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WHEN SHAKESPEARE MEETS AL GORE: IMAGINED INTERACTIONS, COMMUNICATION COMPETENCE, AND IMMEDIACY IN TRADITIONAL AND ONLINE-BASED DISTANCE EDUCATION

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Communication Studies

by

Tammy L. Croghan B.A., Southeastern Louisiana University, 2001 M.A., Southeastern Louisiana University, 2003 August, 2008

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ABSTRACT

The growth of distance education, in its many forms, has had consequences for both online universities as well as more traditional universities. This study examines instructional behaviors and communication strategies used in face-to-face and online educational settings. The purpose of this study is to explore student perceptions of instructor immediacy, motivation, and communicator competence in addition to their own motivation and intrapersonal communication use in higher education settings. This dissertation follows a social scientific organizational pattern: introduction, literature review, methods, results, and discussion. The first two chapters examine the purpose of the study and the appropriate research on distance education, teacher immediacy, communication and communicator competence, student motivation, and imagined interactions. The third chapter describes the participants, instruments, and methods utilized in both the pilot and current study. The fourth chapter presents the results of the 6 hypotheses and 5 research questions posited for this current study. Finally, the discussion considers how the results clarify the potential and pitfalls associated with online education. Conclusions about the roles of immediacy, motivation, communicator competence and imagined interactions in online education are posited. The role of sample demographics and different methodological approaches are examined and implications for future research are considered.

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CHAPTER 1

INTRODUCTION

David Leonard (1999) contends that while the Internet offers the potential for a global academic community, "...a significant number of university administrators and faculty persist in focusing their vision on the bricks and mortar. They remain fixed in the world of atoms and nearly oblivious to the new learning world being built within their midst" (p. 9). He concludes that the current cohort of students and workers must be lifelong learners for whom the traditional educational mode "is no longer a valid learning model in the Digital Age" (p. 9). While Leonard's contention that traditional education is largely obsolete seems more hyperbolic than accurate since traditional education is still and will probably remain the primary mechanism for educating students for the foreseeable future, the need to create greater access to knowledge and information using different media is reflected in the proliferation of online courses and degrees being offered by traditional colleges and universities.

Higher education undergoes frequent changes including competing educational ideologies, shifting administrative paradigms, disciplinary turf wars, and an increasingly diverse student body. One of the few constants in post-secondary education is the ever present push for becoming stronger, faster, and better at all educational levels. This push for a more responsive educational system comes from politicians, business leaders, parents, and the students themselves as the recognition that being competitive globally requires a well-educated workforce. Technophiles and business executives have argued that traditional higher education formats (face-to-face) while still the primary mechanism for preparing young adult (18-24 year-old) students for careers has not kept pace with nontraditional student diversity or technological improvements (Cetron & Daview, 2003).

Educators, administrators and even students are constantly looking for the next best way to achieve the most comprehensive education while maintaining a balance of education and quality of life.

For many, distance education has been touted as a panacea for educating a diverse (racially, ethnically, socio-economically, etc.) student body that must compete globally. Despite its promise, little research has examined how communication strategies should be adjusted to accommodate the new medium. Students will only be able to gain a truly comprehensive educational experience if the content of the course is communicated effectively. In order to create a comprehensive educational experience that can complement or even supplant traditional educational practices, educators must understand where current strategies (related to issues such as immediacy, student motivation and perceptions of teacher competence) are effective in communicating course content and where they fall short. From there, educators will be able to maintain working, alter flawed, and eliminate counterproductive strategies.

National and International Trends in Distance Education

Education in the digital age (most often referred to as distance education), while being offered via alternative media, still has the same tacit goal: disseminating information. While the different operational definitions of distance education will be discussed later, both online courses and full degree programs have increased dramatically. According to Potashnik and Capper (1998), "open universities" that provide only online courses and degrees have created 11 separate mega-universities that graduate in excess of 2.8 million students annually. Turkey and China with the two largest open universities jointly have over 1.1 million enrolled students of which 130,000 graduate annually. Over half of China's engineering and technology graduates attained their

degrees from China's distance education mega-university, China TV University System. In addition, both African and Latin American countries have developed virtual university systems offering distance education classes integrating existing universities to allow for greater access to higher education without increasing construction and infrastructure costs.

The open university is not just an international phenomenon. In the United States, for-profit distance-only universities are the fastest growing sector in higher education. Current estimates of college and university students found that only four to five percent overall are enrolled with for-profit institutions, but one-third of all online students are enrolled with for-profit rather than traditional universities (Gallagher, 2003).

In addition to for-profit distance education institutions, many traditional colleges and universities are offering online courses and degrees. In 1999, International Data Corporation (1999), projected that by 2002 approximately 85 percent of U. S. two- and four-year colleges and universities would offer distance education courses, up from 62 percent in 1998. The IDC also projected that student enrollments would increase from just over 500,000 to well over two million students in that 4 year span. While the IDC's first projection of a 23 percent increase in colleges and universities offering online courses was not met, the second projection by the IDC was correct as the estimated enrollments in college-level, credit-granting distance education courses in 2002 was 2,876,000, with 82 percent of these at the undergraduate level according to the National Center for Education Statistics (2003). Bishop and Spake (2003) contended that up to one-half of traditional programs would soon be online. According to the National Center for Education Statistics (2003) this projection was correct. College-level distance education courses were offered by 55 percent of all 2-year and 4-year institutions.

Additionally, college-level, distance education courses were offered at the graduate level by 52 percent of the institutions that had graduate programs.

Reasons for the Distance Education Explosion

These trends have academic institutions scrambling for a share of the distance education pie. The primary reason for the explosion of distance education is because it offers advantages to both the institutions of higher education offering them and the students enrolling in them including: increased college and university profits, increased student enrollment, more flexible scheduling, and increased access to educational opportunities. For colleges and universities, distance education offers economic rewards and access to potential students who cannot utilize traditional academic settings. For students, distance education allows greater flexibility in scheduling coursework around the complicated lifestyles of non-traditional as well as traditional students that frequently involve familial and employment responsibilities.

Administrators have also taken a keen interest in online education because of its potential for reducing university expenditures associated with traditional educational formats (repair and upkeep of student-related infrastructures, for example), while increasing their ability to reach a market of students otherwise inaccessible. The result is an increasing boom in the use of Internet classes within the university and the desire from teachers, administrators, and students to continue this growth. As with any new technology or advance in the field of education, its success is dependent on the college or university's ability to adapt and incorporate it. One way that universities have used distance learning is to increase educational partnerships and outsourcing which allows institutions of higher education to utilize their resources more efficiently in conjunction with other colleges and universities (Dunn, 2000).

Additionally, distance education is a lucrative market that continues to grow exponentially. Kariya (2003) projected that distance learning would increase from \$4.5 billion in 2003 to \$11 billion by 2005. While the National Center for Educational Statistics has not compiled data about distance education after this 2003 projection, if this prediction has not been met yet, it soon will be. One reason for the growth of distance education courses is the dramatic increase in online courses. With the majority of Americans having access to computers and the Internet, the Internet is being used more frequently than other distance education media including interactive television, correspondence, and compressed video options (Hickman, 2003). For colleges and universities, saddled with increasing student populations and less financial support, it offers hope for these institutional woes.

Besides the advantages to colleges and universities, distance education can be a vital component of lifelong learning for both traditional and non-traditional students. While educators have expanded computer-assisted instructional strategies that make traditional classrooms more interactive (Hiltz, 1986; Hiltz, 1994), others have continued to look to increase teaching and educational possibilities by persistently seeking ways to improve, expand, and even transcend the boundaries of the face-to-face educational format (Bailey & Cotlar, 1994; Hiltz, 1986; Ragsdale & Kassam, 1994; Swan, 2002) of which distance education is the primary example. According to Anna Sikora (2002) in a study entitled: *A profile of participation in distance education*, in 1999–2000, for the National Center for Education Statistics, an arm of the U.S. Department of Education, 8 percent and 10 percent of undergraduate and graduate students, respectively, participated in distance education. This percentage is not as high as it could be, partly due to availability and partly due to traditional students' preferences for face-to-face classes.

Therefore, it is up to educators to increase availability as well as to continue working on the online class environment to overcome the areas in which it still has limitations, in relation to face-to-face classes. Some characteristics of students participating in distance education courses or degrees support existing notions of distance education students.

For on-line college students, lack of proximity to the institution of higher education they were attending was significantly higher than people who lived within easy commuting distance (Sikora, 2002). In addition, many students using distance education were more likely to have delayed entry into higher education or were financially independent, older, married, or had dependents. Financial support for education also played an important role in students using distance education. Undergraduate students who participated were approximately 60 percent more likely to be financially independent than a dependent on parental assistance. While non-traditional students are still the primary recipients of distance-only degrees, an increasing number of traditional students are taking online courses.

Family and work responsibilities were another factor that impacted the use of distance education. Undergraduates using distance education were over 60 percent more likely to be married. Graduate students (grouped with first professional students) were even more likely to use distance education to continue their education while maintaining their work or family responsibilities. The graduate students enrolled in distance education courses or degrees were more than twice as likely to view their role as "employee who studies" (14.7%) rather than either a "student who works" (5.9%) or a "student who does not work" (4.6%). Additionally, graduate students enrolled in distance education courses were significantly more likely to work full-time than either part-time or not at all.

In addition, differences in learning preferences create a difference in the reasons for participating in distance education courses or degrees. Despite the prevailing stereotype about their technological ineptitude, women are significantly more likely to participate in distance education courses than are men (even when the researchers accounted for the possibility of covariance) (Sikora, 2002). Sullivan (2001) found that females using distance education were more likely to report family obligations and anonymity as reasons for enrolling in online courses than did males who were more likely to report work responsibilities as the major reason for being involved in distance courses. A significant body of research suggests that distance education is more female friendly for reasons ranging from feminist critical perspectives that traditional classrooms propagate patriarchy (Belenky, Clinchy, & Goldberger, 1986; Pagnucci & Mauriello, 1999) to quantitative and interpretive approaches that suggest that online courses are less formal and chilly (American Association of University Women, 2000; Behnke & Sawyer, 2000; Savicki, Kelley, & Ammon, 2002) than traditional courses.

Despite the aforementioned advantages, education in traditional face-to-face settings has advantages in facilitating the social component of education that is the key "to the learning process [which] are the interactions among students themselves, the interactions between faculty and students, and the collaboration in learning that results from these interactions" (Palloff & Pratt, 1999, p. 5). The two types of social interactions articulated by the authors are student-to-student and student-to-teacher interactions. The former, student-to-student social, consists of exchanges of information, personal and course-related, between students in different contexts. The role of student-to-student social interactions is quite different in online instructional contexts (e.g., trust, disclosure, etc.). These social interactions between students in the form of collaboration, discussion,

or cooperative inquiry are vital to educational success (Johnson, 1981; Moore & Kearsley, 1996; Rovai, 2002). Student-to-student interactions can influence motivation, social competencies, and sense of community.

The latter consists of the instructional interactions that provide immediacy, motivation, and communication between teachers and students. While many of the roles that need to be accomplished by face-to-face and online instructors are the same (e.g., organizational, administrative, facilitative, and instructional), the difficulty in accomplishing them is quite different. For this reason, extensive efforts have been made to improve educational strategies for online instruction that compensate for apparent loses in immediacy and social interaction. Because of its limitations with regard to social interaction, online classes are unlikely to replace face-to-face classes for the traditional student body.

Purpose of Study

The purpose of this study is to explore student perceptions about immediacy, student motivation, and communicator competence as well as their own imagined interaction use in higher education settings. The trends above attest to the institutional and student interest and participation in distance education, and this study examines the differences in these elements as related to online (asynchronous) versus face-to-face (synchronous) instruction. The shift of universities and colleges toward online class offerings, not to mention online degrees, demands that communication researchers begin looking at the communicative effects on the teacher/student relationship in this burgeoning medium.

Despite the popularity of distance education, questions and concerns about the quality of this mode of education arise. Research in traditional classrooms has found that

teacher immediacy influences the perception of instructional quality (Allen, Witt, & Wheeless, 2006; Schrodt & Witt, 2006; Teven & Hanson, 2004; Witt, Wheeless & Allen, 2004), however, this immediacy would seemingly be more difficult to establish in mediated environments. Despite the extensive research done on educator immediacy, there is a corresponding lack of research regarding the effect of the different modes of instruction (online versus face-to-face instruction) on student perceptions of teacher immediacy. Additionally, the possible connection between student intrapersonal communication with the instructor and student perceptions of teacher immediacy has not been addressed at all.

Addressing this scarcity of research is important for understanding student perceptions. The effect of student use of imagined interactions (intrapersonal communication) becomes very significant when examining online versus face-to-face learning environments. Knowing that the pre-communicative strategies (frequency, valence, rehearsal, conflict management, and self-dominance) are important to the actual communication event requires research into differences manifest in different educational formats. Since these intrapersonal interactions may be the closest online students ever get to a face-to-face meeting with their instructors, it is important to understand how their usage may affect perceptions of the instructor's communicator competence and immediacy.

Another area of research left underdeveloped regards student perceptions of instructor's communicator competence. Communication competence as a concept is very nebulous, so there is considerable debate over its operational definition. In general (according to the behavioral perspective), communication competence is "the ability of an interactant to choose among available communicative behaviors in order that he (sic)

may successfully accomplish his (sic) own interpersonal goals..." (Weimann, 1977, p. 183). Communicator competence, while still primarily a behavioral approach, is less concerned with interpersonal motivation and more concerned with the organizational context in which it takes place (Monge, Bachman, Dillard, & Eisenberg, 1982). Expanding the idea of communicator competence into education is important because it allows for a more equitable assessment of the differences between traditional and online communication than does the more frequently studied communicative competence. The increase of online courses elucidated above requires items that accurately reflect distance education students and their experiences that require a more contextual scale such as communicator competence. Communicator competence may offer us a much more accurate depiction of student perceptions of instructor's communicative ability because it more accurately depicts the teacher/student relationship, particularly in online courses, since it uses items that assess non-face-to- face behaviors (for example, "...responds to messages (phone calls, emails, etc.) quickly") rather than items used on more personal scales assessing communicative competence (for example, "enjoys social gatherings where he/she can meet new people"). Also, a greater understanding of how the dynamic of the online environment may affect student perceptions of instructor communicator competence may offer instructors new tools in effective teaching.

Given that some research suggests lower motivation in students in distance education courses than their peers in traditional courses (Qureshi, Morton, & Antosz, 2002), this study will pair an instructor/professor's face-to-face courses and online courses to control for instructional differences between academic faculties and assess student motivations in the two environments. Some of the current research on student motivation is limited because there has been little effort by researchers to control

instructor variability related to educational strategy and ability which can confound interindividual comparisons of self-reports of student motivation. Student motivation is an important characteristic to examine because it impacts many aspects of the student's perception of her/his educational experience.

Finally, this study assesses the frequency and preferred type of media (face-toface, phone, email, and so on) students use with their instructors in order to elicit possible connections between interpersonal instructor/student communication and intrapersonal instructor/student communication. By looking at all of these disparate elements (perceptions of teacher immediacy, imagined interaction usage, communicator competence, and student motivation), affecting education, while simultaneously controlling for individual differences in student and instructor motivation, this study offers a greater understanding of the instructor/student relationship in both face-to-face and online instructional environments.

Organization of Dissertation

This dissertation will consist of five chapters: introduction, literature review, methods, results, and discussion. The current chapter, the introduction, provides an overview of the topic, explaining the purpose of the study and the organization. The second chapter reviews literature on the various definitions of distance education, teacher immediacy, communicative and communicator competence, student motivation, and imagined interactions. The third chapter is a description of the methods and procedures utilized in the study. Included in this section are the pilot, the current study, the instruments that were employed, the alpha reliability and scoring of the instruments being used, and the statistical tests used to analyze the data. The fourth chapter presents the results of the tested hypotheses and research questions for the current study. Finally, the

fifth chapter is a discussion of the results including possible practical applications,

limitations, and implications for future research.

CHAPTER 2

LITERATURE REVIEW

This chapter reviews the relevant literature on distance education, communication competence, immediacy and immediate behaviors, student motivation, and imagined interactions and considers the application of these concepts on instructional behaviors in face-to-face and online courses. This review of literature is concluded with a section delineating the specific hypotheses and research questions examined in this study.

Both communicator and communication competence are essential to reaching an optimal educational environment. Not only must teachers feel confident in their ability to communicate, but students must have confidence in their instructor's abilities. Although many things may affect how students rate a teacher's communicator competence, one of particular significance is immediacy. This is important because increased perception of immediacy can increase perceptions of communicator or communication competence. The relationship between communication competence and immediacy is problematized in distance education settings. The role of motivation, on both the students taking the courses and their perceptions of the instructors teaching them, as a mediating factor also needs to be considered. While these three constructs have been studied previously, the role of medium needs to be addressed as higher education offers more online and distance courses. Intrapersonal communication, imagined interactions in particular, might offer some insight into deciphering the complexities associated with online education. Imagined interactions, in addition, might be a valuable tool for improving online student perceptions of immediacy and communication competence.

