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Higher education leadership and communication apprehension reduction efficacy

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REDUCTION EFFICACY

by

Shane Puckett, B.A., M.A.

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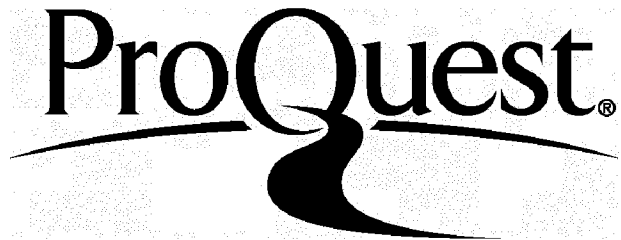
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by__Shane Puckett_____

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Efficacy

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Head of Department

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ABSTRACT

Universities use public speaking courses to reduce the communication

apprehension among the student population of the institution. Previous research connects

lower communication apprehension to higher university retention rate and higher student

success rates. However, a gap in current research does not explain if communication

apprehension reduction is as significant when a student enrolls in a public speaking

course taught online as opposed to a public speaking course taught in a traditional face-

to-face manner. The purpose of this study was to explore the efficacy of systematic

desensitization as it is used in public speaking courses online. This study set-out to

answer two research questions:

1. Does the technique of systematic desensitization significantly lower
   communication apprehension for students taking a public speaking course
   online compared to traditionally taught face-to-face courses?

2. Do students who choose online public speaking courses have a higher
   level of communication apprehension than those who choose the
   traditionally taught public speaking courses?

This study found that there were no significant differences in lowering

communication apprehension when comparing effects of systematic desensitization

methods from the public speaking courses taught online and those taught traditionally.

The study also found that there was no significant difference in levels of communication

apprehension for student populations which chose to enroll in the online public speaking
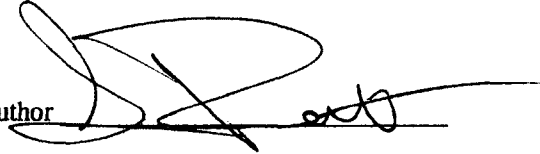
course when compared to the traditionally taught course. The benefits of offering public speaking to lower communication apprehension for students in a higher education setting are seen similarly in the online offerings as they are seen in the traditional courses.

APPROVAL FOR SCHOLARLY DISSEMINATION

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DEDICATION

The process of preforming and producing a dissertation is more than the lone efforts of the author. There are a multitude of people who made personal sacrifices to aid in this process. The first is Cassia Carmichael, whose love and patience made my life easier. Her support through this process was invaluable and immeasurable. For that, I will forever be indebted and grateful. I would also like to dedicate this to my mother, Eloise Puckett. Without her instilling a tenacity for education and a strong work ethic, I might not have made it through the long hours. Finally, to my friends, who loved and supported me through my multiple absences, I am incredibly thankful.

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CHAPTER 1

INTRODUCTION

As technological advances are made and individuals become comfortable and familiar using this technology, the more technology becomes interwoven in the fabric of society (Wrench & Punyanuant-Carter, 2007). Specifically in the academic world, more than ninety-six percent of the nation's higher education institutions offer some form of online learning opportunities (Ebersole, 2007). The use of online courses in post-secondary education is seen as critical to many institutions' long term strategy, which is to increase retention and growth (Allen & Seaman, 2010). Allen and Seaman (2011) reported the view of online education as a critical component to an institution's long-term strategy is growing. Institutions claiming that online education as a critical component to their long-term strategies have risen from 51% in 2009 to 65% in 2011. With the push to integrate coursework online, some questions about particular subjects might not have been addressed, specifically in the field of communication studies with courses like the basic public speaking course (Allen, 2006). This particular course has been used by universities to lower communication apprehension (Hoffman & Sprague, 1982).

Communication apprehension is seen as an individual's unique level of apprehension, "which results in a number of individual differences, such as the effectiveness of, amount of, and desire for, communication" (Byrne, Flood & Shanahan, 2012, p. 566). Communication apprehension is seen as the varied levels of anxiety and fear which increases due to methods of communication used, type of communication

1

participated in, and the length of time within the communication process (McCroskey, 1977a). There are two types of communication apprehension that the basic course tries to help alleviate and manage: trait apprehension and state apprehension (Behnke & Sawyer, 1998; Harris, Sawyer, & Behnke, 2006). It is known that the use of systematic desensitization in the basic public speaking course helps lower communication apprehension for those that suffer from it (Finn, Sawyer, & Schrodt, 2009; Glaser, 1981; Hoffman & Sprahue, 1982).

Communication apprehension has been identified by colleges and universities as a key component in student retention and student success (Ericson & Garner, 1992; McCroskey, Booth-Butterfield & Payne, 1989; Russ, 2012). McCroskey (2009) explains that the increased feelings of threat that communication apprehension evokes in the individual causes the individual to want to flee from that experience. The amount of uncertainty and the feeling of risk often cause a person to view these experiences as unsafe. Therefore, a high communication apprehensive student, who is not given help or treatment for his/her apprehension, will either perform poorly in these spaces or choose to leave these spaces. Without identification and help, university leadership understands that these students will perform worse in academics and have a high probability of dropping out (Ericson & Garner, 1992; McCroskey, 1977a; McCroskey et al., 1989).

Statement of the Problem

While claiming the ultimate source for the decisions being made might be more elusive, concerns of efficacy arise with the decision being made by higher educational leaders to increase online courses for the basic public speaking class (Allen, 2006; Linardopoulos, 2010). Is this decision to include the basic public speaking course as an

online course a hasty generalization or a sweeping generalization? Currently, the field of communication studies lacks evidence proving that methods used to teach a public speaking course online has any effect on communication apprehension levels of the student (Clark & Jones, 2001; Nicosia, 2005). Without this information, leaders who choose to place a public speaking course online might be placing their students with high communication apprehension at risk (Allen, 2006). Lotkowski, Robbins and Noeth (2004) explained that distancing students from the on-campus experience creates a sense of detachment from relationship building and learning.

> Sixty-two percent of academic leaders (defined as Chief Academic Officers, such as a Provost) believe that the learning outcomes of online education are the same or superior to those in traditional face-to-face education (Allen &Seaman, 2006), critics argue that because of intrinsic differences, online education cannot possibly replicate the learning that occurs in traditional face-to-face classrooms (Bejerano, 2008, p. 411).

Due to the importance of lowering communication apprehension through the use of a basic public speaking course, Bejerano (2008) raised questions of whether public speaking online courses are appropriate. "The rush to provide advances in technology, specifically online and distance learning, is in sharp contrast to institutional goals of retaining and graduating students" (Allen, 2006, p. 122).

Therefore, a gap of knowledge exists. Researchers do know that communication apprehension levels are key for student success (Ericson & Garner, 1992; McCroskey et al., 1989). Research in the field of communication studies also suggests that the methods designed to lower communication apprehension for students are successful in the

physical face-to-face basic public speaking classroom; specifically, that the technique of systematic desensitization is successful in lowering communication apprehension in the physical classroom (Rubin, Rubin & Jordan, 1997). Yet, research does explain "the online classroom limits the number of techniques and strategies that teachers use to educate and students use to learn" (Bejerano, 2008, p. 413). Research has no clear answer if communication apprehension levels of students are being positively or negatively affected by teaching the basic public speaking class online (Clark & Jones, 2001; Nicosia, 2005). Thusly, the problem lies with the unknown efficacy of the decision-making process to offer this particular course online.

Purpose of the Study

The purpose of this study was to examine the efficacy of lowering communication apprehension levels in a basic public speaking class taught online. Specifically, this study examined if there were any significant differences in lower apprehension levels between teaching an online or face-to-face basic public speaking course. Secondly, this study examined if there was an increased number of communication apprehensives who gravitate to these online basic public speaking courses, as opposed to taking them in person.

Research Questions

Research Question 1: Does the technique of systematic desensitization significantly lower communication apprehension for students taking public speaking courses online compared to traditionally taught face-to-face courses?

Research Question 2: Do students who choose online public speaking courses have a higher level of communication apprehension than those who choose the traditionally taught public speaking courses?

Significance of the Study

The importance of this study highlighted the assumption beneath each research question within the study. Therefore, the significance of this study was two-fold. Research was to identify if online public speaking courses were adversely affecting the student population by not significantly lowering communication apprehension. Bejerano (2008) discussed this concern as he examined educational leadership offering these types of classes in an online format. Secondly, if students were given the option to take a public speaking course online, this research was to identify if these university offerings were uniquely contributing to an 'at-risk' or a disadvantaged population (Allen, 2006).

These basic public speaking courses are important, as they satisfy both the university needs and student needs (Ericson & Gardner, 1992; McCroskey, 1977a; Russ, 2012). Since the 1970s, universities have understood the problems that communication apprehension causes the student in classes (McCroskey, 1977a, 1977b, 1980; Scott & Wheeless, 1977). McCroskey (1977a) explained how students with the same aptitudes for a course will perform significantly different academically due to their communication apprehension levels. McCroskey (1977a) further explained how communication apprehension affects teacher expectations and student attitudes towards learning. All of these aspects can jeopardize the education for the high communication apprehensive (Morreale & Pearson, 2008). And beyond the problems for the student, university leadership fundamentally understands the outcomes to the problems; when high

communication apprehension exists it hurts student performance and increases student attrition rates (Mehrley, 1984; Rubin, Graham, & Mignerey, 1990). This is to say that university leaders understand the importance to student success in the classroom and student retention rates by offering a basic public speaking course to lower communication apprehension. With high communication apprehension, it causes a lot of uncertainty for the sufferer (McCroskey, 1977a). "The development of helplessness occurs when regularity of expectations, either positive or negative, is not present" (McCroskey, 1983, p. 42). This concept of helplessness and learner negative expectations that McCroskey (1983) discussed was the increase of uncertainty in a situation. When a person has uncertainty, it decreases the attachment and the buy-in of the university; at a university level, this is the case for the high communication apprehensive student (Ericson & Garden, 1992; McCroskey et al., 1989). This uncertainty increased the reticence in high communication apprehensives (Hoffman & Sprague, 1982). This in turn led to higher drop-out rates for the institution (Ericson & Garden, 1992). In order to combat this uncertainty and communication apprehension, universities have tasked communication courses, specifically the basic public speaking courses, to help students manage the effects of communication apprehension or diminish the existence of this apprehension (Allen, 2006; McCroskey et al., 1989; Morreale & Pearson, 2008; Rubin, Rubin, & Jordan, 1997).

Since the 1960s, communication educators have been developing ways to diminish or remove communication apprehension from students (Finn et al., 2009; McCroskey, 1976; Rubin et al., 1997). Over the years, these educators have been able to successfully and significantly lower communication apprehension levels with specific

teaching methods, control of the environment, and access to specific activities (Adler, 1980; McCroskey, 1972; Neer, 1982; Robinson, 1997). Research explained how these aspects work and should be deployed in the physical classroom but not the online classroom (Linardopoulos, 2010). Literature suggests that university leadership might believe that the basic public speaking online courses has the same communication apprehension lowering effects as the physical courses (Clark & Jones, 2001). However, Allen (2006) and Bejerano (2008) suggested that without similarly significant reductions to lowering communication apprehension rates, universities could be under serving the student population and could be impacting the university's retention rates.

McCroskey (1977a) reported that anywhere from 15-20% of students who take the basic public speaking course self-identify as having high communication apprehension. Ryan and Xenos (2011) explained that people who have difficulties engaging in social communication in the real world prefer computer-mediated communication. Christensen (2012) reported that respondents felt more comfortable in sharing experiences and narratives in online settings. Hammick and Lee (2014) suggested that "virtual worlds led shy people to feel less fear in communication" (p. 307). However, Allen (2006) reports "on-line communication skills courses create even more difficulties for at-risk students" (p. 125). Furthermore, this at-risk population (i.e., first generation college student) has even higher needs for communication skill development because they often perceive the university as a hostile environment and lack support groups necessary for their college completion goals (Tinto, 2004).

Theoretical Framework

Derrida (2002) explained that if a person reflects on experience in general, what an individual cannot deny is that the experience is conditioned by time. Every experience takes place in the present. And in this present experience, there is the kernel or point of the now. The happenings and circumstances of the now is a kind of event or occurrence, different from every other now that an individual has ever experienced (Derrida, 2002). Yet, also in the present, the individual remembers the recent past, and thus anticipates what is about to happen. The memory and the anticipation coexist in the concept of repeatability (Derrida, 2002). Because what the individual experiences now can be immediately recalled, it is repeatable and that repeatability, therefore, motivates the individual to anticipate the same thing happening over and over again.

"It is destined, that is, to reproduce impassively, imperceptibly, without organ or organicity, the received commands. In a state of anaesthesis, it would obey or command a calculable program without affect or auto-affection, like an indifferent automation" (Derrida, 2002, p. 73). Therefore, what is happening right now is also not different from every other now that a person has ever experienced. At the same time, the present experience is an event and it is not an event because it is repeatable. This "at the same time" was the crux of the matter for Derrida (2002). The conclusion was that individuals can have no experience that does not essentially and inseparably contain these two agencies of event and repeatability.

By Derrida's standards, every present can be viewed through a lens of the past, which directs how a person internalizes and perceives the present; it should be easy to understand the uniqueness of this theoretical position to exposure therapy. Exposure

therapy, also known as systematic desensitization, helps an individual reprogram their responses to stimuli by replacing previous experiences with new ones (Finn et al., 2009). This is one of the tasks of a speech educator in a basic public speaking course. The educator is tasked with controlling the environment to produce enough positive reinforcement which produces an experience for the student. Through exposure therapy, the speech educator can effectively change the understood repeatability for the lived experience by effectively changing the 'trace' perceived by the student. This process helps lower and diminish the existence of communication apprehension.

Assumptions

Throughout this study, there were a few basic assumptions. The first assumption was the ability of the student to internalize his or her fear and anxiety about various communication contexts. The foundation of this assumption comes from McCroskey (1978) when he stated, "It has been argued by many that the best way to find out how someone feels about something is simply to ask the person" (p. 192). However, this assumption does have problems. While a basic public speaking course can be seen as the first formalized instruction and training in communication for students (McCroskey, 1978), this study assumed that these students had the ability to analyze and internalize experiences that they might have never had. Secondly, students would answer the self-report openly and honestly (Podsakoff & Organ, 1986). By randomizing the collection of self-reports, the data would be richly diverse with a representative cross section of the student population. Gall, Gall and Borg (2007) stated that studies based on a narrow population may still have generalizable implications if the accessible population is similar to a larger target population or "a randomly drawn sample from it" (p. 168).

Limitations

Due to timeframe and access, generalizability was one limitation to this study. With only examining a single university, the sample size was limited in diversity. Therefore, the generalizability might be less robust. This study limited itself to a mid-size four year public institutions. Again this might have limited the generalizability of the results. Another limitation might have been the standardization of teaching styles and departmental standards and requirements. With the study having used multiple instructors, each speech educator might have set different standards in teaching the basic public speaking course. For instance, some instructors might teach the course as more of a fundamental course of communication, while other educators might teach the basic public speaking course as a performance arts based course.

Delimitations

To set a few parameters to the study, this author only collected data from instructors of the basic public speaking class who are teaching both the online and face-to-face courses in the same academic timeframe. Therefore, each instructor was teaching at least one online basic speaking course and at least one face-to-face basic speaking course. This was to ensure the same information was being taught to each student in the same timeframe. By ensuring this, it was easier to justify the reliability of the results.

Secondly, the research did not look at any basic public speaking classes that were taught in a hybrid design. A hybrid design basic public speaking course is taught through online instruction, but all presentations are given in a face-to-face context with a physical audience present. While some institutions employ this hybrid design, to best answer the

research questions, this study only focused on communication apprehension levels of students from basic public speaking courses taught purely online or purely face-to-face.

To stabilize the instruction even further, this author only examined courses from a single university. The university observed standardizes the activities, speeches, instruction and course textbook used in teaching the course. By only looking at these standardized courses, this author controlled for random influence created by the diversity of activities, speeches, instruction and course textbook which might create a difference in communication apprehension levels.

Definitions

Communication apprehension is "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1977a, p. 82).

Systematic desensitization is a treatment designed "to reduce anxiety and phobias through the process of reciprocal inhibition (i.e., a person cannot be anxious and relaxed at the same time)" (Duff et al., 2007, p. 73).

Computer-mediated communication "uses telecommunication technologies such as email, real-time chat, computer conferencing/online discussion systems, and online databases to support human communication between spatially separated learners" (Chen et al., 2011, p. 101).

CHAPTER 2

REVIEW OF LITERATURE

Cicero (1942), most elegantly explained in his classic work, *De Oratore*, "I turn pale at the outset of a speech and quake in every limb and in all my soul" (p. XXVI). The idea that communication apprehension in public address plagued one of the greatest speakers of the Roman Empire can be both troubling and reassuring. Troubling in the sense that if such a great orator with all his experience had trouble speaking, how can one help those in a basic public speaking class? But this idea is also reassuring in the sense that if Cicero had such a fear of public address and became so great, then there is hope for the most fearful and anxious in a basic public speaking course.

In the field of instructional communication research, communication apprehension has been suggested to hold a pivotal role in shaping education outcomes (Powers & Smith, 1980). Research has further suggested that communication apprehension is a major inhibitor to student retention, leadership, emotional intelligence, and multicultural appreciation (Blume, Baldwin, & Ryan, 2012; Fall, Kelly, MacDonald, Primm, & Holmes, 2013; McCroskey et al., 1989). Increasingly, universities choose to design curriculum strategies to meet the needs of students who suffer from high and intense forms of communication apprehension (Byrne, Flood, & Shanahan, 2012; Ericson & Gardner, 1992).

Universities are becoming conscience to the destructive power and the far reaching impacts of communication apprehension to student success while in school and the implications of communication apprehension when these students reach the workforce (Blume et al., 2012; Fall et al., 2013; Russ, 2012).

Monroe and Borzi (1988) explained that if a high school senior suffered from high communication apprehension, he/she was less likely to even apply for admission to college than low communication apprehensives. Before even reaching the step of college, prior to the admissions process, communication apprehension could be acting as a deterrent for many high school students. This means that having high communication apprehension can halt post-secondary success before it starts (Ericson & Gardner, 1992).

Postsecondary Success

Early research indicates a conceptual relationship between communication apprehension and indicators of student success in the classroom (McCroskey, 1977a; 1980, McCroskey, Richmond, & McCroskey, 2009; Scott & Wheeless, 1976). "As early as 1937, researchers were interested in the relationship between speech anxiety, performance, and academic achievement" (Bourhis & Allen, 1992, p. 68). While most of the initial work in the area of communication apprehension focused on performance, recent studies have examined a wide range of problems in various contexts which are the result of communication apprehension (Ericson & Gardner, 1992; McCroskey, 1977b; McCroskey et al., 1989). Research in the field of communication apprehension has explained student success beyond the classroom (Blume et al., 2012). Studies have examined how student success in a post-secondary institution can be affected in two ways, academic success and interpersonal success (McCroskey et al., 1989).

McCroskey, Booth-Butterfield and Payne (1989) considered academic success as the ideas of "intellectual ability, experience, and training the student brings to the university as well as effective 'studenting' behaviors (i.e. attendance, scheduling properly, meeting deadlines) while at the university" (p. 100). McCroskey (1977a) explained most of the problems raised here were directly due to an active avoidance while apprehension was high. Attributable to this active avoidance, studies have shown that high communication sufferers will have lower grade point averages than lower communication apprehensives when the aptitude for each group is the same (McCroskey, 1977a). Furthermore, this active avoidance of high communication apprehensives reduced the likeliness that the student would meet with peers or professors to talk about subject matter or would attend, participate, comprehend and remember class content (Booth-Butterfield, 1988; Bourhis & Allen, 1992).

Because of the anxiety produced by the oral communication process, students with high communication apprehension have a significantly high rate of attrition and drop-out rate from the university (Ericson & Gardner, 1992). These drop-out rates and retention rates were most significantly seen in the first two years at the university (McCroskey et al., 1989). Higher communication apprehension was consistently associated with poorer outcomes of academic achievement (Byrne et al., 2012). For this reason, researchers in the field of communication apprehension constantly liken communication apprehension to a mostly ignored learning disability (McCroskey, 1977a).

Another contributing factor to these higher drop-out rates and lower retention rates for communication apprehensive was seen in their interpersonal success (Fall et al.,

2013). Interpersonal success was defined as "the communicative and social skills the student brings to the university as well as the continued successful development of those skills at the university" (McCroskey et al., 1989, p. 100). The effects of communication apprehension habitually produced and caused such behaviors in a student like social isolation, disintegration and helplessness (Daly & Stafford, 1984). This feeling of anxiety and fear caused the student to withdraw from groups; furthermore, this feeling made the student less likely to join potential groups or become involved on campus (McCroskey et al., 1989). This meant that high communication apprehensives were less likely to engage other students, professors, advisers or counselors who could offer academic assistance or social comfort (Booth-Butterfield, 1988). "Even under circumstances of superior academic achievement, a student who feels disconnected from and unrelated to the people and traditions of the university was likely to abandon the university for a safer place" (McCroskey et al., 1989, p. 101). In addition, the anxiety generated through communication apprehension had a direct effect on the perception of the environment, not just the experience.

These concepts of academic success and interpersonal success were influential to each other as the pressure of one compounded the other (McCroskey et al., 1989; Nelson, Scott, & Bryan, 1984; Tinto, 2014). For this pressure to be contextualized for a college freshman, one must examine the effects of the student while in a normal day of college. The student characterized as having high communication apprehension, which causes anxiety and fear with his/her communication and communication strategies. When this student is in class, he/she is fearful to interact. So when he/she does not understand a concept the professor is lecturing over or discussing in the class, the anxiety might be so

great as to paralyze and prevent the student from raising a concern or asking a question (McCroskey et al., 1989). Furthermore, group settings were a point of tension. So while the student could not get the information in the class from the professor, the student was also unable to communicate with peers about the lecture or the assignment (Daly & Stafford, 1984). With this level of handicap toward acquiring the information to be academically successful, it was clear as to why scores of high communication apprehensives with high aptitudes were lower than to be expected (McCroskey, 1977a). As the communication apprehension persisted and the student struggled academically, studies showed that retention rates for this student decreased (Ericson & Gardner, 1992; Rubin, Graham, & Mignerey, 1990).

Adding to this uncertainty of placement in a post-secondary education environment was the lack of interpersonal success for this student (McCroskey et al., 1989). If receiving poorer than expected outcomes and grades was not enough of a demotivation, the student felt distant from the institution and from the people within the institution (Daly & Stafford, 1984). This disconnect and absence of shared identity caused the student to question the safety of the post-secondary environment (McCroskey et al., 1989). Student affair administrators go to great lengths to ensure a social interplay among the student population. These administrators understand that the more a student identifies with the campus, this identification process raises retention rates (Yook, 2012). Mayhew, Grunwald and Dey (2005) "demonstrated the impact of the dynamic interconnections between human and interpersonal environments on a range of student outcomes" (Chang et al., 2011, p.43). In order to retain students, university administrations go to great lengths to create relationships for the students to connect with

the institution and connect with the traditions at the institution, because institutions know this creates retention power within each student (Yook, 2012). The student feels as if they become a stakeholder of the university and they buy into the culture of the institution (Eckles & Stradley, 2012). Without this buy in effect, students with high communication apprehension feel isolated and implement avoidance strategies (Ericson & Garner, 1992). Often high communication apprehension creates a barrier during this buy in process, which causes many high communication apprehensives to leave within their first two years (McCroskey et al., 1989).

This two year window that McCroskey, Booth-Butterfield, and Payne (1989) explained is very significant, because this two year window was further backed up by Ericson and Gardner (1992). Rubin, Gram and Mignerey (1990) concluded a four year study of communication competencies. In this study, it was discovered that those with high communication apprehension who were more apprehensive than their peers during these first two years of college either became less apprehensive during their junior year or did not graduate. For university leadership, these findings were significant due to the problems associated with communication apprehension on retention (Ericson & Garner, 1992). First, these findings alluded to the fact that communication apprehension levels can be lowered (Finn et al., 2009; McCroskey, 1972). And secondly, if help was not found in lowering communication apprehension, it was highly likely that the student would not graduate (Ericson & Garner, 1992; McCroskey et al., 1989; Rubin et al., 1990).

Development

"The discipline of communication is well positioned to address students'

personal, educational, and professional development. Simply stated, the communication

discipline is viewed as central to the goals of the educational system" (Morreale &

Pearson, 2008, p. 225). Barriers, like communication apprehension, prevent the

development of young people in contemporary society which allows them to learn critical

language, verbal and oral skills that are crucially needed (Barker, 2006). Reed and Spicer

(2003) explained in a study that interpersonal communication is the foundation to

creating and sustaining relationships. Interpersonal communication and the development

of interpersonal relationships is a "key factor that influences how individuals are

perceived and the quality of their relationships with others" (Morreale & Pearson, 2008,

p. 230).

With a keen understanding of the importance of communication and the added

lack of communicational skill development due to communication apprehension, this

significantly hinders a communication apprehensive in the workplace (Winiecki & Ayres,

1999). Fall et al. (2013) explained that this uncertainty within the communication process

only compounds the effect it has on the individual's ability to work in this globalized

economy. But beyond cross-cultural lines of communication, this high communication

apprehension would hurt the worker who needs to communicate between and among sub-

cultures and co-cultures in the same physical geography.

The Nature of Communication Apprehension

Understanding the nature of communication apprehension in addition to

understanding how to diminish the effects of communication apprehension has long been

a concern of speech educators (McCroskey, 1977a). Communication education research

has done much to shed light on this concern; to understand where the anxiety stems

(Beatty, McCroskey, & Heisel, 1998) and what methods could be used to decrease these

levels of fear due to the theoretical foundations to these methods (Rubin, Rubin, &

Jordan, 1997). While the concept of communication apprehension is not completely

understood, there is a considerable amount of research in the field of communication.

From 1977 to 1997, research on the concept and phenomenon known as communication

apprehension was the single most researched and reported topic in the field of

communication studies (Byrne et al., 2012). To understand anxiety in the communication

process, one must first understand the conceptualization of communication apprehension.

The construct of communication apprehension was developed through the

research of communication avoidance (Hoffmann & Sprague, 1982) and studying varying

aspects of anxiety during oral communication. During these initial stages of research, a

simple yet limiting conceptualization of communication apprehension was developed.

The original conceptualization (McCroskey, 1970) was viewed very broadly as an

anxiety which specifically affected and was related to oral communication. "Each

individual has a unique level of apprehension, which results in a number of individual

differences, such as the effectiveness of, amount of, and desire for, communication"

(Byrne et al., 2012, p. 566).

Further investigation and research in the area of communication apprehension

soon questioned these initial parameters (McCroskey, 1983). The conceptual construct

started to shift towards the general communication process and towards specific

communication contexts. With that shift, the definition of communication apprehension

was given another focus, "an individual's level of fear or anxiety associated with either real or anticipated oral communication with another person or persons" (McCroskey, 1980, p. 109). This reconceptualization of communication apprehension has been seen as most appropriate due to the inclusivity of all modes of communication, but also due to the broadening of perspectives about communication. Richmond and McCroskey (1985) tried to describe an individual suffering from high communication apprehension as a person that will

> suffer from general anxiety, to have a low tolerance for ambiguity, to lack self-control, to not be adventurous, to lack emotional maturity, to be introverted, to have low self-esteem, to not be innovative, to have a low tolerance for disagreement and to not be assertive (p. 45).

