to a lecture on group work. After the lecture, a group speech project was assigned that required the subjects to work in groups of three or four students to prepare a presentation on the topic of their choice. The assignment required a group outline, a group bibliography and a group PowerPoint slideshow to accompany the presentation. Each class was given time to select their groups after the lecture. Students were given four weeks to accomplish this task. Although some class time was allotted during the

semester for this project, students were informed that most of the preparation had to be completed outside of class. Students were able to self-select their groups and expected to manage their personal time to allow for groups meetings.

The second part of the aforementioned supplemental survey that was distributed with the PRPSA and which gathered demographic information about the students, there were additional questions about the students experience with and impressions of public speaking. As part of the same class period, and prior to receiving the pre-PRCA-24, students were asked to respond to another supplemental survey that focused on their experience with and impressions of group work.

### **Participants**

On the first day of the semester, 49 students were enrolled in the two sections of COM-290 under study. After describing the purpose of the research and providing an informed consent form, two students declined participation. One student withdrew after the first class meeting and one after completion of the group project, reducing the total participants to 45. One subject did not complete the entire post-PRPSA and therefore was not included in the data analysis. The total sample of students who completed the course as well as all data collection instruments was 44.

The following descriptive statistics are divided into four areas for analysis: demographics, experience with and perception of public speaking, PRPSA scores, and PRCA-24 scores. Demographics were collected on a supplemental survey distributed with the pre-PRPSA. These include gender, age, semesters completed, enrollment status, residence, and number of roommates. Additionally, students' reasons for enrollment in their selected section of COM-290 and their amount of participation in extracurricular

activities were also captured. Also collected on the pre-PRPSA as well as the pre-PRCA-24 supplemental surveys was information about students' experiences with and perception of public speaking and group work. Finally, statistics about students' scores on the PRPSA and the PRCA-24 were gathered. Each of these instruments are self-scoring, and students were allowed time to calculate their scores after completing the surveys. However, I recalculated the scores after collection to ensure accuracy.

## **Demographics**

### **Gender**

There were 24 males and 20 females who participated in the study. Males comprised 55%. Females comprised 45% of the subjects studied.

Table 1

*Distribution of Participants by Gender*

Gender	Participants	Percent of total
Male	24	55%
Female	20	45%

### **Age**

Three students, or 7% of the subjects, were age 25 or older, while the remainder of the students (93%) were between the ages of 18 and 24.

Table 2

*Distribution of Participants by Age*

Age category	Participants	Percent of total
18-24	41	93%
25+	3	7%

### **Semesters Completed**

COM-290 is a required course for all business students. Freshmen are not permitted to enroll in the course. Therefore, all students surveyed had experienced at least two semesters of college coursework before taking COM-290. Twenty (20) students, or 45% of the total respondents, had completed two (2) semesters. Eleven (11) students, or 25%, had completed 3-4 semesters; seven (7) students, or 16%, had completed 5-6 semesters; and six (6) students, or 14% had completed more than six (6) semesters of coursework at the time of data collection. Therefore, 70% of the subjects had between two and four semesters of college experience, and identified themselves as either sophomores or juniors.

Table 3

*Distribution of participants by number of semesters completed*

Semesters completed	Participants	Percent of total
2	20	45%
3 to 4	11	25%
5 to 6	7	16%
More than 6	6	14%

### **Enrollment Status**

Of the 44 subjects, only one was attending Rider University on a part-time basis. The majority of students were enrolled in 12 to 18 credits of coursework, identifying them as full-time students.

Table 4

*Distribution of Participants by Current Number of Credits Enrolled*

Credits enrolled	Participants	Percent of total
1-11	1	2%
12-18	43	98%

**Residence/Roommates**

With regard to residence, 25 students (57%) reside on campus. Seven students (16%) reside off campus with roommates. Twelve students (27%) reside at home with their families.

Table 5

*Distribution of Participants by Location of Residence*

Residence	Participants	Percent of total
On campus	25	57%
Off campus (with roommates)	7	16%
At home with family	12	27%

Students were asked to report the number of people with whom they reside. The term *roommates* is used to represent this information, regardless of whether the roommate is a relative or not. All students reported having at least one roommate. Fifteen (15) students, or 34%, reside with one roommate. Three (3) students, or 7% reside with two roommates. Eight (8) students, or 18% reside with three roommates. Eleven (11) students, or 25%, reside with four roommates. Seven (7) students, or 16%, reside with five or more roommates.



Table 6

*Distribution of Participants by Number of Roommates*

Number of roommates	Participants	Percent of total
1	15	34%
2	3	7%
3	8	18%
4	11	25%
5+	7	16%

**Reason for Enrollment in Assigned Section**

Student subjects were asked to identify their top three reasons for choosing to enroll in their particular section of COM-290. Students were provided a list of reasons and asked to rank their three top reasons, with 1 being the main reason. Three (3) respondents responded to the directions in general, but did not identify the order of their choices as first, second, and third. However, their data was calculated into the totals because they did attempt to provide information. Three (3) respondents only chose their top reason, and one (1) student skipped the question entirely, so all blank answers were assigned their own unique code and are represented in Table 7 (below) as *No Response*.

Categories were then consolidated to capture the fundamental reason for choosing the two sections included in this study. The first category was *schedule*, which included options one through five and eight (1-5, 8). The next category was *professor*, which included options six and seven (6, 7). The third category was identified as *friends*, which included options nine and ten (9, 10). The final category was *other*, which encompassed any response written in by the participants as well as any responses left blank (11, 12). Because three (3) respondents did not specify the order of their top three choices, it was

decided that it would be best to choose the one main reason from each respondent. This was determined based on at least two of the same answers in any one category. If responses were spread over a variety of three categories, the response labeled number one was then used.

Of the 132 coded responses, 89 students (67%) identified the convenience of the class time in their school schedule as one of the top three reasons why they chose their particular section of the course. Thirty-seven (37) of the 44 participants (84%) chose *schedule* as at least two of the top three reasons for choosing their particular sections of COM-290.

Table 7

*Distribution of Participants by Top Three Reasons and Final Coded Response for Choosing their Section of COM-290*

Reason	Total	Percent	First Choice	Second Choice	Third Choice	Final coded response (2 out of 3)	
Schedule (1-5, 8)	89	67%	34	25	30	37	84%
Professor (6, 7)	24	18%	6	12	6	3	7%
Friends (9, 10)	4	3%	1	0	3	0	0%
Other (11, 12)	15	11%	3	7	5	4	9%

### **Participation in Extracurricular Activities**

Students were prompted to respond to the following: List up to four extracurricular activities that you are involved with at Rider that require you to speak to groups of 10 or more people on occasion. Students provided a variety of responses. While the types of extracurricular activities were not analyzed, the number of extracurricular activities are captured in Table 8.

Table 8

*Distribution of Participants by Number of Extracurricular Activities*

Number of extracurricular activities	Participants	Percent
0	12	27%
1	11	25%
2	14	32%
3	5	11%
4	2	5%

**Experience With and Perception of Public Speaking and Group Work**

On each of the supplemental surveys distributed with the PRPSA and the PRCA-24, students answered questions about their perceptions. Along with the PRPSA, students answered questions about their experience with public speaking. These questions also prompted responses regarding self-perception of anxiety level and quality of performance.