Distance Education

Distance Education Defined

The difficult task of operationalizing distance education makes understanding and comparisons in research difficult. Distance education includes: written correspondence courses, audio and or videotapes, interactive television, computer enhanced instruction, online instruction, webcasting, virtual classes as well as a combination of any and or all of the above. Many definitions of distance education exist. According to the National Center for Education Statistics (2003), distance education is defined as "education or training courses delivered to remote (off-campus) sites via audio, video (live or prerecorded), or computer technologies, including both synchronous (i.e., simultaneous) and asynchronous (i.e., not simultaneous) instruction" (p. 1). Interestingly the National Center for Education Statistics (2003) excluded the following types of courses from its analysis of distance education "(1) courses conducted exclusively on campus; (2) courses conducted exclusively via written correspondence; and (3) courses in which the instructor traveled to a remote site to deliver instruction in person" (p. 1). The fact that many distance education courses may include a small amount of on-campus course or lab work, on-campus exams, or occasional on-campus meetings was acknowledged. For Michael Moore, former director of The American Center for the Study of Distance Education, Penn State, and Greg Kearsley (1996): "Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, as well as special organizational and administrative arrangements" (p. 2). According to the United States Distance Learning Association (2005), distance education is "the acquisition of knowledge and skills through mediated information and instruction,

encompassing all technologies and other forms of learning at a distance" (homepage: <u>http://www.usdla.org/html/aboutUs/vmd.htm</u>). From the publication: Sloan-C View (2003) came the startling insight that "online educators want to say exactly what is new about higher learning online today, yet a proliferation of terms complicates things" (p. 1).

For this study, distance education is limited to courses offered as one hundred percent online. Implicit in this definition is that it is possible for all coursework to be completed without the student ever having interpersonal face-to-face interactions with the instructor. There are two main reasons that distance education is operationalized as one hundred percent online. First, this criterion controls for most student interaction with their instructor. If students have mixed coursework (some in-class and some online), it would be difficult to control for differences in immediacy and communicator competence based on the medium of interaction. The second reason is purely pragmatic. The sample that is accessible is either face-to-face or online.

Online Instruction and Communication

Researchers and scholars have been investigating methods for improving the practice of education for as long as the profession has existed. In recent years, the attention of many scholars has been turned toward the emerging format of online education. Educators' lack of information regarding processes and strategies that may be effective in online instruction has hindered the integration of this form of technology for many "traditional" teachers (Bailey & Cotlar, 1994). For this reason, it is essential that the research related to online education focus attention on the reality of what is the current status of online education and what can be done to improve educator skills related to the various media available. This study deals specifically with student-professor communication and its effects on student perceptions of those professors. Clark (1994)

suggests that it is not the technology that makes the difference, but the instructional method utilized by the instructor. Additionally, Russell contends in his book, *No Significant Difference Phenomenon* (1999) that the media used by educators and students has no significant difference on educational outcomes. Some of the 355 studies presented consider learning variables such as student satisfaction, course grades, standardized test scores, but the reality is that the educational medium used does affect learning in both positive and negative ways. Considering this, the teacher/student relationship becomes particularly important. Communication is one of the most significant aspects of the teacher/student relationship because it is one that is under the control of the instructor. Vonderwell and Zachariah (2005) illustrate the importance of instructor communication in online education with regards to student motivation and participation as well as creating a sense of community. They quote a respondent as saying:

This course is much different than those I have been involved with in the past in an online fashion. Many times the students are left to do their work and don't hear much from each other or the instructor unless they really need it. The manner in which you are [the instructor is] facilitating this course requires the students to keep on task, and much more interestingly, still maintain the "community" that develops among students in a course (p. 218).

Also important to creating a positive learning environment for students via the Internet is insuring that instructors remain vigilant in addressing diverse learning styles. Because of the nature of an Internet-based class, they tend to be more suitable for independent learners. Unfortunately, students often choose this method of instruction not based on learning style, but based on convenience. For this reason, teachers are given the challenge of finding a way to teach students through a medium that may not necessarily be the most suitable to their particular learning style (Mupinga, Nora, & Yaw, 2006).

Instructor communication skills can be improved in order to improve the educational experience of all involved. However, in order to do this we must first

understand how communication is related to student perceptions. This project will examine perceptions of communicator competence, perceptions of teacher immediacy, student motivation, and the uses of imagined interactions instructional settings.

Communicator Competence

Communication Competence

Communication competence is a complex concept; and as such, scholars have had a difficult time establishing a firm definition. Researchers differ in opinion with regard to how communication and/or communicator competence should be conceptualized. This difference is evident not only within specific definitions, but also in the variety of factors measured in communication competence scales. The difficulty in establishing a universal definition has forced scholars to attempt meta-classifications of communication competence. Wiemann and Backlund (1980) contend that communication falls into two main perspectives: the cognitive and the behavioral. The cognitive perspective views communicative competence "as being a mental phenomenon distinct and separated from behavior ... competence is indicative only of potential performance or capability" (p. 187). Behavioral definitions of communication competence are concerned with performing appropriate or inappropriate actions (i.e., requires some direct references to communicative behavior). Weimann's (1977) definition of communication competence as "the ability of an interactant to choose among available communicative behaviors in order that he (sic) may successfully accomplish his (sic) own interpersonal goals during an encounter while maintaining the face and line of his (sic) fellow interactants within the constraints of the situation" (p. 183) is clearly behavioral. Additionally, operational definitions of communication competence that requires observers to make an evaluation about communication competence of themselves and/or others belong to the behavioral

perspective. The Communicator Competence Questionnaire (CCQ) (Monge, Bachman, Dillard, & Eisenberg, 1982) which measures the participant's and a designated other's ability to encode and decode messages falls into the behavioral definition of communication competence. More recent research has tried to refine the definition of communication competence with discussions of pre- and post-interaction outcomes. Spitzberg, Canary, and Cupach (1994) offer this definition based upon effectiveness and appropriateness, "Most theorists have settled on appropriateness and effectiveness as inclusive, valid, and useful criteria. Appropriate interaction avoids the violation of valued rules, norms, or expectancies in a given context or contexts... Effective interaction obtains valued outcomes, objectives or goals. The combination of these two criteria provides for a very useful conceptualization of optimal, or competent, interaction" (p. 185).

Another way of conceptualizing communication competence is it being either strategic or tactical.

Strategic communication pertains to knowledge of organizational realities, what things 'mean' in the organization, and may vary from one organization to another. Tactical communication represents the skills one has available to use as instruments to accomplish personal, group, and

organizational goals (Sriussadaporn-Charoenngam & Jablin, 1999, p. 382).

Research on tactical communication competence, a skills-based approach, has found that there are similarities in skills required for individuals to be considered "competent" across occupations and between different organizational levels (Jablin, Cude, House, Lee, & Roth, 1994).

The obvious complexity of defining or conceptualizing communication competence is also seen in the variety of scales used to measure competence levels. The differences in the measured components of scales show a divergence in how communication competence is defined by the scales' designers. Wiemann's (1977) Communication Competence Scale measures five components of communication competence: general competence, empathy, affiliation/support, behavioral flexibility, and social relaxation. Duran and Kelly's (1988) Communicative Adaptability Scale, which also serves as a scale of communication competence, measures six components: social composure, social experience, social confirmation, appropriate disclosure, articulation and wit. Although each of these measures indicates what would traditionally be thought of as competent communication, the differences in focus and scope are evident. Also, components of these scales are often interpreted as skills-based; however, communication scholars mark a clear distinction between communication skills and communication competence.

Communication skills, or the "specific components that make up or contribute to the manifestation or judgment of competence," provide individuals with rules and guidelines regarding the process of communication (Spitzberg & Cupach, 1984; p. 8). However, these communication skills are not sufficient to establish an individual's communication competence. The context in and audience with whom the communication takes place must also be addressed in the evaluation of one's competence (Hajek & Giles, 2003). One scale that measures communication skills in a specific context is the Communicator Competence Questionnaire (CCQ) (Monge, Bachman, Dillard, & Eisenberg, 1982) which was developed to evaluate communication competence in organizational settings by assessing encoding and decoding skills. The ability to

construct precise, appropriate messages and listen to the messages sent back from the receiver is vital to both supervisors in organizational settings as well a teachers in educational settings. A teacher who is difficult to understand or does not listen is not communicatively competent.

Despite the complexity of precisely defining communication competence, the traditional pro-social aspects of the concepts are researched and utilized in attempts to improve people's communication competence levels. Waldron and Lavitt's (2000) study addressed the effect of communication competency training on "welfare-to-work" clients. The study found that those clients who completed the communication training program tested at higher levels of communication competence than they had before beginning the program. The study also found that several of the pro-social measures of communication competence utilized by the researchers predicted client success in finding and maintaining employment. A further finding makes a connection between higher levels of communication competence and greater amounts of communication planning. The authors' findings support the importance of intrapersonal communication on communication competence. One way that communication planning increases communication competence is through reducing anxiety in interpersonal communicative interactions. The rehearsal function of imagined interactions for example is valuable for individuals to make "changes as necessary for achieving desired outcomes" (Honeycutt, 2003, p. 43).

Additionally, this study provides support for the idea that pro-social communication competence can be taught. Waldron and Lavitt's (2000) study illustrates several important points regarding applying standards of communication competence to willingness to communicate. First, individuals, who are communicatively competent,

may take this competence for granted and fail to accurately depict the effect their perception of their own competence has on their willingness to communicate. Secondly, this research could imply that if individuals were able to increase their communication competence levels, they might also increase their willingness to communicate. Further research into the connection between communication competence and willingness to communicate is necessary in order to gain a greater understanding of whether communication competence has less of an effect on competent individuals' willingness to communicate or whether those individuals simply are not aware of the positive effect competence has.

Implications for Teacher Communicator Competence

Some research has been done on communication competence in educational settings. Rubin, Rubin, and Jordan (1997) examine the role of instruction on communication apprehension and communication competence. The authors found that the student perceived communication competence increased in all contexts from the beginning of a public speaking class to the end of the class. Additionally, research by Rubin, Graham, and Mignerey (1990) found a significant increase in perceived competence over the course of 4 years of collegiate work. Almeida (2004) using discourse analysis techniques reported students' perceptions of communication competence as performance, communication competence as attractiveness or intelligence, and communication competence as sociability. While this research offers valuable insight into students' self-perceptions about their own communication competence, perceptions of instructor communication competence has been largely ignored.

By separating the communicator from communication competence, the door is opened to the study of web-based teacher communicator competence. The Communicator Competence Questionnaire seems to be more suited to computermediated instruction because it assesses the instructor's ability to encode and decode messages. This is significant for two reasons. First, researchers are able to address students' perception of their teacher's communicator competence. In the context of a learning environment, it is essential to understand not only the teacher's communicative abilities, but the students' perception of their instructor's abilities as well. Researchers must address students' perceptions in order to get a complete view, if they are to offer ways to improve overall teaching and education.

Secondly, researchers are able to focus on the types of communication most frequently utilized within the web-based class, and most communication used in distance education falls into the behavioral definition. Normal web-based types of communication such as discussion board, e-mail, traditional mail, and comments left in a digital dropbox need to be specifically addressed. Although there are, generally, possibilities for face-toface or telephone interaction between student and instructor even in distance education classes, these may often be limited, if they occur at all.

Although there are a myriad of definitions of communication competence, equally valid in many contexts, the behavioral definition best addresses this new instructional environment because it can be used to measure the appropriateness and effectiveness of the strategies being used as well as tactical communication competence skills are taking place when using different instructional mediums. While communication competence (and the perception of) is vital to a positive instructional environment, including a

number of methods of interactions, distance education conceptions require an operational definition that offers limited to no option for effective nonverbal communication.

Immediacy

While there is a plethora of communication research on immediacy, especially its role in traditional classroom learning, very little has been done in the area of distance learning. Mehrabian (1969) described immediacy as those behaviors that "enhance closeness to and nonverbal interaction with another" (p. 213). His definition suggests that immediacy is both verbal and nonverbal. Most of the immediacy research to date has focused on traditional face-to-face classrooms using either combined verbal and nonverbal scales or nonverbal immediacy scales. Many of these studies examine the role of immediacy on educational outcomes (cognitive or affective learning) (Anderson, 1979; Gorham & Christophel, 1990; Kelley & Gorham, 1988; McCroskey, Richmond, & Bennett, 2006, Plax, Kearney, McCroskey, & Richmond, 1986; Richmond, Gorham, & McCroskey, 1993). Much of the research on immediacy has focused on the educational value of nonverbal immediacy, which in the traditional face-to-face setting seems to have a positive impact on learning. The role of nonverbal immediacy would seem to be negligible in asynchronous educational formats. For this reason, the research on the role of generalized and verbal immediacy needs to be more thoroughly examined. Generalized Immediacy

Two of the first scales developed to measure immediacy were the Generalized Immediacy (GI) scale and the Behavioral Indicants of Immediacy (BII) scale (Andersen, 1979). The fifteen-item BII measures specific nonverbal behaviors such as eye contact, gestures, body position, kinesics, and smiling. Accordingly, Anderson defines immediacy as "...those nonverbal behaviors that reduce physical and/or psychological distance

between teachers and students" (p. 544). In addition, Andersen's (1979) study of 238 communication students found that perceptions of teacher immediacy were related to affective and behavioral learning outcomes.

Unlike the BII which has limited usefulness in online education, the GI scale presents students with two general questions using semantic differential-scaled items. The first question consists of 5 semantic differential items that assesses student perceptions of their instructor's immediacy specifically. The second question gauges student perceptions of the instructor's teaching style with 4 semantic differential items indicating immediacy or non-immediacy. While constructed initially to gauge nonverbal and paralingual behaviors, the GI scale can still be used to assess overall perceptions of immediacy. Kearney (1994) intimates that the GI scale is a highly inferential instrument that "measures a general or gestalt impression of an individual's overall level of immediacy" (p. 169). This gestalt impression of immediacy is appropriate with online students who have limited access to their instructor outside of mediated channels. Verbal Immediacy

Even though Mehrabian (1969) recognized the role of verbal cues in perceptions of immediacy, no instrument was developed to measure verbal immediacy until the research done by Gorham (1988). This seminal work produced the Verbal Immediacy Behaviors scale which measures verbal behaviors that increase arousal and liking for the instructor. These behaviors include "humor in class..., as are his/her praise of students' work, actions, or comments and frequency of initiating and/or willingness to become engaged in conversations with students..." (p. 47). In addition, teacher self-disclosure, asking questions, feedback and inclusive pronouns also foster the perception of instructor immediacy. This set of specific verbal immediacy behaviors reduces "psychological

distance by recognizing individual students and their ideas and viewpoints, by incorporating student input into course and class design, by communicating availability and willingness to engage in one-to-one interactions, and by enhancing their 'humanness' via humor and self-disclosure" (Gorham, 1988, p. 52).

Gorham (1988) acknowledged the role of the previous research on BAT's [behavior alteration techniques] that influenced her conception of verbal immediacy. Plax, Kearney, McCroskey, and Richmond's (1986) and Richmond, McCroskey, Kearney, and Plax's (1987) work on the role of pro-social alteration techniques and its relationship to both immediacy and educational outcomes found support for the role of immediacy on student learning. In other words, both verbal and nonverbal immediacy are enmeshed in the verbal messages being contextualized by the teachers' nonverbal immediacy behaviors.

Gorham (1988) reported that the combination of verbal and nonverbal immediacy behavior accounted for a significant amount of variance in both affective learning and cognitive learning. The Verbal Immediacy Behaviors (VIB) instrument consists of 20 items that describe specific behaviors which characterized the best teachers. Gorham (1988) contends that "verbal and nonverbal behaviors function together to generate immediacy" (Gorham, 1988, p. 46). In face-to-face interactions, educators encode both verbal and nonverbal immediacy behaviors. In text-based mediated interactions, nonverbal immediacy behaviors are limited making the VIB a valuable resource for comparing perceptions of immediacy between face-to-face and online students.

While the VIB is still frequently used in communication research, often in conjunction with a nonverbal immediacy scale, there has been concern expressed over the validity of the VIB. Robinson and Richmond (1995) argue that the VIB is probably a

measure of teacher effectiveness rather than one of teacher immediacy. Robinson and Richmond (1995) conclude that the VIB lacks both face and construct validity. While Robinson and Richmond make this claim when comparing the VIB to the Nonverbal Immediacy Behavior scale because the authors found only moderate correlation levels on VIB items, other studies have supported Gorham's claims. For example, Gorham and Christophel (1990) corroborated the role of humor as a source of verbal immediacy. Gorham and Christophel (1990) found that "the total number of humorous incidents recorded for each teacher was positively correlated with the frequency of his/her use of other verbal and nonverbal immediacy behaviors" (p. 58). Menzel and Carrell (1999) found that verbal immediacy was perceived as more important than nonverbal immediacy on the students' perception of their own learning. Finally, the Verbal Immediacy Behaviors scale is also easily modified to fit an online environment unlike its nonverbal counterparts.

Online Teacher Immediacy

Based on Andersen's (1979) definition of teacher immediacy, "Teacher immediacy is conceptualized as those nonverbal behaviors that reduce physical and/or psychological distance between teachers and students" (p. 544), developing as sense of teacher immediacy can become nearly impossible within the context of online communication. While never explicitly defining immediacy Gorham's VIB scale (1988) offers an expanded view, to include oral communication, which opens the door to addressing online teacher immediacy. This means that we can consider behaviors such as addressing students by name, praising students, and using humor (all communicative behaviors that can occur during on-line interactions) as a way to assess students' perceptions of teacher immediacy.