Trait Communication Apprehension

Earlier works on communication apprehension focused on a trait conceptualization of communication apprehension. In trying to distinguish this new concept from general views of stage fright (McCroskey, 1970), research limited this perspective of communication apprehension to be measured by focusing on trait-like patterns (Beaty, Behnke, & McCallum, 1978). The original research advanced the construction of communication apprehension as exclusive to being a trait of an individual, rather than any response to a situational element or condition during a specific communication transaction (Harris et al., 2006). Due to this early conceptualization, most of the data and research limits the view of communication apprehension in a trait approach (McCroskey, 1983). However, situational views of communication apprehension started to develop, which encouraged the field to conceptualize the

broadening of perspective. In order to capture the dynamic essence of these new developments, McCorskey (1977b) proposed that "the construct can be analyzed from two perspectives: trait-like communication apprehension and context communication apprehension" (as cited in Russ, 2012, p. 313).

To understand the different perspectives of communication apprehension, an explanation of the differences between context and trait communication apprehension must be offered. Communication apprehension has evolved beyond the simple stage-fright understanding of anxiety; however, it remains grounded in psychological anxiety theory. Researchers routinely examine psychological and physiological indicators when examining speech anxiety as communication apprehension (Behnke & Beatty, 1981). This trait-like anxiety, seen in some speakers, resembles an enduring personality-like trait (Witt & Behnke, 2006). In short, the idea of trait anxiety measures indicates the likelihood or the proneness of the individual to have general communication anxiety in most situations.

McCroskey (1977) explained that this trait-like communication apprehension is a relatively enduring personality-type variable. Strelau (1994) explained trait anxiety as a relatively stable state of anxiety. While it has high points and low points of anxiety, trait speech anxiety does not have the extremes or spikes of anxiety that is seen in state speech anxiety. This trait-like communication apprehension "captures the general level of discomfort an individual experiences when communicating with others across diverse contexts" (Russ, 2012, p. 314). Therefore, this trait-like speech anxiety is seen as the level of feeling stressed or discomfort that one experiences on a daily basis in relation to communication apprehension.

Beyond the varying classifications of context or situation, individuals who experience trait-like communication apprehension usually experience this discomfort along a wide range of communication situations and contexts.

Trait-like communication apprehension is completely different than context communication apprehension. Context communication apprehension, also known as state speech anxiety, resembles more of a temporary state of anxiety that is brought about due to conditions relating to the audience and the public speaking context (Beatty, Behnke, & McCallum, 1978). This context communication apprehension should be seen as "a transitory orientation, providing a more composite analysis of the level of discomfort an individual experiences when communicating in different environments" (Russ, 2012, p. 314). This construct of communication apprehension captures the varying levels of discomfort that a person would experience when communicating in divergent environments. Therefore, this state speech anxiety can be seen as the specific anxiety a person might experience when aroused by a public speaking event, but not while speaking in a small group or in a one-on-one context.

Although an individual might not experience anxiety through communication apprehension while communicating in one context, in the specific context of public address, an individual might start feeling discomfort. Strelau (1994) theorized that an individual's level of trait speech anxiety was relative to the amount of anxiety experienced by the individual when experiencing a stimulus like a public speaking event. Trait speech anxiety is the overall condition of communication apprehension regardless of context. When examining state communication apprehension, different people might experience different levels of communication apprehension when placed in similar

communication contexts. These contexts could provide a more abrasive view of an individual's communication apprehension based on the differing environments.

When regarding context, most research have narrowed the scope to examining an individual's comfort level during a group discussion, interpersonal conversation, formal meeting, and formal presentations (Russ, 2012). While broad, this wide range has allowed communication apprehension to be examined in multi-facets of the human communication experience. In these different contexts, an individual might have a spike or leveling effect with their communication apprehension. It is a false belief that an individual who might experience communication discomfort in one context will experience any discomfort in another.

Trait-like communication apprehension and context communication apprehension might be completely different constructs when examining communication discomfort; however, these concepts should not be seen as dichotomous (McCroskey, Richmond, & McCroskey, 2009). While both of these perspectives analyze a singular disposition, the anxiety or discomfort associated with human communication, each construct provides a unique lens to examine this disposition (Russ, 2012). "To view all human behavior as emanating from either a trait-like, personality orientation of the individual or from the state-like constraints of a situation ignores the powerful interaction of these two sources" (McCroskey, 1983, p. 15). It would be a mistake to view these constructs as opposing views on the creation of communication apprehension; moreover, this view would create a false dichotomy of communication apprehension.

No isolated element or characteristic of a person's personality has been proven to be significant as having universal predictability across all situations for all individuals.

Furthermore, no single situation has been identified to predict a universal behavior for all individuals (Behnke & Sawyer, 1998). For this reason, research rejected this false trait/context dichotomous view of communication apprehension, and supports the view that the sources of communication apprehension precedes on a continuum (Russ, 2012).

As decades of research examined the extent and the effects of communication apprehension, speculation still exists as to where this apprehension derives (Harris et al., 2006). Questions concerning the origin of this fear and anxiety were rising with little progress being made on these etiological factors. Some speculated factors based on an individual's social learning processes, "particularly in the form of a learned helpless model" (Beatty, McCorskey, & Heisel, 1998, p. 197). However, there has been very little empirical support for this model. Research in the field of psychology and personality theorists started to increasingly turn their attention to the role of biology in human behavior (Opt & Loffredo, 2000).

Most of the work to examine this biological research in the model of trait-like communication apprehension pivoted on the notion of temperament (Opt & Loffredo, 2000). Bates (1989) defines temperament as the "biologically rooted individual differences in behavioral tendencies that are present early in life and are relatively stable across various kinds of situations and over the course of time" (p. 4). Due to the way Bates (1989) framed this biological trait model of temperament, which research has increasingly indicated that these biological-traits have prenatal origins (Buss, 1989; Calkin & Fox, 1992; Beatty, McCroskey, & Heisel, 1998) usually detectable during infancy, has turned attention away from any other socialization process models.

Furthermore, Beatty, McCroskey, and Heisel (1998) added, "individual differences in communication apprehension are most traceable to differences in biological functioning" (p. 199).

The Communibiological Paradigm

This theoretical position of biological functioning was the foundation that conceptualized trait communication apprehension as a communibiological paradigm. Within the communibiological paradigm, Beatty, McCroskey, and Heisel (1998) hold to five basic propositions. (a) All social interactions are based on brain activity, whether this psychological processing includes cognition, affection or motor response. Because of these processes, it "necessitates a neurobiology of communication traits" (p.198). (b) Before any psychological experience can exist, brain activity must have taken place. (c) When looking at individual differences, like temperament, in people, neurobiological structures have been highly linked empirically. Because of this underlying association, trait communication apprehension is most likely the product of genetic inheritance. (d) Research has suggested that an environment only holds a trace or small amount of influence or effect on trait development. Eysenck and Eysenck (1985) concluded the ratio of genetic inheritance to environmental contribution to be approximately 80/20. (e) Neurobiological functioning underlies the principle differences observed in interpersonal behavior. Beyond the psychobiology literature, interpersonal communication scholars also have recognized the influence of biology as a contributing factor when trying to understand interactions (Cappella, 1991).

In addition to their research concerning trends of interpersonal communication, Knapp, Miller, and Fudge (1994) suggested that future interpersonal scholars should be "paying more attention to the growing body of work by geneticists that address issues of behavior" (p. 7).

This new reconceptualization of trait communication apprehension looks extremely familiar to personality research, more specifically the "Big Three" factors of personality: psychitcism-emotional control, extraversion-introversion, and neuroticism (Opt & Loffredo, 2000). This comparison, along with the context of outlining the development of trait communication apprehension, allowed the building of a temperament based model, which has a very desirable predictive power (Beatty, McCroskey, & Heisel, 1998).

Beyond the predictive power of this temperament-based model, rooted in the communibiological paradigm of communication apprehension, it provides "a viable explanation for both the behavioral and emotional components of communication apprehension" (Beatty, McCroskey, & Heisel, 1998, p. 203). Looking to the definition of communication apprehension, created and conceptualized by McCroskey (1977), this behavioral component of active avoidance can now be understood. McCroskey (1978) clearly argued when people, who identify as high communication apprehensives, were more likely to experience anxiety when required to communicate, actively avoid circumstances necessitating communication, and choose to engage less during oral communication when this situation was unavoidable. Furthermore, the emotional dimension where the individual tends to experience a strong negative affect was

explained as coinciding with similar biologically-based models, developed by psychobiologists, to account for pleasant and unpleasant emotions (Gray, 1991; Gray & McNaughton, 2000; Opt & Loffredo, 2000).

To best understand this biologically-based model of communication apprehension, one must understand the neuropsychology of anxiety. Gray and McNaughton (2000) first explained this theory of anxiety by exploring the association of anxiety with the septo-hippocampal system. This new view of a biologically rooted source for anxiety was at odds with traditional theories. "This juxtaposition of anxiety with the septo-hippocampal system will appear odd, principally in holding that the septo-hippocampal system has an important role to play in anxiety when orthodoxy held it to be important for memory" (Gray & McNaughton, 2000, p. 1). While on the surface this heterodoxy that Gray and McNaughton (2000) proposed ran counter to traditional thought; however, not only did the biology justify this view with decades of research data (Gray, 1991), but the philosophical and theoretical groundwork that Derrida (2005) explains also adds support to this theory.

The Neuropsychology of Anxiety

To support the theory suggesting this neuropsychology of anxiety, Gray and McNaughton (2000) offer three starting points. The first starting point utilized research data examining the procedure of electrical stimulation of the brain to elicit varying forms of defensive behavior (Flynn, 1976; Graeff, 1991). By stimulating points of the hypothalamus and the central periaqueductal grey, it is possible to elicit escape behavior, also known as a "flight" response, or defensive behavior, also known as a "fight" response. The second starting point is the idea of conditioned fear. This one observable

signal is coupled with a negative stimulus. After a period of time, a subject comes to anticipate the negative stimulus whenever the observable sign is present, thus creating fear (LeDoux, 1994; Davis, 1992). "If an initially neutral stimulus is paired, in a standard Pavlovian conditioning paradigm, as a conditioned stimulus with a painful unconditioned stimulus such as electric shock, the conditioned stimulus comes to elicit a variety of conditioned responses that can plausibly be interpreted as signs of fear" (Gray & McNaughton, 2000, p. 3). The last starting point to bridge the gap to suggest this neuropsychology of anxiety is the behavioral effects of anxiolytics, drugs which reduce self-reported or physician-assessed anxiety. The theory stems from "the common actions of all clinically well-established anxiolytic drugs as makers for anxiety itself" (Gray & McNaughton, 2000, p. 4).

As the communibiological paradigm of communication apprehension takes shape through the foundations laid by the neuropsychology of anxiety, the differences between the concepts of 'fear' and 'anxiety' must be known. Blanchard and Blanchard (1990) produced results which were critical in distinguishing fear and anxiety. Furthermore, research suggests a better understanding of the conditions and situations which distinguish fear for anxiety (Blanchard et al., 1993). This is best understood as forms of behavior that a rat will engage in when the rat must leave an area due to the presence of a cat, or forms of behavior that a rat will engage in when the rat must enter an area where a cat has been or might be. It is the form of behavior that is most interesting, not the type of stimuli, because the presence of a cat or cat odor "have the advantage of being stimuli which can release these two different classes of behavior without the need for prior training" (Gray & McNaughton, 2000, p. 5). Blanchard and Blanchard (1990) based their

categorical differences on whether the behavior functions to remove the animal for a dangerous situation or functions to facilitate entry to a dangerous situation. Whether passive or active avoidance is present, in the former case, fear is involved; in the latter case, anxiety is involved. The rat would be experiencing anxiety when approaching, but experiencing fear when escaping.

Blanchard et al. (1993) explains that the closer the animal gets to the perceived threat, the more likely 'escape' will take precedence over an anxious approach. Furthermore, it should be noted that this defensive distance is a cognitive construct developed by the subject. While anxiety and fear might depend on physical or temporal distances from danger, it also depends on the amount of perceived threat. This means that the greater the amount of perceived threat, then the greater physical or temporal space is needed to produce a specific value of defensive distance. To put this in context to communication apprehension and this cognitive construct of defensive distance, a person experiences different levels of anxiety as time draws nearer to perceived threat in a communication situation. This anxiety looks and feels different at different points of physical space. This physical distance in the context of a public speaking course is time. As time draw nearer to the anticipated speech act, the levels of anxiety heighten. Therefore, the perceived levels of anxiety will be different from the experienced levels of anxiety the night before a speech is due and minutes before the speech act is to be performed.

Both behavior and stimulus analysis can range from perceived time to plan to immediate danger requiring action. This view has led to an understanding of a hierarchical defense system (Graeff, 1994). The neurology of this hierarchical defense

system explains why research shows the behavior produced by these different levels of anxiety and perceived threats exist in different parts of the brain.

Emotion Systems to Manage Threats

Prior discussions have only examined trait communication apprehension and the biologically-based model. To better understand the breakdown of state or context communication apprehension and the biological viewpoint, Gray and McNaughton (2000) identify three key emotion systems that help humans manage these threats experienced during state anxiety. The first is called a behavioral approach system (BAS), which is a system that helps guide humans when desiring to achieve goals. "The BAS is a motivational system linked to goal-striving and approach to rewards that is hypothesized to be comprised of psychosocial factors and neurobiological systems" (Stange et al., 2013, pp. 139-140). When events involving goal-striving or attainment are occurring, the activation of the BAS is likely to occur. Furthermore, an extreme or prolonged activation of the BAS may lead to particular symptoms ranging from mood elevation to hypomanic/manic episodes (Urosevic et al., 2008). When deactivation of the BAS occurs, a completely different response may be elicited. Deactivation of the BAS is triggered in response to failure of a goal or non-attainment of a goal. Symptoms associated with deactivation of the BAS may lead to depressive symptoms such as sadness, anhedonia, lack of energy and hopelessness (Urosevic et al., 2008; Stange et al., 2013). Through this theory, as humans look to accomplish various goals, the mind is aroused to the completion of these goals. When conditions lend themselves to the attainment of these goals, activation occurs which releases positive feedback. However, not all goals are met. When there is failure, the BAS elicits a negative response. In a very broad sense, the BAS

model advocates a framework for better understanding the development of anxiety and communication apprehension through interactions with the environment.

The second, a behavior inhibition system (BIS), is characterized as moderating an individual goal-directed behavior when a threat is detected. Gray (1991) proposed what the majority of researchers would call the most detailed model of the neurobiology of temperament and emotion. This conceptual framework is in a continual state of refinement, but the BIS examines the neurological processing when the context of an environment produces a potential or actual punishment as consequence to an act. "One aspect of Gray's model particularly relevant to communication apprehension is a set of neurological circuits linking the structures related to the hippocampus, the subiculum, and septum that forms the behavior inhibition system (BIS)" (Beatty, McCroskey, and Heisel, 1998, p. 206). According to Gray (1991), the theory of BIS is related to the sensitivity of punishment as well as avoidance of motivation. When triggered, subjects pick up on cues within the environment in order to prevent negative experiences, which have previously been developed as feelings of fear, anxiety, frustration, and sadness (Hirsh & Kang, 2015).

When discussing general motivational systems which underlie behavior, theorists point and argue about the merit of the BAS and BIS models. Theorists contract these models as approaches to understand mood regulation. The BAS is believed to regulate appetitive motives, in which the goal is to move toward something desired (Carver & White, 1994). This can be seen in contrast to the BIS model. In the BIS, the idea of avoidance is said to be used to regulate aversive motives; more specifically, the goal is to move away from experience either perceived or real as unpleasant.

Finally, the fight-flight-freeze system (FFFS) is explained as a system which promotes escape or a defensive behavior when confronted with a serious or life-threatening stimulus. The construct of fear is inherently a psychological process in determining assessment and reaction to a threatening situation. While there exist many studies of fear producing the FFFS response as a trait-like variable, "there are well-established measures of fear, these primarily assess response to phobia stimuli rather than a reaction tendency to acute fear" (Maack, Buchanan, & Young, 2015, p. 117). Some researchers state that FFFS can be activated through chronic maltreatment; this repeated experience can cause lifelong consequences, "including increase risk for internalizing problems (e.g., anxiety and depression), externalizing problems (e.g., aggressive behavior), and emotion dysregulation" (Thompson, Hannan, & Miron, 2014, p. 28). While this is learned threat construction, some researchers argue that these long-standing difficulties should be seen as a threat-readiness trait due to the neurological changes that occur through the response of chronic maltreatment. However, these traits are not equivalent to the fear trait posited by Perry (2001) for which no correlates in an existing personality theory have been identified.

When looking at these three systems – BAS, BIS, and FFFS, each system accounts for anticipation regarding perceived constructs of reality based on experience or psychobiological processing. Each system is quite different in the uniqueness of how the processing occurs. The BAS is related to how people anticipate the concept of pleasure, and the association with a personality characteristic of optimism, reward-orientation, and impulsiveness (Gray & McNaughton, 2000). The FFFS is responsible for the behavior reactions to stimuli associated with fear. These reactions to fear are coupled with

personality factors such as avoidance and fear-proneness (Gray, 2000). "The r-RST makes a clear distinction between fear (FFFS) and anxiety (BIS); fear directs one away from threat whereas anxiety induces caution when one must move toward threat" (Thompson, Hannan, & Miron, 2014, p. 29).

This brings us back to the previous scenario of a mouse interpreting and anticipating a cat in the room or the threat construction of signs that a cat has been in the room. These processes operate differently as psychobiological functions. One process, the FFFS, must compensate and regulate the fear constructed. If a mouse was in a room and confronted with the clear and present dangers of a cat, this scenario would produce fear for the mouse. The mouse would then calculate the threat construction through the available physical or temporal distance of the threat (Gray & McNaughton, 2000). This distance, which can be either physical or meta-physical, determines the perceived threat construction. The shorter the distance, the more the threat is perceived which produces fear. This changes as the scenario changes. When a mouse enters a room with a remaining scent of a cat, the neurological processing of behavior is different. The mouse would be using the BIS which helps cope with the anxiety created by the scent. This anxiety would produce caution as the mouse operated through the understanding that danger might be around. Barlow (1988) distinguishes anxiety as the association with future danger, whereas, fear is associated with imminent danger.

State Communication Apprehension

With the former groundwork established, one can understand that the general communication apprehension a person holds is constructed as trait speech anxiety; whereas, context or situation specific anxiety in communication is state speech anxiety.

This difference is important when researchers want to understand reduction of each. Because of this difference, when researchers examine anxiety caused by the fear of speaking in front of a particular audience at a specific and designated time, this is state speech anxiety. Harris, Sawyer, and Behnke (2006) use Spielberger (1972) to explain, "Trait and state represent different psychological constructs and must be clearly delineated to make subsequent discussions of state anxiety measurement more meaningful" (p.213). Therefore, it is understood that state communication apprehension is a transitory condition which may vary in degrees of intensity depending on this situation and the fluctuation of time. This is different than trait communication apprehension as it is based on a personality trait, which is generally indicative of a person's level of anxiety across many different modalities of communication.

While individuals with high trait communication apprehension have a chronic tendency to experience threat construction when no real threat exists, Strelau (1994) explains that these individuals are capable of changing the response to these threat constructs as they pertain to the environment, stress, and maturation. Therefore, the notion that these temperament traits cannot be changed is false. However, trait communication apprehension can help predict state communication apprehension. Beatty and Friedland (1990) examined the role of trait communication apprehension as it pertains to state communication apprehension along a public speaking task. This study indicated that variables of trait communication apprehension predicted state communication apprehension while the inverse of these two did not.

However, this study claimed that trait public speaking communication apprehension was the most significant and efficient predictor of state public speaking communication apprehension (Harris, Sawyer, & Behnke, 2006).

Thematically, whether state or trait forms of communication apprehension, there are three potential suggested sources for either form of apprehension: a) fear of peer evaluation, b) prior communication experiences, and c) preparation. These three sources have been identified as root causes that either aided or impeded the reduction of oral communication apprehension in all four subgroups: interpersonal, group discussion, meetings, and public speaking.

Studies have suggested that individuals might have a heightened sense of fear or anxiety when they perceive themselves as unsatisfactory or being rejected by their peers (Gardner et al. 2005). Furthermore, this increase in fear has been associated with an increase in anxiety and apprehension of high oral communication apprehension sufferers (Richmond & McCroskey, 1998). When individuals can assess, acknowledge, and deal with a peer's evaluation, oral communication apprehension is reduced. But when peer evaluation is not addressed or acknowledged, it creates uncertainty about a perceived peer evaluation which increases fear and anxiety.

For high communication apprehensives, this fear of being perceived negatively or being judged dominates their thoughts. Beyond the anxiety of this uncertainty, "the fear is not only that peers might hold negative perceptions of the student but that those negative perceptions might be made public and visible in some way" (Byrne et al., 2012, p. 574). This public display or visible showing of disapproval might further lead the communication apprehensive to feeling foolish or having their peers laugh at them.

Moreover Byrne, Flood, and Shanahan (2012) observed that the higher the communication apprehension score, the more negatively the individual perceives peer evaluations. Concerning this fear of peer evaluation, some suggest the issue might be in conjunction with identity construction issues, but no evidence has been produced to that affect.

Beyond the fear that a communication apprehensive holds about peer evaluation, another contributing factor is seen as the amount of experience an individual holds with that particular type of communication exchange and with whom they are speaking. First, concerning the experience with a specific type of communication, not all people have experience with public communication. This lack of experience increases uncertainty and adds to anxiety (Lucas, 2015). It is understood that when an individual has no experience with a task, there is doubt about the task, doubt about his/her abilities, and doubt about his/her performance within an unfamiliar environment. With this increase of multifaceted uncertainty, anxiety forms for the communication apprehensive (Griffen, 2009). Furthermore, Gudykunst (1993) explains this anxiety as "the feeling of being uneasy, tense, worried or apprehensive about what might happen" (p. 70). This feeling exists not from what is, but the worry of the unknown. Therefore, much of the fear and anxiety that exists about public speaking can be based on simply the fear of the unknown.

Furthering the conversation about lacking experience as a potential source of apprehension, this uncertainty also exists with a lack of knowledge of the audience or the people with whom the communication apprehensive is speaking. When people meet one another, a primary concern is to increase the "predictability about the behavior of both themselves and others in the interaction" (Berger & Calabrese, 1975, p. 100). Therefore,

whether a person is considered a low or high communication apprehensive, anxiety is always heightened when an individual communicates to strangers, as opposed to communicating with friends (Byrne et al., 2012). As the experiences increase, the predictability of behaviors and norms emerge. This increase in familiarity of the stranger as a friend reduces anxiety.

Finally, preparation has been identified as a source to aid in reducing communication apprehension. Preparation allows the individual to be comfortable with the subject matter, as well as allowing for a thorough vetting of analysis and context of the information. When a person is prepared for a conversation or a public address, it is estimated that this proper preparation can reduce stage fright and anxiety up to seventy-five percent (Walter, 1993). "This comfort can encourage confidence regarding understanding of the topic in an educational setting or having a full grasp of facts or events in a workplace situation" (Byrne et al., 2012, p. 576). With preparation, the known of the communication situation in the future still exists, but the predictive power of the individual's abilities and behaviors are better known. This predictive power helps lower uncertainty of the communication, which has the effect of lowering anxiety for communication apprehensives.

Communication Apprehension in the Classroom

There are specialized training programs designed to help those with excessively high levels of oral communication anxiety. However, even in schools and universities "where such programing exists, the typical student is not enrolled in them but is in a basic public speaking course" (Biggers, 1988, p. 4).

In a national 2001 Gallup poll, Americans were surveyed on their greatest fear. The fear of public speaking was identified by 40% of the population. The fear of public speaking was only surpassed by the fear of snakes that 51% identified as their greatest fear. Furthermore, in 2005, there was a survey that produced similar results with 42% of respondents claimed to be terrified by public speaking; whereas, 28% of respondents claimed to be afraid of dying (Blyth, 2006). Moreover, a social situation concentrated research study asked more than 9000 participants to rank their greatest fears. This study suggested that public speaking produced and provoked more anxiety than any other social situation (Ruscio et al., 2008). Jones (2003) explained that 81% of business executives report that giving a public address was the most nerve-wracking part of their jobs. From these numbers, one can grasp the broad scope of those affected with public speaking anxiety.

When this concept of communication apprehension, with a specific focus on public speaking, is viewed in the classroom, McCroskey (1970) first explains that twenty percent of students in a basic public speaking course report high communication apprehension. McCroskey (1976) explains that these percentages go up in smaller universities and community colleges. Within the 20% of high communication apprehensives, the anxiety generated by the act or thought of public speaking is described as debilitating (McCroskey, 1977a). "By 'debilitating' is meant apprehension of sufficient magnitude to interfere seriously with the individual's functioning in normal human encounters" (McCroskey, 1977a, p.28). So considering this debilitating function of communication apprehension, one must understand how the effects of oral communication apprehension manifest itself in the classroom.

McCroskey (1977a) reported this condition of communication apprehension as "a syndrome associated with either real or anticipated communication with another person or persons" (p. 28). Furthermore, he equated these communication apprehensive persons to special needs students who are being forgotten or left to suffer. McCroskey (1977a) hinted that these communication apprehensives have been marginalized by the U.S. Department of Health, Education, and Welfare. This is not a view that has died out over the years. Horwitz (2002) explains this fear within communication apprehension as "the hidden communication disorder because it is frequently not recognized, acknowledged, or discussed" (p. 1). This disorder manifests in different ways in the classroom, and can significantly alter a student's behavior. Specifically looking to higher education, students who suffer from high communication apprehension may feel uncomfortable or even unable to ask questions during class (Bowers, 1986). These communication apprehensives may choose to "skip classes or choose modules that exclude their feared type of communication" (Byrne et al., 2012, p. 567). Moreover, these students with high communication apprehension often seem to achieve less in the class than their aptitudes would justify (O'Mara et al., 1996).

This last claim from O'Mara, Allen, Long, and Judd (1996) concerning achievement and aptitude needs to be explained a little more in context. One must understand the multifaceted plight of the communication apprehensives in the classroom to appreciate the challenges that face these individuals. Many assumptions about education modality and methodology to help communication apprehensives have been proven to be unsuccessful.

One myth with helping these types of sufferers is that communication educators need to have small classrooms. However, this misconception might be rooted in qualitative data. Byrne, Flood, and Shanahan (2012) report that the majority of high communication apprehensives "experience little difficulty in taking part in group discussions with friends or when they have a friend in the group. Most feel comfortable with people they know and, as a result, express themselves freely" (p. 570). These smaller spheres of influence should reduce pressure and anxiety created, which is causing all the problems for communication apprehensives. Scott and Wheeless (1976) held two studies to examine the impact of communication apprehension in small classes with enrollment being reduced from 30 students to 20 students. However, in both the normal 30 student classroom and the smaller 20 student classroom, the impact was the same; high communication apprehensives "were found to receive lower scores on both objective tests and instructor-evaluated written projects than low communication apprehensives" (McCroskey, 1977a, p. 30).