The goal of the supplemental survey that was distributed with the PRCA-24 was to determine the students' experience with group work. They were asked how frequently they were assigned to work groups in college classes, if they liked working in groups, and what their biggest obstacle was when working in groups.

**Public Speaking**

When asked if students had previously taken a course dedicated to public speaking either in high school or in college, 33 respondents (75%) answered that they had no prior experience and 11 (25%) respondents had been exposed to public speaking training prior to the course.

Table 9

*Distribution of Participants by Prior Experience with Public Speaking*

Prior public speaking experience	Participants	Percent
No experience	33	75%
Prior experience	11	25%

Students were then asked to assess their level of anxiety about public speaking. Although this quality was more formally measured in the PRPSA, it was interesting to ascertain participants' perceived level of public speaking apprehension. This information will later be compared to the more formal results of the PRPSA and the PRCA-24. Nine (9) respondents identified a high level of anxiety about public speaking, while 27 reported a moderate level, and 8 reported a low level of anxiety.

Table 10

*Distribution of Participants by Level of Perceived Public Speaking Anxiety*

Level of anxiety	Participants	Percent
High	9	20.5%
Moderate	27	61.4%
Low	8	18.2%

When asked how frequently they had been expected to deliver a speech as part of a class assignment in college, students were given the choices *frequently*, *sometimes*, and *almost never*. Students answering *frequently* totaled seven (7), or 16%. The majority of the respondents, totaling 25, chose *sometimes*. This was 57% of the total. Twelve (12) students replied that they have almost never had to deliver a speech thus far in college. This equated to 27% of the respondents.

Table 11

*Distribution of Participants by Frequency of Speaking Requirement*

Frequency of speech delivery	Participants	Percent
Frequently	7	16%
Sometimes	25	57%
Almost never	12	27%

The final question on the supplemental survey inquired how the students perceived their past attempts with public speaking. Ten (10) students had a negative perception of their performance in past speeches, equating to 23% of the total population. The other 34 students had a positive perception of their performance, totaling 77% of the total.

Table 12

*Distribution of Participants by Perception of Past Speech Performance*

Perception of past speech delivery	Participants	Percent
Positive perception	34	77%
Negative perception	10	23%

**Group Work**

When asked how frequently students were expected to work in groups as part of a class assignment in college, students were given the option to choose *frequently*, *sometimes*, or *almost never*.

Table 13

*Distribution of Participants by Frequency of Group Assignments in College*

Frequency	Participants	Percent
Frequently	27	61%
Sometimes	16	36%
Almost never	1	2%

When asked if they like working in groups, students were prompted to answer simply with *yes* or *no*. Seventy-five percent (75%) answered in the affirmative, and the rest (25%) responded that they did not like working in groups.

Table 14

*Distribution of Students' Preference for Working in Groups*

Preference for groups	Participants	Percent
Like	33	75%
Do not like	11	25%

Respondents were asked to identify the biggest obstacle that they have to overcome when working in groups. Responses were coded and like categories were consolidated. Although the question prompted students to identify their biggest obstacle, some respondents offered more than one answer. In such cases, the first response was used. Most frequently (36%), students cited difficulties in communicating with others as the biggest obstacle in group work. Uneven distribution of workload was identified as the second biggest (27%) obstacle to overcome. Scheduling challenges were identified by 18% of respondents. Trusting others and their work quality was a major obstacle for 11% of students. It was interesting to note that two students (5%) were concerned about not being helpful or smart enough to contribute to group work, and one student (2%) did not encounter any obstacles with group work.

Table 15

*Distribution of Students' Obstacles When Working in Groups*

Biggest Obstacle	Participants	Percent
Difficulties with communication	16	36%
Distribution of workload	12	27%
Scheduling	8	18%
Trusting other members'/ work quality	5	11%
Not feeling helpful/smart enough	2	5%
No obstacles	1	2%

Students were asked if they were currently employed and, if so, were they required to give prepared speeches or work in small groups as part of their job. Fourteen (14) students were not employed, while 27 worked part-time and three (3) worked full-time. Of the part-time workers, four (4) were required to give prepared speeches while 23 were not. From this same group of part-timers, it was reported that 11 were required to work in groups, while 16 did not. Of the three (3) full-time employees, two (2) were required to deliver speeches and work in groups while one (1) full-timer was not required to do either.

Table 16

*Distribution of Employment Status and Requirements to Deliver Speeches and Work in Groups*

Employment status	Deliver speeches?		Work in Groups?	
	Yes	No	Yes	No
Full-time (n=3)	2 (67%)	1 (33%)	2 (67%)	1 (33%)
Part-time (n=27)	4 (15%)	23 (85%)	11 (41%)	16 (59%)
Not employed (n=14)	--	--	--	--

The final item on the pre-PRCA-24 supplemental survey first informed the students that they were going to be required to work in groups to prepare a speech. Students were asked if they anticipated having a positive experience with the assignment. Forty-two (42) students anticipated having a positive experience while two (2) did not.

Table 17

*Distribution of Students' Perception of Positive Experience with the Group Speech Assignment*

Perception of group experience	Participants	Percent
Positive perception	42	95%
Negative perception	2	5%

**PRPSA**

The PRPSA was distributed two times during the semester. Scores on this instrument could range from 34 to 170. Students were aware of this range to assist them when computing their scores. In addition to students self-calculating their scores on the PRPSA, all scores were reviewed for accuracy. Numerical scores were then translated to a category to determine if students had a high, moderate, or low level of public speaking anxiety. A score of 132 or higher on the PRPSA means that students have a high level of anxiety. Moderate anxiety is within a range of 98 to 131. The low anxiety range is 98 or less. The median between the highest and lowest possible scores is 102 for the PRPSA.

The first distribution of the PRPSA took place on the first day of class, after students consented to participating in the study. In the interest of clarity, this first distribution of the instrument will be referred to as the pre-PRPSA for the purpose of



distinguishing it from the second distribution in this study. Scores on this study's pre-PRPSA ranged from 66 to 161, with a mean of 104. The median score was 102, the mode was 66, and the standard deviation was 25.25.

Seven (7) students, or 16% scored in the high anxiety range of 132 or higher on the pre-PRPSA. Nineteen (19) students, or 43%, scored in the moderate anxiety range of 98 to 131. Eighteen (18) students, or 41%, scored in the low anxiety range of 98 or less.

Table 18

*Distribution of Pre-PRPSA Scores Based on Anxiety Level*

Level of anxiety	Participants	Percent
High	7	16%
Moderate	19	43%
Low	18	41%

The second distribution of the PRPSA was on the last day of the course. This tool will be referred to as the post-PRPSA for clarity in this study. Scores on the post-PRPSA ranged from 39 to 152, with a mean of 92. The median score was 91, the mode was 87, and the standard deviation was 24.48.

Three (3) students, or 7%, scored in the high anxiety range of 132 or higher on the post-PRPSA. Sixteen (16) students, or 36%, scored in the moderate anxiety range of 98 to 131. Twenty-five (25) students, or 57%, scored in the low anxiety range of 98 or less.