In looking at student perceptions of online teacher immediacy, it is important to understand if the immediacy created by nonverbal immediacy is basically lost in online education or if online instructors and students find a way to compensate for them. In order to compensate for a lack of face-to-face interactions, students have been shown to increase their verbal immediacy behaviors (Swan, 2002).

Swan's (2002) study suggests that both instructors and students may fill the immediacy gap through the use of a greater number of verbal immediacy behaviors such as increased textual interaction and active relevant online discussion. Of course, this, like nonverbal immediacy in face-to-face classrooms, will vary based on the individual instructor. However, it does suggest the possibility for instructor training aimed at eliminating any perceived discrepancy in online versus face-to-face immediacy. There are a considerable number of pedagogical strategies that can be utilized to diminish, if not eliminate, this gap. According to Baker (2004) instructors may provide a biological sketch, post a photograph, and encourage positive self-disclosure in order to set a positive foundation for building immediacy in an online class. During the course instruction, instructors can increase immediacy by providing consistent fresh content, responding to e-mails regularly and participating in discussion boards with students in order to give students the impression that the instructor is actively involved with the class. Finally, instructors can foster a sense of personal concern by addressing students by first name, using humor and having chat room or IM hours so that distant student feel that the instructor is as available to them as they are to face-to-face students (Baker, 2004).

Motivation

Student motivation and perceptions of instructor motivation are important factors affecting students' perceptions of both instructor communication competence and

immediacy. Motivation is a process that includes specific directive and stimulating properties (Brophy, 1983). Motivation has the capacity to arouse student interest and to cause student investigation of their own behaviors in an effort to lead students to preferred behaviors. According to Brophy (1987), student motivation to learn can be conceptualized either as a trait or a state orientation. Trait motivation is a general, enduring predisposition toward learning that changes little across time, while state motivation is an attitude toward a specific discipline or class. While some argue that teachers can do little to change trait motivation, they can impact state motivation. According to Brophy (1987), state motivation can be encouraged by modeling, communicating teacher expectations, or socialization in appropriate behaviors. Wittrock (1978) argues that this motivational schema has attitudinal and cognitive elements that can be developed by teachers using various instructional goals and strategies. In essence, teachers play a vital role in stimulating the development of student motivation toward learning. Motivation can be a confounding factor in instructional and communication competence in general. Beatty and Payne (1985) in a study on cognitive complexity found that motivation was a confounding variable in cognitive complexity and along with writing apprehension accounted for a significant portion of variance of attributed to differences in cognitive complexity.

Student Motivation and Immediacy

The importance of student motivation as a mediating factor on teacher immediacy in the areas of cognitive and affective learning has been examined in a number of studies (Christophel, 1990; Christophel & Gorham, 1995; Frymier, 1993; Richmond, 1990). Motivation research has examined student communication traits and behaviors and how motivation affects immediacy as well as different types of learning. Frymier (1993) found
that student's state motivation impacted the role of immediacy on subsequent learning outcomes. In this study of 178 undergraduate students, Frymier (1993) found that students behaved differently to teacher immediacy based upon their level of state and trait motivation. She found that teacher verbal and nonverbal immediacy had the greatest effect on the motivation levels of low to moderately motivated students and the least effect on highly motivated students thus it appears that immediacy can mitigate some of the negative consequences associated with low state motivation in students.

Richmond (1990) examined teacher uses of power in the classroom and the effect of different types of power on perceived teacher immediacy and subsequent student motivation. While the author was primarily concerned with different methods of behavioral alteration, this study added some insight into the role motivation and immediacy play in instructional settings. Despite Richmond's inability to define the exact relationship between immediacy and motivation, she concluded, "...the critical link between teachers' communicative behaviors and student learning may be the impact of those behaviors on student motivation....If this is the case, the role of communication in the classroom is much more than simply the means of transmitting content and messages of control. It may be the primary means by which motivation can be increased and, as a result, learning enhanced" (p. 195).

A longitudinal study by Christophel and Gorham (1995) measured immediacy and motivation throughout the course of a semester. They found that, although there were no significant differences in the distributions of types of motivating and demotivating behaviors during a semester, student motivation was typically perceived of as an attribute of the student, but student demotivation was perceived of as an instructor-created problem. This research suggests that negative behaviors by teachers have more of an

impact on student demotivation than do positive teacher behaviors on student motivation. Despite the emphasis on the demotivational consequences of negative teacher behaviors, the authors contend that the results indicated "a causal relationship between teacher immediacy and state motivation" (p. 292) and conclude that "state motivation levels are modifiable by teacher behavior within the classroom environment" (p. 301).

Christophel (1990) attempted to articulate the relationship between motivation, immediacy, and learning by examining the role of nonverbal and verbal immediacy, state and trait motivation on perceived learning in students. While the author found that nonverbal immediacy was more effective at changing state motivation than verbal immediacy, the author suggests that "...teacher immediacy must first modify students' state motivation prior to becoming an effective predictor of learning" (p. 335). The author found that state motivation was more strongly related to positive learning outcomes than was trait motivation. This research, therefore, provides support for defining the role of teacher immediacy on student motivation. "Immediacy (verbal and nonverbal) is clearly a useful tool in the classroom for enhancing student motivation" (Hurt, Scott, & McCroskey, 1978, p. 462).

While in many ways the explosion of distance learning is a natural expansion of educational opportunities espoused by many, if not all, educators (e.g., lifelong learning, equitable educational access, etc.), this new instructional delivery system engenders both great possibility and apprehension. This apprehension may arise from the current lack of research about the quality of instruction that takes place in an asynchronous educational environment. A lot of research has established the importance of immediacy (nonverbal and verbal) on motivation and perceived learning, but nonverbal immediacy is unavailable for most online courses. An examination of the role of verbal/textual

immediacy in online settings is vital for understanding its relationship to state motivation and perceived student learning in this new environment. A communication construct that might offer valuable insight for improving both face-to-face and online instruction is imagined interactions.

Imagined Interactions

Imagined interactions are defined as "a process of social cognition through which individuals imagine themselves in anticipated or recalled interactions with others" (Honeycutt, Zagacki, & Edwards, 1989, p. 168). Individuals utilize these imaged interactions throughout their life generally, until it is brought to their attention, without even realizing it. Imagined interactions include a number of characteristics and functions. The characteristics of IIs include proactivity or retroactivity, frequency, variety, discrepancy, self-dominance, valance, and specificity. Functions of imagined interactions include maintaining relationships, conflict and management resolution, rehearsal, selfunderstanding, catharsis, and compensation (Honeycutt, 2003). By understanding the characteristics of IIs, we can better understand the benefits and pitfalls of their functions and how they may enhance or inhibit the online learning experience.

Characteristics of Imagined Interactions

The characteristics of IIs include proactivity or retroactivity, frequency, variety, discrepancy, self-dominance, valance, and specificity. Imagined interactions are either proactive (looking forward) or retroactive (looking backward). Proactive imagined interactions involve visualizing or rehearsing interactions, which may occur in the future (Honeycutt, 2003). Proactive IIs assist individuals in the planning stages of communication. This allows the individual to play through a number of strategies or possibilities, which can help reduce primary tension regarding the upcoming interaction.

Proactive imagined interactions also serve in increasing the individual's confidence level (Honeycutt, 2001). This characteristic facilitates a number of the functions of IIs, such as rehearsal and conflict management resolution.

Retroactive imagined interactions involve rehashing previous interactions, judging them and determining what one should or should not have said (Honeycutt, 2003). By utilizing retroactive IIs, individuals better understand the events that occurred as well as evaluate strategies used versus other strategies available to them at the time. This process can assist in reducing the individual's secondary tension (Honeycutt, 2003). The retroactive characteristic of imagined interactions facilitates the conflict and management resolution, self-understanding, catharsis, and compensation functions of imagined interactions. Through this process one is able to better understand their communication processes, increase effective communication, and release tension and other negative feelings (Honeycutt, 2003).

Frequency deals with the regularity with which one has imagined interactions and with the relative number of IIs an individual has and is not tied to any particular type of form of imagined interaction (Honeycutt, 2003). Honeycutt, Zagacki, and Edwards (1992) showed that those who have frequent IIs are also more likely to use irony, sarcasm, understand the hidden meaning in puns, and paraphrase others. This suggests that the frequent use of imagined interactions may assist in an individual's ability to better understand the communication they have with others as well as their own communication skills. In the instructional setting, frequency should play a particularly important role for face-to-face students since they interact more frequently and in more diverse ways than do most of their online counterparts

Variety deals with the number of different topics and people involved in one's

imagined interaction. Whereas one individual may have interactions repeatedly with only one communication partner and covering only one topic, another individual may have interactions with many different communication partners and covering many topics (Honeycutt, 2003). Variety in imagined interactions creates an arena for individuals to play the same communication event in many ways. The individual may have an imagined interaction on the same topic with different individuals, searching for the best alternative. For example, a teenager may play over asking permission to break curfew with each of his or her parents, in order to determine which one is most likely to say yes. Also, the individual may play the same event in different ways with the same individual. For example, a student may consider a number of "variations" on his or her "Why my work is late" story with the same professor in order to prepare for the actual conversation. In most cases such as these, variety is used to increase the likelihood of effective communication.

Discrepancy is the relationship of how closely one's imagined interactions reflect the actual interaction that occurred or will occur (Honeycutt, 2003). High levels of discrepancy are generally considered negative in most imagined interactions. Since the positive aspects of imagined interactions generally revolve around either preparation or evaluation of actual encounters, discrepancy is counterproductive to these goals. It has also been related to catastrophizing, or increasingly negatively discrepant imagined interactions (Honeycutt, 2003).

Self-dominance is concerned with who is in control of the conversation during the imagined interaction. If the individual who is having the imagined interaction is in control of the conversation, then it is said to be self-dominated. If the communication partner does most of the talking, the interaction is said to be other dominated (Honeycutt,

2003). Most imagined interactions are self-dominated. "For example, it is rare and almost unnatural to imagine listening to long monologues or lectures by others" (Honeycutt, 2003, pp. 140). In the instructional setting, self-dominance should play a particularly important role for online students since they normally have little to no actual face-to-face contact with their online instructors making it unlikely that the instructor will play a significant role in the students' IIs.

Valence addresses the degree of emotional affect, or pleasantness, associated with the imagined interaction (Honeycutt, 2003). The valence of imagined interactions may be related to their functions. As Honeycutt, Zagacki, and Edwards (1992) found, positive valence is negatively related to actual conversation recall. If we consider that functions of IIs include maintaining relationships, conflict and management resolution, selfunderstanding, catharsis, and compensation, it becomes evident that many of these functions are more likely to be utilized if the imagined interaction is negatively valenced. Therefore if the imagined interaction is positively valenced we are unlikely to continue rerunning it and the actual interaction will fade in our memory. Valence, either positive or negative, may also affect or be affected by our perception of the individual with whom the actual conversation will or did occur. In the instructional setting, valence should be more important for face-to-face students since they normally have more communicationrich interactions (nonverbal, paralingual, as well as verbal/textual).

Finally, there is specificity, which focuses on the level of detail within the interaction (Honeycutt, 2003). Specificity is related to a number of positive aspects of imagined interactions. Honeycutt (1999) suggested that higher levels of specificity in imagined interactions increase one's ability for recall. Honeycutt *et al.* (1992) show that high levels of specificity are related to the ability to detect meaning, conversational

alternatives and conversational memory.

Functions of Imagined Interactions

Each of the characteristics discussed can be assigned to define and explore an individual's imagined interactions. With this understanding of what imagined interactions are, it is important to understand how individuals utilize their IIs. For this we must look at the functions of imagined interactions. It is important to note here that individuals may not utilize or be aware that they utilize all of the functions of imagined interactions. Also, each function is capable of standing on its own, although they may be used in conjunction. For example, an individual may only be using the maintaining relationships function or they may have an imagined interaction that combines maintaining relationships, conflict and management resolution, rehearsal, self-understanding, catharsis, and compensation (Honeycutt, 2003).

Imagined interactions are often used by individuals to maintain numerous types of relationships. "IIs can psychologically maintain relationships by concentrating thought on relational scenes and partners" (Honeycutt, 1995, p. 143). Research has shown that imagined interactions are most likely to occur with significant others (Honeycutt, 2003), be useful in maintaining long distance relationships with those others (Allen & David, 1994), and shape the development of those relationships (Honeycutt, 1995). This becomes significant when dealing with relationships such as the teacher/student relationship because there is often less frequent actual interaction than with other significant others and may be particularly important in the online educational setting in which the student has limited, if any, face-to-face contact with the instructor, but the instructor holds an important position in the student's life, at least for outcomes related to

this course

Imagined interactions are associated with conflict management and resolution as they are often utilized to link one actual interaction to another (Honeycutt, 2003). In other words an individual may begin with a retroactive imagined interaction of an event and then turn that into a proactive imagined interaction of the next actual interaction to take place. This can have both positive and negative outcomes. If used in a positive manner, the individual will use the retroactive imagined interaction to locate possible points of error or compromise. Then, use a proactive II to prepare for a positive and progressive actual interaction. Imagined interactions, however, can also be used negatively to keep conflict alive (Honeycutt, 2003). In this case the individual may use a retroactive imagined interaction to find fault or place blame and then use proactive II to plan their next attack. Regardless, of whether the IIs are used in a positive or negative form, they do contribute to maintaining conflict or the progression toward a resolution.

Individuals may utilize the rehearsal function of imagined interactions "to aid in the planning process to help reduce anxiety and increase speech fluency" (Honeycutt, 2003, p. 41). The use of the rehearsal function can be used in a variety of manners, such as preparing for interviews, conversations regarding sensitive topics, or first encounters. The rehearsal function may also be used to increase one's commitment to a course of action by allowing for a "previewing" of both positive and negative outcomes of the action (Klinger, 1990). Overall, the use of the rehearsal function of imagined interactions may reduce tension regarding an upcoming event and assist in the planning and commitment to plan of an actual interaction.

The self-understanding function of imagined interactions "may help uncover opposing or differing aspects of the self" (Honeycutt, 2003, p.43). This is an important

function of imagined interactions as it increases our ability to evaluate and improve our communication skills and our understanding of our actions and motives. Secondly, the self-understanding function allows us to look at and evaluate what is really significant to us and what is inconsequential requiring no further actual interaction. Finally, this function allows us to deal with issues that are very important or sensitive to us which may have been dismissed by our significant others previously (Allen & David, 1994).

Imagined interactions can create a sense of catharsis through, "their ability to relieve tension and reduce uncertainty about another's actions" (Honeycutt, 2003, p.44). Catharsis may be used after a significant confrontation to relieve the tension that is typically left over after a tense actual interaction. Following along these lines, catharsis can also create an outlet for individuals to have interactions which include behaviors or expressions of emotion, which they could not in the actual encounter (Allen & Berkos, 1998). It is easy to see how catharsis through imagined interactions can be psychologically beneficial to the individual utilizing them.

Imagined interactions can also serve the function of compensation, which is to say that they can assist the user in compensating for actual interactions that are unlikely or impossible (Honeycutt, 2003). This function of imagined interaction is particularly important to the study of online education. Because there is often very little face-to-face interaction between instructors and students, compensation imagined interactions may be the students' only option. As with Honeycutt, et al.'s (1989-90) findings, when looking at compensation imagined interactions among the elderly who have limited contact with their loved ones, in which they found that the less contact with their loved ones the elderly had the more they utilized imagined interactions for compensation. Similarly, students' may seek to supplement their lack of actual interaction with instructors by

engaging in compensatory imagined interactions.

While the characteristics and functions of imagined interactions articulated above offer insight into instructional behaviors, IIs engender both benefits and possible pitfalls. Imagined interactions, for example, can increase communication competence, by encouraging reflective thinking, enhancing communication sensitivity, and increasing confidence. Another benefit to proactive imagined interactions is that they allow for planned strategies, reduced tension, and create opportunities for external input. These benefits exist because the individual is given the opportunity to walk through the process of the interaction, in his or her own terms. Although, this imagined interaction might not reflect the actual interaction, confidence is gained by having a general idea of what to expect. Benefits of retroactive imagined interactions include increased understanding, strategizing, and reduced tensions. Rehashing the interaction allows an increased understanding of the actual interaction and both partners' motives. It also allows the individual to strategize more effective ways to handle similar situations in the future. This leads to reduced tensions regarding possible similar interactions the individual expects to encounter (Honeycutt, 2003).

Honeycutt also identifies three major pitfalls of imagined interactions: catastrophizing, keeping conflict alive, and egocentrism. Catastrophizing occurs when our imaginations make the encounter much worse than it will likely be. In its extreme, this can result in self-fulfilling prophecies, as the individual may avoid actual interactions altogether. The second pitfall, keeping conflict alive, relates to the use of retroactive imagined interactions by individuals to revisit prior conflict interactions, the result may be an extension of the conflict due to attempts to justify one's position or plot future interactions. Finally, due to the introspective nature of imagined interactions, they often

tend to fall victim to egocentrism. Individuals give themselves a much greater role in the interaction than is likely to, or did occur. Although, these pitfalls do exist, it seems the benefits outweigh the disadvantages and therefore imagined interactions will continue to be utilized by individuals attempting to make sense of their communication experiences (Honeycutt, 2003).