Furthermore, the opposite was also seen to be unfruitful when examining class size and communication apprehension. The assumption of mass lecture type classroom environments does relatively nothing to lower communication anxiety. "In a study of 709 students in a mass lecture course, no relationship between communication apprehension and achievement whatsoever was observed" (McCroskey, 1977a, pp. 30-31).

Beyond the size of the classroom, others might assume that personalized or individualized instruction would help lower and ease the stress and anxiety to ease the suffering or communication apprehension. Some research has suggested that high communication apprehensives feel more comfortable talking in one-on-one situations

with friends, or at least when they know the other person (Byrne et al., 2012). However, as reported from Scott, Yates, and Wheeless (1976) research was conducted to examine the effect of Personalized Systems of Instruction (PSI) on high communication apprehensives. The researchers determined that students with high communication apprehension were taking the modules often (repeated testing was allowed to demonstrate mastery); nevertheless, high communication apprehensives were completing fewer modules. So "it was concluded, the PSI system was not proving effective for students with high communication apprehension" (McCroskey, 1977a, p. 30).

With these noticeable impacts to affect the communication apprehensive sufferer, one needs to better understand how this condition can create effects specifically in the classroom. While pressure exists to help the communication apprehensive on a personal level, communication educators cannot ignore the impact to the learning environment which is created. "Unfortunately, communication apprehension does have an impact on learning, and that impact is negative" (McCroskey, 1977a, p. 29). The first and most obvious expectation from high communication apprehension sufferers is avoidance (McCroskey, 1977a; Bowers, 1986). This has a greater impact on the learning environment than just the communication apprehensive alone. It is understood that when these communication apprehensives miss class, they lose out on valuable information and the classroom experiences of learning the information in this specific environment. But here are more drawbacks than just this lost opportunity to the sufferer. The learning environment suffers due to the loss of potential additions that these students can provide. When the plurality of voices in a classroom diminishes, the diversity is lost with it. The opportunity lost to the sufferer is also an opportunity lost on all students in the class. For

higher education, this plurality of voices and diversity of thought is highly prized, as seen in recent U.S. Supreme Court cases as *Fisher v. University of Texas at Austin* and *Grutter v. Bollinger*. In these cases, the court affirmed the ability of a university to use a holistic admissions process to create a diverse student body that benefits the entire university. When the suffering of communication apprehension becomes so great that the sufferer chooses avoidance, the university loses this benefit, and the learning environment loses the potential for educational gains.

Secondly, beyond class avoidance, the student's apprehension levels might cause an interference with the successful completion of the assignments or assessments (McCroskey, 1977a; Bowers, 1986). Although the greatest impact to this scenario is the outcomes of missed or uncompleted assignments on the communication apprehensive's future opportunities and success. This scenario has far reaching consequences to the learning environment. Educators look to these assignments as barometers of learning in the classroom (Sawyer, et al., 1992). If these assignments are not true reflections of ability and understanding, but a reflection of the debilitating nature of communication apprehension, educators will be motivated along an inappropriate learning trajectory. This in turn produces an opportunity cost of the entire class. Classes that should be pushing further with different or deeper educational goals are stunted due to these misleading scores from missed or under-performed assignments and assessment. Not understanding and correcting for the communication apprehension sufferers can have a far reaching effect in classrooms, which is seen beyond the personal impact for the communication apprehensive.

Now that it is understood a) what happens to a high communication apprehensive and b) what happens with the classroom, one needs to address the cause of these classroom effects. While broadly, the problem stems from the high apprehension; but to only look there would be in a sense 'victim-blaming' the problem away. There is more to these classroom effects, and it would be wise to better understand them.

Since the publication of Rosenthal and Jacobson's (1968) *Pygmalion in the Classroom*, much attention has been given to the correlation between the expectation that the teacher has for the specific student and actual student achievement. Dusek (1975) explains that in numerous studies, it has been observed that a teacher's expectation predicts differential achievement between students even when there is no difference in a student's actual skills or abilities. Due to the possibility of previous lower performance caused by high communication apprehension, this could shape a teacher's expectations as low for a person suffering from high communication apprehension. Since intelligence is usually strongly associated with achievement, without a diagnosis of high communication apprehension, it is easy to assume that lack of achievement could be attributed to the lack of intelligence. But this assumption would be wrong. "Since high communication apprehensives were found to achieve less than low communication apprehensives in instructional environments but not in others, that correlation could not account for the differential result" (McCorskey, 1977a, p. 31). This could be a fallacious foundation for the lower achievement for communication apprehensive if one were to take teacher's expectations into account.

Computer-Mediated Communication

As technology grows and the use of technology broadens and develops, more communication methods and strategies will be deployed using these technological advances. To better understand the use of technology to meet human needs in communication, one could observe the way people are using computers and the internet to facilitate communication. Communication by way of the web and how students primarily use technology to communication on campuses today is referred to as computer-mediated communication. Specifically, computer-mediated communication "is used to refer to a wide range of technologies that facilitate both human communication and the interactive sharing of information through computer networks, including e-mail, discussion groups, newsgroups, chat, instant messages, and Web pages" (Barnes, 2003, p. 4).

From this definition of computer-mediated communication, one can imagine the vast amount of communication on a college campus being defined as this. This splits computer-mediated communication in to two forms: synchronous and asynchronous. Synchronous computer-mediated communication has a similar chronemic nature to face-to-face communication, because both happen in real time. These forms are like chat and instant messages where there is less space of time between the dialog or discussion. Asynchronous computer-mediated communication does not have a similar chronemic structure or nature as face-to-face communication. An example of this asynchronous form would be the use of email to communicate with another person. Synchronous and asynchronous computer-mediated communication both come with varying levels of communication apprehension within different contexts.

While the function of communication remained the same, the use of computer-mediated communication can cause a change to the ideas of mental modeling and channels. Specifically with the idea of mental models, which as Barnes (2003) explains "the models that people have of themselves, others, the environment and objects with which they interact" (p. 15), the type of communication can changes these expectations. To better understand the idea of mental models and the use of these in communication, mental models are perceptions of the communication process elements and how they might react within the communication exchange. Mental models are created through the processing of information and are further developed from personal perceptions of existing knowledge. As communication is mediated through technology, more uncertainty and ambiguity creeps in to the communication process. When someone is sending instant messages as correspondence with another person, each of the subjects are forming mental images of the other if they have not met in a face-to-face environment. This lends computer-mediated communication to lack contextualized meaning and information due to the loss of access. Ong (1982) explained,

> In real human communication the sender has to be not only the sender but in the receiver position before he or she can send anything...Human communication is never one-way. Always it not only calls for response but is shaped in its very form and content by anticipated response (p. 176).

As one can expect, communication with limiting variables, such as those that exist in computer-mediated communication, can create more problems with this anticipated response when more ambiguity exists in the communication process.

Beyond the differences in mental modeling, computer-mediated communication changes the channel of the process. Barnes (2003) writes "In face-to-face communication, the voice is the channel for the symbolic environment of speech that is used to create spoken language. When using computer-mediated communication, the computer network becomes the symbolic environment in which human communication occurs" (p. 16). This further explains the difficulty in creating specified meaning or more holistic meaning in a context. With the differing in channels, access to communication becomes more limited. Such nonverbal communication like paralanguage, which is described as "vocal phenomena" (Knapp & Hall, 2002, p. 381) to imply meaning, would not exist.

Mehrabian and Ferris (1967) explained in a study that only seven percent of the communication that humans rely on to produce meaning is considered verbal communication, which is considered word choice and arrangement (Knapp & Hall, 2002). Furthermore, the same study stated that 38% of human communication is produced through vocal phenomena called paralanguage. As students and the academy choose to increase computer-mediated communication, this choice is limiting access to the paralanguage that humans have historically relied for a large portion of communicated meaning.

Additionally, the use of various mediums in the human communication process can shape the meaning. Cathcart and Gumpert (1986) examined how interpersonal communication can be mediated. They explained this meditation as any human communication where a medium has been interposed to transcend the limitation of time and space. Specifically, one can look to email as this type of mediated interpersonal

communication. Email transcends physical time, because it can exist in multiple times: when it is being drafted and when it is being read. Secondly, it means this definition as it transcends space. Email does not actually inhabit physical space as a face-to-face conversation. This poses a few problems in a communication context. Cathcart and Gumpert (1986) explain that "a handwritten or typed letter can facilitate a personal relationship over distance, but the time it takes to transport the message along with the lack of immediate feedback alters the quality and quantity of information shared" (p. 30). Similarities to these phenomena can be seen in computer-mediated communication.

While limiting, computer-mediated communication does offer access to interpersonal relationships. However, while these relationships can exist, one must understand the contexts of these relationships and the barriers that surround them. When examining the types of relationships that can exist through computer-mediated communication, like that of a student/instructor relationship in the context of an online public speaking course, this relationship would be most similar to a relationship that Horton and Wohl (1986) called a para-social relationship. "Para-social relationships are the seeming face-to-face relationships that develop between spectator and performer through radio, television, and the movies" (Barnes, 2002, p. 17). There is this implied agreements between both parties, performer and spectator, that they will progress in this relationship as if it were not mediated, as if it were face-to-face (Horton & Wohl, 1986). Therefore, people start believing that they are developing an interpersonal relationship with technology.

Meyrowitz (1985) argues these para-social interpersonal relationships only create an illusion of a relationship. These relationships are argued as "the unidirectional mass

medium of television offers the illusion of face-to-face interaction with performers and political figures" (Barnes, 2002, p. 17). This false relationship only exists in the mind of the viewer. The viewer projects the majority of the content and context of this developing relationship, which only exists in the context of the viewer's mind. Meyrowitz (1985) explains that "viewers come to feel they 'know' the people they 'meet' on television in the same way they know their friends and associates" (p. 119).

These previous studies in the field of television can shed some light to how people view the relationship of student/instructor or instructor/student in an online public speaking course. While interaction can happen one-to-one, most interactions for both were one-to-many. Throughout the course, the instructor posted messages, either via text or video, to the class. Within these videos, students could adopt these false para-social interpersonal relationships. Similarly, as the student records his/her presentations to be viewed by the instructor and the class, the instructor developed para-social interpersonal relationships with each student. In order to develop communication and/or feedback, Ong (1982) explains that the students and instructor had to use the context of response and anticipated response. With a false unidirectional relationship being created to anticipate responses, it makes it difficult to engage. This false relationship only increases ambiguity and uncertainty in a communication context. And as studies have stated previously, when ambiguity and uncertainty increase, fear and anxiety are most likely to increase as well.

Paradoxical Implications of Computer-Mediated Communication

As technology makes access to communication and access to people easier and more convenient, does this ease and convenience expand human experience, enhance quality of life, or facilitate democracy (Shedletsky & Aitken, 2004)? Wilhelm (2000)

explains that it does neither of those things, and that actually, communication technology does the very opposite. Other studies specifically claim that these communication technologies operate to reinforce physical and existential barriers between people, which in turn diminishes any social interaction (Arakaki Game, 1998). Furthermore, it is reported that "the consequences of technology are always profoundly contradictory; contradiction is of the essence of technology, not just some accidental byproduct of the historical process" (Arakaki Game, 1998, p. 127). Therefore, a paradox of function and use starts to develop as an individual studies the nature of computer-mediated communication.

But there are many more paradoxical implications with technology, specifically with computer-mediated communication. Take, for example, the vehicle of this type of communication – the use of the internet. The internet has allowed humankind to cultivate an ever-shrinking "global village." Looking past the obvious oxymoronic paradox in the name of the term, many groups view this vehicle "as a means to reduce cultural isolation and distance" (Shedletsky & Aitken, 2004, p. 8). However, other groups see this vehicle, not as a benevolent tool to bring people together, but as a malevolent tool to destroy culture. Some see the internet as a powerful way for the United States to power project while homogenizing culture by creating a domination of US culture over all others (Ess, 2001). Even furthering the idea of this vehicle, the internet, as a paradoxical tool, one can examine the use of the internet in businesses today. Employers and companies assume that the internet increases productivity. However, what one observes in reality is that the internet has enabled workers, at all levels, access to being social or access to their private

business affairs very easily; therefore, productivity has actually lowered with the increase of the internet (Shedletsky & Aitken, 2004).

Currently, there is a growing line of empirical research exploring an interpersonal communication paradox called the internet paradox hypothesis. This hypothesis recognizes that the majority of internet usage is for interpersonal communication and interpersonal relationship purposes (Kraut et al., 2000). While researchers know this to be true, there are conflicting studies explaining the effects of the use of the internet for these purposes on interpersonal communication, relationship, and an individual's psyche. LaRose, Eastin, and Gregg (2001) explain support for a positive view of internet use as it relates to enhancing our communication lives; however, Kraut et al. (2000) reports the oppose effects. These findings of adverse effects to interpersonal communication being caused by internet use further by saying that it can "reduce interpersonal connection…and reduce psychological well-being. Some researchers think the internet will increase depression and loneliness" (Shedletsky & Aitken, 2004, p. 8).

Whether relationships or the individual is positively or negatively affected, researchers do agree that communication changes as it operates differently online. Studies report when individuals communicate online differences such as word choice, turn-taking, implied meaning, and social actions enacted happen frequently and consistently. Baym (2000) explains that we all must work hard to communicate online due to the uncertainty of interpreting meaning; this process is more difficult because individuals cannot observe online context as a method to infer meaning and recognize intentions.

Computer-Mediated Communication and Apprehension

Wrench, Brogan, McCroskey, and Jowi (2008) explain that 47% of people who suffer from communication apprehension attribute this anxiety to lack of control. How control affects human cognitions and behaviors is a constant research question by many social scientists in the field of psychological perspectives. In the research area of control, individuals perceive harnessing control as they "exert more effort, try harder, initiate action, and persist in the face of failure and setback; they evidence interest, optimism, sustained attention, problem solving, and an action orientation" (Skinner, 1996, p. 556). These are qualities and characteristics of those that feel empowered through their perception of holding control.

However, the feeling is quite different for those who feel as if they are losing control or have a lack of control. Skinner (1996) explains the lack of control as a feeling of need to "withdraw, retreat, escape, or otherwise become passive; they become fearful, depressed, pessimistic, and distressed" (p. 556). The lack of control should not be perceived as the concept of learned helplessness. While both have similar features and qualities, the separating characteristic lies within the desire for control. Learned helplessness is "an acquired repertoire of behaviors and skills by which a person self-regulates internal events – such as emotions, pain, and cognitions – that interfere with the smooth execution of behavior" (Rosenbaum, 1983, p.68). Just because an individual has a lack of control, does not mean the person does not desire control; whereas, learned helplessness is seen as the feeling of lack of control meets the lack of desire for control. However this connection between control and communication apprehension is illusive. MacIntyre and Donovan (2004) explain this lack of a relationship as "difficult to explain

but might reflect a difference between trait anxiety and communication apprehension, the influence of a mediated variable such as opportunity for control, or measurement issues" (pp. 581-582).

Some communication apprehension might be the result of computer-mediated communication apprehension (Scott & Timmerman, 2005). This is to say that communication apprehension stems for a medium which feels unfamiliar or uncertain. When a person does not feel comfortable using technology as a way to communicate with others, then the individual's communication apprehension levels will be on the rise. However, the current majority of the generation on college campuses taking online classes has grown up with this technology. They are very familiar with this modality of communication. This specific generation sees computer-mediated communication as commonplace; therefore the mere presence of these tools as a medium would have little to no effect to increase communication apprehension of this sort (Wrench & Punyanuant-Carter, 2007). Gearhart and Bodie (2012) explains that computer-mediated communication can actually be therapeutic for those that have face-to-face communication apprehension. And therefore, the stress that is commonly associated with communication apprehension is rarely interrelated to computer-mediated communication apprehension.

When looking at computer-mediated communication attitudes and familiarity, "people with predisposed good attitudes towards computer-mediated communication will be more likely to use computer-mediated communication as an outlet to express themselves if they have high levels of communication anxiety" (Burke et al., 2013, p. 6). This idea is further supported with Kelly, Duran and Zolten's (2001) exploration of email

use among reticent and non-reticent college students. While both sets of students used email on the same level of frequency when communicating with college faculty, the reticent student expresses a stronger preference for using computer-mediated communication. They perceive it as a more comfortable means of communication when communicating to faculty.

Researchers suggest that anxiety and anxiousness significantly predicts emotional connections people make on social media, such as Facebook (Claytona et al., 2013). Furthermore, these findings suggest that social media outlets are used by those who feel high communication apprehension in face-to-face interact; for these individuals, there is more comfort and ease with the interaction through computer-mediated communication on social media. The implications of this phenomenon are that given an outlet like social media, individuals who feel communication apprehension in face-to-face communication will gravitate to more computer-mediated communication. This suggests as apprehension grows greater in individuals, "the use of social media outlets to communicate, such as Facebook, also become greater (Burke et al., 2013, p. 7).

While this computer-mediated communication trend toward social media increases, Davis (2013) warns that face-to-face communication plays a vital part for adolescents in discovering their self-worth and identity. Furthermore, Burke et al. (2013) explains as adolescents "using the Internet and other electronically mediated means for social support lack the same relief as those who seek face-to-face comfort" (p. 7). This suggests that as communication apprehension is on the rise, people move to structures that seem to give them access to communication, like computer-mediated social networking site. While the problems associated with high communication apprehension

are never addressed and remain at the same levels, the individual feels as if they have an outlet to voice their opinion or address their concerns. However, the connections with others on these social networking sites do not seem to be as strong as face-to-face interactions. Therefore, this computer-mediated alternative that the high communication apprehensive believes to be an equal alternative is a false assumption. Furthermore, the literature explains that the support levels are not as strong either (Burke et al., 2013).

Lewnadowski et al. (2011) addresses this concern as they call into question the direction of our growing mental health regarding the lack of support and the continued levels of suffering as social networking and social media continues to grow. This has a compounding effect as Zhang, Tang and Leung (2011) stated that individuals with lower communication apprehensives seek other low communication apprehensives; however, those that suffer from high communication apprehension had fewer network extensions and less maintenance of relationships through the use of social networking sites. Furthermore, this study explained that because of the aforementioned factors of fewer network extensions and less maintenance, these sufferers of high communication apprehension had significantly lower levels of satisfaction, in terms of gratification and self-esteem, from the use of these social media and social networking sites.

Looking specifically at college students, Ranney and Troop-Gardon (2012) observed the communication modalities of communication apprehensives in their first year of college. Research suggested that students who are high communication apprehensives are slower to make new friends within the first year; however, these apprehensives used computer-mediated communication to connect with existing long term friendships. This experience and extra modality during the first year added to a more

positive adjustment. The implications of this phenomenon could explain that the computer-mediated communication helps these apprehensives learn how "to cope and deal with their stressful transition into college life" (Burke et al., 2013, p. 10). This alternative modality to communicate also helped those who were suffering from depression and anxiety (Ranney & Troop-Gordon, 2012).

Access to an alternative channel of communication can help those experiencing a difficult time with a transition. However, these studies only examine the transition of physical space with an alternative to stay connected to existing relationships. While a benefit in coping can be seen with the existence of an alternative when transitions of an interpersonal nature happen, there is a lack in the literature to examine the effectiveness of this alternative in coping with high communication apprehension and coursework.

Online Education

The origins of the online classroom has its roots in distance education (Lim, Morris, & Kupritz, 2007). Morabito, Sack and Bhate (1999) charted the evolution and the growth of distance education throughout four changing generations: (a) print-based instruction, (b) early technologies in broadcasting systems, (c) online instruction, and (d) web-based teleconferencing platforms. The advancement of web-based instruction has broadened and unwrapped a new era in distance education, and it is also attributed to the continual expansion of various educational opportunities by reaching people in various geographical locations (Smaldino, Lowther, & Russell, 2005). Because of these increasing technologies, global access to learners is more of a reality.

"With the recent growth of the Internet and other distance technologies, web based course delivery has become an attractive option for expanding the educational

opportunities available to students" (Rivera & Rice, 2002, p. 1). Classroom environments

are composed of two differing spaces: the physical space, which represents the

arrangement of the room, and the psychological space, which is represented by levels of

respect, care, praise, and feedback (Ellis, 2004).

> From a general perspective, the physical component of the learning environment
>
> may be located online, in a traditional classroom, or a hybrid of the two formats.
>
> The psychological components, frequently labeled climate, are found in the
>
> interactions that occur between people in these learning environments (Mullen &
>
> Tallent-Runnels, 2006, pp. 257-258).

When segregating the online classroom, a person must be prepared to understand the non-

linear, asynchronous nature of Web-based learning (Ruberg, Taylor, & Moore, 1996).

Therefore, "online instruction is defined as any form of learning and/or teaching that

takes place via computer network" (Lim, et al., 2007, p. 28).

The advancement in technology of online instruction over recent years has opened

new pathways in distance learning (Lim et al., 2007). This contribution has expanded

educational opportunities by giving access to people in various geographical locations

and thus allowing learners worldwide access to education (Smaldino et al., 2005). Online

instruction opens education pathways and helps address the issues of time and place

constraints on delivering learning experiences. Furthermore, it allows flexibility of

learning modes so participants in online education can better control their learning pace,

path, and contingencies of instruction (Lim et al., 2007). This expansion in access can be

seen in the increase from 1.6 million students taking at least one online course during the

Fall of 2002 to more than 7.1 million in 2012, which represents a compound annual growth rate of 16.1 percent (Allen & Seaman, 2013).

Based on responses from more than 2500 colleges and universities, 63% of respondents explain that online learning was a critical part of their institution's long term strategy (Allen & Seaman, 2010). "Leaders in the field of education have argued that e-learning technologies can effectively respond to accelerating global competition, increase the quality of learning experiences, remove situational barriers, and be more cost effective" (Anderson, 2008, pp. 91-92). Academic administrators self-reported to be "extremely optimistic about the growth of online learning, with over 80 percent reporting that they view it with 'more excitement than fear'" (Allen & Seaman, 2012, p. 2). This might be due to the increased proportion of higher education students who are taking college and university courses online. Allen and Seaman (2013) reported that 33.5% of higher education students were taking at least one online course.

There is a growth of empirical comparisons which explain that online students perform as well as students taught through traditional means (Russell, 1999; Tucker, 2001). Researchers suggested that student satisfaction does not significantly differ between web-based compared to traditional instructional mediums (York, 2008).

> However, many of the studies within this body of literature suffer from a range of methodological weaknesses, such as relying on small, nonrandom samples; failing to replicate findings; lacking demographic controls; and comparing courses with substantial differences in content, materials, instructors, and methods of evaluating student performance (Driscoll, Jicha, Hunt, Tichavsky, & Thompson, 2012, p. 313).

Recent research that uses comparisons of larger samples and replicated courses have demonstrated that the traditional classroom students tend to score higher grades on identical assessments when matched to their online counterpart (Urtel, 2008). Therefore, the literature on the effectiveness of online versus traditional classrooms can be characterized as a debate (Driscoll et al., 2013). Even when applying meta-analyses to understand trends in the data, the literature is often a reflection of an even divide between studies that find traditional classes outperforming online course or find the opposite (Sitzmann, Kraiger, Steward, & Wisher, 2006).

In addition to the research validity questions raised previously, not all are excited nor embracing this growth in distance learning. Nearly two-thirds of the faculty surveyed by Allen and Seaman (2012) claimed they believe that the learning outcomes for an online course are inferior or somewhat inferior to those for a comparable face-to-face course. Beyond faculty having these perceptions of outcomes, learners also see concerns. "Learners also report the lack of a sense of belonging or community during online learning that prevents the development of shared feelings and emotions between learners and instructors" (Lim et al., 2007, p. 28).

The Differences of Teaching Modalities

When looking at these two modalities of teaching, the literature is clear about the differences. Logan, Augustyniak, and Rees (2002) explains that the online environment does offer a unique opportunity for flexible, student-centered learning. Specifically with this claim, online course students are required to take responsibility for their own education and are forced to be proactive with the learning process (Logan et al., 2002). This lack of immediate availability of a professor in the online environment to respond to

questions concerning the course materials can prompt students to discover answers on their own, which is a process that usually reinforces the acquisition of knowledge (Atkinson & Hunt, 2008). Furthermore, online learning students must participate directly in the construction of knowledge and cannot rely on passive, instructivist pedagogy (Summers, Waigandt, & Whittaker, 2005).

Online course offerings can be seen as dynamically different as these environments can provide a more comfortable setting for participation from students who are shy or lack confidence in a traditional class environment (Clark-Ibanez & Scott, 2008). The flexibility and unique access to multiple instructional methods that these online course offering gives to the online student might not exist for the traditional classroom (Sitzmann et al., 2006). Specifically with this environment and due to the asynchronous design of online courses, students have the ability to learn at their own pace, go back and review and reread portions for competency, take breaks if the student is tired, and work during times that is most effective for the student's education (York, 2008).

But these online course designs, where standardized courses built around generic content and multiple choice exams are replacing distinctive classes taught by specialized faculty. Ritzer (2004) argued that this process is "McDonaldizing" higher education. Most of the concerns about the differences between the traditionally taught course versus the online course centered around the replication of the interaction that occurs in a traditionally taught class, which is argued to be vital to the learning process (Rovai & Barnum, 2003). "Students learn far more in courses than direct content, and in an online environment they do not have the same opportunities for spontaneous, open discussion

with their instructors and peer" (Driscoll et al., 2012, p. 314). While online courses employ a host of platforms to encourage and replicate interaction, scholars argue that these online measures are "not comparable to a real-time, in-person discussion" (Summers et al., 2005, p. 246).

Treatment of Communication Apprehension

When it comes to lowering speech anxiety, speech educators typically employ one or more of the following methods: (a) the skill deficit model, (b) systematic desensitization, and (c) cognitive modification (Stacks & Stone, 1984). These three models are reflective in the strategies used to teach the basic public speaking course. The skills deficit model is fairly simple and straightforward. This is where the educator helps lower speech anxiety simply by instructing the students in the steps to develop a public address. This works by giving the student a model to use in the drafting stages and reduces uncertainty by developing skill abilities (Glaser, 1981).

Probably the most successful technique used to lower speech anxiety is by way of systematic desensitization. Systematic desensitization falls in the category of methods like exposure therapy (Finn, Sawyer, & Schrodt, 2009). The more a student becomes familiar with the activity, uncertainty is lowered by experience. Finally there is cognitive modification. This model treats the communication apprehension due to the person's negative self-appraisal of one's communication abilities through a cognitive modification programs like self-concepts and self-disclosiveness (Stacks & Stone, 1984).

Ayres and Hopf (1985) conducted a study which examined the use of experience and visualization as factors for state speech anxiety reduction. Within this study, visualization "requires the person to imagine performing some action successfully in a

carefully guided exercise" (Ayres & Hopf, 1985, p. 319). This act of visualization is synonymous to an athlete visualizing a goal or visualizing a win before acting in the game. Theoretically, this visualization helps reshape the understood present or event. Conceptually, this calms the participant prior to the performance. The researchers found two significant results that suggested both experience and visualization help reduce state speech anxiety.

It is worth mentioning the tool used to conduct the research for visualization was developed by Ayres & Hopf (1985) with no mention of a pilot study or reliability or validity testing. While the validity and reliability are questionable within the techniques used for visualization, the methods of testing experience were strong. Research of experience within this study suggests that while experience will lower speech anxiety, as the participant gains more and more experience the less anxiety is removed by each further experience. This is to say that the progress to eliminate speech anxiety is rapid and great in the beginning, but then becomes slower with more experience.