Table 19

*Distribution of Post-PRPSA Scores Based on Anxiety Level*

Level of anxiety	Participants	Percent
High	3	7%
Moderate	16	36%
Low	25	57%

When comparing the pre- and post-PRPSA scores, 33 students realized a decrease in public speaking anxiety from the beginning to the end of the semester. This equated to 75% of all respondents. Ten (10) students, or 23%, realized an increase in their level of public speaking anxiety. One (1) student (2%) saw no change in anxiety. The average change from the pre-PRPSA to the post-PRPSA was 12.66 points. The score changes ranged from a decrease in anxiety of 54 points to an increase in anxiety of 21 points.

Table 20

*Distribution of Participants by Change in Public Speaking Anxiety*

Change in public speaking anxiety	Participants	Percent
Decrease in anxiety	33	75%
Increase in anxiety	10	23%
No change in anxiety	1	2%

**PRCA-24**

The PRCA-24 is an instrument that is used to measure apprehension across four communication subcontexts: group discussions, meetings, interpersonal conversations, and public speaking. These scores can range from six to 30, and any subcontext scores above 18 indicates some level of apprehension in that particular subcontext. When totaling the subcontext scores, an overall communication apprehension score is then calculated, which translates into a level of general communication apprehension. Similar to the PRPSA, levels can be low, moderate, or high. Scores between 24 and 55 represent a low level of communication apprehension. If the respondent's score is between 55 and 83, they have a moderate level of communication apprehension. Scores between 83 and 120 indicate a high level of communication apprehension.

The PRCA-24 was distributed before students were assigned a group speech assignment, and again after all students had completed the assignment. For the purpose of this study, the former distribution of the instrument will be referred to as the pre-PRCA and the latter will be referred to as the post-PRCA. It should be noted that students completed the post-PRCA before receiving individual grades for the assignment. The median between the highest and lowest possible scores is 72 for the PRCA-24. Scores on this study's pre-PRCA-24 ranged from 24 to 100, with a mean of 63. The median score was 60, the mode was 57, and the standard deviation was 18.37.

Eight (8) students, or 18% scored in the high anxiety range of 83 to 120. Twenty-two (22) students, or 50%, scored in the moderate anxiety range of 55 to 83. Fourteen (14) students, or 32%, scored in the low anxiety range of 24 to 55.

Table 21

*Distribution of Pre-PRCA-24 Scores Based on Level of Communication Apprehension*

Level of communication apprehension	Participants	Percent
High	8	18%
Moderate	22	50%
Low	14	32%

The second distribution of the PRCA-24 occurred after the group speech assignment was completed. This tool will be referred to as the post-PRCA for the purpose of this study. Scores on the post-PRCA ranged from 27 to 102, with a mean of 61. The median score was 59, the mode was 74, and the standard deviation was 18.67.

Five (5) students, or 11%, scored in the high communication apprehension range of 83 to 120 on the post-PRCA. Twenty-one (21) students, or 48%, scored in the

moderate communication apprehension range of 55 to 83. Eighteen (18) students, or 41%, scored in the low communication apprehension range of 24 to 55.

Table 22

*Distribution of Post-PRCA Scores Based on Level of Communication Apprehension*

Level of communication apprehension	Participants	Percent
High (83 – 120 points)	5	11%
Moderate (55 – 83 points)	21	48%
Low (24 – 55 points)	18	41%

Twenty-two (22) students realized a decrease in CA as measured by the PRCA-24. Nineteen (19) students realized an increase in CA. Three (3) students reported no change in CA. The average change in communication apprehension from the pre to post PRCA-24 was a decrease of 2.25 points. Half of the students overall had a favorable improvement with regard to communication apprehension from the beginning of the group assignment to the end, yet the other half realized no change or even increased their level of communication apprehension.

Table 23

*Distribution of Participants by Change in Communication Apprehension*

Change in communication apprehension	Participants	Percent
Decrease in CA	22	50%
Increase in CA	19	43%
No change in CA	3	7%

The four areas of potential change in communication apprehension were in group discussion, meetings, interpersonal conversations, and public speaking. The average

change in group discussion communication apprehension scores from pre to post-PRCAs was .32 points. On average, students lowered their communication apprehension during group discussion slightly. The average change from the pre to post meetings score was .55, indicating that students' communication apprehension with meetings decreased slightly. The average change from pre to post interpersonal conversation scores was .45. This represents a slight decrease in student's communication apprehension when engaging in conversation with one or more individuals. The most significant difference in subcontext scores was the change from pre to post-PRCA public speaking scores, which represents an average change of .98 points.

From the beginning of the group assignment to the end, students lowered their communication apprehension by more than 2.25 points, with the most favorable reduction in public speaking apprehension accounting for 44% of the overall change. Students' communication apprehension when engaging in interpersonal conversations improved by 20%; meetings improved 22%; groups improved by 14%.

Table 24

*Distribution of Change in Communication Apprehension by Subcontext of the PRCA-24*

Change in CA by subcontext	Change	Percent of overall change
Group discussion	.32	14%
Meetings	.55	22%
Interpersonal conversations	.45	20%
Public speaking	.98	44%

## Power

Power analysis was used to determine the power for each of the variables that would be used in crosstabulations. Although it was not necessary to determine power after establishing significant relationships between variables, it was interesting to determine if any variable had a power of 80% percent or more suggesting that it could be significant. All power analyses were for large effects.

This test verified that all variables which did not prove significant in the crosstabulations and did not have a power of 80% (as was the cases with all variables) were certainly not significant based on the number of subjects studied. Cohen (1977) would suggest a larger population for study if significance was to be identified. However, regardless of the power level, the crosstabulations that did prove significant, which will be discussed in the following section, did not require power analysis.

Table 25

### *Variables and Their Corresponding Power*

Variable	Power
Gender	60%
Age	60%
Semesters completed	<42%
Roommates	<42%
Reason for section choice	<42%
Extracurricular activities	<42%
Prior public speaking course	60%
Perceived public speaking anxiety	44%
Frequency of speaking opportunities	44%
Perception of public speaking performance	60%

## **Crosstabulations**

After establishing the distribution of each of the demographic variables and the test scores, the next step was to look for any relationships between these variables. Crosstabulation analysis was performed to determine relationships between the demographic information provided on the supplemental surveys and the scores on each version of the PRPSA and PRCA-24. Using a significance level of  $p < .05$ , Pearson's chi-square test revealed 14 significant relationships between these variables. This means that the relationships that were found to have less than a .05  $p$  value had less than a 5% chance that the connection between the variables was the result of chance. Power analyses were conducted for each of the significant relationships and, although not one of the ten significant relationships proved to have at least 80% power, the chi square results were enough to prove their significance. These relationships are identified below, with further consideration given to each pairing.

### **Age and Pre-PRCA Interpersonal Score**

Students were asked to select from two age groups, *18 to 24* or *25+*. Three (3) respondents were in the 25+ age category. Their scores on the interpersonal portion of the pre-PRCA were 13, 21, and 17. The average of these scores were two (2) points higher than the overall mean in that category. This relationship resulted in a significance level of  $p = .015$ , however this represents only a small portion of the total participants.