Imagined Interactions Research

The majority of imagined interaction research has focused on personal relationships. Honeycutt and Wiemann (1999) conducted a study on imagined interactions in the context of marital relationships. The results showed that couples with greater overall communication levels also participated in a greater number of imagined interactions. The study also showed that there was no gender difference in frequency of imagined interactions within married couples. This finding is in direct contradiction to a study discussed later. A possible explanation for this may be that intensity of relationship might have an effect on the frequency of imagined interactions experienced with a particular communication partner. Another study conducted by Honeycutt and Brown (1998) addressed the use of imagined interaction in preparation of joke telling within the marital relationship. This rehearsal of humor is common, when there is the possible misunderstanding or rejection of the joke. The study did show not only frequent disagreement of what is considered humorous, but in the partners' reactions to jokes. It is the awareness of these differences and the active cognitive attention to them that is the driving force behind the motive for the imagined interaction.

These concepts can easily be related to organizational theory in that relationship dynamics and the sensitive nature of use of humor are important issues in organizations today (Boverie, Hoffman, Klein, McClelland, & Oldknow, 1994; Decker & Rotondo,

2001, Wood, Beckmann, & Pavlakis, 2007). The particularly relevant concept in this study is the use and reception of humor. However, there are significant differences in how humor is used, received, and measured within the organizational environment. One of the most fundamental differences in organizational versus interpersonal humor is participant power difference. In the interpersonal relationship, power differences are relatively small; however, organizational relationships, including the teacher-student relationship, have comparatively large power differences. This should result in differences in the reasoning behind imagined interactions related to humor and in the extent to which these imagined interactions occur. This can be illustrated using the Honeycutt and Brown (1998) study. In this study, imagined interactions were the result of fear of misunderstanding or rejection of the joke. In the educational environment, the use of humor by instructors is usually identified as an immediacy behavior (Christophel, 1990; Christophel & Gorham, 1995; Richmond, 1990). Imagined interactions of humor, however, may be the result of a fear of adverse reactions from instructors or university disciplinary actions. Because the consequences in the educational environment could be much more serious (i.e., have legal consequences) than those in interpersonal relationships, it is likely that the imagined interaction will be more diligently considered.

A study conducted by Edwards, et al. (1989) focused on sex differences in imagined interactions. The findings were that females had imagined interactions that were more frequent and more pleasant than those of men. Because of the prevalence of gender study within the field of education and technology, this study can be particularly beneficial to the examination of imagined interactions within the university setting.

Another area of imagined interaction research of interest to educational studies is that which focuses on inter- or cross-cultural use of imagined interactions. A study by

Petress (1995) examined international students' use of imagined interactions in preparation for study in American universities. The study showed imagined interaction usage during preparation of initial messages, review of past messages, and repair of past messages for future use. Expanding understanding of this type of imagined interaction can assist in greater understanding of instructional communication, as more and more universities (especially with greater access through technology) become increasingly international.

Imagined interactions regarding contrasts between peers and authority figures have been studied in relation to racial differences. African Americans were shown to have more negative emotions associated with their imagined interactions when the interaction involved a European American communication partner. Findings also indicated that emotions associated with imagined interactions, whether negative or positive, were intensified when the interaction involved an authority figure (Vrana & Roflock, 1996). While the ethnicity of an online instructor may not be apparent to students, if the instructor follows recommendations for immediacy behaviors, such as posting a photo online, this information becomes available to students and may impact their perceptions of the nature of any interactions with the instructor. Although this factor is not included in the current study, it certainly is one that would benefit from empirical attention. As we continue to move away from old ideas such as the melting pot, in the United States, it is important that organizations learn about peoples' cultural differences. Studies such as Vrana and Roflock's (1996) are an excellent start, but they need to be expanded to include a multitude of ethnic backgrounds so that universities can better equip their instructors for dealing with a diverse educational environment.

Honeycutt, Edwards, and Zagacki (1989-1990) explored a number of concepts

associated with imagined interactions within this study. First, the study provided support for the egocentrism pitfall discussed earlier. In their imagined interactions individuals spoke more lines, were more likely to initiate the conversation and were more likely to dominate the conversation. This was true even in retroactive imagined interactions where the conversation partner dominated the actual interaction. The study also revealed that individuals experience a greater number of imagined interactions within their personal relationships and regarding personal issues. A third relevant finding was the support of the concept of both proactive and retroactive imagined interactions. This particular study has a significant value because it validates a number of the fundamental propositions of imagined interaction theory.

Imagined Interactions in the Teacher/Student Relationship

Although the imagined interaction research has been previously focused predominately on personal relationships, particularly romantic, the theory seems to have potential value in educational research. Berkos, Allen, Kearney, and Plax (2001) found that students used imagined interactions to deal with teacher misbehaviors. They used three broad categories of teacher misbehaviors: incompetence, indolence, and offensiveness. Incompetent teacher misbehaviors were operationalized as excessively difficult, unenthused, and/or boring. Offensive teacher misbehaviors were operationalized as attempts to embarrass or demean students. Indolent teacher misbehaviors were operationalized as tardy and unprepared. The authors found that students were more likely to use imagined interactions than either engage or confront the misbehaving teacher, perhaps because of the power differential in this relationship. This suggests "that the substitution function of IIs occurs when the consequences of confrontation have the potential to thwart or undermine goals or when the perceived

costs associated with confronting the violator outweigh the perceived rewards of confrontation" (Berkos, Allen, Kearney, & Plax, 2001, p. 298). Just as in the personal relationship, imagined interactions may affect how students and instructors manage, define, and view their teacher/student relationships. More research into imagined interactions within the educational setting may increase the understanding of teacher/student relationships.

By applying imagined interactions to the teacher/student relationship (particularly in the realm of online coursework) researchers can offer new insight into how students develop impressions of teachers and how teachers can more effectively communicate with students. As with any new technology, communicative skills must grow and advance in order to meet the changing educational environment. In order to assist educators in increasing their communicative skill within the new technology, we must first understand how current teacher/student communication is perceived by the student. Imagined interactions offer researchers a method for looking at how students visualize their interactions with both face-to-face and online instructors and how these visualizations may affect their perceptions of their teachers' competence and immediacy.

The use of imagined interactions in the development of the teacher/student relationship remains understudied. However, in many cases of online education, this may be the only type of communication the student has with the instructor. In order to effectively study imagined interaction theory, variables must be specific to the context under examination.

Hypotheses and Research Questions

Based on research in communicator competence, immediacy, student motivation, and imagined interactions, eight hypotheses are proposed in relation to their role in

different instructional contexts. The hypotheses and research questions are divided into 2 distinct sections: the relationship between instructional variables and online education specifically (Hypotheses 1 and 2), and differences between face-to-face and online education on the various instructional variables cited above (Hypotheses 3, 4, 5, and 6; Research Questions 1, 2, 3, 4, and 5).

Online Instruction

According to previous research, women are significantly more likely to participate in distance education courses than are men (Sikora, 2002). In addition, some research suggests that distance education is more female-friendly than traditional face-toface classrooms (American Association of University Women, 2000; Behnke & Sawyer, 2000; Belenky, Clinchy, Goldberger, & Tarule, 1986; Pagnucci & Mauriello, 1999; Savicki, Kelley, & Ammon, 2002). Hence, the first hypothesis is a replication hypothesis based on the foregoing studies:

Hypothesis 1: Females will be more likely than males to enroll in online English courses.

Research suggests that the instructional medium does not affect educational outcomes (Clark, 1994; Russell, 1999). Vonderwell and Zachariah (2005) contend that instructor communication in online education is essential to student motivation and participation as well as creating a sense of community. Christophel (1990) found that the desire to take additional coursework was directly correlated with significant affective learning outcomes. Therefore, the following hypothesis is posed:

Hypothesis 2: Previous online coursework will be positively correlated with both student motivation and perceptions of instructor immediacy toward the online English course.

Face-to-Face versus Online Instruction

Since a vast majority of the research on immediacy has focused on the importance of the nonverbal over verbal immediacy (Anderson, 1979; Gorham & Christophel, 1990; Kelley & Gorham, 1988; McCroskey, Richmond, & Bennett, 2006, Plax, Kearney, McCroskey, & Richmond, 1986; Richmond, Gorham, & McCroskey, 1993), the students who have interactions that pair nonverbal and verbal immediacy cues should rate their instructors higher overall on all forms of immediacy.

The research on student motivation suggests that immediacy can improve student motivation particularly for low state motivation students (Christophel 1990, Frymier, 1993; Richmond, 1990). The fact that face-to-face students have paired nonverbal-verbal immediacy should increase perceived motivation (Anderson, 1979; Gorham & Christophel, 1990; Kelley & Gorham, 1988; McCroskey, Richmond, & Bennett, 2006, Plax, Kearney, McCroskey, & Richmond, 1986; Richmond, Gorham, & McCroskey, 1993).

Hypothesis 4: Students in traditional classrooms will rate instructors' motivation levels higher than will online students.

Some research suggests lower motivation in students in distance education courses than their peers in traditional courses (Qureshi, Morton, & Antosz, 2002). The research on the relationship between nonverbal immediacy and state motivation would suggest online students who do not have any nonverbal immediacy will have less state motivation improvement than will face-to-face students. This study will pair an instructor/professor's face-to-face courses and online courses to control for instructional differences between academic faculty members and assess student motivations in the two

Hypothesis 3: Students in traditional (face-to-face) classes will perceive of more generalized and verbal immediacy in their instructors than will their online peers.

environments.

Hypothesis 5: Students in online classes will have less motivation (state and trait) than will students in traditional (face-to-face) classes.

Valence addresses the degree of emotional affect, or pleasantness, associated with the imagined interaction (Honeycutt, 2003). Valence, either positive or negative, may also affect or be affected by our perception of the individual with whom the actual conversation will or did occur. If this is the case, then immediacy, particularly nonverbal immediacy, should result in students in traditional face-to-face settings rating the valence of their imagined interactions as higher than online students. Frequency deals only with the relative number of IIs an individual has and is not tied to any particular type or form of imagined interaction. Honeycutt, Zagacki, and Edwards (1992-1993) found that the frequent use of imagined interactions may assist in an individual's ability to better understand the communication they have with others as well as their own communication skills. Since the students in traditional face-to-face classes have more interactions with their instructors, they should have more frequent imagined interactions because the imagined interactions should involve more and different characteristics and functions than their online peers.

Hypothesis 6a:Students in traditional (face-to-face) classes will have significantly more positive and frequent imagined interactions with their instructor than will online students

Self-dominance is concerned with who is in control of the conversation in the imagined interaction. If the individual who is having the imagined interaction is in control of conversation, then it is said to be self-dominated. If the communication partner does most of the talking, the interaction is said to be other dominated (Honeycutt, 2003). The fact that many online students will have never seen or heard their instructor makes it likely that their IIs will be self-dominated.

Hypothesis 6b: Online students will use the self-dominance characteristic when having imagined interactions with their instructor more often than traditional face-to-face students.

Little research has been done in the instructional area of imagined interactions.

This lack of research suggests the role of the characteristics of imagined interactions

needs to be examined to understand how it is used in different educational contexts.

Research Question 1: Are there any significant differences in the use of the characteristics of imagined interaction (discrepancy, valence, frequency, self-dominance, specificity, retroactivity, variety, and proactivity) between traditional face-to-face and online students.

Here again, the dearth of research on the functions of imagined interactions needs

to be addressed before a direction can be hypothesized.

Research Question 2: Are there any significant differences in the use of the functions of imagined interactions (rehearsal, self-understanding, catharsis, compensation, conflict management, and communication satisfaction) toward their instructors between traditional face-to-face and online students.

Since there has been no research on communicator competence in instructional

settings, the direction of the relationship cannot be hypothesized.

Research Question 3: Is there any difference between perceptions of instructor communicator competence between face-to-face and online students?

It would be valuable to know if there was a preferential difference in contact

between online and face-to-face students because it would allow instructors to make more

informed choices.

Research Question 4: Is there any difference in the frequency of media use for traditional face-to-face and online students?

It would be valuable to know if there was a preferential difference in contact for

instructors because of the possible consequences on instructional issues like immediacy

and student motivation.

Research Question 5: Is there any difference in the frequency of media use by instructors with their face-to-face and online students?

CHAPTER 3

METHODOLOGY

The general purpose of this section is to describe the instruments, sample, and statistical analyses utilized to test the hypotheses and research questions discussed in the previous chapter. This chapter is divided into two main sections. The first section deals with the participant demographics, instrumentation, and statistical tests used to analyze the pilot study. The final section will examine the demographic information about the sample and instrumentation in the current study. This section will conclude with a reliability table of the variables examined in the final project.

Pilot Study

A pilot study was conducted to ensure that all aspects of the instrument were appropriate for this study, that the items were coherent and intelligible, that the items elicited appropriate information needed to evaluate the hypotheses and research questions posited, that the instrument was valid across instructional media, and that the variables allowed for the most interpretive data.

Participants

Questionnaires from 179 participants were collected in a snowball sample completed for introductory- level Communication courses at a medium-sized public university in the South. Forty-nine (27.4%) of the respondents for the pilot were male while the remaining 130 participants (72.6%) were female. The disparity between the normal ratio of men to women is partially accounted for by the significant sex differences in online courses where only 20 participants (21.7%) were male and 72 (78.3%) were female. The average age of the participants was 23.5 years of age overall and 26.7 years of age for those completing the questionnaire online compared to 20.1 years of age for

those completing the questionnaire in a traditional English course. One hundred seventythree (96.6%) of the respondents for the pilot were United States citizens. The ethnic composition of the participants was 54.2% European American (which is slightly lower than the university average of 61.0%), 31.3% African American (which is slightly higher than the university average of 29.4%), 0.6% Asian American, 0.6% Latino/a, 1.1% Middle Eastern American, 3.4% Native American (tribal membership not included), 1.7% responded as "other" (listing several ethnicities from the ethnicities included in the questionnaire), and 13 (7.3%) students did not respond to the question. Six participants (3.2%) were excluded from the study because they did not complete a majority of the questionnaire. One hundred thirty-nine (77.6%) of the respondents for the pilot had satisfactorily completed previous English coursework (3 students (1.7%) did not respond to the question). Sixty-four (35.7%) participants had satisfactorily completed previous distance coursework (1 student (0.6%) did not respond to the question).

Instrumentation

The instrument for the pilot study consists of two questionnaires: one for traditional (face-to-face) students and one for online students. The questionnaires are identical with the exception of additional spaces on the online form to provide numbers for demographic and semantic differential questions (the traditional students will circle the ones that apply to them). Both questionnaires consist of five major parts (see Appendix A). The first section was comprised of demographic questions about the research participant as well as several Likert-scaled items that assessed: the number of English courses completed, distance courses attempted and completed as well as approximate G.P.A.

The second section of the instrument measured the participants' use of imagined interactions. First, the characteristics of participant IIs were assessed using the 37 items from the Survey of Imagined Interactions (Honeycutt, 2003). These 37 items measure discrepancy, valence, frequency, self-dominance, specificity, retroactivity, variety, and proactivity on a 7-point Likert scale. The reliability coefficients for characteristics of IIs as reported by Honeycutt (2003) were discrepancy .84, valence .85, frequency .76, selfdominance .77, specificity .73, retroactivity .80, variety .67, and proactivity .73. The reliability coefficients in the pilot for II characteristics were discrepancy .67, valence .71, frequency (after dropping one item for low reliability) .75, self-dominance .65, specificity (after dropping two items for low reliability) .62, retroactivity .77, variety (after dropping one item for low reliability) .69, and proactivity .69. The participants then completed a modified version of the 24 items of Survey of Imagined Interactions written specifically for educational contexts that measures the functions of IIs. These 24 items measure selfunderstanding, rehearsal, catharsis, communication satisfaction, conflict management, compensation, and relational maintenance on a 7-point Likert scale. The reported reliability coefficients for functions of IIs were self-understanding .70, rehearsal .75, catharsis .61, communication satisfaction .89, conflict management .81, compensation .73, and relational maintenance .70 (Honeycutt, 2003). The reliability coefficients in the pilot for functions of IIs were self-understanding .79, rehearsal .84, catharsis .73, communication satisfaction .81, conflict management (after dropping one item for low reliability) .70, and compensation .85. Since relational maintenance was not appropriate to the educational context being examined, it was not included as a variable in the pilot study. At the conclusion of the imagined interaction section are 14 items that gauge the participants' use of valence, frequency, and self-dominance (3 characteristics of IIs)

modified to reflect educational contexts that have been hypothesized to be different between face-to-face and online students on a 7-point Likert scale. The reported reliability of the SII coefficients of these characteristics of IIs as referenced above were valence .85, frequency .76, and self-dominance .77 (Honeycutt, 2003). The reliability coefficients in the pilot for these three characteristics of IIs in the educational context were valence (after dropping two items for low reliability) .76, frequency (after dropping one item for low reliability) .63, and self-dominance (after dropping two items for low reliability) .76.