The visualization technique is related to skills training in the skill deficit model. It allows the speaker to examine the skills learned to produce a speech, and imagine the speaker performing the steps prior to the actual event. Secondly, this visualization technique helps cognitive modification. With the completion of visualizing success, this boosts the confidence of the speaker. Slowly, over time and multiple contexts, a speaker who chooses to use the visualization technique will feel more confident, self-assured, and the ability to assume the role of a public speaker will become easier.

This communication apprehension which is related to speech anxiety ranges from very mild to very extreme apprehension. In such cases with extreme communication

apprehension, effects can be characterized by both physiological and psychological responses which can be debilitating for a person (McCroskey, Ralph, & Barrick, 1970). McCroskey (1972) estimates as many as 20% of students enrolled in basic public speaking classes suffer from extreme communication apprehension. This statistic only reflected the most extreme cases, while the majority of these courses consist of students with some level of communication apprehension. So, in discussing communication apprehension, one must be concerned with both the developed fear and the process by which this fear is developing. This anxiety does not just appear as the speaker is in the act of communicating, but exists prior to the event. It builds or is created through the anticipation of the communication act. As the field of communication studies becomes more aware of the depth of this concern, many institutions have warranted the development of special laboratories and treatment programs to help these students with extreme communication apprehension.

The major problem with speech communication research is it has historically focused on the traditional teaching methods used within the traditional classroom, which many refer to the brick and mortar classroom or the face-to-face classroom (Allen, 2006). These methods were developed for real time face-to-face communication within tangible physical spaces. As education changes, most specifically with the employment of online education growing steadily, the field needs to examine whether or not these techniques are relevant in this new online educational sphere. These online educational spheres rely heavily on intangible physical spaces; whereas, these spaces are void of real time face-to-face interaction among classroom participants and peers. Previous research has traditionally mapped out techniques and methods of reducing communication anxiety, but

has done very little to reflect on the effectiveness of these designed techniques and methods upon the online environment or populations that chose these environments.

One of the most effective methods of reducing speech anxiety is through systematic desensitization. This method uses experience and uncertainty reduction theory to diminish both state and trait communication apprehension. This is the most common strategy used to reduce high communication apprehension (Glaser, 1981). Therefore, one must question the usefulness and meaningfulness of this treatment method for the online educational environment. Concepts of medium and format should be questioned, as well as types of education being taught. Performance or skills based learning would present unique and challenging obstacles for the instructor. Coupling this distance conflict with a heightened or deep-seated fear of the activity, the online education problems for a basic public speaking course increases in difficulty (Allen, 2006).

Education researchers must also question which populations are most at-risk when creating opportunities through technology. Institutions, which offer multiple opportunities to satisfy credit hours, must examine who will most likely sign up for these opportunities, while having the understanding of the challenges of that population. If an individual has a heightened or deep-seated fear of an activity, the abstraction or the distances that an online course might offer could seem enticing (Linardopoulos, 2010). If the most fearful populations, those having the highest in communication apprehension or speech anxiety, are signing up for these online basic public speaking courses, this awareness might shift the decision-making paradigm to allow such classes. The decision-making process lack this information which is needed to realize if structures are

systematically setting up students with high communication apprehension for more difficulty in learning the material or setting them up for complete failure.

There are two significant levels that systematic desensitization help lower communication apprehension for students: exposure therapy and uncertainty reduction theory. Concerning the first - exposure therapy, the neurobiology of communication apprehension reduction must be examined (Harris et al., 2006). Gray and McNaughton (2000) examine that as a general rule, the effects of sensitization decays rapidly while habituation to a previously feared stimulus tends to dissipate gradually. Sensitization, in these respects, is understood as "the increase of state anxiety following punishment," whereas habituation is referred to as "the progressive waning of state anxiety associated with low levels of negative reinforcement" (Finn, Sawyer, & Schrodt, 2009, p. 94). Essentially, as one experiences these negative feelings, this constant exposure removes the feeling of punishment that one associates with the event, as well as removing the state anxiety of communication apprehension connected with this perceived punishment.

The exposure to these negative feelings allows the speaker to adjust incrementally to each additional exposure. This feeling of punishment diminishes each time as the participant is forced to experience and interpret each event. Therefore, in relation to the state communication apprehension experienced in public speaking, the more a student is exposed to public speaking, theoretically the anxiety the student experiences about public speaking should diminish. Ayres and Hopf (1985) explained that "it seems fairly apparent that the more experienced one is at giving speeches the less likely one is to experience speech anxiety (p. 321)." Furthermore in this study, respondents with the highest levels of anxiety had the most anxiety decrease per speech experience.

Secondly, research indicates there is another level to systematic desensitization as a speech anxiety reduction technique. Uncertainty reduction theory (URT) is caused by systematic desensitization. Specifically when talking about desensitization in the field of communication, research is examining the "arranging fear-provoking scenes into a graded hierarchy" (Wilkins, 1971, p. 311). In discussing desensitization, this is the fear associated with experiences felt or perceived in an ordered sense. So when understanding the concept of systematic desensitization, this is the guided development of the fear as it is rearranged in the theoretical hierarchy of the unknown. This is to say that the more an individual does not know or does not understand in a given scene, anxiety increases. This is the underpinning to uncertainty. As this uncertainty increases or decreases, the anxiety climbs further up the theoretical hierarchy or down, respectively.

Uncertainty reduction theory posits that much of human communication is carried out for the purposes of giving and gaining new information about those interacting, and therefore this interaction reduces the unknown or uncertainty of aspects of interpersonal relationships or social situations (Witt & Behnke, 2006). As individuals communicate and interact, participants gain more understanding about the social situations involved. This, in return, reduces uncertainty. When speakers are more unsure of themselves and uncertain about the performance or what they are doing, it stands to reason that speech related anxiety will result. With the application of uncertain reduction theory, the more a speaker becomes familiar with audiences, speech development in public speaking spheres or the feelings associated with presenting a public address, communication apprehension will be reduced. This reduction of anxiety and fear happens because the speaker can predict with greater certainty the events within the context of the public speaking event.

Justification/Theoretical Framework

Systematic desensitization or exposure therapy works on the philosophical

framework of the argument about "trace" and "repeatability" (Derrida, 1967, 1989, 1995,

2002, 2005; Roy 2010). The theoretical framework for communication apprehension

reduction or the methods developed by speech educators to reduce level of speech

anxiety can be best explained through the work of Jacques Derrida (1967, 1989, 1995,

2002, 2005). Once the concept of repeatability and the trace is understood, then the use of

systematic desensitization or exposure therapy is better realized.

Therefore, starting with the simplest argument that Derrida can formulate, he

looks to the premises of the foundations of thought and experience. If one reflects on an

experience in general, what one cannot deny is that the experience is conditioned by time.

Every experience, necessarily, takes place in the present. In the present experience, there

is the kernel or point of the now. What is happening right now is a kind of event, which

is different from every other now that one has ever experienced (Derrida, 2002). Yet,

also in the present, one will remember the recent past and then anticipate what is about to

happen. This memory and the anticipation consist in repeatability. "To think, what is

called thinking, at one and the same time, both what is happening (we called that an

event) and the calculable programming of an automatic repetition (we call that a

machine). For that, it would be necessary in the future to think both the event and the

machine as two compatible or even in-dissociable concepts" (Derrida, 2002, p.72).

Derrida (2002) explained that these two ideas, the event and the machine, are antinomic.

These two concepts seem to appear out of joint, but logically sound. Event and machine

appear this way because one conceives an event as a singular non-repeatable substance.

When juxtaposed with this concept of machine, a concept based on repetition, these two seem to counter-balance one another.

"It is destined, that is, to reproduce impassively, imperceptibly, without organ or organicity, they received commands. In a state on anaesthesis, it would obey or command a calculable program without affect or auto-affection, like an indifferent automaton" (Derrida, 2002, p.73). This so-called impossible event, the blending of what one knows with the event befallen them, canals the singularity of the event. This gives every now, or event, a resemblance of the past. Because what one experiences now can be immediately recalled, it is repeatable and that repeatability therefore motivates a person to anticipate the same thing happening again. Therefore, what is happening right now is also not different from every other now that one has ever experienced.

However, at the same time, the present that is being experienced is an event and it is not an event because it is repeatable. This notion of "at the same time" is the crux of the matter for Derrida (2002). Derrida (2002) refers to this concept as "difference." For Derrida (2002), it is this relationship in which the machine like repeatability is internal to the irreplaceable singular event while remaining heterogeneous to each other. The conclusion is that one can have no experience that does not essentially and inseparably contain these two agencies of event and repeatability.

This notion of repeatability and event is not wasted on researcher in the field of communication apprehension. Strelau (1983) describes anxiety reactivity as "a temperament feature that determines the relatively stable and characteristic intensity (magnitude) of reaction for a given individual. It is a dimension in which individuals differ and these differences can be characterized quantitatively" (p. 177). As Derrida

(2002) recounts the machine, Strelau (1998) theorized that an individual's level of reactivity governs the amount of anxiety experienced when confronted with a situation or stimulus, like that of public speaking (Roberts et al., 2005).

Derrida's (2002) machine can be further compared to Gray's (1982) comparator. When looking at the three emotional systems that allow humans to manage stress – BIS, BAS, and FFFS, "these three are controlled by another specialized neurological circuit called the comparator, which predicts the probability of future reinforcement conditions based in part on signs of punishment and reward detected in the environment" (Harris, Sawyer, & Behnke, 2006, p. 214). Within the communibiological paradigm (Beatty, McCroskey, & Heisel, 1998), the septo-hippocampal system functions as a comparator by generating and comparing expectations from past experiences with the event based current stimuli. Klonowics (1987) explains that "reactivity plays a pivotal role in mediating relations between the environment factors and human respondent and operant behavior" (p. 184).

Therefore, the basic theoretical argument coming from Derrida (1967, 1989, 1995, 2002, 2005) can be generally seen in current communication apprehension research. However, this basic argument of Derrida (1967, 2005) contains four important implications which must be understood to develop a holistic theses. First, "experience" as the experience of the present is never a simple experience of something present over and against a person, right before an individual's eyes as in an intuition; there is always another agency there. Repeatability contains what has passed away and is no longer present, and what is about to come but is not yet present (Roy, 2010). The present, therefore, is always complicated by non-presence. Derrida calls this minimal

repeatability found in every experience – the trace (Derrida, 2005). Indeed, the trace is a

kind of proto-linguisticality, Derrida (1967) also calls it arche-writing, since language in

its most minimal determination consists in repeatable forms. These are the necessary and

foundational conditions of experience. As following Kant, Husserl and Keidegger,

Derrida (2005) explains that these conditions would function as a foundation for all

experience.

Second, the argument explains that the experience disturbs the traditional

structure of transcendental philosophy. The disturbance consists in a linear relationship

between foundational conditions and found experience. Derrida (Roy, 2010) finds this

disruption between the event and the understood past. In traditional transcendental

philosophy, as in Kant for example, an empirical event such as what is happening right

now is supposed to be derivative from or founded upon conditions which are not

empirical. This is to say, events that are mentally constructed. Yet, Derrida's basic

argument demonstrates that the empirical event is a non-separable part of the structural or

the foundational conditions (Derrida, 2002). Or, in traditional transcendental philosophy,

the empirical event is supposed to be an accident that overcomes an essential structure.

But with Derrida's argument, we see that this accident cannot be removed or eliminated.

Perspective of the present is forced by the non-present (Roy, 2010).

With this accident and empirical event, which Derrida (1989) explains as a kind

of "origin-heterogeneous" (p. 108), which claims the origin is heterogeneous

immediately. This philosophical view point goes hand-in-hand with the current

understanding of anxiety. Beatty (1988) suggests that most speakers experience arousal

during a public address. How the speakers view this arousal is key to understanding the

emotion experienced during the event. While other researchers have claimed that autonomic arousal alone is insufficient to cause public speaking anxiety, "the speaker must cognitively experience anxiety in the speaking situation for the emotion to be considered public speaking anxiety" (Beatty, 1988, p. 29).

Third, if the origin is always heterogeneous, then nothing is ever given as such in certainty (Derrida, 1989). Because we can never know the now or the event, only living it through the trace, nothing can be said to be certain in the stability of now. Whatever is given is given as other than itself, and has already past or is still to come (Derrida, 2002). Again, one produces an effort or and emotional experience bound in the understood past; therefore, what is given as an emotional response can never be directly tied to the now, only to the trace. What becomes foundational therefore in Derrida is this as: origin as the heterogeneous as. The as means that there is no knowledge as such, there is no truth as such, there is no perception as such (Derrida, 1989; Roy, 2010). One can never know the now or the perceived present, because a person is only viewing the now through the lens of what has been.

Therefore, a person can never engage with the truth of the now, which causes the origins of the now to be heterogeneous. This connects to the previously explored temperament feature know as reactivity. Harris, Sawyer, and Behnke (2006) postulates "physiologically, the reactivity mechanism acts as a stimulation processor by magnifying or decreasing the intensity of incoming signals" (p. 217). Both empirically and theoretically, justification is the same for how subjects respond to specific stimuli. Some subjects process the stimuli as low in intensity, while others might process it with high intensity. The existence of the event is the same; however, the perception of the event is

quite different. This difference is due to an individual's developed trace. This is the lens by which the individual interprets an event.

Fourth, if something like a fall has already taken place, has taken place essentially or necessarily, then every experience contains an aspect of lateness (Roy, 2010). When the individual falls the next time, the replication of the experience will be imposed on the now as it is being experienced. As discussed previously, individuals experience the now through the trace. This is why a person can have a terrible fall years previously, then have a minor fall and say that the fall was not so bad. This experienced comparative of judging what happened with previous experiences keeps individuals from experiencing the now (Derrida, 1995). It seems as though a person is always late for the origin since it seems to have always already disappeared as it is being interpreted. Every experience then is always not quite on time or, as Derrida quotes Hamlet, time is "out of joint." Derrida (1995) understands that everything is connected in the individual and to the individual.

This correlates with the idea that Klonowicz (1987) explains about persons with varying levels of reactivity and behavior. For example, research describes persons with "low reactivity engage in fewer planning and controlling attempts, a phenomenon consistent with previous predictions" (Harris, Sawyer, & Behnke, 2006, p. 217). While the individual variation in reactivity does not uniquely affect the outcomes of a speech event, the work to prepare for the event is a heavier burden for higher communication apprehensives. A high reactive person is prone to prepare for a worst-case-scenario. For these individuals, this stress is the effect of not having adequate coping resources (Klonowicz, 1987).

Now with the clear theoretical research of Derrida and the understanding that every present is viewed through a lens of the past, which directs how we internalize and perceive the present, it should be easy to understand the uniqueness of this theoretical underpinning to exposure therapy. Exposure therapy helps an individual reprogram his/her responses to stimuli by replacing previous experience with new ones. This is one of the tasks of a speech educator in a basic public speaking course. The educator is tasked with controlling the environment to produce enough positive reinforcement which produces an experience for the student. Through exposure therapy, the speech educator can effectively change the understood repeatability for the lived experience by effectively changing the trace perceived by the student.

Research Questions

Research Question 1: Does the technique of systematic desensitization significantly lower communication apprehension for students taking a public speaking course online?

Research Question 2: Do students who choose online public speaking courses have a higher level of communication apprehension than those who choose the traditionally taught public speaking courses?

CHAPTER 3

METHODOLOGY

While the skill deficit model and the cognitive modification model of these

communication apprehension reduction methods might be successfully deployed in an

online setting with various techniques, the purpose of this study was to ascertain whether

speech educators can successfully develop systematic desensitization in an online basic

public speaking class. Systematic desensitization requires the fear and anxiety producing

parameters to be controlled and altered to induce exposure therapy. Without the

successful creation of a scene or atmosphere to produce or reduce the particular fear or

anxiety, systematic desensitization could not be utilized. Therefore this study was

designed to identify if exposure therapy can be utilized in the online environment. In

addition, this study was designed to determine if communication apprehension levels

were significantly affected in the online classroom when compared to the traditionally

taught classroom. Due to the gaps of knowledge, this research tested whether systematic

desensitization in an online basic public speaking course was successful in lowering

communication apprehension compared to a traditional face-to-face course. Furthermore,

this research examined if there was a larger portion of high communication apprehensives

choosing to enroll in an online public speaking course or a traditional taught course.

Population and Sample

This study looked specifically at college students from a mid-sized southern

university, who were enrolled in entry level public speaking course. A total of 12 entry

73

level public speaking courses were used with 256 participants with a mean age of 24.6 (s=6.865) and with a range of 18 to 59 years. There was a traditional class surveyed for every online class surveyed; that is, there were six traditional face-to-face courses and six online courses surveyed. Within the face-to-face courses, there was a total of 134 participants, 78 of the participants identified as male and 56 of the participants identified as female (one chose not to identify). Whereas, in the online courses, there were 117 participants, 45 of the participants identified as male and 72 of the participants identified as female (4 chose not to identify).

Two public speaking educators taught these 12 courses. Each educator taught one of each course, a traditional speech course and online speech course, in the same university quarter. This is to say that if the instructor taught a traditional course, he or she would teach an online course within the same timeframe of the university quarter. The educators teaching these classes differed in degrees obtained; one educator was a tenure track assistant professor with a terminal degree in Communication and Information Science (instructor A) and one educator was a non-tenure track instructor with a Master of Arts degree in Communication Studies (instructor B).

Instruction for the traditional courses was standardized by the department of the university. Each instructor was required to cover the same information and materials within each traditional class. Methods of instruction for this information and the course materials were similar for both speech educators. While each educator used varying activities to develop focus on the key concepts of the course material, the primary methods used in teaching the information was the use of lectures (See Appendix D and F).

Instruction for the online course was similarly standardized for each instructor by the department at the university. However, more liberties were offered to instructors in creating assignment delivery and the parameters for preforming the speech act. While these liberties existed, both educators chose similar parameter. Both educators did not require a live audience to be present for the recording of the student's presentations for those students enrolled in the online course. Concerning instruction methods, both instructors used similar tools such as Moodle discussion forums for students to interact. Videos and lecture components on the Moodle website to deliver course information and to examine the course textbook. (See Appendix E and G).

Four original speeches were drafted and presented by each student in front of 25 to 30 classmates within the traditional face-to-face public speaking course. For this traditional course, students were required to present to a live audience in real time. Each presentation day for the tradition course lasted either 75 minutes or 110 minutes. In the duration of the course, students were required to watch four original speeches from each classmate during these presentation days.

For the online public speaking courses, students presented four original presentations with technology. No live audience was required when the online student presented a speech. The student recorded the presentation using a computer, camcorder, or some other technology which allowed the student to digitally send the instructor the recording. Most student recordings were uploaded to YouTube.com, then the student sent a hyper-link of the internet protocol address to the instructor for viewing at a later time, making the speech an asynchronous event. Students of the public speaking online courses were not mandated by the instructor to view each classmate's online presentation.

Data was gathered from public speaking students taking a basic public speaking course from both traditional teaching settings and online teaching settings. Students self-selected the online or traditional classes from the 2014-15 and the 2015-16 academic years. These students were asked to fill out self-reports, both pretests and posttests, on communication apprehension –the Personal Report of Communication Apprehension (PRCA-24) (See Appendix A), which was originally created by James McCroskey (1978). Pretests and posttests were matched using the participants' campus wide identification (CWID) numbers. The department de-identified the pretests and posttests data by removing the CWID from both the pretests and the posttests.

Once the CWID was removed, the department attached a randomly generated number and then gave copies of the pretest and posttest with matching random generated numbers, as to follow the institutional review board (IRB) guidelines as established through the Human Subjects Committee (See Appendix B and C). Therefore, the only identification materials of the students were demographic information. The students were informed of their ability to decline participation. Due to the lack of identifying information on the self-reports, both pretest and posttest, participation or non-participation did not jeopardize the student's relationship with the department or university in any way. As a result of these self-reports, participants were able to assess and identify their level of communication apprehension. Beyond communication apprehension levels, demographic data such as age, ethnicity, and sex was also collected.

This was a convenient sample. The communication studies program within this mid-size southern university collected this communication apprehension data through random selection through random assignment to each speech educator. The research

measured both the traditionally taught classes and the online classes. With both speech educators having taught both the online and traditionally set courses, this helped minimize errors in consistency of assignments, activities and methods of teaching. Each educator taught one traditional course and one online course at the same time, which helped limit bias and research error; however, differences between courses instructors were examined.

Instrumentation

The instrument used in the pretest and posttest procedures was the PRCA-24, which was originally developed by James McCroskey in 1970. The PRCA is a self-report of 24 items ranked on a Likert scale within four subgroups of communication. This instrument is widely used and preferred in communication research to earlier versions. It is highly reliable, alpha regularly >.90, and it has a high predictive validity (McCroskey, 1982). The PRCA-24 measured the overall construct of communication apprehension, but also broke communication apprehension down into four sub-categories: a) one-on-one interpersonal communication, b) small group communication, c) communication within a meeting, d) and public communication.

McCroskey (1997), using data from over 100,000 subjects within the US, reported a mean total score on the PRCA-24 as 65.60, with a standard deviation of 15.30. This is how the report is able to suggest that those who score more than an 80 on the PRCA are considered high communication apprehensives. Those that score 50 and below are considered to be low communication apprehensives. No item analysis was performed because this specific study is examining communication apprehension holistically, not in these sub-categories. Furthermore, the PRCA-24, as an instrument, is more robust when

examining communication apprehension as a whole, rather than individual sub-categories

(McCroskey, 1982).

In McCroskey's (1970) article, he explained how the tool worked and the

evidence for the reliability of the PRCA. While initially the PRCA used the fundamental

understanding of why self-reporting is the most valid tool, McCroskey (1978) further

proved the validity of the PRCA empirically.

Pascual-Ferra (2013) went a step further than McCroskey in proving the

significance and the robustness of the PRCA-24. Specifically, Pascual-Ferra wanted to

measure the strength of four different communication apprehension measurements

through understanding the congenercity of these measurements. "The criteria for

congenericity are important because (1) estimates of scale reliability such as those

generated by Cronbach's alpha greatly overestimate the reliability of noncongeneric

measures, and (2) error covariances indicate that latent variable(s) other than the

construct of interest contribute to item scores, thereby producing confounded

measurements" (Pascual-Ferra, 2013, p. ii). In this study, the PRCA-24 was found to be

the best fit and with the least amount of statistical error. Specifically and the most

interesting of this comparison, with the exception of the PRCA-24 "error covariance

showed profound noncongenericity among the rest of the measurement models used"

(Pascual-Ferra, 2013, p. 133). Furthermore, this study found no errors of covariance

among the sub-categories of the PRCA-24. The PRCA-24 was the only communication

apprehension measurement with congenercity, which means its "Cronbach's alpha did

not overestimate the reliability, and Raykov's composite reliability coefficient and

Cronbach's alpha could be used interchangeably when estimating the reliability using this particular factor solution" (Pascual-Ferra, 2013, p. 135).

Procedure

The study had each speech educator teach a traditional face-to-face public speaking course, where all instruction and assignments were conducted in a physical classroom setting. Whereas teaching an online public speaking course, all instruction and coursework were found online, with no physical space used for class meetings or used for presenting speeches. This study excluded hybrid taught public speaking courses. Hybrid courses rely on instruction to be web based; however, the speeches would be performed in a traditional classroom setting. Data was collected from instructors who will have taught at least two traditional public speaking classes and two online public speaking classes.

The information and instruction taught in both the traditional face-to-face courses and the online courses were based from a common departmental syllabus, which requires four speeches that have to utilize both informative and persuasive intent. With instructor A, three informative speeches and one persuasive speech were required in both the online and the traditional courses (See Appendix D and E). With instructor B, two informative speeches and two persuasive speeches were required in both settings (See Appendix F and G). Both instructors used the same textbook written by Stephen Lucas (2015), *The Art of Public Speaking* (12 ed.). These courses, both the traditional and online, were set in the quarter system based on an 11 week quarter.

The department of the university randomly selects the courses to be measured, both online and the face-to-face courses. This randomization happened when the

department chose the courses, both traditional and online, due to the classes being taught by the selected speech educators. The speech educators also helped with this randomized process by self-selecting times when he or she would teach the traditional course. Finally, this process was considered randomized by the students' self-selecting the courses that they enrolled in. Because research participants were not randomly positioned into the control group or the experimental group, a quasi-experimental nonequivalent control-group design was used in collecting the data. Data was collected from a pretest and posttest method. Before any instruction was given on the first day of class, the speech educators were instructed by the department to explain the nature of the PRCA-24 to students and the choice to participate in the self-report was completely voluntary with no bearing on the student's success in the course. By request of the department, the instructor gave the following statement,

> The School of Communication is performing research to better understand
> communication apprehension. We would invite you to help us with this study, but
> please realize that you are free to opt out of this study. If you choose to
> participate, your completed PRCA-24 form will act as implied consent. If you do
> not want to participate, just return the unfilled out form as everyone is returning
> the form. Your participation or non-participation will have no bearing on your
> performance in this class. For those participating, know at any time you can
> withdraw from the study and your PRCA-24 will be destroyed (see Appendix B).

For the online courses, this statement appeared in the online platform prior to any instruction. The online pretests were then collected before the instruction of the first week was administered. From that point forward, the courses, both online and traditional, were

taught as normal. Once the last speech was presented, the instructor reminded the students about the nature of the PRCA-24, and the choice to participate was anonymously collected and completely voluntary with no bearing on their course grade. For the online course, another news notification was issued and an email reminder was sent. Once the self-reports were collected by the instructor of the course, the reports were delivered to the School of Communication for their purposes. The Director of the School of Communication de-identified the PRCA-24 reports by removing the student CWID. By request of the institutional review board (IRB) guidelines (see Appendix B), the principle investigator was not allowed to see the original identifiable PRCA-24 pretests or posttests with students' CWID. In order to match pretests with posttests, the School of Communication attached a corresponding randomly generated numbers to replace the CWID which was removed.

Once the CWID was removed which de-identified the students and the random number attached to both pretest and posttest, the director of the School of Communication sent the researcher a copy of the original PRCA-24. The principle investigator then input the raw data into statistical software. Once the communication apprehension information from the copied PRCA-24 with removed CWID was collected and stored electronically, the copied PRCA-24 reports were delivered back to the School of Communication to be destroyed.

Data Analysis

The data analysis was performed by the author of the study. Statistical Package for the Social Sciences (SPSS) was used to produce the output of the independent t-test and the factorial ANOVA to help answer the research questions.

The study employed a factorial analysis of variance (ANOVA) with a 2x2 design to answer research question one. This factorial analysis was used to examine if there is a significant difference in pretest and posttest mean scores for both the traditionally taught face-to-face speech course and the online taught course. Communication research of traditional face-to-face learning within a basic public speaking course has produced results that suggest after four presentations, the communication apprehension levels of a student will be significantly reduced (Ayres & Hopf, 1985). The ANOVA helped determine if there was a significant difference in communication apprehension levels due to the difference in systematic desensitization used in online and face-to-face public speaking instruction.