### **Semesters Completed and Pre-PRCA Group Discussion Score**

This relationship resulted in a significance level of  $p = .013$ . Students were asked to identify how many semesters (excluding winter and summer sessions) that they had completed thus far in college. The 20 students that had two completed two semesters

scored an average of 13.4 points on the group discussion portion of the pre-PRCA. This is .2 points higher than the mean of the total sample, which was 13.2. The 11 students that had three or four semesters completed scored an average of 12.4 points, or .8 points lower than the average. The seven students that had 5-6 semesters completed scored an average of 12.4, or .8 points lower than the average. The six students that had 7 or more semesters completed scored an average of 15, or 1.8 points higher than the average.

Table 24 shows how these scores are dispersed around the overall mean based on number of semesters completed.

Table 26

*Distribution of Semesters Completed and Pre-PRCA Group Discussion Scores in Relation to Overall Mean*

Semesters completed	Average score in pre group discussion	< mean pre group discussion	> mean pre group discussion	= mean pre group discussion
2 (n=20)	13.4	8	8	4
3-4 (n=11)	12.4	4	3	4
5-6 (n=7)	12.4	4	3	0
7+ (n=6)	15	2	4	0
<b>TOTAL</b>		18	18	8

### **Semesters Completed and Pre-PRCA Meetings Score**

This relationship resulted in a significance level of  $p = .034$ . The 20 students that had two completed two semesters scored an average of 15.3 points on the meetings portion of the pre-PRCA. This is equal to the mean of the total sample, which was also 15.3. The 11 students that had three or four semesters completed scored an average of 14.8 points, or .5 points lower than the overall average. The seven students that had 5-6



semesters completed scored an average of 14.4, or .9 points lower than the average. The six students that had 7 or more semesters completed scored an average of 17, or 1.7 points higher than the average. Table 25 shows how these scores are dispersed around the overall mean based on number of semesters completed.

Table 27

*Semesters Completed and Pre-PRCA Meetings Score*

Semesters completed	Average	< mean pre meetings	> mean pre meetings	= mean pre meetings
2 (n=20)	15.3	11	8	1
3-4 (n=11)	14.8	6	5	0
5-6 (n=7)	14.4	4	3	0
7+ (n=6)	17.0	3	3	0
<b>TOTAL</b>		24	19	1

**Semesters Completed and Pre-PRCA Interpersonal Score**

This relationship resulted in a significance level of  $p = .022$ . The 20 students that had two completed two semesters scored an average of 14.7 points on the interpersonal portion of the pre-PRCA. This is .2 points higher than the mean of the total sample, which was 14.5. The 11 students that had three or four semesters completed scored an average of 13.8 points, or .7 points lower than the overall average. The seven students that had 5-6 semesters completed scored an average of 12.9, or 1.6 points lower than the average. The six students that had 7 or more semesters completed scored an average of 17.3, or 2.8 points higher than the average. Table 26 shows how these scores are dispersed around the overall mean based on number of semesters completed.

Table 28

*Semesters Completed and Pre-PRCA Interpersonal Score*

Semesters completed	Average	< mean pre interpersonal	> mean pre interpersonal	= mean pre interpersonal
2 (n=20)	14.7	12	8	0
3-4 (n=11)	13.8	6	5	0
5-6 (n=7)	12.9	4	3	0
7+ (n=6)	17.3	3	3	0
TOTAL		25	19	0

In each of the three significant relationships associated with semesters completed, the group consisting of participants with seven or more semesters completed had the highest average in comparison to their less academically seasoned classmates. In the group discussion context, this category of students scored 1.6 points higher than the next category. In the meetings context, the difference was 1.7 points. In the interpersonal context, the difference was 2.6 points higher than the next category of semesters completed. In all three contexts, students with five to six semesters of college completed had the lowest average score amongst their classmates.

Scores on the four subcontexts of the PRCA-24 can range from a low of six (6) to a high of 30. According to its developer, any score higher than 18 indicates some degree of communication apprehension in that sub context. However, unlike the PRCA-24 overall score, the score for the subcontexts were not divided into low, moderate and high apprehension. Conversely, when asked to define their perceived level of public speaking anxiety on the supplemental survey, student chose from low, moderate, or high anxiety. Therefore the two variables are not being compared using exact standards. However, there is value in this data in that the information indicates a strong relationship between

students' perceived public speaking anxiety and their actual degree of communication apprehension as measured on three of the four subcontexts of the pre-PRCA.

**Perceived Public Speaking Anxiety and Pre-PRCA Group Score**

This relationship resulted in a significance level of  $p = .004$ . Those nine (9) students who perceived themselves as having a high level of public speaking anxiety scored an average of 17 on the pre-PRCA group context. The 27 students who perceived themselves as having a moderate level of anxiety scored an average of 12.7. on the pre-PRCA group discussion context. The eight (8) students who perceived themselves as having a low level of anxiety scored an average of 10.4 in the pre group context.

Table 29

*Distribution of Perceived Public Speaking Anxiety and Pre-PRCA Group Discussion Subcontext Scores*

Perceived Public Speaking Anxiety	Total	Average on Pre-PRCA group discussion score
High	9	17
Moderate	27	12.7
Low	8	10.4

There were only four (4) students who scored higher than 18 on the pre-PRCA group discussion context. According to McCroskey's interpretation, these students are considered to have some level of communication apprehension. Of those four (4) students who could be identified as having some degree of apprehension as per the PRCA-24, three (3) reported a high level of perceived public speaking anxiety and one (1) student reported a moderate level of perceived anxiety.

### **Perceived Public Speaking Anxiety and Pre-PRCA Meeting Score**

This relationship resulted in a significance level of  $p = .015$ . Those nine (9) students who perceived themselves as having a high level of anxiety scored an average of 20.9 on the pre-PRCA meeting context. The 27 students who perceived themselves as having a moderate level of anxiety scored an average of 14.7. on the pre-PRCA meeting context. The eight (8) students who perceived themselves as having a low level of anxiety scored an average of 10.9 in the pre-PRCA meeting context.

Table 30

*Distribution of Perceived Public Speaking Anxiety and Pre-PRCA Meeting Subcontext Scores*

Perceived Public Speaking Anxiety	Total	Average Pre-PRCA Meeting Score
High	9	20.9
Moderate	27	14.7
Low	8	10.9

There were 11 students who scored higher than 18 on the pre-PRCA meeting context. Of the 11 who could be identified as having some degree of apprehension as per the PRCA, six (6) reported a high level of perceived communication anxiety. The other five (5) reported a moderate level of anxiety.

### **Perceived Public Speaking Anxiety and Pre-PRCA Public Speaking Score**

This relationship resulted in a significance level of  $p = .005$ . Those nine (9) students who perceived themselves as having a high level of anxiety scored an average of 25.4 on the pre-PRCA public speaking context. The 27 students who perceived themselves as having a moderate level of anxiety scored an average of 20.1 on the pre-PRCA public speaking context. The eight (8) students who perceived themselves as

having a low level of anxiety scored an average of 14.3 in the pre-PRCA public speaking context.

Table 31

*Distribution of Perceived Public Speaking Anxiety and Pre-PRCA Public Speaking Subcontext Scores*

Perceived Public Speaking Anxiety	Total	Average Pre-PRCA Public Speaking Score
High	9	25.4
Moderate	27	20.1
Low	8	14.3

There were 28 students who scored higher than 18 on the pre-PRCA public speaking context. Of the 28 who could be identified as having some degree of apprehension as per the PRCA, eight (8) reported a high level of perceived communication anxiety. Nineteen (19) reported a moderate level of perceived anxiety. One (1) student reported a low level of perceived apprehension. It is also worth noting that the average scores for the pre-PRCA public speaking context were substantially higher than that of any other subcontext that was determined to have a significant relationship with perceived CA.