The third section of the pilot study contains all the semantic differential items being examined in the pilot study and includes 2 distinct scales: one examining the students' perceptions of his/her instructors' immediacy and the other assessing the students' perceptions of his/her instructors' motivation (but not the students' trait or state motivation). The first scale is the Generalized Immediacy Scale (Anderson, 1979) which normally consists of 9 semantic differential bipolar adjectives using a 7-point continuum. The 9 items are then summed. Anderson (1979) found reliability coefficients for the 9 items of .81. The pilot study only uses 4 of the items from the Generalized Immediacy Scale. Since Anderson (1979) found that all 9 items load on one unrotated factor and the first 5 items assess the participants' agreement with the statement that the instructor is immediate, these 5 items were not used in the pilot study to reduce the overall length of the questionnaire and decrease respondent fatigue. The four bipolar pairs are immediatenot immediate, cold-warm, friendly-unfriendly, and close-distant. The pilot found a .58 reliability overall for the GIS which improved to .68 when the pair immediate-not immediate was dropped. The next section uses the Student Motivation Scale (SMS) to assess student perceptions of the instructor motivation to teach this particular class.

Fourteen bipolar semantic differential items from different Student Motivation Scales (Beatty and Payne, 1985; Christophel, 1990; Richmond, 1990) on a 7-point continuum that assess the instructor's interest in teaching the specific course being analyzed. Beatty and Payne (1985) found reliability coefficients for their 4 items of .93 and .96 in two separate administrations of their scale. Christophel (1990) found reliability levels for the 12 items of .96. Richmond (1990) reported reliability coefficients of .94 for the five items on that Student Motivation Scale. The pilot study found reliability coefficients of .89 for the 14 items assessing student perceptions of their instructors' motivation. The final instrument addresses two problems discovered in this section of the pilot study. The instrument used in the pilot does not assess the participants' motivation toward English courses or college course work in general. For example, the 12-item Student Motivation Scale (SMS) (Christophel, 1990) is usually administered so that the participant completes the scale twice: once measuring motivation toward education as a whole (trait) and a second time measuring motivation toward a certain course (state). To correct this oversight the final instrument contains 3 distinct scales assessing 2 self-reports about the participant's own motivation and 1 scale examining the students' perceptions of her/his instructors' motivation.

The fourth section of the pilot study examines student perceptions of their instructor's verbal immediacy behaviors and communicator competence. Gorham's (1988) Verbal Immediacy Behaviors (VIB) scale gauges student perception of their instructor's ability to communicate immediacy in verbal or written form as appropriate to the medium. The VIB scale consists of 17 Likert-type items with a 5- point range. Gorham (1988) found split-half reliabilities on 17 of the original 20 items (3 were removed for low correlations to other items) that were moderately correlated at .94. In

the pilot, the Verbal Immediacy Behaviors scale had reliability levels for the 17 items of .87. The second scale in this section is the Communicator Competence Questionnaire. The Communicator Competence Questionnaire (Monge, Backman, Dillard, & Eisenberg, 1982) consists of 12 items on a 7-point Likert scale. The scale, developed primarily for organizational contexts, measures two distinct factors: encoding and decoding competence. Monge, Backman, Dillard, and Eisenberg (1982) found an average reliability level of .85 for both encoding and decoding for both supervisors and subordinates in their initial research. The high levels of correlation between the two distinct factors and concerns about multicollinearity have caused some researchers to treat communicator competence as one factor (Papa & Tracy, 1988). The pilot study treated communicator competence as one factor because after removing one item for low reliability levels, all except two of the remaining 11 Communicator Competence Questionnaire items were at least moderately correlated (r > .40). The Communicator Competence as one 90.

The final section of the instrument examines participant media preference and willingness to enroll with his/her instructor in another face-to-face or online course. The participants disclosed the frequency and preferred type of media (face-to-face, phone, email, and so on) they use with their instructors. These items were constructed by the researcher to assess if differences in media use are associated with perceptions of instructor competence. The willingness to take another course with the participants' instructor assesses the overall perception of the instructor. It might also give insight into the role of immediacy on communicator competence in online contexts.

Statistical Tests of Hypotheses and Research Questions in the Pilot Study

Hypothesis 1 could not be tested as hypothesized. This mistake was corrected for the final project questionnaires (Appendix B). Hypothesis 2 could not be tested because the pilot questionnaire did not have a section measuring overall student motivation. Additionally, online coursework was an ordinal level variable that has been changed to an interval level variable. This mistake was corrected for the final project questionnaires (Appendix B). Hypothesis 3 was fully supported. Students in traditional (face-to-face) classes did perceive more generalized and verbal immediacy in their instructors (M = 5.57, <u>M</u> = 3.34, respectively) than did their online counterparts (<u>M</u> = 4.86, <u>t</u> = 3.91, <u>p</u> < $.001, \underline{d} = .59; \underline{M} = 3.04, \underline{t} = 2.91, \underline{p}. < .01, \underline{d} = .38$). Hypothesis 4 was supported. Students in traditional (face-to-face) classes did perceive more instructor motivation (M = 5.29) than did their online counterparts (M = 5.04, t = 1.71, p = .05, d = .22). Hypothesis 5 could not be tested because the pilot questionnaire did not have a section measuring either student trait or state motivation. This mistake was corrected for the final project questionnaires (Appendix B). Hypothesis 6a was partially supported. Students in traditional (face-to-face) classes did have significantly more positive (valence) imagined interactions (M = 4.61) than online students (M = 4.34, t = 2.06, p = .02, d = .32). Students in face-to-face classes did use IIs more frequently ($\underline{M} = 4.36$) than online students ($\underline{M} = 4.16$, $\underline{t} = 1.08$, $\underline{p} = .14$, power = .30) but not at a statistically significant level. Hypothesis 6b was supported. Online students did use the self-dominant imagined interactions ($\underline{M} = 4.26$) more often than traditional face-to-face students ($\underline{M} = 4.07$, $\underline{p} =$ $.05, \mathbf{d} = .24$).

Research Question 1 found no statistically significant differences in the use of the characteristics of imagined interaction (discrepancy, valence, frequency, self-dominance,

specificity, retroactivity, variety, and proactivity) between traditional face-to face and online students (M = 4.34, M = 4.19, t = 1.31, p = .19; M = 4.51, M = 4.34, t = 1.34, p = .17; M = 4.36, M = 4.19, t = 1.08, p = .29; M = 4.54, M = 4.60, t = -0.48, p = .53; M = 4.41, M = 4.25, t = 1.28, p = .20; M = 4.57, M = 4.39, t = 1.01, p = .31; M = 4.49, M =4.64, t = -1.01, p = .32; M = 4.83, M = 4.86, t = -0.14, p = .89, respectively). Research Question 2 found no statistically significant differences in the use of the functions of imagined interaction (communication satisfaction, rehearsal, compensation, catharsis, conflict, and self-understanding) between traditional face-to face and online students (M = 4.43, M = 4.36, t = 0.48, p = .63; M = 4.74, M = 4.67, t = 0.42, p = .67; M = 3.98, M = 0.42, p = .67; M = 0.48, p = .63; M = 0.48, M = 0.48,3.92, t = 0.30, p = .76; M = 4.41, M = 4.44, t = -0.19, p = .85; M = 4.95, M = 4.76, t = 1.22, p = .23; M = 4.22, M = 4.42, t = -1.25, p = .21, respectively). Research Question 3 found no statistically significant difference in perceptions of instructor communicator competence between traditional and online students (M = 5.22, M = 4.99, t = 1.75, p =.09, power = .53) though it was approaching significance. Research Question 4 could not be tested as hypothesized because the media use variable was ordinal level. This mistake was corrected for the final project questionnaires (Appendix B). Research Question 5 could not be tested as hypothesized because the media use variable was ordinal level. This mistake was corrected for the final project questionnaires (Appendix B).

Current Study

Participants

Questionnaires from 334 participants were collected from 3 different instructors (all 3 instructors have M.A.'s, teach the same course, and have taught both face-to-face and online courses for more than 2 and less than 5 years) teaching both introductorylevel face-to-face and online English courses at a medium-sized public university in the South. Two hundred twenty-five (67.4%) of the respondents were female and 108 participants (32.3%) were male while 1 (.3%) participant did not respond to the question. The disparity between the normal men to women ratio is partially accounted for by the significant sex differences in online courses where only 29.6% were male and 70.4% were female. The average age of the participants was 23.7 years of age overall and 27.3 years of age for those completing the questionnaire online as compared to 20.0 years of age for those completing the questionnaire in a traditional classroom. Three hundred twenty-five (97.3%) of the respondents for the pilot were United States citizens. The ethnic composition of the participants was 55.4% European American (which is slightly lower than the university average of 61.0%), 31.7% African American (which is slightly higher than the university average of 29.4%), 0.9% Asian American, 0.9% Latino/a, 0.3% Middle Eastern American, 2.4% Native American (tribal membership not included), 1.8% responded as "other" (listing several ethnicities from the ethnicities included in the questionnaire), and 22 (6.6%) students did not respond to the question. Nine participants (2.6%) were excluded from the study because they did not complete a majority of the questionnaire. Two hundred eighty-five (85.3%) of the respondents had satisfactorily completed previous English coursework (3 students (0.9%) did not respond to the question). Two hundred twenty-three (66.8%) had attempted and 217 (65.0%) participants had satisfactorily completed previous online coursework (4 (1.2%) and 6 (1.8%) participants respectively did not respond to the questions about online coursework.

Instrumentation

The instrument for the current study like the pilot study consists of two questionnaires: one for traditional (face-to-face) students and one for online students.

The questionnaires are identical with the exception of additional spaces on the online form to provide numbers for demographic and semantic differential questions (the traditional students will circle the ones that apply to them). Both questionnaires consist of five major parts (see Appendices A & B). The first section was comprised of demographic questions about the research participants as well as several Likert-scaled and open-ended items that assessed: the number of English courses completed, distance courses attempted and completed as well as approximate G.P.A.

The second section of the instrument measured the participants' use of imagined interactions. First, the characteristics of participant IIs were assessed using the 37 items from the Survey of Imagined Interactions (Honeycutt, 2003). These 37 items measure discrepancy, valence, frequency, self-dominance, specificity, retroactivity, variety, and proactivity on a 7-point Likert scale. The reliability coefficients for characteristics of IIs as reported by Honeycutt (2003) were discrepancy .84, valence .85, frequency .76, selfdominance .77, specificity .73, retroactivity .80, variety .67, and proactivity .73. The reliability coefficients of the II characteristics in this study were discrepancy .75 (after dropping the item "When I have a real conversation that I have imagined, the actual conversation is very different than what I imagined" for low reliability), valence .72, frequency (after dropping the item "I rarely imagine myself interacting with someone else" for low reliability) .63, self-dominance .66, specificity (after dropping the item "When I have an imagined interaction, I often only have a vague idea of what the other person says" for low reliability) .66, retroactivity .68, variety .55, and proactivity .66 (after dropping the item "I often have imagined interactions before interacting with someone of importance" for low reliability). Characteristics of imagined interactions with reliability coefficients below .65 were excluded from further statistical analysis (i.e.,

frequency and variety). The participants then completed a modified version of the 24 items of Survey of Imagined Interactions written specifically for educational contexts that measures the functions of IIs. These 24 items measure self-understanding, rehearsal, catharsis, communication satisfaction, conflict management, compensation, and relational maintenance on a 7-point Likert scale. The reported reliability coefficients for functions of IIs were self-understanding .70, rehearsal .75, catharsis .61, communication satisfaction .89, conflict management .81, compensation .73, and relational maintenance .70 (Honeycutt, 2003). The reliability coefficients for functions of IIs in the current study were self-understanding .77, rehearsal .78, catharsis .71, communication satisfaction .71, conflict management .59, and compensation .80. Since relational maintenance was not appropriate to the educational context being examined, it was not included as a variable in the pilot study. The conflict management function of imagined interactions was excluded from later statistical analysis because of its low reliability coefficient (below .65). At the conclusion of the imagined interaction section are 14 items that gauge the participants' use of valence, frequency, and self-dominance (3 characteristics of IIs) modified to reflect educational contexts that have been hypothesized to be different between face-to-face and online students on a 7-point Likert scale. The reported reliability of the SII coefficients of these characteristics of IIs as referenced above were valence .85, frequency .76, and self-dominance .77 (Honeycutt, 2003). The reliability coefficients for these three characteristics of IIs in the educational context in the current study were valence .71 (after dropping the two items "I do not enjoy most of my imagined interactions with my instructor" and "My imagined interactions with my instructor are usually quite unpleasant" for low reliability), frequency .72, and selfdominance .71 (after dropping the items "My instructor has a lot to say in my imagined

interactions" and "When I have imagined interactions my instructor talks a lot" for low reliability).

The third section of the current study contains all the semantic differential items being examined and include 3 distinct scales assessing 2 self-reports about the participant's own motivation and 2 scales examining the students' perceptions of her/his instructor. The first scale in this section gauges the participant's motivation toward taking classes at the university in general. The participants complete 4 bipolar semantic differential items using a 7-point continuum. Beatty and Payne (1985) found reliability coefficients for the 4 items of .93 and .96 in the two separate administrations of the scale. The reliability coefficients for general participant motivation were .93 in the current study. The next section considers the participants' motivation toward taking his/her current English class. The participants complete 12 bipolar semantic differential items on a 7-point continuum that assess the students' interest in the specific course being analyzed. Christophel (1990) found reliability levels for the 12 items of .96. The reliability coefficients for participant motivation toward her/his specific English class were .87 in the current study (after dropping the four bipolar pairs "Involved/ Uninvolved," "Don't want to study/Want to study," "Inspired/Uninspired," and "Looks forward to it/Dreads it" for low reliability). The 12-item Student Motivation Scale (SMS) (Christophel, 1990) is usually administered so that the participant completes the scale twice: once measuring motivation toward education as a whole (trait) and a second time measuring motivation toward a certain course (state). Since the 4-item scale (Beatty & Payne, 1985) is already assessing trait motivation, it is unnecessary to repeat the second measurement of SMS concerned with trait behaviors. The third portion examines the students' perceptions of her/his instructor's general immediacy. The Generalized

Immediacy Scale (Anderson, 1979) consists of 9 semantic differential bipolar adjectives using a 7-point continuum. The 9 items are then summed. Anderson (1979) found reliability coefficients for the 9 items of .81. The reliability coefficients for the 4-item Generalized Immediacy Scale were .67 in the current study. The final section considers the participants' perception of his/her instructor's motivation toward the English class he/she is teaching. Like the previous administration, the participants completed 12 bipolar semantic differential items on a 7-point continuum that assess the students' perception of their instructors' interest in the specific course being analyzed. Christophel (1990) found reliability levels for the 12 items of .96. The reliability coefficients for the 12-item instructor motivation scale were .84 in the current study.

The fourth section of the pilot study examines student perceptions of their instructor's verbal immediacy behaviors and communicator competence. Gorham's (1988) Verbal Immediacy Behaviors (VIB) scale gauges student perception of their instructor's ability to communicate immediacy in verbal or written form as appropriate to the media. The VIB scale found split-half reliabilities on 17 items at .94. The reliability coefficients for the Verbal Immediacy Behaviors (VIB) were .87 in the current study (after dropping the item "Calls on students to answer questions even if they have not indicated that they want to talk" for low reliability). The second scale in this section is the Communicator Competence Questionnaire. The Communicator Competence Questionnaire (Monge, Backman, Dillard, & Eisenberg, 1982) consists of 12 items on a 7-point Likert scale. The scale developed primarily for organizational contexts measures two distinct factors: encoding and decoding competence. Since the pilot study corroborates Papa and Tracy (1988) findings of high correlation of factors, the two factors (encoding and decoding) will be treated as one factor. Monge, Backman, Dillard,

and Eisenberg (1982) found an average reliability level of .85 for both encoding and decoding for the both supervisors and subordinates in their initial research. The reliability coefficients for the Communicator Competence Questionnaire were .91 in the current study (after dropping the item "My instructor's writing is difficult to understand" for low reliability).

The final section of the instrument examines participant media preference and willingness to enroll with his/her instructor in another face-to-face or online course. The participants will disclose the frequency and preferred type of media (face-to-face, phone, email, and so on) they use with their instructors. These items were constructed by the researcher to assess if differences in media use are associated with perceptions of instructor competence. The willingness to take another course with the participants' instructor assesses the overall perception of the instructor.

Table 1.

		Online	Overall
	Face-to-Face		
Discrepancy	.68	.80	.75
Valence	.67	.76	.72
Frequency	.61	.68	.63
Self-Dominance	.66	.65	.66
Specificity	.62	.70	.66
Retroactivity	.65	.72	.68
Variety	.56	.55	.55
Proactivity	.69	.61	.66

Cronbach Alpha Reliabilities for Survey Instruments Used by Instructional Medium

Table 1 (Continued)

F	ace-to-Face	Online	Overall
Self-Understanding*	· .75	.79	.77
Rehearsal*	.84	.68	.78
Catharsis*	.64	.76	.71
Comm. Satisfaction'	* .61	.71	.71
Conflict Managemen	nt* .50	.61	.59
Compensation*	.78	.83	.80
Valence*	.61	.77	.71
Frequency*	.69	.75	.72
Self-Dominance*	.62	.74	.71
Student Trait Motivation	.96	.89	.93
Student State Motivation	.83	.89	.87
Instructor General Immediacy	.68	.66	.67
Instructor State Motivation	.91	.77	.84
Verbal Immediacy	.82	.90	.87
Communicator Competence	.89	.92	.91

CHAPTER 4

RESULTS

This chapter presents the results of the statistical analyses of the data from the current study. The results of the statistical procedures will be presented in the following manner. First, the statistical tests assessing the role of differences in participant characteristics for those enrolled in online instruction will be examined. Secondly, the relationship between participants enrolled in traditional face-to-face instruction versus online instruction will be tested. Additionally, a post hoc MANCOVA table assessing the variables examined in this study with age, G.P.A., and student trait motivation as covariates will be presented (see Table 6). Finally, a summary table of the results of the various hypotheses and research questions will be presented (see Table 7).