The study used an independent t-test to examine the mean difference in scores of the pre-test to determine if there was a significant difference of communication apprehension, state or trait speech anxiety, between students who chose the traditional speech course or the online speech course. This t-test helped the author understand communication apprehension levels of the two groups. This t-test was used to answer research question two. Specifically, research question two tries to understand if there was a significant difference in communication apprehension between students who choose to take the public speaking course online as opposed to the traditional taught public speaking course.

CHAPTER 4

RESULTS AND ANALYSIS

The purpose of this study was to better understand whether there was a significant difference in lowered communication apprehension levels of students who took traditionally taught public speaking courses and public speaking courses taught online. Furthermore, the researcher compared communication apprehension levels of students prior to taking a public speaking course, both traditional and online, to better understand enrollment behaviors of high communication apprehensives.

The research questions addressed differences in lowered communication apprehension between traditionally taught public speaking courses and those taught online, as well as the enrollment behavior of students due to communication apprehension levels.

Research Questions:

In conducting this study, the researcher sought to answer the following questions:

1. Does the technique of systematic desensitization significantly lower communication apprehension for students taking a public speaking course online compared to traditionally taught face-to-face courses?

2. Do students who choose online public speaking courses have a higher level of communication apprehension than those who choose the traditionally taught public speaking courses?

Data Analysis Strategy

The PRCA-24 was administered to students in 12 public speaking courses at a mid-sized southern university, with six courses taught in a traditional face-to-face manner and six courses taught online. Results from the survey included 256 participants in academic years 2014-2015 and 2015-2016. Mean scores of PRCA-24 pretests and posttest were collected and analyzed.

Findings

Research Question 1

Does the technique of systematic desensitization significantly lower communication apprehension for students taking a public speaking course online?

Using pretests and posttests of 189 paired respondents, this study compared the PRCA-24 total mean scores. While a total of 256 participants volunteered to fill out the PRCA-24, only 189 pairs of corresponding pretests and posttests were able to be matched. Some participants completed a pretest without completing a posttest, and some participants completed a posttest without completing a pretest. From these matched pairs, a 2x2 design factorial Analysis of Variance (ANOVA) was used to compare the mean differences between pretests and posttest of the traditionally taught public speaking courses and the public speaking courses taught online. The 2x2 factorial design examined if there was a significant difference between traditionally taught students and online taught students when systematical desensitization, the modality of treatment, was created in differing spaces.

In short, there was no significant difference in lowered communication apprehension with either traditionally taught public speaking courses ($M = 58.77$, $SD =$

17.06) or public speaking courses taught online (M = 60.20, SD = 14.96) $F(1, 187) =$ .008, $p > .05$. The modality choice made no significant difference in the ability to lower communication apprehension for students in a public speaking course.

A 2x2 design factorial analysis of variance was used to measure the speech educator's influence in lowering communication apprehension. There was no significant difference in lowered communication apprehension between either Instructor A (M = 58.43, SD = 17.61) and Instructor B (M = 59.17, SD = 17.61) F(1, 187) = .000, $p > .05$. The choice of the instructor made no significant difference in the ability to lower communication apprehension for student in a public speaking course.

A one way repeated measures analysis of variance (ANOVA) was conducted on the influence of speech educator and modality on the lowering of communication apprehension. All effects were not statistically significant at the .05 significance level. The main effect for speech educator yielded an F ration of F(1, 229) = .495, $p > .05$, indicating no significant difference in lower communication apprehension between Instructor A (M = 1.01, SD = .66) and Instructor B (M = 1.10, SD = .66). The main effect for modality of instruction yielded an F ratio of F(1,229) = .250, $p > .05$, indicating no significant difference in lowering communication apprehension between the online classroom (M = 1.08, SD = .66) and traditional face-to-face instruction (M = 1.03, SD = .67). The interaction effect was not significant, F(1, 229) = .310, $p > .05$.

With the majority of student classifications of these public speaking courses being college seniors, which accounts for 63.7% respondents, a ceiling effect needed to be examined. Of the participants in the study, 18.4% were classified as freshman, 6.4% were classified as sophomore, and 11.5% were classified as juniors. This ceiling effect could

account for no effect found in either modality population. To better understand if a ceiling effect could contribute to the result of the 2x2 factorial ANOVA concerning modality, the researcher observed the levels of communication apprehension among the sample population to compare them with other studies. These levels included low communication apprehensives, ranging from 0-50 on the PRCA-24, normal communication apprehensives, ranging from 51-79 on the PRCA-24, and high communication apprehensives, ranging from 80-100 on the PRCA-24. Only 24.5% of students in both the online and the traditional face-to-face courses self-identified as being high communication apprehensives; whereas, 19.3% identify as low apprehensives and 56.2% identify as having normal communication apprehension. The research suggests no ceiling effect was found. With a slightly higher percentage than 20% of the population being high communication apprehensives, this research aligns itself with national averages and previous research conducted on traditional higher education basic public speaking courses (Blume et al., 2012; McCorskey 1977a)

To further examine any relationship that classification might have upon the communication apprehension level, a one way repeated measures analysis of variance (ANOVA) was conducted on the influence of college classification and level communication apprehension in pretest scores. The college classification of the student has no significant effect on the level of communication apprehension in pretest scores, $F(3,210) = .566$, $p > .05$. Contrary to some of the previous research conducted, this data suggests that communication apprehension levels were not influenced the participating student's college classification. These result help further affirm that no ceiling effect was observed.

Finally, a two-way analysis of variance (ANOVA) was used to understand if any relationship exists between the two independent variables of classification of the student and the college within the university the student is studying when observing the pretest and posttest PRCA-24 scores. Classification levels of the student included freshman, sophomore, junior and senior. Designations of the college within university included the College of Education, the College of Business, the College of Liberal Arts, the College of Applied and Natural Sciences, the College of Engineering and Science and students not affiliated with a college. All effects were not statistically significant at the .05 significance level.

The main effect for college type yielded an $F(5, 159) = .685, p > .05$, indicated no significant difference between the College of Applied and Natural Science ($M = 59.6$, SD $= 14.5$), the College of Liberal ($M = 58.8$, SD $= 15.8$), the College of Business ($M = 58.2$, SD $= 15.3$), the College of Education ($M = 59.1$, SD $= 18.4$), the college of Engineering and Science ($M = 48.1$, SD $= 6.4$), and those not affiliated with a college ($M = 63.3$, SD $= 19.7$). The main effect for classification yielded an $F(3, 159) = .685$, $p > .05$, indicated no significant difference between freshman ($M = 59.7$, SD $= 13.2$), sophomore ($M = 51.91$, SD $= 13.2$), junior ($M = 57.4$, SD $= 17.6$) and seniors ($M = 59.3$, SD $= 16.2$). The interaction effect was not significant, $F(10, 159) = .762, p > .05$.

Research Question 2

Do students who choose online public speaking courses have a higher level of communication apprehension than those who choose the traditionally taught public speaking courses?

The researcher compared PRCA-24 pretest mean scores of traditional face-to-face taught public speaking courses and online taught public speaking courses. Of the 256 total participants, 233 completed the PRCA-24 pretest for all 12 courses. An independent t-test was used to examine the difference in PRCA-24 mean scores between the two modalities of teaching.

The reported communication apprehension scores prior to a student choosing to enroll in an online public speaking course (M = 65.58, SD = 17.38, SE = 1.70) was not significantly higher than a student choosing to enroll in a traditionally taught public speaking courses (M = 65.95, SD = 18.78, SE = 1.66), $t(231) = .156, p < .05$. Therefore, the research suggested there is no significance difference (see Table 3) in pretest mean scores between the modalities of traditionally taught public speaking courses and public speaking courses taught online.

The similarities in communication apprehension can be seen when examining the online population to the traditionally taught population. These levels included low communication apprehensives, ranging from 0-50 on the PRCA-24, average communication apprehensives, ranging from 51-79 on the PRCA-24, and high communication apprehensives, ranging from 80-100 on the PRCA-24. With almost equal proportions existing in each level of communication apprehension for both modalities of instruction, the research suggests no ceiling effect was found (see Table 4). Therefore, due to this observation, there was little to no difference in pretest levels of communication apprehension to suggest that particular groups of communication apprehensives gravitate to a specific modality. More interestingly, there was very little difference in pretest populations of all levels of communication apprehension between

students who enrolled in the online public speaking courses in comparison to the

traditionally taught course.

CHAPTER 5

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to explore the efficacy of the understanding held by higher education leadership in offering public speaking courses online. Universities use public speaking courses to reduce the communication apprehension among the student population of the institution. This reduction of communication apprehension in the traditionally taught public speaking courses has led to higher retention rates and higher student's academic success in higher education institutions. Therefore, this study examined the efficacy of lowering communication apprehension levels through the use of systematic desensitization as a tool in a basic public speaking class taught online. Specifically, this study examined if there was a significant difference in lower apprehension levels from teaching an online or face-to-face basic public speaking course. Secondly, this study examined if there was any increased population of high communication apprehension sufferers which gravitated to a specific teaching modality, either face-to-face or online, when enrolling in a basic public speaking course.

Conclusions

When answering Research Question 1, the research found that there was no significant difference in lowering communication apprehension through systematic desensitization. Due to a possible ceiling effect, where an independent variable no longer has an effect on the dependent variable, proportions of each level of communication apprehension population was observed. This observation suggested no ceiling effect has

occurred due to similar averages in national testing and other communication apprehension levels on similar populations. These results suggest similar outcomes of lowering communication apprehension by way of systematic desensitization for both public speaking courses taught online and through traditional means.

Furthermore, when answering Research Question 2, the researcher found that there was no significant difference of enrollment in the online or face-to-face modalities for high communication apprehensives. To ensure no ceiling effect was present, proportions of the levels of communication apprehensives were examined. No ceiling effect was observed. With finding almost equal representation and proportions of all levels of communication apprehension in each modality, no preference for either modality was observed for high communication apprehensives. Therefore, higher education leadership can continue offering public speaking courses through an online modality without any apprehension or concern that student retention rates or student success will be affected. Moreover, higher education administrations should not be concerned that specific populations are being created with higher communication apprehension when opting to offer the basic public speaking course online.

Discussion of the Results

With demand to offer online higher education and the needs to expand access of higher education globally, universities worldwide are looking at ways to open the classrooms of their institutions through various modalities of learning. This study produces statistical measures which helps explain the gaps in knowledge about these modalities, specifically using online teaching tools and methods in public speaking courses. This gap of knowledge needed to be filled for higher educational leaders to

appropriately understand the implications of offering the option to enroll in a public speaking course online. Historically, the offering of the basic public speaking course on higher education campuses has produced beneficial effects like increasing retention rates among the student population and increasing student academic success. This information helped shed light in determining if higher educational leaders were making logical errors, both hasty generalizations and sweeping generalization, when opening these specific online course offerings (Allen, 2006).

With no significant difference being found between the two modalities, online and face-to-face public speaking courses, this research suggests that no logical error, either hasty generalizations or sweeping generalizations, was being made by educational leadership. This was further supported as there was no ceiling effect found. On the contrary, the population ratios of participants having various levels of communication apprehension where found to be very similar to other studies on the traditional face-to-face course and national averages. This further reinforces that the use of online teaching is not significantly different in lowering of communication apprehension when compared to the traditionally taught face-to-face public speaking course. These two courses are similar in effect for lowering communication apprehension through systematic desensitization.

However, there might be a problem with this generalization due to the design of this study. When reflecting back on the self-identifying process of communication apprehension with the online students, other factors might cause an effect that were not observed or accounted for when designing the study. Specifically, the timing of online pretests being administered needs some discussion. Students self-identify the

communication apprehension level he/she had prior to any knowledge about the course. These students do not know if a public address is required to be recorded in front of a live audience or not. Before filling out the PRCA-24, these students are unaware to how the audience function of public address will be satisfied. The uncertainty that a student has about how the class will be arranged and the requirements of the speeches might account for an increased communication apprehension levels which was recorded in the pretest of the PRCA-24. When participants learn that the speech performance requirement does not include a traditional and a physical audience, this information can lower the anxiety of the communication apprehensive, particularly students who suffer from state communication apprehension about public address. Without any techniques to lower communication apprehension, like the skills deficit model, cognitive modification or systematic desensitization, just learning that the required speech performances will not require a live audience in the course could lower communication apprehension in and of itself.

A public speaking courses is a preforming arts based course. The uncertainty of the design of the course could have further increased the anxiety and fear in taking such a course in an online setting. The modality shift of this course could have fueled communication apprehension prior to the explanation of the course structure. Returning to the idea of pretest placement, the pretest communication apprehension scores might have been affected due to other variables. Most of these variables could be eliminated by administering the pretest at a different time prior to course information or instruction being given. If the online instructor was able to explain the course, the course design and the parameters of how speeches would be recorded and presented, if might mitigate or

remove these other variables which might have an effect on the increase or decrease in communication apprehension scores of the pretest.

As communication apprehension has been tied to retention rates, with no significant difference being found between the two modalities, higher education leaders can be more confident in the choice to list public speaking as an online course. The finding of this study indicates, with no significant difference in modalities in lowering communication apprehension, institutions of higher education should not suffer with retention or academic success of the student population if public speaking were to be offered as an online course. Therefore, leaders of higher education institutions will be able to offer with confidence the public speaking courses online to gain similar student retention and academic success that previous research has attributed to the traditional public speaking course.

Furthermore, the results of Research Question 2 indicate that students with high, average or low communication apprehension do not seem to favor or gravitate toward public speaking online or traditionally taught public speaking classes. In this particular study, results suggest that equal populations in levels of communication apprehension will result if both online and face-to-face public speaking courses are offered. The level of communication apprehension seems not to be a primary factor in the decision-making calculus for students when choosing to take a public speaking course. Therefore, the option to offer a public speaking course in higher education can be done with the institutional needs in mind. Furthermore, higher education leadership can create these online offering without the fear that a special population with specific or different needs will be created.

While a special population was not created by the existence of this course, the existence of this course might highlight differences in a population or a population shift. The majority of undergraduates who would be exposed or required to take a public speaking course would belong to the millennial generation. The millennial generation approaches technology and the environment of work differently than previous generations; therefore, the levels of communication apprehension might be shaped differently for this generation than other generations previously researched.

To get a better idea of the millennial generation, Bump (2014) explains that a millennial is a person born between the years of 1982 through 2004. Deal, Altman, and Rogelberg (2010) explained, as college students, the millennial generation has shown to have higher positive traits like self-esteem and assertiveness. These higher positive traits could affect how these millennials view public speaking. This might also alter the anxiety and fear associated with communication apprehension. Having a better understanding of the current generation being studied and the difference that exist with previous generations studied might help the design of future research.

Furthermore, the millennial generation is more familiar with the use of technology and the access of the work world through technology (Deal et al., 2010). As compared with other generations surveyed, there is little known about how these technological views or differing views of work affects the level of communication apprehension holistically or any subcategories of communication that the PRCA-24 surveys. Generational difference seen in the views toward modality as a variable to be studied or controlled might help explain differences in previous research and the found results of this study.

It should also be noted that there was a larger proportion of seniors in the overall study than any other classification. There are contributing factors to this skew. Firstly, there are a limited amount sections for public speaking offered every quarter. Most students at the university are required to take a public speaking course in order to complete his/her degree requirements. Seniors are allowed to enroll into courses for the following quarter before juniors, sophomore and freshmen. Because some senior delay enrolling in the public speaking course until his/her last year attending the university, this has added to the backlog of students who need the public speaking course.

There were two traditionally taught face-to-face public speaking courses within the study that had an increased amount of freshmen and sophomores students. One of the courses was a late addition, which means the class was created just prior to the first day of the quarter. This means every classification of student had an equal opportunity to enroll in this class. Another course was designed specifically for incoming freshmen.

It is also worthy to note, beyond having an unequal opportunity for the classifications students to choose courses that he/she wants to enroll, there was a limited amount of online offerings of public speaking. Each quarter the university would offer two sections of the online public speaking course, yet the university would offer eight to ten sections of the traditionally taught public speaking course. This further limited the junior, sophomore, and freshmen populations from accessing these courses.

Implications

With knowing that communication apprehension is not significantly different with either modality, higher education leadership is better informed and re-assured that offering public speaking will not affect students negatively in terms of communication

apprehension. With half of the literature suggesting there is not a significant difference and the of half suggesting there is a significant difference when offering public speaking online compared to the traditionally taught face-to-face course, this study adds to the body of knowledge which supports the use of online classrooms for public speaking. This research added to the body of knowledge by examining the special tool of systematic desensitization. Systematic desensitization functions with no significant difference in either modality.

Communication apprehension reduction is a tool used to help students not only be more comfortable with their educational surroundings, but aid the student's academic success. If an institution is inclined to offer more public speaking courses online, due to the needs of the student population or institutional resources, the higher educational leadership has the research to understand that communication apprehension through systematic desensitization will be equal to the face-to-face classroom.

Recommendations of Further Study

Due to the findings in this study that no significant difference exists between online and traditionally taught public speaking courses when reducing communication apprehension, future research may want to examine a possible association effect with the constructs of public speaking in physical space with an audience present and the construction of a speech recorded which is later place on the internet. While traditional notions of public address include live audiences, not to exclude but not all inclusive of broadcast, future research might examine if the concept of "public speaking" shifts or is re-conceptualized in the online modality. In the online course, the use of the online modality might be broadening the definition inherently to broadcast inclusive due to the

construction of the course as online. If a speech educator is implying inherently that a student recording a speech with only a recording device present in the room as public address, then the traditional notions and ideas of public address change. The idea of "what public address is" might be different for students who took the online public speaking course in comparison to the students who took the course traditionally. This possible definitional and sematic difference might change anxiety or fear levels of communication for students from difference modalities of learning. The exposure therapy of systematic desensitization might have changed the construct of public speaking in such a narrow focus as to prevent the communication apprehension reduction method from addressing the fear and anxiety associated with public speaking to a live audience.

This illuminates another area of future research. Communication education research needs to understand the primary concerns for students taking an online public speaking course. The results for Research Question 2 suggest that students who take the online basic public speaking courses have similar proportions within the population in levels of communication apprehension as does the traditionally taught course. There might be added components of stress when taking or preparing to take a basic public speaking course online. With the two speech educators in this study, both required students to post speeches publicly online, which means others from class and others around the world can view the presentation. The existence of this performance online might cause students fear and anxiety with the experience of the course. This existence might cause an increase of communication apprehension, where the traditional classroom experience does not have this stressor.

With the differences of context for these two public speaking environments, the research

and studies performed in similar fashion to this researcher's study might be comparing apples to oranges. Having one student contextualize a feeling of anxiety and fear about the communication process, then cross applying that response to another student's contextualization of anxiety and fear in a different environment might be asking too much in order to create generalizations about both experiences. Without a test which can rule out other mitigating variables, the discovery of communication apprehension and what communication apprehension means for these two different populations might be an illusory. However, if future research could pretest the communication apprehension levels of the two populations, then posttest after the construction of a shared experience. At this point of shared experience, researchers have the ability to better understand how the two populations contextualize the fear and anxiety of communication processes. This could be as easy as having both the traditional course students and the online students give an address to the same audience at the end of the academic session.

APPENDIX A

PERSONAL REPORT OF COMMUNICATION APPREHENSION (PRCA-24)

Personal Report of Communication Apprehension (PRCA-24)

This instrument is composed of twenty-four statements concerning feelings about communicating with others. Please indicate the degree to which each statement applies to you by marking whether you: **Strongly Disagree = 1; Disagree = 2; are Neutral = 3; Agree = 4; Strongly Agree = 5**

_____1. I dislike participating in group discussions.

_____2. Generally, I am comfortable while participating in group discussions.

_____3. I am tense and nervous while participating in group discussions.

_____4. I like to get involved in group discussions.

_____5. Engaging in a group discussion with new people makes me tense and nervous.

_____6. I am calm and relaxed while participating in group discussions.

_____7. Generally, I am nervous when I have to participate in a meeting.

_____8. Usually, I am comfortable when I have to participate in a meeting.

_____9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.

_____10. I am afraid to express myself at meetings.

_____11. Communicating at meetings usually makes me uncomfortable.

_____12. I am very relaxed when answering questions at a meeting.

_____13. While participating in a conversation with a new acquaintance, I feel very nervous.

_____14. I have no fear of speaking up in conversations.

_____15. Ordinarily I am very tense and nervous in conversations.

_____16. Ordinarily I am very calm and relaxed in conversations.

_____17. While conversing with a new acquaintance, I feel very relaxed.

_____18. I'm afraid to speak up in conversations.

_____19. I have no fear of giving a speech.

_____20. Certain parts of my body feel very tense and rigid while giving a speech.

_____21. I feel relaxed while giving a speech.

_____22. My thoughts become confused and jumbled when I am giving a speech.

_____23. I face the prospect of giving a speech with confidence.

_____24. While giving a speech, I get so nervous I forget facts I really know.

SCORING:

Group discussion: 18 - (scores for items 2, 4, & 6) + (scores for items 1,3, & 5)

Meetings: 18 - (scores for items 8, 9, & 12) + (scores for items 7, 10, & 11)

Interpersonal: 18 - (scores for items 14, 16, & 17) + (scores for items 13, 15, & 18)

Public Speaking: 18 - (scores for items 19, 21, & 23) + (scores for items 20, 22, &24)

Group Discussion Score: _____

Interpersonal Score: _____

Meetings Score: _____

Public Speaking Score: _____

To obtain your total score for the PRCA, simply add your sub-scores together. _____

Scores can range from 24-120. Scores below 51 represent people who have very low CA. Scores between 51-80 represent people with average CA. Scores above 80 represent people who have high levels of trait CA.

NORMS FOR THE PRCA-24: (based on over 40,000 college students; data from over 3,000 non-student adults in a national sample provided virtually identical norms, within 0.20 for all scores.)

	Mean	Standard Deviation	High	Low
Total Score	65.6	15.3	> 80	< 51
Group:	15.4	4.8	> 20	< 11
Meeting:	16.4	4.2	> 20	< 13
Dyad (Interpersonal):	14.2	3.9	> 18	< 11
Public:	19.3	5.1	> 24	< 14

Source:
McCroskey, J. C. (1982). *An introduction to rhetorical communi*cation (4th Ed). Englewood Cliffs, NJ: Prentice-Hall.

APPENDIX B

IRB HUMAN SUBJECTS COMMITTEE FORM

DEPARTMENT HEAD APPROVAL FORM

TO: Dr. Bryan McCoy
            Department Chair, Curriculum, Instruction, and Leadership

FROM: Shane Puckett, Doctoral Student, College of Education
            Dr. Dawn Basinger, Associate Professor, College of Education

SUBJECT: HUMAN USE COMMITTEE REVIEW

Project: Efficacy of online public speaking courses as it relates to communication apprehension reduction.

DATE: November 18, 2015

My signature attests that I am aware of this proposal that is being conducted.

Curriculum, Instruction and Leadership Department

_____   _____
Dawn Basinger, Principal Investigator (Signature)   Date

_____   _____   _____
Shane Puckett – Student Researcher   Academic Program   Date

Brian McCoy_____
Department Chair Name (Print)

_____   _____
 Department Head   Date
(Actual Original Signature Required)

Do you plan to publish this study?	■ YES □ NO
Will this study be published by a national organization?	□ YES ■ NO
Are copyrighted materials involved? Do you have written permission to use copyrighted materials? □ NO	□ YES ■ NO NA □ YES
Researchers must comply with all training requirements from their funding agency.	
COMMENTS:	

STUDY/PROJECT INFORMATION FOR HUMAN SUBJECTS COMMITTEE

Describe your study/project in detail for the Human Subjects Committee. Please include the following information.

TITLE: Efficacy of online public speaking courses as it relates to communication apprehension reduction.

PROJECT DIRECTOR(S): Shane Puckett, M.A. & Dawn Basinger, Ed.D.
EMAIL: sap021@latech.edu & dbasing@latech.edu
PHONE: 318-245-3708 (Shane) & 318-257-2382 (Dawn)

DEPARTMENT(S): Department of Curriculum, Instruction and Leadership/College of Education

PURPOSE OF STUDY/PROJECT: As technological advances are made and individuals become more comfortable and familiar using this technology, the more technology becomes interwoven in the fabric of society. Specifically in the academic world, the use of online courses in post-secondary education is on the rise. Leadership in the field has chosen to expand the use of this teaching modality due to its relative cheap cost and access. With the push to integrate coursework online, some questions about particular subjects might not have been addressed. Specifically in the field of communication studies, administrators are starting to place the basic public speaking course online, which the traditionally taught basic public speaking course has been historically used by universities to lower communication apprehension.

Understanding the nature of communication apprehension in addition to understanding how to diminish the effects of communication apprehension has long been a concern of speech educators. Communication education research has done much to shed light on this concern; to understand where the anxiety stems and what methods could be used to decrease these levels of fear due to the theoretical underpinnings to these methods. While the concept of communication apprehension is not completely understood, there is a considerable amount of research in the field of communication. For 1977 to 1997, research on the concept and phenomenon known has communication

apprehension was the single most research and reported topic in the field of communication studies (Byrne et al., 2012).

When it comes to lowering communication apprehension, speech educators typically employ one or more of the following methods; (a) skill deficit model, (b) systematic desensitization, and (c) cognitive modification (Stacks & Stone, 1984). These three models are reflective in the strategies used to teach the basic public speaking course, and research has supported the success of these strategies in a traditionally taught basic public speaking course. The skills deficit model is fairly simple and straightforward. This works by giving the student a model to use in the drafting stages and reduces uncertainty by developing skill abilities (Glaser, 1981). Probably the most successful technique used to lower speech anxiety is by way of systematic desensitization. Systematic desensitization falls in the category of methods like exposure therapy (Finn, Sawyer, & Schrodt, 2009). The more a student becomes familiar with the activity, uncertainty is lowered by experience. Finally there is cognitive modification. This model treats the communication apprehension due to the person's negative self-appraisal of one's communication abilities through a cognitive modification programs like self-concepts and self-disclosiveness (Stacks & Stone, 1984).

While research suggests these methods work in a traditional classroom, research has not explained if these methods are successful in the online classroom. The purpose of this study is to understand the efficacy of traditional methods of lowing communication apprehension in an online basic public speaking classroom.

SUBJECTS: Data will be gathered from public speaking students taking a basic public speaking course (COMM 110) from both traditional teaching settings and online teaching settings. For the past three years, the School of Communication (formerly the Department of Speech) has been collecting data from the COMM 110 courses. Students taking randomly selected online and traditional classes from the 2014-15 and the 2015-16 academic years are asked to fill out self-reports on communication apprehension, Personal Report of Communication Apprehension (PRCA-24). When collecting the data, the department has the students identify with placing their campus wide identification (CWID). To use this data, the Director of the School of Communication will de-identify the data by removing the CWID from the self-reports prior to the researchers ability to view the data. The original PRCA-24 reports will stay locked in the School of Communication. The researchers will not be able to access any identification materials of the students who filed them out. The students are informed of their ability to decline participation. Due to the lack of identifying information on the self-reports, participation or non-participation will in no way jeopardize the student's relationship with the School of Communication, Department of Communication Studies, or Louisiana Tech University. As a result of the report, participants will be able to assess and identify their level of communication apprehension.