Table 32

*Distribution of Perceived Public Speaking Anxiety and Comparison of Average of Three Significant Subcontexts of the Pre-PRCA*

Perceived Public Speaking Anxiety	Pre-PRCA Group Discussion Average	Pre-PRCA Meetings Average	Pre-PRCA Public Speaking Average
High (n=9)	17	20.9	25.4
Moderate (n=27)	12.7	14.7	20.1
Low (n=8)	10.4	10.9	14.3

### **Frequency of Group Work in College and Pre-PRCA Meeting Score**

Because only one student responded *almost never* to the question about experience with group work in college, it was decided that this was not a strong variable with which to crosstabulate scores on either instrument. Nevertheless, these relationships and their significance levels include:

1. Frequency of group work in college and pre-PRCA meeting score: This relationship resulted in a significance level of  $p = .026$ .
2. Frequency of group work in college and pre-PRCA interpersonal score: This relationship resulted in a significance level of  $p = .002$ .
3. Frequency of group work in college and pre-PRCA public speaking score: This relationship resulted in a significance level of  $p = .013$ .

### **Employment Status and Pre-PRCA Interpersonal Score**

This relationship resulted in a significance level of  $p = .013$ . Those 27 students who reported working part-time scored an average of 14.04 on the pre-PRCA interpersonal subcontext. The 14 students who were not employed scored an average of 15.36 on the pre-PRCA interpersonal subcontext. It is interesting to note that students holding part-time jobs scored an average of 1.32 points lower on the pre-PRCA interpersonal subcontext than students who were not employed. However, there was minimal difference in scores between students working full-time (15.33) and unemployed students (15.36).

Table 33

*Distribution of Employment Status and Pre-PRCA Interpersonal Subcontext Scores*

Employment	Total	Average Pre-PRCA Interpersonal Score
Full time	3	15.33
Part time	27	14.04
Not employed	14	15.36

Students enrolled in full-time programs carry a course load of 12 to 18 credits.

Because only one student was enrolled in fewer than 12 credits, it was decided that number of credits was not a strong variable with which to crosstabulate scores on either instrument. Nevertheless, these relationships and their significance levels include

1. Credits and pre-PRCA interpersonal score: This relationship resulted in a significance level of  $p = .003$ .
2. Credits and post-PRCA group discussion score: This relationship resulted in a significance level of  $p = .013$ .
3. Credits and post-PRPSA score: This relationship resulted in a significance level of  $p = .047$ .

**T-Tests to Compare Means of PRPSA and PRCA-24**

A t-test involves the statistical examination of two population means to determine if there is a significant difference. In this study, t-tests were used to measure the results of the pre-PRPSA and post-PRPSA as well as the pre-PRCA-24 and the post-PRCA-24. The results of the t-tests indicated that it is statistically improbable that the results are random. The power for these t-tests was 99% for both large and medium effects.

Paired-sample two-tail tests were conducted to compare test scores from the pre-PRPSA and the post-PRPSA instruments as well as the test scores from the pre-PRCA-24 and the post-PRCA-24. There was a significant difference in pre-PRPSA scores (M=104.41, SD=25.25) and post-PRPSA scores (M=91.75, SD=24.48);  $t = 5.34$ . The observed difference between the sample means (104.41 – 91.75) is convincing enough say that the pre-PRPSA and the post-PRPSA scores differ significantly. (See Table 38) These results suggest that PRPSA scores really are impacted by experience in a public speaking course. Specifically, the results of the t-test suggest strong evidence that the experience in COM-290 improves students' level of public speaking anxiety as measured by the PRPSA.

Table 34

*PRPSA t-Test: Paired Two Sample for Means*

	Variable 1	Variable 2
Mean	104.4091	91.75
Variance	637.4567	599.2151
Observations	44	44
Pearson Correlation	0.800787	
Hypothesized Mean Difference	0	
Df	43	
t Stat	5.344731	
P(T<=t) one-tail	1.63E-06	
t Critical one-tail	1.681071	
P(T<=t) two-tail	3.25E-06	
t Critical two-tail	2.016692	

However, there was not a significant difference in pre-PRCA-24 scores (M=63.07, SD=18.37) and post-PRCA-24 scores (M=60.82, SD=18.67);  $t = 1.44$ . The



observed difference between the sample means (63.07 – 60.82) was not convincing enough to say that the pre-PRCA and the post-PRCA scores differ significantly. (See Table 39) These results suggest that PRCA-24 scores were not impacted by experience in group work. Specifically, the results of the t-test suggest strong evidence that the experience with a group assignment in COM-290 does not necessarily improve students' level of communication apprehension as measured by the PRCA-24.

Table 35

*PRCA-24 t-Test: Paired Two Sample for Means*

	Variable 1	Variable 2
Mean	63.06818	60.81818
Variance	337.5069	348.6173
Observations	44	44
Pearson Correlation	0.844459	
Hypothesized Mean Difference	0	
Df	43	
t Stat	1.44421	
P(T<=t) one-tail	0.077964	
t Critical one-tail	1.681071	
P(T<=t) two-tail	0.155927	
t Critical two-tail	2.016692	

## Discussion

Gender was not related to public speaking anxiety or communication apprehension. The subjects in this study were divided almost equally (24 males and 20 females), yet there was no significant difference in their results.

Because only three (3) students were in the 25+ age category, it was decided that this would not be a demographic worth exploring further. However, the results can be

used to predict how college students of traditional age might respond to public speaking and interpersonal communication, given that 93% of students in this study were between 18 and 24 years of age.

By extension, with 45% of the total population having completed two semesters of courses at the time of this study, there may be some explanation of how sophomores in particular respond to public speaking anxiety and communication apprehension. Because sophomores typically have not yet had internships or exposure to professional work environments, a study to explore the significance of such experience may benefit institutions in developing internship programs at an earlier point in students' academic careers. In addition, because seniors comprised 30% of the participant population, it would be interesting to determine why these students are delaying taking a 200-level course. Perhaps these students are particularly anxious communicators, which would impact the relationship between semesters completed and communication apprehension.

Because only one (1) student respondent was enrolled part-time, it was decided that enrollment status would not be a worthwhile demographic to explore. While it may seem that employment would be the primary reason why students attend college on a part-time basis, there could be many reasons why students choose this status. This is an aspect that could be explored in a future study.

With more than half of the respondents residing on campus with at least one roommate, it would be interesting to further explore the significance of residential college living arrangements and communication apprehension. Does regular exposure to others in a residential setting help students improve comfort with communication? The number of roommates could have impact on students' level of apprehension as well. However,

within the parameters of this study, it was determined that there was no significant relationship between residence and communication apprehension.

The students' reported reasons for selecting a particular section of COM-290 proved to be due to schedule constraints. An overwhelming 84% of students' responses identified some type of response related to time or schedule as one of the primary reasons for choosing their section of the course. It was helpful to know that most students did not enroll in their section of COM-290 because of a comfort they felt with the professor or friends in their class. Therefore we can assume that the sample was not necessarily expecting to feel an enhanced level of comfort due to the other people in the classroom.