Online Instruction

Hypothesis 1 contends that females should be more likely to enroll in online English courses than will males. This hypothesis was tested using an independent samples t-test. This hypothesis was not supported. Female students were not more likely to enroll in and complete online English courses ($\underline{M} = 3.14$, $\underline{M} = 3.08$, respectively) than were male students ($\underline{M} = 2.99$, $\underline{t} = 0.31$, $\underline{p} = .38$; $\underline{M} = 2.94$, $\underline{t} = 0.28$, $\underline{p} = .38$).

The second hypothesis asserts that previous online coursework will be positively correlated with student motivation and perceptions of instructor immediacy. This hypothesis was partially supported. A Pearson product-moment correlation revealed that online coursework was positively associated with student trait and state motivation as well as instructor immediacy (although not at a statistically significant level). Online coursework and student trait motivation ($\underline{r} = .11$, $\underline{p} = .02$, $\underline{r}^2 = .01$) and student state motivation ($\underline{r} = .10$, $\underline{p} = .03$, $\underline{r}^2 = .01$) were both positively correlated at a statistically
significant level. The correlation between online coursework and instructor immediacy ($\underline{r} = .03, \underline{p} = .33$) was not statistically significant. A post hoc partial correlation matrix was run to see if G.P.A. and trait motivation were serving as suppressor variables masking variance in student state motivation toward their introductory English class. The correlations between previous online course work, student motivation, and instructor immediacy, controlling for G.P.A. and student trait motivation, were not statistically significant. The results suggest that online coursework and student state motivation ($\underline{r} = .07, \underline{p} = .11$) were still positively correlated but not at a statistically significant level. The results of partial correlation matrix revealed a change in direction for the relationship between online coursework and perceived instructor immediacy ($\underline{r} = .02, \underline{p} = .38$) from positively to negatively correlated when controlling for G.P.A. and student trait motivation, but not at a statistically significant level.

Face-To-Face Instruction Versus Online Instruction

The third hypothesis asserts that students in traditional (face-to-face) classes will perceive of more generalized and verbal immediacy in their instructors than will their online peers. This hypothesis was partially supported. Face-to-face students were more likely to perceive verbal immediacy ($\underline{M} = 3.39$) in their instructors than were online students ($\underline{M} = 3.05$, $\underline{t} = 4.38$, $\underline{p} < .001$, $\underline{d} = .68$) at a statistically significant level. Face-toface students were also more likely to perceive generalized immediacy ($\underline{M} = 5.46$) in their instructors than were online students ($\underline{M} = 5.34$, $\underline{t} = 1.04$, $\underline{p} = .15$) but not at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, face-to-face students were more likely to perceive verbal immediacy ($\underline{M} = 3.16$) in their instructor than were online students ($\underline{M} =$ 3.05, $\underline{t} = 0.89$, $\underline{p} = .19$) but not at a statistically significant level. For instructor 1, online

students were more likely to perceive generalized immediacy (M = 5.53) in their instructor than were face-to face students (M = 5.44, t = 0.56, p = .29) but not at a statistically significant level. For instructor 2, face-to-face students were more likely to perceive verbal immediacy (M = 3.66) and generalized immediacy (M = 5.49) in their instructor than were online students (M = 3.04, t = 5.13, p < .001, d = .75; M = 5.22, t = 1.30, p = .10) but only perceptions of verbal immediacy was at a statistically significant level. For instructor 3, face-to-face students were more likely to perceive verbal immediacy ($\underline{M} = 3.48$) in their instructor than were online students ($\underline{M} = 3.04$, $\underline{t} = 2.54$, <u>p</u> < .01, d = .34) at a statistically significant level. For instructor 3, face-to-face students were more likely to perceive generalized immediacy (M = 5.47) in their instructor than were face-to face students (M = 5.18, t = 1.03, p = .15) but not at a statistically significant level (see Table 2). Therefore, online and face-to-face students perceived different levels of verbal immediacy for 2 of the 3 English instructors, but the students perceived no difference in the generalized immediacy of any of their English instructors, regardless of the medium.

Table 2

	Face-to	o-Face	Onl	ine		
	М	SD	М	SD	t	р
Verbal Imm.	3.39	0.57	3.05	0.81	4.38	.000
General Imm.	5.44	1.04	5.34	1.13	1.04	.15

The Role of Instructional Medium on Perceptions of Instructor Verbal and Generalized Immediacy

Table 2 (Continued)

Instructor 1	Face-te	o-Face	Onl	line		
	М	SD	М	SD	t	р
Verbal Imm.	3.16	0.57	3.05	0.78	0.89	.19
General. Imm.	5.44	1.00	5.53	1.04	-0.56	.29
Instructor 2	Face-te	o-Face	On	line		
	М	SD	М	SD	t	р
Verbal Imm.	3.66	0.48	3.04	0.85	5.13	.000
General. Imm.	5.49	1.17	5.22	1.12	1.30	.10
Instructor 3	Face-te	o-Face	On	line		
	М	SD	М	SD	t	р
Verbal Imm.	3.48	0.58	3.04	0.81	2.54	.01
General. Imm.	5.47	0.96	5.18	1.31	1.03	.15

The fourth hypothesis contends that students in traditional (face-to-face) classes will perceive of more instructor motivation to teach their English course than will their online peers. This hypothesis was supported. Face-to-face students perceived more instructor motivation to teach this English course ($\underline{M} = 5.16$) than did the online students ($\underline{M} = 4.91$, $\underline{t} = 2.26$, $\underline{p} < .01$, $\underline{d} = .31$) at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, face-to-face students perceived more instructor motivation to teach this English course ($\underline{M} = 5.23$) than did the online students ($\underline{M} = 5.04$, $\underline{t} = 1.21$, $\underline{p} = .12$) but not at a statistically significant level. For instructor 2, face-to-face students perceived more instructor

motivation to teach this English course ($\underline{M} = 5.24$) than did the online students ($\underline{M} = 4.82$, $\underline{t} = 2.18$, $\underline{p} = .02$, $\underline{d} = .32$) at a statistically significant level. For instructor 3, face-to-face students perceived more instructor motivation to teach this English course ($\underline{M} = 4.90$) than did the online students ($\underline{M} = 4.83$, $\underline{t} = 0.28$, $\underline{p} = .39$) but not at a statistically significant level. While face-to-face students perceived more instructor motivation to teach the English course, it was significant for only 1 of instructors examined.

The fifth hypothesis claims that online students will have less state and trait motivation than will their face-to-face peers. This hypothesis was not supported. Online students had more motivation toward the specific English course (M = 4.75) than did face-to-face students ($\underline{M} = 4.38$, $\underline{t} = 3.13$, $\underline{p} = .001$, $\underline{d} = .46$) at a statistically significant level. Online students also had more trait motivation toward their education in general (M = 5.93) than did face-to face students (\underline{M} = 5.87, \underline{t} = 0.41, \underline{p} = .34) but not at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, online students had more motivation toward the specific English course ($\underline{M} = 4.49$) than did face-to-face students ($\underline{M} = 4.33$, t = 0.94, p = .18) but not at a statistically significant level. For instructor 1, online students also had more trait motivation toward their education in general (M = 6.41) than did face-to face students (M = 6.03, $\underline{t} = 1.87$, $\underline{p} = .03$, $\underline{d} = .27$) but unlike state motivation, it was at a statistically significant level. For instructor 2, online students had more state motivation ($\underline{M} = 4.93$) than did face-to-face students ($\underline{M} = 4.67$, $\underline{t} = 1.30$, $\underline{p} = .10$) but not at a statistically significant level. For instructor 2, face-to-face students had more trait motivation toward their education in general ($\underline{M} = 5.77$) than did online students ($\underline{M} = 5.60, \underline{t} = 0.61, \underline{p} =$.27) but not at a statistically significant level. For instructor 3, online students had more state motivation ($\underline{M} = 4.95$) than did face-to-face students ($\underline{M} = 4.09$, $\underline{t} = 3.31$, $\underline{p} < .001$, \underline{d}

= .47) at a statistically significant level. For instructor 3, online students also had more trait motivation toward their education in general ($\underline{M} = 5.70$) than did face-to-face students ($\underline{M} = 5.64$, $\underline{t} = 0.15$, $\underline{p} = .44$) but not at a statistically significant level. Therefore, online and face-to-face students reported different aggregate levels of state motivation, but it was statistically significant for only 1 of the 3 instructors examined. In addition, while there was no difference between online and face-to-face students on trait motivation levels in general, the online students of 1 of the 3 instructors reported statistically significant higher trait motivation than their face-to-face counterparts.

Hypothesis 6a claims that face-to-face students will have significantly more positive and frequent imagined interactions with their instructor than will online students. This hypothesis was partially supported. Face-to-face students did have more frequent imagined interactions with their instructors (M = 3.46) than did online students (M =3.14, $\underline{t} = 2.90$, $\underline{p} < .01$, $\underline{d} = .41$) at a statistically significant level, but online students had more positive interactions with their instructors (M = 4.38) than did face-to-face students $(\underline{M} = 4.17, \underline{t} = 2.35, \underline{p} < .01, \underline{d} = .32)$ also at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, faceto-face students had more frequent imagined interactions with their instructors (M = 3.22) than did online students ($\underline{M} = 3.16$, $\underline{t} = 0.37$, $\underline{p} = .36$), but online students had more positive interactions with their instructors ($\underline{M} = 4.35$) than did face-to-face students ($\underline{M} =$ 4.22, t = 0.94, p = .17) but neither were at a statistically significant level. For instructor 2, face-to-face students had more frequent imagined interactions with their instructors (M =3.81) than did online students ($\underline{M} = 3.08$, $\underline{t} = 4.08$, $\underline{p} < .001$, $\underline{d} = .62$) at a statistically significant level, but online students had more positive interactions with their instructors $(\underline{M} = 4.42)$ than did face-to-face students ($\underline{M} = 4.24$, $\underline{t} = 1.10$, $\underline{p} = .14$) but not at a

statistically significant level. For instructor 3, face-to-face students had more frequent imagined interactions with their instructors ($\underline{M} = 3.48$) than did online students ($\underline{M} = 3.24$, $\underline{t} = 1.02$, $\underline{p} = .16$) but not at a statistically significant level, but online students had more positive interactions with their instructors ($\underline{M} = 4.38$) than did face-to-face students ($\underline{M} = 3.96$, $\underline{t} = 2.48$, $\underline{p} < .01$, $\underline{d} = .36$) at a statistically significant level (see Table 3).

Hypothesis 6b contends that online students will use the self-dominance characteristic when having imagined interactions with their instructor than will face-toface students. This hypothesis was supported. Online students reported higher levels of self-dominance with their instructors (M = 4.46) than did the face-to-face students (M =4.04, t = 4.88, p < .001, d = .68) at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, online students reported higher levels of self-dominance with their instructors (M = 4.39) than did the face-to-face students ($\underline{M} = 4.02$, $\underline{t} = 2.67$, $\underline{p} < .01$, $\underline{d} = .41$) at a statistically significant level. For instructor 2, online students reported higher levels of selfdominance with their instructors (M = 4.50) than did the face-to-face students (M = 4.12, t = 2.86, p < .01, d = .40) also at a statistically significant level. For instructor 3, online students reported higher levels of self-dominance with their instructors (M = 4.52) than did the face-to-face students ($\underline{M} = 3.97$, $\underline{t} = 2.97$, $\underline{p} < .01$, $\underline{d} = .42$) also at a statistically significant level. Therefore, online students used the self-dominance characteristic of imagined interactions (modified for instructional contexts) more than face-to-face students did for all 3 English instructors.

Table 3

	Face-te	o-Face	On	ine		
	М	SD	Μ	SD	t	р
Frequency	3.46	0.99	3.14	1.03	2.90	.01
Valence	4.17	0.78	5.34	0.89	-2.35	.01
Instructor 1	Face-te	o-Face	Onl	ine		
	М	SD	М	SD	t	р
Frequency	3.22	1.11	3.16	0.99	0.37	.36
Valence	4.22	0.87	4.35	0.834	-0.94	.17
Instructor 2	Face-te	o-Face	Onl	ine		
	М	SD	М	SD	t	р
Frequency	3.81	0.78	3.08	1.11	4.08	.000
Valence	4.24	0.71	4.42	1.02	-1.10	.14
Instructor 3	Face-t	D-Face	On	ine		
		<u> </u>				
	М	SD	М	SD	t	р
Frequency	3.48	0.89	3.24	0.97	1.02	.16
Valence	3.96	0.62	4.38	0.74	-2.48	.01

The Role of Instructional Medium on Frequency and Valence of Imagined Interaction Used with Instructors

Research question 1 asks if there are any significant differences between the use of characteristics of imagined interaction (discrepancy, valence, self-dominance,

specificity, retroactivity, and proactivity) between face-to-face and online students. There were differences in the use of 1 characteristic of imagined interactions (i.e., proactivity) between face-to-face and online students at a statistically significant level. Online students reported higher levels of proactivity (M = 5.22) than did the face-to-face students (M = 4.80, t = 3.36, p = .001, d = .62) at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, there were no statistically significant differences in the use of the characteristics of imagined interaction (discrepancy, valence, self-dominance, specificity, retroactivity, and proactivity) between traditional face-to face and online students ($\underline{M} = 4.15$, $\underline{M} = 4.09$, $\underline{t} =$ 0.37, p = .71; M = 4.31, M = 4.29, t = 0.12, p = .91; M = 4.67, M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.77, t = -0.62, p = .91; M = 4.75, M = 4.75, M = 4.75, M = 4.75, M = -0.62, p = .91; M = -0.62,.54; M = 4.64, M = 4.76, t = -0.80, p = .42; M = 4.53, M = 4.41, t = 0.63, p = .53; M = 4.89, M = 5.15, t = -1.46, p = .15, respectively). For instructor 2, there was only 1 statistically significant difference in the use of the characteristics of imagined interactions between traditional face-to face and online students. Online students, for instructor 2, reported higher levels of proactivity (M = 5.29) than did the face-to-face students (M = 4.74, t = 2.37, p = .02, d = .36) at a statistically significant level. There were no statistically significant differences in the use of the remaining characteristics of imagined interactions (discrepancy, valence, self-dominance, specificity, and retroactivity) between traditional face-to face and online students ($\underline{M} = 4.07$, $\underline{M} = 3.98$, $\underline{t} = 0.56$, $\underline{p} = .58$; $\underline{M} =$ 4.41, $\underline{M} = 4.43$, $\underline{t} = -0.09$, $\underline{p} = .93$; $\underline{M} = 4.60$, $\underline{M} = 4.79$, $\underline{t} = -1.22$, $\underline{p} = .22$; $\underline{M} = 4.65$, $\underline{M} = -1.22$ 4.80, <u>t</u> = -0.80, <u>p</u> = .42; <u>M</u> = 4.63, <u>M</u> = 4.77, <u>t</u> = -0.66, <u>p</u> = .51, respectively). For instructor 3, there were no statistically significant difference in the use of the characteristics of imagined interactions between traditional face-to face and online students. Online students, for instructor 3, however, reported higher levels of proactivity

 $(\underline{M} = 5.22)$ than did the face-to-face students ($\underline{M} = 4.69$, $\underline{t} = 1.93$, $\underline{p} = .06$) at a level approaching statistical significance. There were no statistically significant differences in the use of the remaining characteristics (discrepancy, valence, self-dominance, specificity, and retroactivity) of imagined interactions between traditional face-to face and online students ($\underline{M} = 4.14$, $\underline{M} = 3.89$, $\underline{t} = 1.01$, $\underline{p} = .32$; $\underline{M} = 4.36$, $\underline{M} = 4.20$, $\underline{t} = -0.73$, $\underline{p} = .47$; $\underline{M} = 4.46$, $\underline{M} = 4.69$, $\underline{t} = -1.20$, $\underline{p} = .24$; $\underline{M} = 4.61$, $\underline{M} = 4.89$, $\underline{t} = -1.13$, $\underline{p} = .25$, respectively). While there was 1 characteristic of imagined interactions (proactivity) that was used more frequently by online students than face-to-face students, there was no significant difference between online and face-to-face students use of the other 5 characteristics of imagined interactions (discrepancy, valence, self-dominance, specificity, and retroactivity). In addition, only one of the three instructors' students reported a difference between proactivity use between the face-to-face and online students at a statistically significant level (see Table 4).