PROCEDURE: A self-report titled the Personal Report of Communication Apprehension (PRCA-24) will be used to measure communication anxiety and fear. The PRCA-24 (please see Appendix A) is the instrument which is most widely used to measure communication apprehension. It is preferable above all earlier versions of the instrument (PRCA, PRCA10, PRCA-24B, etc.). It is highly reliable (alpha regularly

>.90) and has very high predictive validity. The PRCA is a self-report of 24 items ranked on a Likert scale within four subgroups of communication. It permits one to obtain sub-scores on the contexts of public speaking, dyadic interaction, small groups, and large groups. Before any instruction is to be given on the first day of class, the instructor will explain the nature of the PRCA-24 and that the choice to participate in the pretest/posttest reports is completely voluntary with no bearing on their success in the course. The instructor will give the following statement, "The School of Communication is performing research to better understand communication apprehension. We would invite you to help us with this study, but please realize that you are free to opt out of this study. If you choose to participant, your completed PRCA-24 form will act as implied consent. If you do not want to participant, just return the unfilled out form as everyone is returning the form. Your participation or non-participation will have no bearing on your performance in this class. For those participating, know at any time you can withdraw from the study and your PRCA-24 will be destroyed." From that point forward, the courses, both online and traditional, will be taught as normal. Once the last speech is presented, the instructor will remind the students about the nature of the PRCA-24, and the choice to participate is anonymously collected and completely voluntary with no bearing on their course grade. Once the self-reports are collected by the instructor of the course, the reports are delivered to the School of Communication for their purposes. The Director of the School of Communication will de-identify the PRCA-24 reports by removing the student CWID. In order to match pretests with posttest, the School of Communication will attach corresponding randomly generated numbers to replace the CWID which was removed. Once the CWID has been removed, de-identifying the students, and the random number attached to both pretest and posttest, the director of the School of Communication will allow the researchers to input the raw data into statistical software. Once the communication apprehension information from the copied PRCA-24 with removed CWID have be collected and stored electronically, the copied PRCA-24 reports will be delivered back to the School of Communication to be destroyed.

INSTRUMENTS AND MEASURES TO INSURE PROTECTION OF CONFIDENTIALITY, ANONYMITY: All participant responses will be kept confidential. At no point will the researchers have access to the identifying materials (like the reports with a student's CWID). For purposes of this research, no identification could be made to any participant, thus keeping their complete confidentiality and anonymity.

RISKS/ALTERNATIVE TREATMENTS: There are no known psychological, social, or legal risks or side effects involved with participation in the proposed project. **All testing conducted in this study is used on a yearly basis in basic public speaking course around the United States. None of these procedures differ from routine academic measures used in communication studies.** Participation is voluntary with informed consent. If a participant wants to withdrawal from the study or wants to withdraw their test results at any time, the testing will be stopped or the data will be destroyed, respectively.

BENEFITS/COMPENSATION: Each participant will be able to assess and identify their level of communication apprehension after each PRCA-24. Furthermore, the

academic community will benefit from a better understanding of the effects from the use of traditional communication apprehension lowing methods in an online teaching atmosphere.

SAFEGUARDS OF PHYSICAL AND EMOTIONAL WELL-BEING: This study requires minimal contact with the participants (i.e., handing out a self-report). All information collected from this study will be held strictly confidential. No one will be allowed access to the data other than the researchers.

Appendix A

Personal Report of Communication Apprehension (PRCA-24)

This instrument is composed of twenty-four statements concerning feelings about communicating with others. Please indicate the degree to which each statement applies to you by marking whether you: **Strongly Disagree = 1; Disagree = 2; are Neutral = 3; Agree = 4; Strongly Agree = 5**

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_____11. Communicating at meetings usually makes me uncomfortable.

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_____20. Certain parts of my body feel very tense and rigid while giving a speech.

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Source:
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APPENDIX C

IRB HUMAN USE COMMITTEE REVIEW

LOUISIANA TECH
U N I V E R S I T Y

MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO: Dr. Dawn Basinger and Mr. Shane Puckett

FROM: Dr. Stan Napper, Vice President Research & Development

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: December 10, 2015

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

**"Efficacy of Online Public Speaking Courses as it Relates to
Communication Apprehension Reduction"**

HUC 1390

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. *This approval was finalized on December 10, 2015 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond December 10, 2016.* Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Dr. Mary Livingston at 257-2292 or 257-5066.

APPENDIX D

TRADITIONALLY TAUGHT PUBLIC SPEAKING COURSE SYLLABUS FROM

INSTRUCTOR A

LOUISIANA TECH UNIVERSITY
COMM 110 SYLLABUS

Communication 110: Principles of Speech. This course is designed to develop the principles of effective oral communication in typical speaker-audience situations, through practice in informative and persuasive speaking. *This course cannot be taken for credit if student has credit for Speech 377.

Instructor: A   **Email:** xxxxxxx   **Office:** xxxx   **Ext:** xxxx

Text
Lucas, S. E. (2015). *The art of public speaking, (12th Ed.).* Boston, MA: Mc-Graw-Hill

Course Learner Objectives & Direct Measures:
Upon completion of this course, students will:
1-Understand the dynamics behind preparing and delivering a quality presentation as measured by   exams and the presenting four presentations.
2-Develop skills for audience analysis/adaptation and speech critique as assessed by Exams and the outline development for four speeches.
3-Demonstrate skills for gathering, organizing, supporting, and presenting material in informative and persuasive contexts as evaluated by presenting four presentations: two informative formats and two   persuasive formats.
4-Improve ability to manage communication anxiety as measured by writing a self-evaluation based on your recorded presentation and the actual presentation of four speeches.

Attendance Policy
Upon registration, students accept responsibility to attend regularly and punctually all classes in which they are enrolled. If a student has excessive absences, the Instructor has the right to recommend to the student's academic dean that the student be dropped from the class and given an appropriate grade. Excessive is defined as more than 2 (two) unexcused absences. Note tardiness is unacceptable and every 3 (three) days a student is tardy will equal 1 (one) unexcused absence.

Absences in Communication 110 will be excused only in the event of the student's illness (a medical doctor's excuse must be submitted for verification; however, **routine appointments are not considered an emergency and may not be excused**), the student's hospitalization, or extremely extenuating circumstances which the student must explain in writing (which may or may not be excused). A written excuse must be submitted for each absence. It is the student's responsibility to present proper documentation for the Instructor's use in determining if an absence is to be excused. The written documentation must be presented at the first class meeting attended after the absence. In order for public speaking to take place, there must be an audience. In addition to successfully completing your own speaking assignments, it is also your responsibility to observe and support your peers. Thus, your attendance on presentation days is **MANDATORY.** An unexcused absence on any designated presentation day will result in a five (5) point deduction from the total points earned for the course, per occurrence of absence. This applies to all students even if the student was not to deliver a speech on that day. If the absence on a presentation day is excused, using the criteria in #2 above, no attendance points will be deducted.

Assignments (additional information is available on Moodle)
Presentations: Four (4) ORIGINAL oral presentations, two informative and two persuasive, are required for completion of this course. Failure to give the four presentations results in a final grade of F regardless of the test grades, the grades earned on the other presentations, and the self-evaluation grade.
1.   **Introduction Speech:** The student will compare their lives to "something."
2.   **Informative Speech:** The student will inform the audience about a topic they choose.
3.   **Debate:** The student will prepare an affirmative or negative speech for a debate.
4.   **Persuasive Speech:** The student will address a **question of policy** by following Problem/Solution/Benefit organizational pattern.

Each student will have a designated date for each presentation as assigned by the instructor. Students are not at liberty to switch dates with other students. **If a student fails to present on their assigned speaking date it's an automatic three (3) letter grade deduction assuming the Instructor allows the student to make-up the speech.**

Speech Packets and Critique sheets will be available online throughout the quarter. A typed **formal outline** (see Chapter 11 in text) is to be submitted <u>before</u> you speak for **each** of the four presentations. <u>Outlines will not be accepted after the speech has been given.</u> Follow the **Formal Outline Format** in your speech packet. The **speaker's outline** (see Chapter 11 in text) is much more informal and should be easy to read at a glance. **DO NOT READ ALOUD FROM YOUR PREPARATION OUTLINE!** Only <u>very brief</u> speaker's notes in the form of a word or phrase outline may be used. All speeches are to be delivered in a natural, <u>extemporaneous</u> style from the brief speaking outline. Specifics will be given for each speech. **The speaking outline is to be submitted at the end of your speech.**

Participation and Self Evaluation Assignment: Each student is required to participate in the course activities which contribute to their participation grade. These activities may require students complete homework assignments and/or activities in-class. Each student is also required to complete a **self-evaluation (PRCA-24).** Participation will include in-class assignments and the invention process handout. These assignments are explained further online and in class.

Examinations/Quizzes: A final examination will be given at the end of the quarter and five pop quizzes. The test/quizzes are derived from the textbook (the final exam is also derived from course lectures). These exams may contain multiple choice, true/false, fill-in-the-blank, and/or short essay questions. In some instances, the Instructor may have the class take exams via Moodle. The examinations will cover the text as follows:
Final Exam: Cumulative
Quizzes: Pop quizzes covering the required readings

Final Grade
The final grade will be based on the total points accumulated on the presentations, participation/self -evaluation, examinations, for a total of 500 possible points as follows:

Introduction Speech	50 points	**Grading Scale**	
Informative Speech	100 points	A=	450 – 500
Debate	100 points	B=	400 – 449
Persuasive Speech	100 points	C=	350 – 399
Quizzes (5 @10pts each)	50 points	D=	300 – 349
Final Exam	50 points	F=	299

and below
Self-Evaluation/Participation   50 points

Tentative Schedule of Topics, Readings, and Activities (subject to change)

WK 1   Chapters 1-4 (Self-Evaluation due)

WK 2   Chapters 5-6, **Introduction Speeches**

WK 3   Chapters 7-11

WK 4   Chapter 15, Speech Workshop

WK 5   **Informative Speeches**

WK 6   Chapters 12-14

WK 7   Chapters 16-17, Speech Workshop

WK 8   **Debates**

WK 9   Speech Workshop

WK 10   **Persuasive Speeches**

WK 11   Self-Evaluation and Final Exam due

Method of Instruction/ Classroom Climate
This course is performance-based and your participation is expected and involves a dynamic learning environment. The success of this course is directly related to the sense of community that we will develop in this classroom. Participation is essential to this process. You are encouraged to appropriately share your views and listen to those of others. Instructional methods will include lecture, demonstration, discussion and application of text materials. Lectures will usually include demonstrations, information to add to your textbook reading, video clips, etc. As a member of the class, you may be asked to participate in some of these demonstrations, which may include impromptu speaking situations. You are responsible for lecture and discussion information as well as your textbook assignments.

Be advised that feedback will include oral and written comments. Constructive criticism is an integral part of evaluating public presentations. You should present yourself in a manner that is "complimentary" to the message in the text of your speech. Remember: each speaker is an individual. Comments from the Instructor are meant for the particular individual speaker and tailored to each speaker's individual needs. Each speaker is evaluated individually on his/her own merits.

Academic Misconduct: *In accordance with the Academic Honor Code, students pledge the following: Being a student of higher standards, I pledge to embody the principles of academic integrity at Louisiana Tech University.* Consequently, students should take special steps to avoid academic misconduct (i.e. plagiarism) at all costs. According to the Louisiana Tech University Bulletin: "penalties may range from dismissal from the University or an academic degree program to a failing grade or lesser penalty as determined by the faculty member, plan of study committee, or supervising authority." Therefore, all work done for this class must be your own. Specifically avoid all speech files. **NOTE: students suspected of cheating/plagiarism will (at minimum) receive a grade of zero for that assignment and the case will immediately be referred to the Louisiana Tech Department of Judicial Affairs without exception!** Please consult the most recent copy of the student handbook for additional information.

Student Conduct: ZERO TOLERANCE POLICY It is the Instructor's goal to create a supportive and encouraging atmosphere in this class. Delivering public speeches is a new and scary experience for many students. Distracting behaviors by audience members can make this experience even more difficult. For this reason, no distractions will be tolerated. Distracting behaviors include such things as playing on your phone, sleeping, talking, laughing inappropriately, rolling your eyes, reading, doing homework, putting your head down, or otherwise interrupting or expressing disinterest in the student's speech. You will be expected to be attentive while your peers are speaking. PLEASE TURN OFF CELL PHONES! Automatic 10 point deduction if your phone interrupts a speaker.

Students with Disabilities: The office of Disabled Student Services (Keeny Hall) coordinates campus-wide efforts to provide information and services to Louisiana Tech students with disabilities. Inquiries concerning services for students with disabilities should be directed to the Office of Disabled Students Services, the Admissions Office, or the Office of Academic Affairs. Services are available to students who provide appropriate documentation to the Office of Disabled Student Services. Any student, with a documented disability condition (e.g., physical, learning, psychiatric, vision, hearing, etc.), requesting classroom accommodations should contact the instructor(s) and the Office of Disabled Student Services at the beginning of each quarter. Reasonable classroom accommodations cannot be provided unless/until the student provides appropriate documentation to the Office of Disabled Student Services. Any student granted the accommodation of having "extended time" for exam purposes will be required to take the exam in the Office of Disabled Student Services. The instructor will not administer the exam.

EMERGENCY NOTIFICATION SYSTEM: All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you're able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit: http://www.latech.edu/administration/ens.shtml.

NEED HELP WITH AN ASSIGNMENT? The syllabus explains that students may get individual help on speech content by meeting with the course instructor prior to the speaking presentation when providing a developed outline. You must meet with me in person to take advantage of this opportunity. In these meetings, I will evaluate the outline, make suggestions for improvement, if needed, and return the outline to you. I urge every student to take advantage of this opportunity in order to address problem areas of your presentation before you are formally graded on it. Often students say that they didn't understand an assignment or thought they were doing what was expected only to be surprised when they received their grade on the assignment. You can guard

against this potential "misunderstanding" by accepting my offer to help. Please understand that this choice is yours, BUT you should also understand that I am not enthusiastic about discussing your grade after the fact unless you have exercised this option. Of course, I will always provide you with a written critique for every speech presentation, but remember that you could have had that evaluation, in large part, prior to the grade had you chosen to do so. Please don't waste my time after the fact if you are unhappy with your grade. Instead, resolve to seek my help, in a timely manner, for future assignments.

Cicero's Five Canons of Rhetoric

Invention	The process of selecting and narrowing a topic, selecting your general purpose and formulating your specific purpose statement, researching, analyzing the audience, and finally selecting your main points in order to create your thesis statement.
Organization	The process or arranging your ideas. This includes formulating the introduction, body, conclusion, transition statements, and sign posts. This includes: Attention getting device, Closing Device, order of Main Points, Sub-points, etc.
Delivery	This is the nonverbal aspects of your speech, including: kinesics (body movements/gestures), proxemics (space), personal artifacts/appearance (clothing), presentation aids, paralanguage (fillers- "um" "uh"), and use of silence.
Style	This is the verbal aspects of your speech, including: literary devices (metaphor, simile, etc.), jargon, definitions, clarity, unbiased, etc.
Memory	The process of selecting the mode of speaking you will use for the speech. This includes: impromptu, extemporaneous, memorization, and

	manuscript. This can also include presentation aids.

Source: Burton, G. O. (n.d.). The Canon's Of Rhetoric. *Silva Rhetoricae*, Brigham Young University, rhetoric.byu.edu

COMM 110 Presentation Rubric

	A (Superior)	B (Excellent)	C (Satisfactory)	D (Fair)	F (Unacceptable)
Topic, Assignment, Logic, Support, and Citation The generation of original ideas that best serve academic and ethical purpose. Appropriate ideas are based on topic, purpose, and supporting evidence.	• In all instances student expertly selected audience-appropriate topic(s) of discussion. • In all instances student expertly responded to the entirety of the assignments purpose. • In all instances student expertly used course/theoretical concepts to create submitted work. • In all instances student expertly used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • In all instances student expertly uses logic that is audience- appropriate.	• Student selected audience-appropriate topic(s) of discussion. • Student responded to the entirety of the assignments purpose. • Student used course/theoretical concepts to create submitted work. • Student used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • Student uses logic that is audience- appropriate.	• On occasion student selected audience-appropriate topic(s) of discussion. • On occasion student responded to the entirety of the assignments purpose. • On occasion student used course/theoretical concepts to create submitted work. • On occasion student used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • On occasion student uses logic that is audience- appropriate.	• Student rarely selected audience-appropriate topic(s) of discussion. • Student rarely responded to the entirety of the assignments purpose. • Student rarely used course/theoretical concepts to create submitted work. • Student rarely used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • Student rarely uses logic that is audience- appropriate.	• Student fails to select audience-appropriate topic(s) of discussion. • Student fails to respond to the entirety of the assignments purpose. • Student fails to use course/theoretical concepts to create submitted work. • Student fails to use and correctly cite (AP, APA, MLA) the appropriate amount of sources. • Student fails to use logic that is audience- appropriate.
Organization The structuring of ideas to effectively convey them to a target audience (classroom/peers/Reader/Professor/Viewing public). Organization of ideas/arguments must be audience-centered.	• In all instances student expertly organized submitted work using functional components/sections. • In all instances student expertly used transitions to connect major ideas. • In all instances student expertly used introductions to introduce their audience to their materials. • In all instances student expertly used conclusions to summarize their major ideas.	• Student organized submitted work using functional components/sections. • Student used transitions to connect major ideas. • Student used introductions to introduce their audience to their materials. • Student used conclusions to summarize their major ideas.	• On occasion student organized submitted work using functional components/sections. • On occasion student used transitions to connect major ideas. • On occasion student used introductions to introduce their audience to their materials. • On occasion student used conclusions to summarize their major ideas.	• Student rarely organized submitted work using functional components/sections. • Student rarely used transitions to connect major ideas. • Student rarely used introductions to introduce their audience to their materials. • Student rarely used conclusions to summarize their major ideas.	• Student fails organized submitted work using functional components/sections. • Student fails to use transitions to connect major ideas. • Student fails to use introductions to introduce their audience to their materials. • Student fails to use conclusions to summarize their major ideas.
Word Choice The use of expressive, aesthetic, and accurate language. Verbal messages must be audience appropriate.	• Student always expertly avoids biased language. • Student always expertly provides definitions, uses appropriate language, and avoids verbal clutter. • Student always expertly uses clear descriptive and emotive language to convey original ideas. • Student always expertly uses creative messages.	• Student avoids biased language. • Student provides definitions, uses appropriate language, and avoids verbal clutter. • Student uses clear descriptive and emotive language to convey original ideas. • Student uses creative messages.	• On occasion student avoids biased language. • On occasion student provides definitions, uses appropriate language, and avoids verbal clutter. • On occasion student uses clear descriptive and emotive language to convey original ideas. • On occasion student uses creative messages.	• Student rarely avoids biased language. • Student rarely provides definitions, uses appropriate language, and avoids verbal clutter. • Student rarely uses clear descriptive and emotive language to convey original ideas. • Student rarely uses creative messages.	• Student fails avoids biased language. • Student fails to provide definitions, uses appropriate language, and avoids verbal clutter. • Student fails to use clear descriptive and emotive language to convey original ideas. • Student fails to use creative messages.

APPENDIX E

ONLINE TAUGHT PUBLIC SPEAKING COURSE SYLLABUS FROM

INSTRUCTOR A

LOUISIANA TECH UNIVERSITY
COMM 110 SYLLABUS

Communication 110: Principles of Speech. This course is designed to develop the principles of effective oral communication in typical speaker-audience situations, through practice in informative and persuasive speaking. *This course cannot be taken for credit if student has credit for Speech 377.

Instructor: A   **Email:** xxxxxxx   **Office:** xxxx   **Ext:** xxxx

Text: Lucas, S. E. (2015). *The art of public speaking, (12th Ed.).* Boston, MA: Mc-Graw-Hill

Required Materials: Students are required to have a video-recording device to record their presentations and a YouTube account to post their presentations (these are not provided by the instructor and are a requirement of this course, there are no exceptions). The student must know/learn how to create a YouTube account, record their speeches, and upload the video to their YouTube account. These videos must be shared with/accessible to the Instructor and fellow classmates in order to receive feedback. This is not an option, it is a requirement. You are also required to have access to dependable internet. Late/incomplete assignments are not tolerated because of lack of internet service.

Course Learner Objectives & Direct Measures:
Upon completion of this course, students will:
1-Understand the dynamics behind preparing and delivering a quality presentation as measured by   exams and the presenting four presentations.
2-Develop skills for audience analysis/adaptation and speech critique as assessed by Exams and the outline development for four speeches.
3-Demonstrate skills for gathering, organizing, supporting, and presenting material in informative and persuasive contexts as evaluated by presenting four presentations: two informative formats and two   persuasive formats.
4-Improve ability to manage communication anxiety as measured by writing a self-evaluation based on your recorded presentation and the actual presentation of four speeches.

Attendance Policy
Upon registration, students accept responsibility to attend regularly and punctually all classes in which they are enrolled. Being an online course requires students access Moodle regularly (at least 4 times a week). This is equivalent to attending this course.

"Absences" in this online Communication 110 will be excused only in the event of the student's illness (a medical doctor's excuse must be submitted for verification; however, **routine appointments are not considered an emergency and may not be excused**), the student's hospitalization, or extreme extenuating circumstances which the student must explain in writing (which may or may not be excused). A written excuse must be submitted for each absence. It is the student's responsibility to present proper documentation for the Instructor's use in determining if an absence is to be excused. The written documentation must be presented at the first class meeting attended after the" absence." In order for public speaking to take place, there must be an audience. In addition to successfully completing your own speaking assignments, it is also your

responsibility to observe and support your peers by viewing their speeches. Late work will not be accepted unless the tardiness is due to an excused "absence." In other words, because this is an online course students are required to keep up with the schedule, assignments, readings, etc. If a student has an emergency and cannot complete their work on time, they must present proof to the instructor in order to receive credit.

Assignments (additional information is available on Moodle)

Presentations: Four (4) ORIGINAL oral presentations, two informative and two persuasive, are required for completion of this course. Failure to give the four presentations results in a final grade of F regardless of the test grades, the grades earned on the other presentations, and the self-evaluation grade.
1.   **Introduction Speech:** The student will compare their lives to "something."
2.   **Informative Speech:** The student will inform the audience about a topic they choose.
3.   **Debate:** The student will prepare an affirmative or negative speech for a debate.
4.   **Persuasive Speech:** The student will address a **question of policy** by following Problem/Solution/Benefit organizational pattern.

Each student will have a designated date for each presentation as assigned by the instructor. Students are not at liberty to switch dates with other students. **If a student fails to present on their assigned speaking date it's an automatic three (3) letter grade deduction assuming the Instructor allows the student to make-up the speech.**

Speech Packets and Critique sheets will be available online throughout the quarter. A typed **formal outline** (see Chapter 11 in text) is to be submitted before you speak for **each** of the four presentations. Outlines will not be accepted after the speech has been given. Follow the **Formal Outline Format** in your speech packets. The **speaker's outline** (see Chapter 11 in text) is much more informal and should be easy to read at a glance. **DO NOT READ ALOUD FROM YOUR PREPARATION OUTLINE!** Only very brief speaker's notes in the form of a word or phrase outline may be used. All speeches are to be delivered in a natural, extemporaneous style from the brief speaking outline. Specifics will be given for each speech. **The speaking outline is to be submitted at the end of your speech.**

Participation and Self Evaluation Assignment: Each student is required to participate in the course activities which contribute to their participation grade. These activities may require students complete homework assignments and/or activities via Moodle. Each student is also required to complete a **self-evaluation (PRCA-24).** Participation will include discussion posts and the invention process handout. These assignments are explained further online and in class.

Final Examination: A cumulative final examination will be given at the end of the quarter. This exams may contain multiple choice, true/false, fill-in-the-blank, and/or short essay questions. You will take the exam via Moodle.

Final Grade
The final grade will be based on the total points accumulated on the presentations, participation/self -evaluation, examinations, for a total of 500 possible points as follows:

		Grading Scale	
Introduction Speech	50 points		
Informative Speech	100 points	A=	450 – 500
Debate	100 points	B=	400 – 449
Persuasive Speech	100 points	C=	350 – 399
Final Exam	50 points	D=	300 – 349
Self-Evaluation/Participation	100 points	F=	299 and below

Tentative Schedule of Topics, Readings, and Activities (subject to change)

WK 1   Chapters 1-4 (PRCA-24 and Discussion Post One due)

WK 2   **Introduction Speeches** Chapters 5-6 (Discussion Post Two Due)

WK 3   Chapters 7-11 (Discussion Post Three Due)

WK 4   Chapter 15, Speech Workshop

WK 5   **Informative Speeches**

WK 6   Chapters 12-14 (Discussion Post Four and Bonus Post Due)

WK 7   Chapters 16-17, Speech Workshop (Discussion Post Five Due)

WK 8   **Debates**

WK 9   Speech Workshop

WK 10   **Persuasive Speeches**

WK 11   Self-Evaluation and Final Exam due August 11th

Method of Instruction/ Classroom Climate
This course is performance-based and your participation is expected and involves a dynamic online learning environment. The success of this course is directly related to the sense of community that we will develop in the virtual classroom. Participation is essential to this process. You are encouraged to appropriately share your views and listen to those of others (discussion posts and speeches). Instructional methods will include PowerPoints, demonstration, discussion and application of text materials. Lectures will usually include information to add to your textbook reading via PowerPoint presentations, and supplemental materials available on Moodle. You are responsible for lecture and discussion information as well as your textbook assignments. Be advised that feedback will include written comments. Constructive criticism is an integral part of evaluating public presentations. You should present yourself in a manner that is "complimentary" to the message in the text of your speech. Remember: each speaker is an individual. Comments from the Instructor are meant for the particular individual

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you with a written critique for every speech presentation, but remember that you could have had that evaluation, in large part, prior to the grade had you chosen to do so. Please don't waste my time after the fact if you are unhappy with your grade. Instead, resolve to seek my help, in a timely manner, for future assignments.

Cicero's Five Canons of Rhetoric

Invention	The process of selecting and narrowing a topic, selecting your general purpose and formulating your specific purpose statement, researching, analyzing the audience, and finally selecting your main points in order to create your thesis statement.
Organization	The process or arranging your ideas. This includes formulating the introduction, body, conclusion, transition statements, and sign posts. This includes: Attention getting device, Closing Device, order of Main Points, Sub-points, etc.
Delivery	This is the nonverbal aspects of your speech, including: kinesics (body movements/gestures), proxemics (space), personal artifacts/appearance (clothing), presentation aids, paralanguage (fillers-"um" "uh"), and use of silence.
Style	This is the verbal aspects of your speech, including: literary devices (metaphor, simile, etc.), jargon, definitions, clarity, unbiased, etc.
Memory	The process of selecting the mode of speaking you will use for the speech. This includes: impromptu, extemporaneous, memorization, and manuscript. This can also include presentation aids.