There was no significance found between the number of extracurricular activities students participated in and their public speaking anxiety or communication apprehension. This was surprising in that one would expect students who were more outgoing to be more comfortable with interpersonal communication. It would be interesting to further explore the relationship between participation in extracurricular activities and communication apprehension by identifying those non-academic environments that enhance students' communication competencies.

The majority of students (75%) had no prior experience with public speaking, providing a largely inexperienced population from which to gather information about anxiety for the purposes of this study. Although it was not within the scope of this research, it would be worth studying the other 25% of students with regard to how they expected to perform in COM-290 based on their former experiences. That is, did students who had former training in public speaking also report lower levels of anxiety?

With most disciplines requiring only one course in speech communication, such information could be helpful when deciding on future curriculum enhancements.

The majority of students (73%) report having to deliver a speech at least occasionally in other classes. Seventy-seven percent (77%) of students also report having a positive perception of their performance on these speeches. Further exploration into student perception of performance in speeches delivered specifically for public speaking courses versus speeches delivered for other courses could be worthwhile. Do students have a higher expectation of their performance in public speaking classrooms?

A comparison of the reported level of perceived speech anxiety and the actual anxiety level as determined by the pre-PRPSA indicates that the number of students with reported and actual high anxiety was similar. Nine (9) students perceived themselves as being highly anxious, while seven (7) actually tested high in anxiety level. Perhaps more telling are the students who perceived themselves as having low speech anxiety. Only eight (8) students perceived themselves as low in anxiety while 18 students actually tested low in anxiety on the pre-PRPSA. Is there some degree of “self-fulfilling prophecy” for the high anxiety subjects? With regard to the low-anxiety subjects, do these students overestimate their level of anxiety, identifying themselves higher than they actually are, so as not to appear overconfident?

Certainly a reduction of 12 points in the overall means from the pre to the post-PRPSA distributions was considerable. A t-test validated this observation. By the end of the semester, the majority of students (75%) decreased in public speaking anxiety. It is not clear whether the decrease was due to the speaking assignments or simply the time spent in the environment. However, it would be worthwhile to seek an explanation for

the 25% of students whose public speaking anxiety actually increased or remained unchanged. What was it about the experience that negatively impacted their level of anxiety? Determining and omitting such a variable should be a priority for instructors of public speaking.

The reduction in the mean from the pre to the post-PRCA-24 was not as dramatic as that of the PRPSA. The mean was a decrease of 2.25 points, from 63.07 on the pre-PRCA-24 to 60.82 on the post-PRCA-24. Results of a t-test suggest that this was not a significant change in communication apprehension and could not be attributed to the students' experience with group work during the semester. However, it was significant to learn that 17 (77%) of the 22 students that decreased in communication apprehension as indicated by the PRCA-24 also decreased in public speaking anxiety as per the PRPSA. Unlike the scores on the PRPSA, the changes in the three ranges of communication apprehension measured by the PRCA-24 were not startling. A decrease in communication apprehension as measured by the PRCA-24 impacted 50% of the students while the other half increased or stayed the same. As is the case with the PRPSA, those students who increased in their level of communication apprehension during the group speech assignment should be considered further. Instructors of public speaking would benefit from knowing how the intervention of a group assignment could possibly create a negative impact on such a large portion of students. Further, it may be necessary to teach students the appropriate techniques for effective group work rather than assume that students know how to behave in this setting.

With regard to group work, 61% of students report frequent experience with this learning arrangement in their courses, while another 36% report sometimes working in

groups. Clearly students are required to manage themselves in group learning environments. How capable they consider themselves to succeed in this arrangement could be explored further. Although 75% of students report that they like working in groups, all but one (1) student was able to identify an obstacle that they have experienced in group work. Among these obstacles, difficulty communicating with group members and uneven distribution of workload were the most frequently identified challenges. These are two areas of focus for educators seeking to improve instruction on group work.

It is interesting to note that 95% of students anticipated a positive experience with the group speech project they were assigned in COM-290. Regardless of past experiences, students can still be optimistic about the possibility of a positive group experience. Like public speaking, group work takes practice to improve. Students may be willing to embrace the challenges of group work if they know that there is a potential for a positive experience.

## **Chapter 5**

### **Limitations and Future Research**

In the interest of best educational practice, it is important to understand the possible impact that group assignments can have on students' overall experience in the classroom. While group work can benefit any learning environment, it is particularly valuable to know how collaboration with fellow classmates can affect students in public speaking courses as these are typically stressful environments for many students. Independent exercises in public speaking can help students lower their levels of anxiety simply because such experience provides practice for the student. Students working in groups to develop and deliver speeches may help students feel both an increased sense of comfort with public speaking as well as a sense of belongingness to the group that might ease their communication apprehension.

#### **Limitations**

There were some limitations in this study that should be recognized. These limitations are related to subjects' confusion with seemingly common terms, the probability that mere exposure to public speaking and group work will positively impact student performance in these skills, and the bias that comes from being an authority figure to the participants in the study.

Using public speaking anxiety and communication apprehension synonymously could cause interpretation issues for respondents. For example, one question on the PRPSA supplemental survey asked students to identify their perceived level of public speaking anxiety. The crosstabulations identified three significant relationships between perceived public speaking anxiety and three of the four subcontexts on the PRCA-24.

However, the PRCA-24 measures communication apprehension, and students could interpret these terms differently. A student might consider anxiety to be debilitating while conversely regarding apprehension as a normal, expected state when communicating in unfamiliar contexts such as groups. Another example of potentially confusing terms could have been the word *positive*. One student's impression of a positive experience could be quite different than another student's interpretation. Positive for one might be related to a favorable grade, while for another it might be a pleasant interpersonal experience with others.

It would be short-sighted to overlook the probability that students will naturally reduce their level of public speaking anxiety simply because they are better practiced by the end of the semester. The public speaking experience will not be as alien at the end of the semester as it was for many students at the beginning of the semester. There is often an element of fear associated with public speaking that can naturally decline as exposure increases.

A possible bias could result from knowing the research participants. Working with the students for 15 weeks and making assumptions about their abilities could cloud the judgment of the researcher who also serves as the instructor. Most data collected for this study was not subject to interpretation, so bias was eliminated as much as possible. Students were assigned subject codes to eliminate any bias that might arise from associating the student with their responses. All efforts were made to be cognizant of the assumptions and possible biases that may have come from my relationship with the class. However, bias can never be completely eliminated when you are familiar with the subjects.



## **Future Research**

I would recommend that future research further explore the possibility of a causal link between group work and a reduction in communication apprehension. This would help educators understand the possible benefits of incorporating group work in to all courses, and most especially those that address public speaking. Toward this end, future research should address the question “Does group work increase or decrease public speaking anxiety?” Using the PRCA-24, the researcher could ask “Does improvement in communication apprehension during the course of working in a group correlate with a reduction in overall public speaking anxiety?” Answering this question, while it may not show direct causation, can bring us closer to understanding the impact that group work has in a public speaking classroom.