Table 4

	Face-to	o-Face	Online			
	М	SD	М	SD	t	р
Discrepancy	4.12	0.86	4.01	1.09	1.09	.28
Valence	4.32	0.78	4.36	0.87	-0.47	.64
Self-Dominance	4.60	0.86	4.76	0.95	-1.64	.10
Specificity	4.64	0.95	4.80	0.97	-1.55	.12
Retroactivity	4.53	1.09	4.57	1.13	-0.42	.66
Proactivity	4.80	1.16	5.22	1.13	-3.36	.001

Differences in the Use of Characteristics of IIs by Students Enrolled in Different Instructional Mediums

Research question 2 asks if there are any significant differences between the use of functions of imagined interactions (rehearsal, self-understanding, catharsis, compensation, and communication satisfaction) modified for instructional contexts toward their instructors between face-to-face and online students. There were differences in the use of 3 functions of imagined interactions (i.e., rehearsal, catharsis, and communication satisfaction) between face-to-face and online students at a statistically significant level. Online students reported higher levels of rehearsal (M = 5.02), catharsis $(\underline{M} = 4.62)$, and communication satisfaction ($\underline{M} = 5.00$) in their imagined interactions with their instructors than did the face-to-face students ($\underline{M} = 4.75, \underline{t} = 2.53, \underline{p} = .01, \underline{d} =$.36; $\underline{M} = 4.31$, $\underline{t} = 2.82$, $\underline{p} < .01$, $\underline{d} = .40$; $\underline{M} = 4.40$, $\underline{t} = 6.99$, $\underline{p} < .001$, $\underline{d} = .98$ respectively) at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, there was only 1 statistically significant difference in the use of functions of imagined interactions toward their instructors between face-to-face and online students. Online students, for instructor 1, reported higher levels of communication satisfaction (M = 4.90) use with their instructor than did the face-to-face students (M = 4.46, t = 3.40, p = .001, d = .48) at a statistically significant level. There were no statistically significant differences in the use of the remaining functions (rehearsal, self-understanding, catharsis, and compensation) of imagined interactions between traditional face-to face and online students with their instructor ($\underline{M} = 4.77, \underline{M} = 5.00, \underline{t} = -1.32, \underline{p} = .19; \underline{M} = 4.18, \underline{M} = 4.20, \underline{t} = -0.11, \underline{p} = .91;$ <u>M</u> = 4.28, <u>M</u> = 4.55, <u>t</u> = -1.60, <u>p</u> = .11; <u>M</u> = 3.85, <u>M</u> = 3.98, <u>t</u> = -0.61, <u>p</u> = .55, respectively). For instructor 2, there was also only 1 statistically significant difference in the use of functions of imagined interactions toward their instructor between face-to-face

and online students. Online students, for instructor 2, reported higher levels of

communication satisfaction (M = 5.05) use with their instructor than did the face-to-face students (M = 4.39, t = 4.41, p < .001, d = .62) at a statistically significant level. There were no statistically significant differences in the use of the remaining functions (rehearsal, self-understanding, catharsis, and compensation) of imagined interactions between traditional face-to face and online students with their instructor ($\underline{M} = 4.87, \underline{M} =$ 5.07, $\underline{t} = -1.17$, $\underline{p} = .24$; $\underline{M} = 4.36$, $\underline{M} = 4.26$, $\underline{t} = 0.39$, $\underline{p} = .69$; $\underline{M} = 4.41$, $\underline{M} = 4.66$, $\underline{t} = -1.17$ 1.36, p = .18; M = 4.12, M = 3.94, t = 0.88, p = .38, respectively). For instructor 3, there was also only 1 statistically significant difference in the use of functions of imagined interactions toward their instructor between face-to-face and online students. Online students, for instructor 3, reported higher levels of communication satisfaction (M = 5.11) use with their instructor than did the face-to-face students ($\underline{M} = 4.59$, $\underline{t} = 2.72$, $\underline{p} < .01$, \underline{d} = .39; \underline{M} = 4.29, \underline{t} = 4.61, \underline{p} < .001, \underline{d} = .65, respectively) at a statistically significant level. Online students, for instructor 3, also reported higher levels of rehearsal ($\underline{M} = 4.97$) and catharsis (M = 4.67) use with their instructor than did the face-to-face students (M =4.52, t = 1.78, p = .08; M = 4.22, t = 1.82, p = .07, respectively) at levels approaching statistical significance. There were no statistically significant differences in the use of the remaining functions (self-understanding and compensation) of imagined interactions between traditional face-to face and online students with their instructor ($\underline{M} = 4.09, \underline{M} =$ 4.00, $\underline{t} = 0.32$, $\underline{p} = .75$; $\underline{M} = 3.56$, $\underline{M} = 3.93$, $\underline{t} = -1.10$, $\underline{p} = .28$, $\underline{p} = .38$, respectively). While there were 3 functions of imagined interactions when modified for instructional contexts (i.e., rehearsal, catharsis, and communication satisfaction) that were used more often by online students than face-to-face students at a statistically significant level, all three instructors' students reported only a significant difference for the communication satisfaction function between online and face-to-face students. For all 3 instructors, the

other 4 functions of IIs (i.e., rehearsal, self-understanding, catharsis, and compensation) were not used statistically significantly differently between online and face-to-face students (see Table 5)

Table 5.

Differences in the Use of Functions of IIs by Students Enrolled in Different Instructional Mediums

	Face-to	o-Face	Online			
	Μ	SD	М	SD	t	р
Rehearsal	4.75	1.08	5.02	0.89	-2.53	.01
Self-Understand	4.21	0.99	4.19	1.05	0.13	.90
Catharsis	4.31	0.97	4.62	1.02	-2.82	.01
Compensation	3.87	1.25	3.96	1.25	-0.63	.53
Comm. Satisfact	4.40	0.75	5.00	0.82	-6.99	.000

Research question 3 asks if there is any difference between perceptions of instructor communicator competence between face-to-face and online students. There were no differences between face-to-face and online students perceptions of instructor communicator competence. While face-to-face students reported higher levels of communicator competence for their instructor ($\underline{M} = 5.35$) than did online students ($\underline{M} = 5.24$, $\underline{t} = 1.30$, $\underline{p} = .26$) it was not at a statistically significant level. Post hoc tests were run to see if the three different instructors had similar results. For instructor 1, online students, however, reported higher levels of communicator competence for their instructor 2, face-to-face students reported higher levels of their instructor 2, face-to-face students reported higher levels of communicator students reported higher levels of communicator competence for their instructor 2, face-to-face students reported higher levels of communicator competence for their instructor ($\underline{M} = 5.43$) than did online

students ($\underline{M} = 5.09$, $\underline{t} = 1.79$, $\underline{p} = .08$) at level approaching statistical significance. Instructor 3, like instructor 2, found that face-to-face students reported higher levels of communicator competence for their instructor ($\underline{M} = 5.44$) than did online students ($\underline{M} = 4.71$, $\underline{t} = 3.38$, $\underline{p} = .001$, $\underline{d} = .48$) at a statistically significant level. While the research question found no relationship between instructional medium and communicator competence, 2 of the 3 instructors' students reported statistically significant differences between the perceptions of online and face-to-face students on perceptions of instructor 1 was perceived of as more communicatively competent by the online students, while instructor 3 was perceived of as more communicatively competent by the face-to-face students.

Research question 4 asks if there is any difference in the frequency of media use for face-to-face and online students? There were significant differences between face-toface and online students' media use (email, telephone calls, mail, and personal visits). Online students reported more use of email ($\underline{M} = 3.98$), telephone calls ($\underline{M} = 0.99$), mail ($\underline{M} = 1.05$), and personal visits ($\underline{M} = 1.14$) than did the face-to-face students ($\underline{M} = 1.24$, <u>t</u> = 8.46, <u>p</u> < .001, <u>d</u> = .43; $\underline{M} = 0.13$, <u>t</u> = 8.80, <u>p</u> < .001, <u>d</u> = .21; $\underline{M} = 0.10$, <u>t</u> = 9.20, <u>p</u> < .001, <u>d</u> = .24; $\underline{M} = 0.78$, <u>t</u> = 2.48, <u>p</u> < .01, <u>d</u> = .15, respectively) at a statistically significant level.

Research question 5 asks if there is any difference in the frequency of media use by instructors with their face-to-face and online students? There were significant differences between instructor media use (email, telephone calls, mail, and discussion board) with their face-to-face and online students. Online students reported receiving more emails ($\underline{M} = 3.48$), telephone calls ($\underline{M} = 0.73$), mail ($\underline{M} = 2.91$), and discussion board posts ($\underline{M} = 2.02$) than did the face-to-face students ($\underline{M} = 1.42, \underline{t} = 7.73, \underline{p} < .001, \underline{d} = .51; \underline{M} = 0.07, \underline{t} = 10.44, \underline{p} < .001, \underline{d} = .37; \underline{M} = 0.09, \underline{t} = 8.31, \underline{p} < .001, \underline{d} = .68; \underline{M} = 0.12, \underline{t} = 10.35, \underline{p} < .001, \underline{d} = .34$, respectively) at a statistically significant level.

Table 6

Multivariate Analysis of Covariance of Age, G.P.A., and Student Trait Motivation on
Survey Instruments Used by Instructional Medium

Multivariate Tests									
Covariates	df	F	р	$\dot{\eta}^2$	power	Wilks' A			
Age	19/28	35 1.63	.03	.10	.94	.90			
G.P.A.	19/28	35 1.65	.02	.10	.95	.90			
Trait Motivation	19/28	85 7.66	.000	.34	1.00	.66			
Instructional Medium	19/28	35 7.10	.000	.32	1.00	.68			
			Age						
Dependent Variable	df	F	р	$\dot{\eta}^2$	powe	er			
Discrepancy	1	0.49	.49	.002	.11				
Valence	1	7.74	.01	.03	.79				
Self-Dominance	1	0.39	.53	.001	.10				
Spacificity	1	1 24	26	004	20				

		A	Age		
Dependent Variable	df	F	р	$\acute{\eta}^2$	power
Discrepancy	1	0.49	.49	.002	.11
Valence	1	7.74	.01	.03	.79
Self-Dominance	1	0.39	.53	.001	.10
Specificity	1	1.24	.26	.004	.20
Retroactivity	1	0.64	.43	.002	.13
Proactivity	1	0.01	.95	.000	.05
Self-Understanding*	1	0.65	.42	.002	.13
Rehearsal*	1	2.68	.10	.009	.37
Catharsis*	1	1.49	.22	.005	.23
Comm. Satisfaction*	1	1.63	.20	.005	.25
Compensation*	1	7.10	.01	.02	.76
Valence*	1	0.01	.95	.000	.05
Self-Dominance*	1	1.60	.21	.005	.25
Frequency*	1	1.30	.26	.004	.21
State Motivation	1	0.12	.73	.000	.06
General Immediacy**	1	4.62	.03	.02	.57
Specific Motivation**	1	11.89	.001	.04	.93
Verbal Immediacy**	1	0.02	.89	.000	.05
Commun. Competence**	1	0.60	.44	.002	.12

* modified for instructional context

** measures perceptions of instructor's educational behaviors

		G.	P.A.			
Dependent Variable	df	F	р	$\acute{\eta}^2$	power	
Discrepancy	1	0.01	.93	.000	.05	
Valence	1	6.07	.01	.02	.69	
Self-Dominance	1	6.45	.01	.02	.72	
Specificity	1	0.11	.74	.000	.06	
Retroactivity	1	1.78	.18	.006	.27	
Proactivity	1	0.01	.96	.000	.05	
Self-Understanding*	1	0.32	.57	.001	.09	
Rehearsal*	1	0.34	.56	.001	.09	
Catharsis*	1	0.23	.64	.001	.08	
Comm. Satisfaction*	1	1.91	.17	.006	.28	
Compensation*	1	1.21	.27	.004	.20	
Valence*	1	1.75	.19	.006	.26	
Self-Dominance*	1	0.34	.56	.001	.09	
Frequency*	1	3.57	.06	.01	.47	
State Motivation	1	2.95	.09	.01	.40	
General Immediacy**	1	1.82	.18	.006	.27	
Specific Motivation**	1	0.16	.69	.001	.07	
Verbal Immediacy**	1	5.28	.02	.02	.63	
Commun. Competence**	1	2.53	.11	.008	.35	

* modified for instructional context
** measures perceptions of instructor's educational behaviors

Trait Motivation							
Dependent Variable	df	F	р	$\acute{\eta}^2$	power		
Discrepancy	1	0.09	.77	.000	.06		
Valence	1	0.46	.50	.002	.10		
Self-Dominance	1	5.80	.02	.02	.67		
Specificity	1	0.12	.73	.000	.06		
Retroactivity	1	0.91	.34	.003	.16		
Proactivity	1	4.77	.03	.02	.59		
Self-Understanding*	1	0.08	.78	.000	.06		
Rehearsal*	1	1.35	.25	.004	.21		
Catharsis*	1	0.59	.44	.002	.12		
Comm. Satisfaction*	1	0.13	.72	.000	.07		
Compensation*	1	0.01	.91	.000	.05		
Valence*	1	0.02	.88	.000	.05		
Self-Dominance*	1	0.89	.35	.003	.16		

Table 6 (Continued)

Dependent Variable	df	F	р	$\acute{\eta}^2$	power	
Frequency*	1	2.81	.10	.009	.37	
State Motivation	1	73.87	.000	.20	1.00	
General Immediacy**	1	24.51	.000	.08	1.00	
Specific Motivation**	1	30.01	.000	.09	1.00	
Verbal Immediacy**	1	2.35	.13	.008	.33	
Commun. Competence**	1	17.87	.000	.062	.99	

* modified for instructional context

** measures perceptions of instructor's educational behaviors

Instructional Medium								
Dependent Variable	df	F	р	ή ²	power			
Discrepancy	1	0.02	.88	.000	.05			
Valence	1	1.21	.27	.004	.20			
Self-Dominance	1	0.60	.44	.002	.12			
Specificity	1	0.45	.51	.001	.10			
Retroactivity	1	0.56	.46	.002	.12			
Proactivity	1	5.41	.02	.02	.64			
Self-Understanding*	1	0.40	.53	.001	.10			
Rehearsal*	1	5.37	.02	.02	.64			
Catharsis*	1	6.36	.01	.02	.71			
Comm. Satisfaction*	1	45.01	.000	.13	1.00			
Compensation*	1	3.44	.06	.01	.46			
Valence*	1	3.84	.05	.01	.50			
Self-Dominance*	1	25.17	.000	.08	1.00			
Frequency*	1	2.43	.12	.008	.36			
State Motivation	1	10.14	.002	.03	.89			
General Immediacy**	1	0.02	.90	.000	.05			
Specific Motivation**	1	0.03	.86	.000	.05			
Verbal Immediacy**	1	12.15	.001	.04	.94			
Commun. Competence**	1	1.70	.19	.006	.26			
* modified for instructional of	context							
** measures perceptions of instructor's educational behaviors								

Table 7

Summary Table of the Results of the Hypotheses and Research Questions

Hypotheses and Research	Questions
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Results

H1: Females will be more likely than males to enroll in online English courses. Not Supported

Hypotheses and Research Questions		Results
H2:	Previous online coursework will be positively correlated with both student motivation and perceptions of instructor immediacy toward the online English course.	Not Supported
H3:	Students in traditional (face-to-face) classes will perceive of more generalized and verbal immediacy in their instructors than will their online peers.	Partial Support
H4:	Students in traditional classrooms will rate instructors' motivation levels higher than will online students.	Supported
H5:	Students in online classes will have less motivation (state and trait) than will students in traditional (face-to-face) classes.	Not Supported
H6a:	Students in traditional (face-to-face) classes will have significantly more positive and frequent imagined interactions with their instructor than will online students.	Partial Support
H6b:	Online students will use the self-dominance characteristic when having imagined interactions with their instructor more often than traditional face-to-face students.	Supported
RQ1:	Are there any significant differences in the use of the characteristics of imagined interaction (discrepancy, valence, frequency, self-dominance, specificity, retroactivity, variety, and proactivity) between traditional face-to-face and online students.	Partial Relationship
RQ2:	Are there any significant differences in the use of the functions of imagined interactions (rehearsal, self-understanding, catharsis, compensation, conflict management, and communication satisfaction) toward their instructors between traditional face-to-face and online students.	Partial Relationship

Table 7 (Cont.)

Hypotheses and Research Questions		Results
RQ3:	Is there any difference between perceptions of instructor communicator competence between face-to-face and online students?	No Relationship
RQ4:	Is there any difference in the frequency of media use for traditional face-to-face and online students?	Relationship
Table	/ (continued)	
RQ5:	Is there any difference in the frequency of media use by instructors with their face-to-face and online students?	Relationship

CHAPTER 5

DISCUSSION

The primary purpose of the current study was to examine the effects of instructional medium on student perceptions. While 2 hypotheses examined the role of biological sex and previous enrollment, the remaining hypotheses examined the relationship between traditional face-to-face student and asynchronous online student perceptions. More specifically, these hypotheses and research questions looked at the differences between face-to-face and online student use of the characteristics of imagined interactions, the functions of imagined interactions (modified for instructional contexts), and the perceptions of an instructor on several instructional communication scales used in previous research. The purpose of this chapter is to discuss the results of the current study and the subsequent implications for instructional communication contexts. The chapter will conclude with a section describing the limitations of the current study and a section suggesting directions for future research.