COMM 110 Presentation Rubric

	A (Superior)	B (Excellent)	C (Satisfactory)	D (Fair)	F (Unacceptable)
Topic, Assignment, Logic, Support, and Citation — The generation of original ideas that best serve academic and ethical purpose. Appropriate ideas are based on topic, purpose, and supporting evidence.	• In all instances student expertly selected audience-appropriate topic(s) of discussion. • In all instances student expertly responded to the entirety of the assignments purpose. • In all instances student expertly used course/theoretical concepts to create submitted work. • In all instances student expertly used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • In all instances student expertly uses logic that is audience-appropriate.	• Student selected audience-appropriate topic(s) of discussion. • Student responded to the entirety of the assignments purpose. • Student used course/theoretical concepts to create submitted work. • Student used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • Student uses logic that is audience-appropriate.	• On occasion student selected audience-appropriate topic(s) of discussion. • On occasion student responded to the entirety of the assignments purpose. • On occasion student used course/theoretical concepts to create submitted work. • On occasion student used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • On occasion student uses logic that is audience-appropriate.	• Student rarely selected audience-appropriate topic(s) of discussion. • Student rarely responded to the entirety of the assignments purpose. • Student rarely used course/theoretical concepts to create submitted work. • Student rarely used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • Student rarely uses logic that is audience-appropriate.	• Student fails to select audience-appropriate topic(s) of discussion. • Student fails to respond to the entirety of the assignments purpose. • Student fails to use course/theoretical concepts to create submitted work. • Student fails to use and correctly cite (AP, APA, MLA) the appropriate amount of sources. • Student fails to use logic that is audience-appropriate.
Organization — The structuring of ideas to effectively convey them to a target audience (classroom/peers/Reader/Professor/Viewing public). Organization of ideas/arguments must be audience-centered.	• In all instances student expertly organized submitted work using functional components/sections. • In all instances student expertly used transitions to connect major ideas. • In all instances student expertly used introductions to introduce their audience to their materials. • In all instances student expertly used conclusions to summarize their major ideas.	• Student organized submitted work using functional components/sections. • Student used transitions to connect major ideas. • Student used introductions to introduce their audience to their materials. • Student used conclusions to summarize their major ideas.	• On occasion student organized submitted work using functional components/sections. • On occasion student used transitions to connect major ideas. • On occasion student used introductions to introduce their audience to their materials. • On occasion student used conclusions to summarize their major ideas.	• Student rarely organized submitted work using functional components/sections. • Student rarely used transitions to connect major ideas. • Student rarely used introductions to introduce their audience to their materials. • Student rarely used conclusions to summarize their major ideas.	• Student fails organized submitted work using functional components/sections. • Student fails to use transitions to connect major ideas. • Student fails to use introductions to introduce their audience to their materials. • Student fails to use conclusions to summarize their major ideas.
Word Choice — The use of expressive, aesthetic, and accurate language. Verbal messages must be audience-appropriate.	• Student always expertly avoids biased language. • Student always expertly provides definitions, uses appropriate language, and avoids verbal clutter. • Student always expertly uses clear descriptive and emotive language to convey original ideas. • Student always expertly uses creative messages.	• Student avoids biased language. • Student provides definitions, uses appropriate language, and avoids verbal clutter. • Student uses clear descriptive and emotive language to convey original ideas. • Student uses creative messages.	• On occasion student avoids biased language. • On occasion student provides definitions, uses appropriate language, and avoids verbal clutter. • On occasion student uses clear descriptive and emotive language to convey original ideas. • On occasion student uses creative messages.	• Student rarely avoids biased language. • Student rarely provides definitions, uses appropriate language, and avoids verbal clutter. • Student rarely uses clear descriptive and emotive language to convey original ideas. • Student rarely uses creative messages.	• Student fails avoids biased language. • Student fails to provide definitions, uses appropriate language, and avoids verbal clutter. • Student fails to use clear descriptive and emotive language to convey original ideas. • Student fails to use creative messages.

COMM 110 Presentation Rubric

	A (Superior)	B (Excellent)	C (Satisfactory)	D (Fair)	F (Unacceptable)
Topic, Assignment, Logic, Support, and Citation The generation of original ideas that best serve academic and ethical purpose. Appropriate ideas are based on topic, purpose, and supporting evidence.	• In all instances student expertly selected audience-appropriate topic(s) of discussion. • In all instances student expertly responded to the entirety of the assignments purpose. • In all instances student expertly used course/theoretical concepts to create submitted work. • In all instances student expertly used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • In all instances student expertly uses logic that is audience-appropriate.	• Student selected audience-appropriate topic(s) of discussion. • Student responded to the entirety of the assignments purpose. • Student used course/theoretical concepts to create submitted work. • Student used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • Student uses logic that is audience-appropriate.	• On occasion student selected audience-appropriate topic(s) of discussion. • On occasion student responded to the entirety of the assignments purpose. • On occasion student used course/theoretical concepts to create submitted work. • On occasion student used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • On occasion student uses logic that is audience-appropriate.	• Student rarely selected audience-appropriate topic(s) of discussion. • Student rarely responded to the entirety of the assignments purpose. • Student rarely used course/theoretical concepts to create submitted work. • Student rarely used and correctly cited (AP, APA, MLA) the appropriate amount of sources. • Student rarely uses logic that is audience-appropriate.	• Student fails to select audience-appropriate topic(s) of discussion. • Student fails to respond to the entirety of the assignments purpose. • Student fails to use course/theoretical concepts to create submitted work. • Student fails to use and correctly cite (AP, APA, MLA) the appropriate amount of sources. • Student fails to use logic that is audience-appropriate.
Organization The structuring of ideas to effectively convey them to a target audience (classroom/peers/Reader/Professor/Viewing public). Organization of ideas/arguments must be audience-centered.	• In all instances student expertly organized submitted work using functional components/sections. • In all instances student expertly used transitions to connect major ideas. • In all instances student expertly used introductions to introduce their audience to their materials. • In all instances student expertly used conclusions to summarize their major ideas.	• Student organized submitted work using functional components/sections. • Student used transitions to connect major ideas. • Student used introductions to introduce their audience to their materials. • Student used conclusions to summarize their major ideas.	• On occasion student organized submitted work using functional components/sections. • On occasion student used transitions to connect major ideas. • On occasion student used introductions to introduce their audience to their materials. • On occasion student used conclusions to summarize their major ideas.	• Student rarely organized submitted work using functional components/sections. • Student rarely used transitions to connect major ideas. • Student rarely used introductions to introduce their audience to their materials. • Student rarely used conclusions to summarize their major ideas.	• Student fails organized submitted work using functional components/sections. • Student fails to use transitions to connect major ideas. • Student fails to use introductions to introduce their audience to their materials. • Student fails to use conclusions to summarize their major ideas.
Word Choice The use of expressive, aesthetic, and accurate language. Verbal messages must be audience appropriate.	• Student always expertly avoids biased language. • Student always expertly provides definitions, uses appropriate language, and avoids verbal clutter. • Student always expertly uses clear descriptive and emotive language to convey original ideas. • Student always expertly uses creative messages.	• Student avoids biased language. • Student provides definitions, uses appropriate language, and avoids verbal clutter. • Student uses clear descriptive and emotive language to convey original ideas. • Student uses creative messages.	• On occasion student avoids biased language. • On occasion student provides definitions, uses appropriate language, and avoids verbal clutter. • On occasion student uses clear descriptive and emotive language to convey original ideas. • On occasion student uses creative messages.	• Student rarely avoids biased language. • Student rarely provides definitions, uses appropriate language, and avoids verbal clutter. • Student rarely uses clear descriptive and emotive language to convey original ideas. • Student rarely uses creative messages.	• Student fails avoids biased language. • Student fails to provide definitions, uses appropriate language, and avoids verbal clutter. • Student fails to use clear descriptive and emotive language to convey original ideas. • Student fails to use creative messages.

APPENDIX F

TRADITIONALLY TAUGHT PUBLIC SPEAKING COURSE SYLLABUS FROM

INSTRUCTOR B

COMM 110-003: Fundamentals of Public Speaking
Fall Quarter 2015

Instructor: Dr. XXXXXXX   Office: XXXXXX
E-Mail: XXXXX   Office Hours: MW – 11:30-3:15
Phone: XXXXX   TR – 2:00-3:15

Course Description:
This course is designed to develop the principles of effective oral communication in typical speaker-audience situations, through practice in informative and persuasive speaking. (This course cannot be taken for credit if student has credit for COMM 377.)

Textbook:
Lucas, S.E. (2014). *The Art of public speaking* (12th ed.). Boston: McGraw-Hill.

Course Learner Objectives & Direct Measures:
Upon completion of this course, students will
1.   Understand the dynamics behind preparing and delivering a quality presentation as measured by taking the midterm exam and presenting 4 speeches.
2.   Develop skills for audience analysis/adaptation and speech critique as assessed by the outline development for 2 speeches and the self-evaluation of a student's own recorded presentation.
3.   Demonstrate skills for gathering, organizing, supporting, and presenting material in informative and persuasive contexts as evaluated by presenting 4 speeches.
4.   Improve ability to manage communication anxiety as measured by the presentation of 4 speeches.

Attendance Policy:
Upon registration, students accept responsibility to attend regularly and punctually all classes in which they are enrolled. Students are permitted a total of three unexcused absences for the quarter. **Students who accumulate more than three unexcused absences will receive a 35 point deduction from their semester's final point total (the equivalent of a full letter grade penalty).** If a student accumulates an excessive number of unexcused absences beyond the initial three, the Instructor has the right to recommend to the student's academic dean that the student be dropped from the class and given a failing grade.

Absences in COMM 110 will be excused only in the event of the student's illness (a medical doctor's excuse must be submitted for verification; however, routine appointments are not considered an emergency and may not be excused), the student's hospitalization, or extremely extenuating circumstances which the student must explain in writing (which may or may not be excused). It is the student's responsibility to present written documentation of each absence. This documentation must be presented at the first class meeting attended after the absence.
In order for public speaking to take place, there must be an audience. In addition to successfully completing your own speaking assignments, it is also your responsibility to

observe and support your peers. **Thus, your attendance on presentation days is MANDATORY.** An unexcused absence on any designated presentation day will result in a five (5) point deduction from the total points earned for the course, per occurrence of absence. This applies to all students even if the student is not scheduled to deliver a speech on that day. If the absence on a presentation day is excused, no attendance points will be deducted.

Make-up Policy:
Due dates for exams, speeches, and outlines are firm. **Assignments missed due to unexcused absences or unpreparedness cannot be made up.** In the case of an excused absence, permission to make up the assignment requires that an official request be made to the instructor immediately and supported with the appropriate documentation.

Grade Disputes:
If you think that a grade should be reviewed, you may submit a typed argument explaining your disagreement with the grade. Be as specific as possible with your grievances, making reference to the assignment sheet, textbook, class notes, or other supporting materials when appropriate. A grade dispute will only be accepted within one week after the student receives the grade. I will carefully review the dispute and respond to the student by e-mail or by setting up a meeting. I do not discuss individual grades in the classroom.

Grades:
There are 350 total points possible in this course. The following is the scale used for letter grades:

A	315-350	C	245-279	F	0-209
B	280-314	D	210-244		

Assignment Point Distribution:

Assignment	Point Value
Speech #1: The Ice Breaker	25
Speech #2: The Demonstration Speech	50
Speech #3: The Informative Speech	80
Outline/Bibliography	20
Speech #4: The Persuasive Speech	80
Outline/Bibliography	20
Mid-Term Exam	50
In-Class Participation	25
TOTAL POINTS POSSIBLE	**350**
Detailed assignment sheets for each speech and outline will be available on Moodle.	

In-Class Participation
This grade is based on attendance, in addition to participation in impromptu/extemporaneous speaking activities, discussions, and other in-class assignments.

Academic Misconduct:
In accordance with the Academic Honor Code, students pledge the following: "Being a student of higher standards, I pledge to embody the principles of academic integrity at Louisiana Tech University." Consequently, students should take special steps to avoid academic misconduct (i.e. plagiarism) at all costs. According to the Louisiana Tech University Bulletin: "penalties may range from dismissal from the University or an academic degree program to a failing grade or lesser penalty as determined by the faculty member, plan of study committee, or supervising authority." Therefore, all work done for this class must be your own. Students suspected of cheating/plagiarism will (at minimum) receive a grade of zero for that assignment and the case will immediately be referred to the Louisiana Tech Department of Judicial Affairs. Please consult the most recent copy of the student handbook for additional information.

Students with Disabilities:
The Office of Disability Services (ODS) coordinates campus-wide efforts to provide information and services to Louisiana Tech students with disabilities. Inquiries concerning services for students with disabilities should be directed to the ODS, the Admissions Office, or the Office of Academic Affairs. Services are available to students who provide appropriate documentation to the ODS. Any student with a documented disability condition (e.g., physical, learning, psychiatric, vision, hearing, etc.), requesting classroom accommodations should contact the instructor and ODS at the beginning of each quarter. Reasonable classroom accommodations cannot be provided unless/until the student provides appropriate documentation to ODS.

Emergency Notification System:
All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you're able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit: http://www.latech.edu/administration/ens.shtml.

Tentative Daily Schedule

Thurs, 9/10	Orientation
Tues, 9/15	Chapters 1-2: Basics of Public Speaking
Thurs, 9/17	Chapters 3-4: Basics of Public Speaking, continued
Tues, 9/22	Ice Breaker Speech Prep
Thurs, 9/24	**Speech #1: The Ice-Breaker Speech**
Tues, 9/29	Chapter 12: Language
Thurs, 10/1	Chapter 13: Delivery
Tues, 10/6	**Speech #2: The Demonstration Speech**
Thurs, 10/8	*No Class Meeting – Read Ch. 5-6 (Finding a Topic)*
Tues, 10/13	Chapters 7-8: Finding Sources
Thurs, 10/15	Chapters 9-11: Organizing the Speech
Tues, 10/20	**Speech #3: The Informative Speech**
Thurs, 10/22	**Speech #3: The Informative Speech**
Tues, 10/27	**Speech #3: The Informative Speech**
Thurs, 10/29	***No Class Meeting - Take-Home Mid-Term Exam Due (Ch. 1-13)***
Tues, 11/3	Chapters 16-17: Persuasive Speaking
Thurs, 11/5	Chapters 14 & 18: Visual Aids and Special Occasions
Tues, 11/10	**Speech #4: The Persuasive Speech**
Thurs, 11/12	**Speech #4: The Persuasive Speech**
Tues, 11/17	**Speech #4: The Persuasive Speech**
Thurs, 11/19	*No Class Meeting – Check All Grades on Moodle*

APPENDIX G

ONLINE TAUGHT PUBLIC SPEAKING COURSE SYLLABUS FROM

INSTRUCTOR B

COMM 110-V84: Fundamentals of Public Speaking
Fall Quarter 2015 (Online)

Instructor: Dr. XXXXXXX   Office: XXXXXXX
E-Mail: XXXXXXXX   Office Hours: MW – 11:30-3:15
Phone: XXXXXXX   TR – 2:00-3:15

Course Description:
This course is designed to develop the principles of effective oral communication in typical speaker-audience situations, through practice in informative and persuasive speaking. (This course cannot be taken for credit if student has credit for COMM 377.)

Required Textbook:
Lucas, S.E. (2014). *The Art of public speaking* (12th ed.). Boston: McGraw-Hill.

Technological Requirements:
In order to complete COMM 110 online, you will be required to own/purchase video recording equipment and have appropriate technical skills. You will need the following:
1. Digital video recording equipment capable of recording up to 10 minutes of video footage. A smartphone, tablet, or laptop with recording capabilities are acceptable, assuming the sound and video quality are consistent. There are significant built-in penalties for poor videography, lighting, and/or sound for each speech.
2. Ability to record a video from a distance, to transfer it to the computer, compress it if necessary, upload it to YouTube and then post a link to the video via Moodle (instructions will be available on Moodle).
3. A functioning computer with consistent access to high speed internet.
4. Access to Moodle and Louisiana Tech Webmail. These are the two official means of communication for this course.
If you are unable to purchase the required equipment or perform the technical tasks required for participation, you should avoid enrolling in this course.

Course Learner Objectives & Direct Measures:
Upon completion of this course, students will
1. Understand the dynamics behind preparing and delivering a quality presentation as measured by taking the final exam and presenting 4 speeches.
2. Develop skills for audience analysis/adaptation and speech critique as assessed by the outline development for 2 speeches and the self-evaluation of a student's own recorded presentation.
3. Demonstrate skills for gathering, organizing, supporting, and presenting material in informative and persuasive contexts as evaluated by presenting 4 speeches.
4. Improve ability to manage communication anxiety as measured by the presentation of 4 speeches.

Assignment Due Dates and Late Work Policy:

All assignments are due at 11:55 PM on the date listed in the schedule. Due dates for exams, speeches, and outlines are firm. **Assignments missed due to unpreparedness, personal technology failures, or non-emergency situations cannot be made up.** You should test video recording and other equipment well ahead of time to make sure you are able to upload and post your speeches.

In the case of legitimate medical or other emergencies, permission to make up an assignment requires that an official request be made to the instructor immediately and supported with appropriate documentation.

Grade Disputes:
If you think that a grade should be reviewed, you may submit a typed argument explaining your disagreement with the grade. Be as specific as possible with your grievances, making reference to the assignment sheet, textbook, class notes, or other supporting materials when appropriate. A grade dispute will only be accepted within one week after the student receives the grade. I will carefully review the dispute and respond to the student by e-mail or by setting up a phone meeting.

Grades:
There are 350 total points possible in this course. The following is the scale used for letter grades:

A	315-350	C	245-279	F	0-209
B	280-314	D	210-244		

Assignment Point Distribution:

Assignment	Point Value
Speech #1: The Ice Breaker	25
Speech #2: The Demonstration Speech	50
Speech #3: The Informative Speech	80
Outline/Bibliography	20
Speech #4: The Persuasive Speech	80
Outline/Bibliography	20
Mid-Term Exam	50
Weekly Participation on Discussion Board	25
TOTAL POINTS POSSIBLE	**350**
Detailed assignment sheets for each speech and outline will be available on Moodle.	

Unit Participation on Discussion Board
There will be 5 unit discussion prompts consisting of questions, videos, and other activities posted to the discussion board on Moodle. Your responses to these prompts, worth 5 points each, will make up your participation grade. You will be graded on depth of thought and reasoning. Responses must be posted by 11:55 PM on the final Friday of each unit.

Speech Recording Guidelines
Please follow these recording guidelines for all speeches in this course. Students who fail

to follow these guidelines will receive point deductions on their speeches.

- The speaker's first job is to be heard – please make sure your recording equipment picks up your voice at an adequate level.
- Stand during your speech if you are able – do not sit in front of your laptop to deliver the speech.
- All speeches in this class should be delivered extemporaneously from brief notes. Do not read off of a computer screen or other device during your speech.
- Properly frame your camera shot so that your entire upper body may be seen during your speech – this will allow your audience to see your gestures, as well as your face. This means that you should not hold the camera yourself. Either have someone else record your speech or position your camera somewhere before you begin.
- Make sure to deliver the speech in a room with adequate lighting – make sure the camera shot is not too dark.
- Do not start and stop the video during your speech.

Uploading Your Speech
You will need a Google/YouTube account to upload your speech. For information on how to upload videos, watch: https://www.youtube.com/watch?v=oZvBuqRxaPs.

Do NOT select the "Private" setting when you are uploading your video. Select either "Public" or "Unlisted." Selecting "Private" will only allow those with your password to see the video. Selecting "Unlisted" will keep your video from appearing in any Google or YouTube searches, but will still allow the instructor and your classmates to see the video, assuming they have the link.

Finally, please include your name and speech title in the title of your video. After you have uploaded your video to YouTube, you should post the link in the appropriate Moodle forum for your instructor and classmates to watch.

Academic Misconduct:
In accordance with the Academic Honor Code, students pledge the following: "Being a student of higher standards, I pledge to embody the principles of academic integrity at Louisiana Tech University." Consequently, students should take special steps to avoid academic misconduct (i.e. plagiarism) at all costs. According to the Louisiana Tech University Bulletin: "penalties may range from dismissal from the University or an academic degree program to a failing grade or lesser penalty as determined by the faculty member, plan of study committee, or supervising authority." Therefore, all work done for this class must be your own. Students suspected of cheating/plagiarism will (at minimum) receive a grade of zero for that assignment and the case will immediately be referred to the Louisiana Tech Department of Judicial Affairs. Please consult the most recent copy of the student handbook for additional information.

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The Office of Disability Services (ODS) coordinates campus-wide efforts to provide

information and services to Louisiana Tech students with disabilities. Inquiries concerning services for students with disabilities should be directed to the ODS, the Admissions Office, or the Office of Academic Affairs. Services are available to students who provide appropriate documentation to the ODS. Any student with a documented disability condition (e.g., physical, learning, psychiatric, vision, hearing, etc.), requesting classroom accommodations should contact the instructor and ODS at the beginning of each quarter. Reasonable classroom accommodations cannot be provided unless/until the student provides appropriate documentation to ODS.

Emergency Notification System:
All Louisiana Tech students are strongly encouraged to enroll and update their contact information in the Emergency Notification System. It takes just a few seconds to ensure you're able to receive important text and voice alerts in the event of a campus emergency. For more information on the Emergency Notification System, please visit: http://www.latech.edu/administration/ens.shtml.

Tentative Schedule

Unit #1: Introduction to Public Speaking
Thursday, September 10 – Friday, September 18
Readings: Chapters 1-4
Watch: All Unit 1 Videos
Assignments:
>   1. PRCA, Part 1 – Due by E-Mail on Friday, September 18
>   2. Ice-Breaker Speech – Post on Speech Forum by Friday, September 18
>   3. Unit Participation – Watch George W. Bush 9-11 Address and Respond to
> Questions on Discussion Board by Friday, September 18

Unit #2: Language, Delivery, and Topic Selection
Monday, September 21 – Friday, October 2
Readings: Chapters 5-6 and 12-13
Watch: All Unit 2 Videos
Assignments:
>   1. Demonstration Speech – Post on Speech Forum by Friday, October 2
>   2. Unit Participation – Watch Mary Fisher's "Whisper of AIDS" Speech and
Respond   to Questions on Discussion Board by Friday, October 2

Unit #3: Finding Sources and Organizing the Speech
Monday, October 5 – Friday, October 16
Readings: Chapters 7-10
Watch: All Unit 3 Videos
Assignments:
>   1. Mid-term Exam – Due by E-Mail on Friday, October 16
>   2. Unit Participation – Watch a Minimum of Five Students' Demonstration
Speeches   and Post Two Pieces of Positive and One Piece of Critical Feedback for
Each. Post on Discussion Board by Friday, October 16

Unit #4: Informative Speaking
Monday, October 19 – Friday, October 30
Readings: Chapters 11, 14, and 15
Watch: All Unit 4 Videos
Assignments:
>   1. Informative Speech – Post on Speech Forum by Friday, October 30
>   2. Bibliography/Outline – Post on Speech Forum by Friday, October 30
>   3. Watch Example Informative Speeches and Positive and Critical Feedback on
> Discussion Board by Friday, October 30

Unit #5: Persuasive Speaking
Monday, November 2 – Friday, November 13
Readings: Chapters 16-17
Watch: All Unit 5 Videos
Assignments:

1. PRCA, Part 2 – Due by E-Mail by Friday, November 13
2. Persuasive Speech – Post on Speech Forum by Friday, November 13
3. Outline/Bibliography – Post on Speech Forum by Friday, November 13
4. Weekly Participation – Watch a Minimum of Five Students' Informative Speeches and Post Two Pieces of Positive and One Piece of Critical Feedback for Each. Post on Discussion Board by Friday, November 13

APPENDIX H

LIST OF TABLES

Table 1

Tests of Between-Subjects Effects (ANOVA)

Modality	Sum of Squares	df	Mean Square	F	Sig.
TotPre	16.263	61	.267	.900	.631
TotPost	13.552	56	.242	.817	.701

a.   R Squared = .000 (Adjusted R Squared = -.005)

Table 2

Communication Apprehension (CA) Level

Level	Frequency	Percent	Cumulative Percent
Low	45	19.3	19.3
Average	131	56.2	75.5
High	57	24.5	100.0

Table 3

t-Test for Districts with Positive and Negative Gain Scores

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig	t	df	Sig (2-tailed)
Survey Total (Equal Variances Assumed)	.582	.446	.156	231	.876

Table 4

Communication Apprehension Levels in Each Modality

Communication Apprehension Level	Modality		Total
	F2F	Online	
Low	27	18	45
Average	73	58	131
High	28	29	57
Total	128	105	233

References

Adler, R. B. (1980). Integrating reticence management into the basic communication curriculum. *Communication Education, 29,* 215-221.

Allen, I. E., & Seaman, J. (2010). Class differences: Online education in the United States, 2010 (ED529952). Retrieved from Sloan Consortium website: http://files.eric.ed.gov/fulltext/ED529952.pdf

Allen, I. E., & Seaman, J. (2011). Going the distance: Online education in the United States, 2011 (ED529948). Retrieved from Sloan Consortium website: http://eric.ed.gov/?id=ED529948

Allen, I. E., & Seaman, J. (2012). Conflicted: Faculty and online education, 2012 (ED535214). Retrieved from Sloan Consortium website: http://eric.ed.gov/?id=ED535214

Allen, I. E., & Seaman, J. (2013). Grade change: Tracking online education, 2013. Retrieved from the eLearning Conference website: http://www.itcnetwork. org/webinars/898-grade-change-tracking-online-education-in-the-united-states-2013.pdf

Allen, T. H. (2006). Raising the question #1: Is the rush to provide on-line instruction setting our students up for failure? *Communication Education, 55*(1), 122-126.

Anderson, T. (2008). *The Theory and Practice of Online Learning* (2nd ed.). Albert, CAN: Athabasca University Press.

Arakaki Game, J. (Ed.). (1998, April). Communication, culture, and technology: An

Internet interview with James W. Carey. *Journal of Communication Inquiry,*

22(2), 117-130.

Atkinson, M. P., & Hunt, A. N. (2008). Inquiry-guided learning in sociology. *Teaching*

Sociology, 36(1), 1-7.

Ayres, J., & Hopf, T.S. (1985). Visualization: A means of reducing speech anxiety.

Communication Education, 34, 318-323.

Barker, O. (2006, May 30). Technology leaves teens speechless: Text-messaging is

wiping out the art of conversation. *U.S.A. Today,* p. D1.

Barlow, D. (1988). *Anxiety and its disorders.* New York: Guilford Press.

Barnes, S. B. (2003). *Computer-Mediated Communication: Human-to-Human*

Communication Across the Internet. Boston, MA: Allyn and Bacon.

Bates, J. E. (1989). Concepts and measures of temperament. In G. A. Kohnstamm, J. E.

Bates, & M. K. Rothbart (Eds.), *Temperament in childhood* (pp. 3-26). New

York: Wiley.

Baym, N. (2000). *Tune in, log on: Soaps, fandom, and online community.* Thousand

Oaks, CA: Sage.

Beatty, M. J. (1988). Situational and predispositional correlates of public speaking

anxiety. *Communication Education, 37,* 28-39.

Beatty, M. J., Behnke, R. R., & McCallum, K. (1978). Situational determinants of

communication apprehension. *Communication Monographs, 45,* 187-191.

Beatty, M. J., & Friedland, M. H. (1990). Public speaking state anxiety as a function of selected situational and predispositional variables. *Communication Education, 38*, 142-147.

Beatty, M. J., McCroskey, J. C., & Heisel, A. D. (1998). Communication apprehension as temperamental expression: A communibiological paradigm. *Communication Monographs, 65*, 197-219.