Determining the reasons why students consider group work to be positive would assist the instructor in developing classroom assignments that require groups. This study indicated that 75% of students like working in groups. As with any subject, when educators know what their students enjoy, they have a better chance of gaining ‘buy-in’ by incorporating those aspects into assignments.

This study has already helped to pave the way for future research by establishing that there is a relationship between students’ perception of their public speaking anxiety and their actual scores on the pre-PRCA-24 subcontexts for group discussion, meetings, and public speaking. However, perception of students was not significant when compared to scores on the same instrument’s post scores.

The relationship between students’ perception of their public speaking anxiety and their scores on the pre-PRPSA scores did not prove to be significant. This is

particularly interesting because the supplemental survey and the pre-PRPSA were distributed at the same time, while the pre-PRCA-24 was distributed a month later and at the beginning stage of a group assignment. Could it be that the mere mention of group work is enough to raise the students' reported apprehension level?

By deploying pre and post tests for both the PRPSA and the PRCA-24, the study was able to show the degree of change in anxiety and communication apprehension. This is valuable in understanding the improvement in students' skills during the course of the semester. It will be valuable to study the results of these instruments in future semesters, especially if there are new instructional interventions employed with the intent of improving student apprehension. As in this study, instructors should arrange their interventions in such a way so as to improve the probability for causation between the intervention and the outcome.

While this research did identify some characteristics that may have a connection to communication apprehension, the data could not support a definitive link between students' experience with group work and a reduction in public speaking anxiety. Although causality could not be found, the data collected from this study will be used to further my personal understanding of students of public speaking as I work to develop strategies to help them overcome their discomfort at the podium.

When conducting future research, I will continue to use the PRPSA to evaluate levels of public speaking anxiety as it is a reliable tool. However, I will change the content of the supplemental survey to elicit more information about students' perceptions of their communication abilities. This effort can help illustrate if there is a relationship

between students' perceptions and the undesirable increase in public speaking anxiety reported by 23% of the respondents in this study.

With regard to the PRCA-24, it may prove beneficial to ask students about their perceptions of group work at the beginning of the semester rather than wait until the group assignment begins. Perhaps scores would be different if students were not on the verge of beginning a group assignment. These students could have been thinking about the stress associated with group work, causing them to rate themselves inaccurately. One might also explore the possibility that four weeks is not enough time to effectively create a change in students' perception of, or their ability with, group work. Future studies could extend the timeframe of group assignments to test the impact of this variable. Adjusting the assignment could also allow for more instructional time devoted to effective group interaction.

It has been my experience that students often have a negative perception of group work. Frequently students relate their dislike of group work to their inability to have sole control over the outcome of their work. However, only three (7%) of the students in this study scored higher than 18 on the section of the pre-PRCA-24 that measures communication apprehension with group discussion. This suggests a question for future study: Why do students verbally express a dislike for group work, yet when asked to report their perceptions on a survey, their responses about group work do not indicate a considerable level of apprehension? Perhaps students' consider it socially unacceptable to resist working with others, or at least they are not willing to commit to such dislike for collaboration on a survey?

In an effort to address the issue of persistence to graduation (Tinto, 1997) colleges could expand on the information collected in this study. A longitudinal study conducted over four to six years that addresses the possible impact that group work can have on persistence rates could be beneficial for colleges. If it can be shown that group work assigned in the classroom can enhance students' connectivity to their larger social context, colleges may have incentive to require collaborative work in their curricula.

### **Conclusion**

The communication instructor would benefit from understanding the possibility of group work impacting the experience of the public speaking student. That is, does group experience increase or decrease public speaking apprehension? Therefore, further research should be conducted to establish a causal relationship between the two variables. The current research can offer insight into the consideration of future research instruments in conducting such inquiry.

All educators can provide their students the opportunity to develop group skills in the classroom through group assignments. Because students often must work on group assignments outside of the classroom, members have the opportunity to meet in more social, less structured settings than would normally be the case in their classrooms. In this context, group work can take on a social dynamic. If effective, the students can realize a sense of belongingness that they might not have experienced had their courses never required group interaction. This connectivity may lead to higher self-confidence for the student and a stronger connection to the larger university context. However, for these ends to be met, group work would have to be the norm in the general college

curriculum rather than employed sporadically. That is, group work must be employed across the disciplines rather than just as part of communication courses.

Educators must be aware that, in a group activity such as the assignment in this study, participants are directed to accomplish a task that will ultimately be graded individually. Thereby, students may not believe that it is worthwhile to fully engage in group work. This is an unfortunate shortfall of assigning individual grades in a group assignment. Conversely, when students know that a group assignment will be awarded a group grade that is shared by every member of the group, they may be more inclined to contribute in group work in an effort to affect the final outcome. However, there is a concern that some students will not ‘pull their weight,’ as indicated by a considerable number of students responding to the PRCA-24 supplemental survey. While belongingness is a need for humans, connection to others should not be used as a strategy for self-promotion at the expense of others. Additionally, the impact that a negative group experience might have on the student should be understood when studying the effects of group work.

Abraham Maslow suggests a need for belongingness to effectively move toward self-actualization. This study suggests that the amount of time one is associated with a group will have an impact upon the degree to which they feel connected. In a study such as this that connects students for only a short period of time, it is difficult to tell if the participants had sufficient opportunity to establish the connection necessary for reduced apprehension. While many participants had a positive experience and a significant increase in comfort during the course of the semester, others may not have had enough time to realize that improvement. Maslow addresses belongingness, but does not indicate

how long it takes for an individual to be sufficiently impacted to effectively fulfill that human need. Nevertheless, with each group experience the student can potentially move closer to a sense of belongingness.

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## Appendix A Personal Report of Public Speaking Anxiety (PRPSA)

**Directions:** Below are 34 statements that people sometimes make about themselves. Please indicate whether or not you believe each statement applies to you by marking whether you:

**Strongly Disagree = 1   Disagree = 2   Neutral = 3   Agree = 4   Strongly Agree = 5**

- \_\_\_\_\_ 1. While preparing for giving a speech, I feel tense and nervous.
- \_\_\_\_\_ 2. I feel tense when I see the words “speech” and “public speech” on a course outline when studying.
- \_\_\_\_\_ 3. My thoughts become confused and jumbled when I am giving a speech.
- \_\_\_\_\_ 4. Right after giving a speech I feel that I have had a pleasant experience.
- \_\_\_\_\_ 5. I get anxious when I think about a speech coming up.
- \_\_\_\_\_ 6. I have no fear of giving a speech.
- \_\_\_\_\_ 7. Although I am nervous just before a speech, I soon settle down after starting and feel calm and comfortable.
- \_\_\_\_\_ 8. I look forward to giving a speech.
- \_\_\_\_\_ 9. When the instructor announces a speaking assignment in class, I can feel myself getting tense.
- \_\_\_\_\_ 10. My hands tremble when I am giving a speech.
- \_\_\_\_\_ 11. I feel relaxed while giving a speech.
- \_\_\_\_\_ 12. I enjoy preparing for a speech.
- \_\_\_\_\_ 13. I am in constant fear of forgetting what I prepared to say.
- \_\_\_\_\_ 14. I get anxious if someone asks me something about my topic that I don’t know.
- \_\_\_\_\_ 15. I face the prospect of giving a speech with confidence.
- \_\_\_\_\_ 16. I feel that I am in complete possession of myself while giving a speech.
- \_\_\_\_\_ 17. My mind is clear when giving a speech.
- \_\_\_\_\_ 18. I do not dread giving a speech.
- \_\_\_\_\_ 19. I perspire just before starting a speech.
- \_\_\_\_\_ 20. My heart beats very fast just as I start a speech.
- \_\_\_\_\_ 21. I experience considerable anxiety while sitting in the room just before my speech starts.
- \_\_\_\_\_ 22. Certain parts of my body feel very tense and rigid while giving a speech.

- \_\_\_\_\_23. Realizing that only a little time remains in a speech makes me very tense and anxious.
- \_\_\_\_\_24. While giving a speech, I know I can control my feelings of tension and stress.
- \_\_\_\_\_25. I breathe faster just before starting a speech.
- \_\_\_\_\_26. I feel comfortable and relaxed in the hour or so just before giving a speech.
- \_\_\_\_\_27. I do poorer on speeches because I am anxious.
- \_\_\_\_\_28. I feel anxious when the teacher announces the date of a speaking assignment.
- \_\_\_\_\_29. When I make a mistake while giving a speech, I find it hard to concentrate on the parts that follow.
- \_\_\_\_\_30. During an important speech I experience a feeling of helplessness building up inside me.
- \_\_\_\_\_31. I have trouble falling asleep the night before a speech.
- \_\_\_\_\_32. My heart beats very fast while I present a speech.
- \_\_\_\_\_33. I feel anxious while waiting to give my speech.
- \_\_\_\_\_34. While giving a speech, I get so nervous I forget facts I really know.

## Appendix B Personal Report of Communication Apprehension (PRCA-24)

DIRECTIONS: This instrument is composed of 24 statements concerning feelings about communicating with other people. Please indicate the degree to which each statement applies to you by circling whether you:

**Strongly Disagree = 1-SA**

**Disagree = 2-A**

**Neutral = 3-U**

**Agree = 4-D**

**Strongly Agree = 5-SD**

Work quickly, recording your first impression.

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



16. Ordinarily I am very calm and relaxed in conversations.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
17. While conversing with a new acquaintance, I feel very relaxed.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
18. I'm afraid to speak up in conversations.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
19. I have no fear of giving a speech.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
20. Certain parts of my body feel very tense and rigid while giving a speech.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
21. I feel relaxed while giving a speech.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
22. My thoughts become confused and jumbled when I am giving a speech.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
23. I face the prospect of giving a speech with confidence.  
1 - SA 2 - A 3 - U 4 - D 5 - SD
24. While giving a speech, I get so nervous I forget facts I really know.  
1 - SA 2 - A 3 - U 4 - D 5 - SD

## Appendix C Supplemental Survey to Accompany PRPSA

Student subject code \_\_\_\_\_

COM-290 Class section \_\_\_\_\_

Demographic information:

1. Gender (circle one):      Male              Female
2. Agegroup (circle one):      18 – 24              25+
3. How many fall and spring college semesters have you completed so far? Do not count summer or winter sessions.      \_\_\_\_\_
5. How many credits are you taking this semester?      \_\_\_\_\_
6. Residence during semester:      On campus              Off campus, with housemates  
At home with family
7. How many roommates, housemates, or family members do you live with?      \_\_\_\_\_

Please specify:

---

8. Why did you take this particular section of COM-290? Rank you top 3 answers, with 1 being the main reason.

\_\_\_\_ Class meeting time worked well with my school schedule

\_\_\_\_ Class meeting time worked well with my work schedule

\_\_\_\_ Class meeting time worked well with my athletic schedule

\_\_\_\_ This time of day is a productive time for me

\_\_\_\_ I prefer a class that meets this frequently each week (night class = one long meeting; afternoon class = two shorter meetings)

\_\_\_\_ I heard positive things about the professor

\_\_\_\_ I heard negative things about other professors teaching the course

\_\_\_\_ I didn't have a choice; it was the only section open

\_\_\_\_ My friends are in this class and I wanted to be with them

\_\_\_\_ My friends are in other section(s) and I wanted to avoid them

\_\_\_\_ Other (please explain)

9. List up to 4 extracurricular activities that you are involved with at Rider that require you to speak to groups of 10 or more people on occasion.

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Topic information:

1. Have you ever taken a course dedicated to public speaking, either in high school or college? (circle one)

Yes                      No

2. Assuming that everyone has some degree of public speaking anxiety, what level of anxiety would best describe your feelings about speaking in public, in general? (circle one)

Low anxiety                      moderate anxiety                      high anxiety

3. How frequently have you been expected to deliver a speech as part of a class assignment in college? (circle one)

Frequently                      Sometimes                      Almost never

4. Do you think you delivered the speech well? (circle one)

Yes                      No

Explain why/why not briefly

---

**Appendix D Supplemental Survey to Accompany PRCA-24**

Student subject code \_\_\_\_\_

COM-290 class section \_\_\_\_\_

1. How frequently have you been expected to work in groups as part of a class assignment in college? (circle one)

Frequently

Sometimes

Almost never

2. Do you like working in groups? (circle one)      Yes                      No

Explain why or why not?

---

3. What is the biggest obstacle for you to overcome when working in groups?

---

4. Are you currently employed? (circle one)

No, not employed

Yes, part-time

Yes, full-time

If yes, does your job require you to give prepared speeches? (circle one)      No      Yes

If yes, please explain:

---

If yes, does your current job require you to work in small groups? (circle one)      No      Yes

If yes, please explain:

---

5. The next assignment in this course will require that you work in groups to deliver a speech. Do you anticipate a positive experience with this assignment? (circle one)

Yes

No

Explain why

---

## Appendix E Informed Consent Form

I agree to participate in a study entitled "A Mixed Methods Study Exploring the Impact of Group Work on Reported Communication Apprehension for Business Students," which is being conducted by Cynthia Vieth, a doctoral candidate at Rowan University.

The purpose of this study is to evaluate the way students respond to communication apprehension when working alone and in small groups. The data collected in this study will be included as part of a doctoral dissertation.

I understand that I will be asked to express my feelings in writing about communication apprehension. As part of the coursework, I will be assigned to work both individually and as part of a small group on public speaking assignments. Although these assignments will be required, my participation in the study is not mandatory. The time allotted for exercises related to this study will not exceed the time regularly scheduled course time.

I understand that my responses will be kept confidential. I agree that any information obtained from this study may be used in any way thought best for publication or education, provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty.

If I have any questions or problems concerning my participation in this study, I may contact Cynthia Vieth at (908) 601-5277 or her faculty advisor, Dr. Michelle Kowalsky at [kowalsky@rowan.edu](mailto:kowalsky@rowan.edu).

Check one:

I agree to serve as a participant in this study. I am aware that there are no risks involved with my participation and that I am free to opt out at any time.

I choose not to participate in this study. I am aware that there will be no repercussions for choosing not to participate.

\_\_\_\_\_  
Participant Name (Please print)

Student subject code \_\_\_\_\_

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

*By signing this form, the participant understands and acknowledges all of the terms listed above, and the participant had chances to ask questions about the study.*

\_\_\_\_\_  
Signature of Investigator/or person explaining the form

\_\_\_\_\_  
Date