Berger, C. R., & Calabrese, R. (1975). Some explorations in initial interaction and beyond: Toward a development theory of interpersonal communication. *Human Communication Research, 1*, 99-112.

Behnke, R. R., & Beatty, M. J. (1981). A cognitive physiological model of speech anxiety. *Communication Monographs, 48*, 158-163.

Behnke, R. R., & Sawyer, C. R. (1998). Conceptualizing speech anxiety as a dynamic trait. *Southern Communication Journal, 63*(2), 160-168.

Bejerano, A. R. (2008). Raising the question #11 the genesis and evolution of online degree programs: Who are they for and what have we lost along the way? *Communication Education, 57*(3), 408-414.

Biggers, T. (1988). Decrease communication anxiety through public speech training. *Communication Research Reports, 143*, 4-17.

Blanchard, R. J. and Blanchard, D. C. (1990). An ethoexperimental analysis of defense, fear and anxiety. In *Anxiety* (ed. N. McNaughton and G. Andrews), pp. 124–33. Otago University Press, Dunedin.

Blanchard, R. J., Yudko, E. B., Rodgers, R. J., and Blanchard, D. C. (1993). Defense

system psychopharmacology: an ethological approach to the pharmacology of

fear and anxiety. *Behavioural Brain Research, 58,* 155–65.

Blume, B. D., Baldwin. T. T., & Ryan, K. C. (2012). Communication apprehension: A

barrier to students' leadership, adaptability, and multicultural appreciation.

Academy of Management Learning & Education, 12(2), 158-172.

Blyth, A. (2006). How to get the most out of public speaking training. *Training

Magazine, 7.*

Booth-Butterfield, S. (1988). Inhibition and student recall of instructional messages.

Communication Education, 37, 312-324.

Bourhis, J., & Allen, M. (1992). Meta-analysis of the relationship between

communication apprehension and cognitive performance. *Communication

Education, 41,* 68-76.

Bowers, J. W. (1986). Classroom communication apprehension: A survey.

Communication Education, 35(1), 372-378.

Bump, P. (2014). Here is when each generation begins and ends, according to the facts.

The Atlantic. Retrieved from http://www.theatlantic.com/national/archive/

2014/03/here-is-when-each-generation-begins-and-ends-according-to-

facts/359589/

Burke, B., Cameron, K., Cooper, J., Johnson, S., & Miller, K. (2013). The correlation between computer-mediated communication and communication apprehension. *Chapman University Communication Studies Undergraduate Research Journal, 3*(2), 1-24. Retrieved from http://journals.chapman.edu/ojs/index.php/mc /article/view/897/1044

Byrne, M., Flood, B., & Shanahan, D. (2012). A qualitative exploration of oral communication apprehension. *Accounting Education: An International Journal, 21*(6), 565-581.

Clark, R. A. & Jones, D. (2001). A comparison of traditional and online formats in a public speaking course. *Communication Education, 50*(2), 109-124.

Cappella, J. N. (1991). The biological origins of automated patterns of human interaction. *Communication Theory, 1,* 4-35.

Carver, C. S., & White, T. L. (1994). Behavior inhibition, behavioral activation, and affective responses to impending reward abd punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67,* 319-333.

Cathcart, R., & Gumpert, G. (1986). The person-computer interaction: A unique source. In G. Gumpert & R. Cathcart (Eds.), *Inter media: Interpersonal communication in a media world* (pp. 323-332). New York: Oxford University Press.

Chang, M. J., Milem, J. F., & Antonio, A. L. (2011). Campus climate and diversity. In J. H. Schuh, S. R. Jones, S. R. Harper, & Associates (Eds.), *Student Services, A Handbook for the Profession.* (5th ed., pp. 43-58). San Francisco, CA: Jossey-Bass.

Chen, C., Pedersen, S., & Murphy, K. L. (2011). Learners' perceived information

overload in online learning via computer-mediated communication. *Research in*

Learning Technology, 19(2), 101-116.

Christensen, D. H. (2012). Increasing student voice and empowerment through

technology: The perceptions of communication apprehension Latter-day Saint

(LDS) seminary students. *All Graduate Theses and Dissertations.* Paper 1166.

Retrieved from http://digitalcommons.usu.edu/etd/1166

Cicero. (1942). *De Oratore (Vol. 1).* (E. W. Sutton, Trans.) Cambridge: Harvard

University Press.

Clark-Ibanez, M., & Scott, L. (2008). Learning to teach online. *Teaching Sociology,*

36(1), 34-41.

Claytona, R. B., Osborn, R. E., Miller, K. B., & Oberle, D. C. (2013). Loneliness,

anxiousness, and substance use as predictors of Facebook use. *Computers in*

Human Behavior, 29, 687-693.

Daly, J. A., & Stafford. (1984). Correlates and consequences of social-communicative

anxiety. In J. Daly & J. McCroskey (Eds.), *Avoiding Communication,* (pp. 125-

144). Beverly Hills, CA: Sage.

Davis, K. (2013). Young people's digital lives: The impact of interpersonal relationships

and digital media use on adolescents' sense of identity. *Computers in Human*

Behavior, 29, 2281-2293.

Davis, M. (1992). The role of the amygdala in conditioned fear. In *The amygdala:*

neurobiological aspects of emotion, memory, and mental function (ed. J. P.

Aggleton), pp. 255–305. Wiley-Liss.

Deal, J. J., Altman, D. G., & Rogelberg, S. G. (2010). Millenials at work: What we know and what we need to do (if anything). *Journal of Business and Psychology, 25*(2), 191-199.

Derrida, J. (1967). (G. C. Spivak, Trans.) *On Grammatology.* Baltimore: John Hopkins University Press.

Derrida, J. (1989). (R. Bowlby, Trans.). *Of Spirit.* Chicago: University of Chicago.

Derrida, J. (1995). (T. Dutoit, ed.). *On the Name.* Stanford, CA: Stanford University Press.

Derrida, J. (2002). (P. Kamuf, Trans.). *Without Alibi.* Stanford, CA: Stanford University Press.

Derrida, J. (2005). (P. Brault & M. Nass, Trans.). *Rogues: Two essays on reason.* Stanford, CA: Stanford University Press.

Driscoll, A., Jicha, K., Hunt, A. N., Tichavsky, L., & Thompson, G. (2012). Can online courses deliver in-class results? A comparison of student performance and satisfaction in an online versus a face-to-face introductory sociology course. *Teaching Sociology, 40*(4), 312-331.

Duff, D. C., Levine, T. R., Beatty, M. J., Woolbright, J., & Park, H. S. (2007). Testing public speaking anxiety treatments against a credible placebo control. *Communication Education, 56*(1), 72-88.

Ebersole, J. F. (2007), Bridging a national knowledge gap. Distance Learning Today, 1(3) 1-3.

Eckles, J. E. & Stradley, E. G, (2012). A social network analysis of student retention using archival data. *Social Psychology of Education, 15*(2), 165-180.

Ellis, K. (2004). The impact of perceived teacher confirmation on receiver apprehension, motivation, and learning. *Communication Education, 53*(1), 1-20.

Ericson, P. M. & Gardner, J. W. (1992). Two longitudinal studies of communication apprehension and its effects on college students' success. *Communication Quarterly, 40*(2), 127-137.

Ess, C. (2001). Introduction: What's culture got to do with it? Cultural collisons in the electronic global village, creative interference, and the rise of culturally-mediated computing. In C. Ess & F. Sudweeks (Eds.), *Culture, technology, communication: towards an intercultural global village.* Albany, NY: State University of New York Press.

Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach.* New York: Plenum.

Fall, L. T., Kelly, S., MacDonald, P., Primm, C., & Holmes, W. (2013). Intercultural communication apprehension and emotional intelligence in higher education: Preparing business students for career success. *Business and Professional Communication Quarterly, 76*(4), 412-426.

Finn, A. N., Sawyer, C. R., & Schrodt, P. (2009). Examining the effect of exposure therapy on public speaking state anxiety. *Communication Education, 58,* 92-109.

Flynn, J. P. (1967). The neural basis of aggression in cats. In *Neurophysiology and emotion*(ed. D. C. Glass), pp. 40–60. Rockefeller University Press, New York.

Harris, K. B., Sawyer, C. R., & Behnke, R. R. (2006). Predicting speech state anxiety from trait anxiety, reactivity, and situational influences. *Communication Quarterly, 54*(2), 213-226.

Hirsh, J. B., & Kang, S. K. (2015). Mechanisms of identity conflict: Uncertainty, anxiety

    an the behavioral inhibition system. *Personality and Social Psychology Review,*

    dio: 10.1177/1088868315589475

Hoffman, J., & Sprague, J. (1982). A survey of reticence and communication

    apprehension treatment programs at U.S. colleges and universities.

    Communication Education, 31, 185- 193.

Horton, D., & Wohl, R. R. (1986). Mass communication and para-social interaction:

    Observation on intimacy at a distance. In G. Gumpert & R. Cathcart (Eds.), *Inter*

    media: Interpersonal communication in a media world (pp. 185-206). New York:

    Oxford University Press.

Horwitz, B. (2002). *Communication Apprehension: Origins and Management.* Albany,

    NY: Singular-Thomson Learning.

Gardner, C.T., Milne, M. J., Stringer, C. P., & Whiting, R. H. (2005). Oral and written

    communication apprehension in accounting students: Curriculum impacts and

    impacts on academic performance. *Accounting Education: An International*

    Journal, 14(3), 313-336.

Gearhart, C. C., & Bodie, G. D. (2012). Sensory-processing sensitivity and

    communication apprehension: Dual influences on self-reported stress in a college

    student sample. *Communication Reports, 25*(1), 27-39.

Glaser, S. R. (1981). Oral communication apprehension and avoidance: The current state

    of treatment research. *Communication Education, 30,* 321-341.

Graeff, F. G. (1991). Neurotransmitters in the dorsal periaqueductal grey and animal

    models of panic anxiety. In *New concepts in anxiety* (ed. M. Briley and S. E.

    File), pp. 288–312. MacMillan Press.

Graeff, F. G. (1994). Neuroanatomy and neurotransmitter regulation of defensive

    behaviors and related emotions in mammals. *Brazilian Journal of Medical and*

    Biological Research, 27, 811–29.

Gray, J. A. (1982). *The neuropsychology of anxiety; An enquiry into the function of the*

    Septo-hippocampal system. Oxford: Clarendon Press.

Gray, J. A. (1991). The neuropsychology of temperament. In J. Strelau & A. Angleitner

    (Eds.), *Explorations in temperament* (pp. 105-128). New York: Plenum.

Gray, J. A., & McNaughton, N. (2000). *The neuropsychology of anxiety* (2nd ed). New

    York: Oxford University Press.

Griffen, E. (2009). *Communication: A First Look at Communication Theory.* (7th ed).

    Boston, MA: McGraw-Hill.

Gudykunst, W. B. (1993). Toward a theory of effective interpersonal and intergroup

    communication: An anxiety/uncertainty management (AUM) perspective.

    Intercultural Communication Competence. Newbury Park, CA: Sage.

Hammick, J. K. & Moon, J. L. (2014). Do shy people feel less communication

    apprehension online? The effects of virtual reality on the relationship between

    personality characteristics and communication outcomes. *Computers in Human*

    Behavior, 33, 302-310.

Harris, K. B., Sawyer, C. R., & Behnke, R. R. (2006). Predicting speech state anxiety

from trait anxiety, reactivity, and situational influences. *Communication*

Quarterly, 54, 213-226.

Jones, D. (2003). Public speaking test the nerves of most directors. *Birmingham Post.*

Kelly, L., Duran, R. L., & Zoltan, J. J. (2001). The effect of reticence on college students'

use of electronic mail to communicate with faculty. *Communication Education,*

50(2), 170-176.

Knapp, M. L., Miller, G. R., & Fudge, K. (1994). Background and current trends in the

study of interpersonal communication. In M. L. Knapp & G. R. Miller (Eds.),

Handbook of interpersonal communication (2nd ed., pp. 3-20). Thousand Oaks,

CA: Sage.

Knapp, M. L., & Hall, J. A. (2002). *Nonverbal communication in human interaction.* (5th

ed). Toronto, ON: Wadsworth.

Klonowicz, T. (1987). Reactivity and the control of arousal. In J. Strelau & H. J, Eysenck

(Eds.), *Personality Dimensions and Arousal* (pp. 183-196). New York: Plenum

Press.

Kraut, R. E., Mukhopadhyay, T., Szczypula, J., Kiesler, S., & Schleris, B. (2000).

Information and communication: Alternative uses of the Internet in households.

Information SystemsResearch, 10, 287-303.

LaRose, R., Easton, M. S., & Gregg, J. (2001). Reformulating the Internet paradox:

Social cognitive explanations of Internet use and depression. *Journal of Online*

Behavior, 1(2). Retrieved from http://www.behavior.net/job/v1n2/paradox.html

LeDoux, J. E. (1994). Emotion, memory and the brain. *Scientific American,* 270, 50–9.

Lewandowski, J., Rosenberg, B. D., Parks, J. M., & Siegel, J. T. (2011). The effect of

informal social support: Face-to-face versus computer-mediated communication.

Computers in Human Behavior, 27, 1806-1814.

Lim, D. H., Morris, M. L., & Kupritz, V. W. (2007). Online vs. blended learning:

Differences in instructional outcomes and learning satisfaction. *Journal of*

Asynchronous Learning Networks, 11(2), 27-42.

Linardopoulos, N. (2010). Teaching and learning public speaking online. *Journal of*

Online Learning and Teaching, 6(1), 198-209.

Logan, E., Augustyniak, R., & Rees, A. (2002). Distance education as different

education: A student-centered investigation of distance learning experience.

Journal of Education for Library and Information Science, 43(1), 32-42.

Lucas, S. (2015). *The Art of Public Speaking.* (12th ed). New York, NY: McGraw-Hill

Education.

Maack, D. J., Buchanan, E., & Young, J. (2015). Development and psychometric

investigation of an inventory to assess fight, flight, and freeze tendencies: The

fight, flight, freeze questionnaire. *Cognitive Behaviour Therapy, 44*(2), 117-127.

MacIntyre, P. D., & Donovan, L. A. (2004). Desire for control and communication-

related personality variables. Psychological Reports, *94,* 581-582.

Mayhew, M. J., Grunwald, H. E., & Dey, E. L. (2005). Curriculum matters: Creating a

positive climate for diversity from the student perspective. *Research in Higher*

Education, 46(4), 389-412.

McCroskey, J. C. (1970). Measures of communication-bound anxiety. *Speech*

Monographs, 37(4), 269-277.

McCroskey, J. C., Ralph, D. C., & Barrick, J. E. (1970). The effects of systematic

desensitization on speech anxiety. *Speech Teacher, 19,* 32-36.

McCroskey, J. C. (1972). The implementation of a large-scale program of systematic

desensitization for communication apprehension. *Speech Teacher, 21,* 255-264.

McCroskey, J. C. (1976). *Communication apprehension in university and community*

college environments. Unpublished manuscript, West Virginia University, West

Virginia.

McCroskey, J. C. (1977a). Classroom consequences of communication apprehension.

Communication Education, 26, 27-33.

McCroskey, J. C. (1977b). Oral communication apprehension: A summary of recent

theory and research. *Human Communication Research, 4*(1), 78-96.

McCroskey, J. C. (1978). Validity of the PRCA as an index of oral communication

apprehension. *Communication Monographs, 45,* 192-203.

McCroskey, J. C. (1980). On communication competence and communication

apprehension: A response to page. *Communication Education, 29,* 109-111.

McCroskey, J. C. (1982). *An introduction to rhetorical communication* (4th Ed.)

Englewood Cliffs, NJ: Prentice-Hall.

McCroskey, J. C. (1983). The communication apprehension perspective. *Communication,*

12(1), 13-38.

McCroskey, J. C., Booth-Butterfield, S., & Payne, S. K. (1989). The impact of

communication apprehension on college student retention and success.

Communication Quarterly, 37(2), 100-107.

McCroskey, J. C. (1997). Willingness to communicate, communication apprehension,

and self-perceived communication competence: conceptualisations and

perspectives, in: J. A. Daly, J. C. McCroskey, J. Ayres, T. Hopf and D. M. Ayres

(Eds) *Avoiding Communication: Shyness, Reticence and Communication*

Apprehension, pp. 75-108, Beverly Hills, CA: Sage Publications.

McCroskey, J. C., Richmond, V. P., & McCroskey, L. L. (2009). Willingness to

communicate, communication apprehension, self-perceived communication

competence and compulsive communication: Conceptualizations and

perspectives. In J. Ayres, T. Hopf, J. C. McCroskey, J. A. Daly, D. M. Sonandre,

& T. K. Wongprasert (Eds.), *Avoiding Communication: Shyness, Reticence and*

Communication Apprehension (3rd ed., pp. 97-129). Cresskill, NJ: Hampton Press.

Mehrabian, A., & Ferris, S. R. (1967). Inference of attitudes from nonverbal

communication in two channels. *Journal of Counseling Psychology, 31,* 248-252.

Meyrowitz, J. (1985). No sense of place. New York: Oxford University Press.

Monroe, C., & Borzi, M. G. (1988). Communication apprehension and avoidance of

postsecondary education. *The School Counselor, 36,* 119-123.

Morreale, S. P., & Pearson, J. C. (2008). Why communication education is important:

The Centrality of the discipline in the 21st century. *Communication Education,*

57(2), 224-240.

Mullen, G. E., & Tallent-Runnels, M. K. (2006). Student outcomes and perseptions of

instructors' demand and support in online and traditional classrooms. *Internet and*

Higher Education, 9, 257-266.

Neer, M. R. (1982). Enrolling students in communication apprehension laboratories. *Communication Education, 31,* 205-210.

Nicosia, G. (2005). Developing an online writing course: Will it work for public speaking? *International Journal of Instructional Media, 32*(2), 163-170.

O'Mara, J., Allen, J. L., Long, K. M., & Judd, B. (1996). Communication apprehension, nonverbal immediacy, and negative expectations for learning. *Communication Research Reports, 13*(1), 109-128.

Ong, W. J. (1982). *Orality and literacy: The technologizing of the world.* London: Methuen.

Opt, S. K., & Loffredo, D. A. (2000). Rethinking communication apprehension: A myers-briggs perspective. *The Journal of Psychology, 134*(5), 556-570.

Pascual-Ferra, P. (2013). *Congenericity and the measurement of interpersonal communication constructs: A confirmatory factor analytic test of four measures* (Doctoral dissertation). Available from Open Access Dissertations. (Paper 1009).

Perry, B. (2001). The neurodevelopmental impact of violence in childhood. In D. Schetky & E. Benedek (Eds.), Textbook of child and adolescent forensic psychiatry (pp. 221–238). Washington, DC: American Psychiatric Press.

Podsakoff, P. M. & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531-544.

Powers, W., & Smythe, M. J. (1980). Communication apprehension and achievement in a performance-oriented basic communication course. *Human Communication Research, 6*(2), 146-152.

Reed, V., & Spicer, L. (2003). The relative importance of selected communication skills

for adolescent's interactions with their teachers: High school teachers' opinions.

Language, Speech, and Hearing Services in Schools, 34, 343-357.

Richmon, V. P. & McCroskey, J. C. (1985). *Communication: Apprehension, avoidance*

and effectiveness. Scottsdale, AZ: Gorsuch Scarisbrick.

Richmond, V. & McCroskey, J. (1998). *Communication Apprehension, Avoidance, and*

Effectiveness. (5th ed.). Needham heights, MA: Allyn and Bacon.

Rivera, J. C., & Rice, M. L. (2002). A comparison of student outcomes and satisfaction

between traditional and web based course offerings. *Online Journal of Distance*

Learning Administration, 5(3), 1-12. Retrieved from

http://www.westga.edu/~distance/ojdla/fall53/rivera53.html

Ritzer, G. (2004). *The McDonaldization of Society (4th ed.).* Thousand Oaks, CA: Pine

Forge Press.

Roberts, J. B., Finn, A. N., Harris, K. B., Sawyer, C. R., & Behnke, R. R. (2005). Public

speaking state anxiety as a function of trait anxiety and reactivity mechanisms.

Southern Communication Journal, 70, 161-167.

Robinson, T. E. (1997). Communication apprehension and the basic public speaking

course: A national survey of in-class treatment techniques. *Communication*

Education, 46(3), 188-197.

Rosenbaum, M. (1983). Learned resourcefulness as a behavioral repertoire for self-

regulation of internal events: Issues and speculations. In M. Rosenbaum, C. M.

Franks, & Y Jaffe 420 Social Communication Apprehension (Eds.), Perspectives

on behavior therapy in the eighties (pp. 54-73). New York: Springer.

Rovai, A. P., & Barnum, K. T. (2003). On-line course effectiveness: An analysis of

student interactions and perceptions of learning. *Journal of Distance Education,*

18(1), 57-73.

Roy, M. (2010). *Concerting deconstruction.* Newcastle upon Tyne, UK: Cambridge

Scholar Publishing.

Rubin, R. B., Graham, E. E., & Mignerely, J. T. (1990). A longitudinal study of college

students communication competence. *Communication Education, 39,* 1-14.

Rubin, R. B., Rubin, A. M., & Jordan, F. F. (1997). Effects of instruction on

communication apprehension and communication competence. *Communication*

Education, 46(2), 104-114.

Ruberg, L. F., Taylor, C. D., & Moore, D. M. (1996). Student participation and

interaction on-line: A case study of two college classes: Freshman writing and

plant science lab. *International Journal of Educational Telecommunications, 2*(1),

69-92.

Ruscio, A. M., Brown, T. A., Chui, W. T., Sareen, J., Steain, M. B., & Kessler, R.C.

(2008). Social fears and social phobia in the USA: Results from the national

comorbidity survey replication. *Psychological Medicine,* 15-28.

Russ, T. L. (2012). The relationship between communication apprehension and learning

preferences in an organizational setting. *Journal of Business Communication,*

49(4), 312-331.

Russell, T. L. (1999). *The No Significant Difference Phenomenon.* Chapel Hill, NC:

Office of Instructional Telecommunications, University of North Carolina.

Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the big five, shyness, narcissism, loneliness, and facebook usage. *Computers in Human Behavior, 27*, 1658-1664.

Sawyer, R. J., Graham, S., & Harris, K. R. (1992). Direct teaching, strategy instruction, and strategy instruction with explicit self-regulation: Effects on the composition skills and self-efficacy of students with learning disabilities. *Journal of Education Psychology, 84*(3), 340-352.

Scott, C. R. & Timmerman, C. (2005). Relating computer, communication, and computer mediated communication apprehensions to new communication technology use in the workplace. *Communication Research, 32*(6), 683-725.

Scott, M. D. & Wheeless, L. R. (1976). An exploratory investigation of three types of communication apprehension on student achievement. Unpublished manuscript, West Virginia University.

Scott, M. D., Yates, M. P., & Wheeless, L. R. (1976, June). An exploratory investigation of the effects of communication apprehension in alternative systems of instruction. Paper presented at the meeting of the International Communication Association, Chicago, IL.

Shedletsky, L. J., & Aitken, J. E. (2004). *Human Communication on the Internet*. Boston, MA: Allyn and Bacon.

Sitzmann, T., Kraiger, K., Steward, D., & Wisher, R. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology, 59*(3), 623-664.

Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology, 71*, 549-570.

Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2005). *Instructional Media and Technologies for Learning* (9 ed.). Upper Saddle River, NJ: Prentice Hall.

Stange, J. P., Shapero, B. G., Jager-Hyman, S., Grant, D. A., Abramson, L. Y., & Alloy, L. B. (2013). Behavioral approach system (BAS)-relevant congnitive styles in individuals with high versus moderate BAS sensitivity: A behavioral high-risk design. *Cognitive Therapy and Research, 37*, 139-149.

Stacks, D. W., & Stone, J. D. (1984). An examination of the effect of basic speech courses, self-concept, and self-discourse on communication apprehension. *Communication Education, 23*, 317-331.

Strelau, J. (1983). *Temperament, personality, activity.* New York: Academic Press.

Strelau, J. (1994). The concepts of arousal and arousability as used in temperament studies. In J. E. Bates & T. D. Wachs (Eds.), *Temperament: Individual differences at the interface of biology and behavior* (pp. 117-141). Washington, DC: American Psychological Association.

Strelau, J. (1998). *Temperament: A psychological perspective.* New York: Plenum Press.

Summers, J. J., Waigandt, A., & Whittaker, T. A. (2005). A comparison of student achievement and satisfaction in an online versus a traditional face-to-face statistics class. *Innovative Higher Education, 29*(3), 233-250.

Tinto, V. (2004). *Student retention and graduation: Facing the truth, living with consequences* (ERIC ED519709). Retrieved from the Pell Institute for the Study of Opportunity in Higher Education website: http://files.eric.ed.gov/fulltext/ ED519709.pdf

Thompson, K. L., Hannan, S. M., & Miron, L. R. (2014). Fight, flight, and freeze: Threat sensitivity and emotion dysregulation in survivor of chronic childhood maltreatment. *Personality and Individual Difference, 69,* 28-32.

Tucker, S. (2001). Distance education: Better, worse, or as good as traditional education? *Online Journal of Distance Learning Administration 4*(4). Retrieved from http://www.westga.edu/~distance/ojdla/winter44/tucker44.html

Urosevic, S., Abramson, L. Y., Harmon-Jones, E., & Alloy, L. B. (2008). Dysregulation of the behavior approach system (BAS) in bipolar spectrum disorders: Review of theory and evidence. *Clinical Psychology Review, 28,* 1188-1205.

Urtel, M. G. (2008). Assessing academic performance between traditional and distance education course formats. *Educational Technology & Society, 11*(1), 322-330.

Walter, L. (1993). *Secrets of Successful Speakers.* New York, NY: McGraw-Hill.

Wilhelm, S. H. (2000). *Democracy in the digital age.* New York: Routledge.

Wilkins, W. (1971). Desesitization: Social and cognitive factors underlying the effectiveness of Wolpe's procedure. *Psychological Bulletin, 76,* 311-317.

Winiecki, K. L., & Ayres, J. (1999). Communication apprehension and receiver apprehension in the workplace. *Communication Quarterly, 47*(4), 430-440.

Witt, P. L., & Behnke, R. R. (2006). Anticipatory speech anxiety as a function of public speaking assignment type. *Communication Education, 55,* 167-177.

Wrench, J. S., Brogan, S. M., McCroskey, J. C., & Jowi, D. (2005). The relationships among social phobia, communication apprehension, and willingness to communicate. *Human Communication, 11*(4), 401-422.

Wrench, J. S., & Punyanunt-Carter, N. M. (2005, October). The relationship between computer mediated communication competence, apprehension, self-efficacy and presence. Paper presented at the Ohio Communication Association's Convention, Dayton, OH.

Yook, E. L. (2012). The effect of communication centers on college student retention: An argument. *Journal of College Student Retention: Research, Theory & Practice, 14*(3), 345-357.

York, R. O. (2008). Comparing three modes instruction in a graduate school work program. *Journal of Social Work Education, 44*(2), 157-171.

Zhang, Y., Tang, T., & Leung, L. (2011). Gratifications, collective self-esteem, online emotional openness, and traitlike communication apprehension as predictors of facebook uses. *Cyberpsuchology, Behavior & Social Networking, 14*(1), 733-739.