Summary of Hypotheses and Research Questions

The first section of this discussion interprets the results of the hypotheses and research question articulated previously. The analysis of these results illuminates some important issues related to perceptions about instructional communication strategies. <u>Online Instruction</u>

The first two hypotheses examine characteristics of online students. The results do not support previous research concerning the biological sex composition of online courses and the role of previous coursework on student self-reports of motivation and perceptions of immediacy in their online instructors. Hypothesis 1 argued that females would be more likely to enroll in online English courses than will males based upon the

research by Sikora (2002). While Sikora's (2002) research was a meta-analysis of Department of Education statistics, it was not supported in the sample collected for this study. It is likely that this disconnect is representative of the changing nature and evolution of the online environment and the online student body. Today's online student body is dramatically different than the online student body that existed when Sikora's 2002 study was conducted. It is likely that in even another five years there will be a significantly different online student body than exists today. Therefore this shift to a more balanced student body may be expected.

Hypothesis 2 asserted that previous online coursework would be positively correlated with student motivation and perceptions of instructor immediacy in online students. While the results showed a significant difference between previous online coursework and self-reported trait and state motivation, but no difference between previous online coursework and perceptions of instructor immediacy, the post hoc partial correlation matrix found no difference when controlling for G.P.A. and student trait motivation. Initially, the previous work of Vonderwell and Zachariah (2005) was supported, while the research by Swan (2002) was not, but the post hoc partial correlation matrix suggests that neither set of research findings were supported. The partial correlation matrix findings suggest that student trait motivation and G.P.A. are important variables for understanding self-reported state motivation or perceived instructor immediacy. Swan (2002) argued that online instructors would use more verbal immediacy messages to adapt to the loss of communicative channels (nonverbal) in distance education settings, the students with previous online coursework did not perceive any more immediacy than those without previous online coursework.

Face-To-Face Instruction Versus Online Instruction

The next 3 hypotheses and 5 research questions examined the differences between traditional and online students' perceptions of immediacy, motivation, communication competence and imagined interactions. The results partially support previous research that stresses the importance of these constructs in different instructional settings. First, verbal and general immediacy are important perceptions of both traditional and online students. Second, traditional students tend to have more positive perceptions of instructor motivation than online students do. This is likely related to nonverbal communication, which is largely inaccessible by most online students. Since the face-to-face students have access to both nonverbal and verbal immediacy, which are paired in traditional educational settings, they may view their instructors as more positively and therefore perceive more instructor motivation than online students. Third, contrary to previous research, online students tended to self-report higher levels of state motivation toward their introductory English course. This may be a difference related to the shift in the online student body. As online education is becoming more common, students are becoming more familiar with what it takes to be a successful online student. The result is a more self-motivated online student body. Fourth, imagined interactions and mediated communication were used by both used by traditional and online students to facilitate different aspects of their educational experience. This was not surprising with the growth of mediated communication, such as email, even within traditional classes. Finally, despite controls on length of instructional experience, diversity of instructional experience, and type of course, differences in instruction played a significant role in perceptual differences.

Hypothesis 3 contended that traditional (face-to-face) students would perceive of more generalized and verbal immediacy in their instructors than would their online peers. The results found that face-to-face students were more likely to perceive verbal immediacy in their instructors than were online students, but there was no statistically significant difference between face-to-face and online students' perceptions of generalized immediacy. The results supported the majority of previous research on immediacy that had focused on the importance of the nonverbal (or paired) nonverbal/ verbal immediacy (Anderson, 1979; Gorham & Christophel, 1990; McCroskey, Richmond, & Bennett, 2006, Plax, Kearney, McCroskey, & Richmond, 1986; Richmond, Gorham, & McCroskey, 1993). The results did not, however, support the nonverbal/ verbal advantage of traditional students with regard to Generalized Immediacy. None of the instructors found a statistically significant difference between their face-to-face and online students on the Generalized Immediacy Scale. These results support Kearney's (1994) contention that the GI measures "gestalt" perceptions of immediacy. This may be a result of paired relationship between verbal and nonverbal immediacy. The implication here would be that it became more difficult for students to detect verbal immediacy in the absence of nonverbal immediacy.

Hypothesis 4 argued that students in traditional (face-to-face) classes would perceive of more instructor motivation to teach their introductory English course. The results supported this hypothesis as well as the previous research on student motivation and immediacy (Christophel 1990, Frymier, 1993; Richmond, 1990) especially in low state motivation students (like those in an introductory general education required English course). Only one of the three instructors sampled was perceived of as more motivated by face-to-face students to teach the introductory English class at a statistically

significant level than the online students.

Hypothesis 5 claimed that online students would have less state and trait motivation than face-to-face students. The results revealed that online students had more state and trait motivation. The online students' motivation toward their introductory English class was at a statistically significant level. These results contradicted the previous research by Qureshi, Morton, and Antosz (2002) that found that online students were less motivated than traditional face-to-face students. It is likely that this is representative of the shift in the online student body. As online education becomes more common, students are becoming more aware of the need for self-motivation in online courses. As this awareness is becoming more prevalent, online courses are drawing more motivated students. Also, students who need the structure of traditional courses are seemingly avoiding online education.

Hypothesis 6a argued that face-to-face students would have significantly more positive and frequent imagined interactions with their instructors. The results revealed that face-to-face students did have more frequent imagined interactions with their instructors, but online students had more positive interactions with their instructors. One rationale for the increased valence in online students is the role of the II characteristic of self-dominance. As online students are less likely to have actual interactions with their instructors that might cause discrepancy, they must rely on self-dominated intrapersonal communication. It then follows that if the interactions are largely repetitive self-dominant intrapersonal communication, these are then likely to be perceived as more positive. Since traditional face-to-face students experience both nonverbal and verbal immediacy, they should have a higher degree of valence (Gorham & Christophel, 1990; Honeycutt, 2003; McCroskey, Richmond, & Bennett, 2006; Richmond, Gorham, & McCroskey,

1993), but the online students actually had more positive interactions with their instructors. Even though frequency deals only with the relative number of IIs and is not tied to any particular type or form of imagined interaction (Honeycutt, 2003), face-to-face students had more frequent imagined interactions with their instructors than did online students.

Hypothesis 6b contended that online students would use the self-dominance characteristic when having imagined interactions with their instructor than will face-toface students. The results revealed this hypothesis to be accurate. Online students reported higher levels of self-dominance with their instructors than did the face-to-face students. The nature of online communication, and the fact that many online students have never seen or heard their instructor, would suggest that online instructional settings will be largely self-dominant.

Research question 1 asked about differences between the use of characteristics of imagined interaction (discrepancy, valence, frequency, self-dominance, specificity, retroactivity, variety, and proactivity) between face-to-face and online students. The only two characteristics of IIs which were significantly different were variety and proactivity. Online students reported higher levels of both variety and proactivity than did the face-to-face students. These results might suggest an important difference between online and face-to-face students arises in their predispositions toward intrapersonal communication.

Research question 2 asked about differences between the use of functions of imagined interactions (rehearsal, self-understanding, catharsis, compensation, conflict management, and communication satisfaction) modified for instructional contexts toward their instructors between face-to-face and online students. There were differences in the use of 4 functions of imagined interactions (i.e., rehearsal, catharsis, conflict

management, and communication satisfaction) between face-to-face and online students. Online students reported higher levels of rehearsal, catharsis, conflict management, and communication satisfaction in their imagined interactions with their instructors than did the face-to-face students at a statistically significant level. These results suggest that in instructional settings online students are forced to use intrapersonal communication more often than interpersonal communication.

Research question 3 asked about differences between perceptions of instructor communicator competence between face-to-face and online students. While there were no significant differences between face-to-face and online students perceptions of instructor communicator competence, there were differences between 2 of the 3 sets of students on their instructor's communicator competence at a statistically significant level, but interestingly for opposing sets of students (online and face-to-face). The results suggest that for communicator competence instructor differences are more important that medium.

Research question 4 asked if there were any differences in the frequency of media use for face-to-face and online students? There were significant differences between face-to-face and online students' media use (email, telephone calls, mail, and personal visits). Online students reported more frequent use of all types of media queried about. While this is not counter-intuitive, these results suggest that online students are actively involved in multi-channel communication with their instructors.

Research question 5 asked if there were any difference in the frequency of media use by instructors with their face-to-face and online students? There were significant differences between instructor media use (email, telephone calls, mail, and discussion board) with their face-to-face and online students. Online students reported receiving

more emails, telephone calls, mail, and discussion board posts than did the face-to-face students. While not counter-intuitive, these results suggest that instructors of online students need to be actively involved in multi-channel communication with their students.

Implications

General

There are several implications about the relationship between instructional setting and instructional strategies that need to be considered. The first implication is that online demographics are not static. While previous research undoubtedly examined a large sample, if not the whole population of online students (Sikora, 2002), online students as well as the courses being taken are rapidly changing. Online students at Northwestern State University will be different from online students at Louisiana State University, Indiana State University, or George Washington University. The students attending them have different experiences and aspirations. Meta-analyses may offer a broad outline of changes in distance education but offers little insight into its role at a regional, state, or specific university level.

The second implication of this project is that conceptions of instructional constructs like immediacy, student motivation, and communication competence need to be re-operationalized. Most of the scales used in this study were designed before or during the infancy of the internet revolution and as such are operationalized for traditional students. That is not to say that these scales should be discarded but rather they should be broadened to acknowledge the changing student body. The Generalized Immediacy Scale, for example, might be a better instrument for comparing immediacy in different education contexts since it gives a general impression of immediacy and not just one part of the nonverbal/ verbal conception of immediacy.

A third implication of this study is that there should be additional emphasis on intrapersonal communication strategies when examining instructional strategies and contexts. The fact that online students had more frequent imagined interactions and used more of the functions of IIs suggests that the online students used IIs to compensate for the lack of more traditional interpersonal communication in face-to-face classes.

The final implication of this project is that both traditional and online students are very diverse. It is possible to make some assumptions about the different groups, but individuals and sub-groups still differ widely. For example, most face-to-face students like to email their professors (especially about absences, etc) and most online students prefer to speak to their professors in person. The idea that traditional and online students are monolithic collections of students is flawed. Additionally, the notion that online education will replace traditional face-to-face education or vice-a-versa is also flawed. The future of education is probably one of blended instructional contexts that fit the lifestyles and time constraints of the students. For that reason alone, much more research needs to be done to assist instruction in different contexts including compressed video, online, and webcasts to name just a few possibilities.

Online Instruction

The implications of this study for online instruction are largely mixed. The first positive finding with implications for distance education is that online students perceive of their instructors as generally immediate. This is significant because it reinforces the efforts of the educators currently implementing these online educational programs. It suggests that instructional strategies are keeping pace with technological advances and that future online education programs have a pedagogical foundation on which to build.

Another positive implication of this study is that the type of student being drawn to online education is highly motivated. This study found, in contrast to previous research, that online students tended to have at least equivalent trait motivation toward education as a whole and more state motivation in taking this general education English course than did traditional students. The benefits of drawing highly motivated students are self-evident and refute perceptions that online student may be taking these classes to avoid the responsibilities of face-to-face classes.

The final positive implication for online instruction is that online students tend to use intrapersonal communication to compensate for the lack of interpersonal communication usually found in online courses. This means that online students are more likely to utilize the functions of IIs than their face-to-face counterparts. This compensatory communication strategy allows students to connect with the instructor that might otherwise be lacking in this instructional medium.

These positive implications, however, cannot completely compensate for the faceto-face interactions that are available to students who take traditional classes. First, online students did not perceive of their instructors as being as verbally immediate. As verbal and nonverbal immediacy are inherently bound together, being deprived of one (nonverbal immediacy) can and seemed to have a dramatic effect on perceptions of the other (verbal immediacy). Additionally, the online students still had a great need for interpersonal interactions with their instructors that could not be fully compensated for with intrapersonal communication. The significant increase of all types of media use by online students, assuming that some contact was simply for clarification, suggests that this increased contact was an effort to bridge an interpersonal gap.

Directions for Future Research

Instructional communication research is a difficult undertaking. Many factors, other than biological sex, previous enrollment, use of intrapersonal communication techniques, instructional strategies, and frequency of contact, account for student perceptions of their instructors. While some of the hypotheses and research questions had moderate to large effect sizes suggesting that these variables account for a significant amount of the variance of student perceptions (e.g., verbal immediacy) in different educational contexts, several hypotheses were either not supported (e.g., biological sex and online enrollment, Sikora, 2002, Savicki, Kelley, & Ammon, 2002) or were statistically significant in the opposite direction than that hypothesized (e.g., motivation, Qureshi, Morton, & Antosz, 2002).

Future research should continue to examine other characteristics of the studentteacher dynamic in higher education to determine what effect they might have on student perceptions and educational outcomes. The role of instructor physical characteristics, especially age and attractiveness, on student perceptions of immediacy in both online and face-to-face settings should be examined. Will attractive and youthful instructors be perceived of as more immediate, communicatively competent, and motivated?

Additionally, research on the effect of gender on student perceptions need to be undertaken. While it is essential that other instructor characteristics be examined, additional efforts to improve the study of instructional communication research must also be begun. Continued efforts to refine and control for educational variables that confound the results are essential to increasing our understanding of the complex interrelationships among instructional communication.

Another area that needs further examination is the role of race/ethnicity on student perceptions. Not only does the race/ethnicity of the student need to be analyzed, but also the race/ethnicity of the instructor. The university at which the data was collected has a large African-American student population. To assess possible differences in perception between Caucasian and African-American students, a post hoc test was run on the various scales used and race/ethnicity. The results suggest that student race/ethnicity significantly affected use of the following characteristics and functions of IIs modified for instructional context: self-dominance, frequency, rehearsal, catharsis, communication satisfaction, conflict management. While no other scales reflected significant differences based upon race/ethnicity this might also be the result of the race/ethnicity of the instructors in the study all of whom where Caucasian.

The results of this study have lead to a significant number of questions to pose for future research. The first arena of future research came not from the results section, but from the methods themselves. In this study, I utilized a cross sectional base (3 instructors) for one semester. In future studies I believe it would be valuable to utilize two other methods. The first would be a long-term longitudinal study of one instructor to address consistency issues. The second would be a shorter longitudinal study of two instructors that would include a qualitative component for of evaluating instructor behaviors. This would address which differences in behavior may affect the students' perceptions of the instructors' communication competence, imagined interaction, and immediacy.

Finally, as online instructional opportunities become more common in other educational settings, additional research should be done these areas to assist efforts to improve educational outcomes.

Conclusion

This dissertation extends the communication research on the use of intrapersonal communication and perceptions of instructional behaviors by students enrolled in different instructional formats. In summary, the results revealed that controlling for differences between instructors had unanticipated results that did not always support previous research. As articulated above this research project has both supported and contradicted previous research on immediacy, motivation, and communication competence. While instructional format does affect various instructional variables, it is important to recognize that for the most part face-to-face and online students still have the same ultimate goal: graduation. Efforts to understand and improve the educational strategies that increase completion rates for college and university students are vital to the continued vibrancy of higher education. Future research should focus on other characteristics that might affect instructional communication and subsequent learning including age, gender roles, and race/ethnicity, to name only a few.

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APPENDIX A: PILOT STUDY INSTRUMENT

Study Title: Imagined Interactions, Communication Competence, and Immediacy in Traditional and Distance Classes

Performance Site: Northwestern State University

Principal Investigator: Tammy L. Croghan 314 G Kyser Hall Northwestern State University (318) 357-6462 office phone <u>CroghanT@nsula.edu</u> email address

The purpose of this study is to assess individual perception of differences in communicative interactions in different educational environments. This research aims to improve instructional strategies. Only the principal investigator will have access to these questionnaires which will have the consent form removed before any data is entered. While the results of this study may be published, no identifying information will be released. There is no known risk to the participants that exceeds normal daily risk. Participants must be 18 years of age or older. **Participation is completely voluntary. Participants may choose not to participate or withdraw from the study at any time without any adverse consequences (nonparticipation will have no impact on student's grade).** Any questions about this research or your rights as a participant should be directed to the principal investigator listed above.

By signing below, you understand and agree to participate in the study described above.

Signature of i articipant

Date

If you wish to receive a copy of the results of this study please supply the following information:

E-mail address

Please complete the following questions about you personally as accurately as possible.

100

Demographics:

1.	Biological Sex:	Male	Female
2.	Age:		
3.	Enrollment Status:	Senior Sophomore Graduate	Junior Freshman Other (specify)
4.	Country of Origin:	United States	Other (specify)
5.	If your country of orig	in is the United States, please s	specify your ethnicity (circle as
	many as apply):	African American	Asian American
		European American/ White	Latino/a
		Middle Eastern American	Native American
		Pacific Islander	Other (specify)
6.	Academic Major:		
7.	English courses comp	leted satisfactorily (C or Better)) excluding this class:
		None	1 - 2 courses
		3 - 4 courses	5 or more courses
8.	Distance learning or o	nline courses completed satisfa	ctorily (C or Better):
		None	1 - 2 courses
		3 - 4 courses	5 or more courses
9.	Distance learning or o	nline courses taken for credit:	
		None	1 - 2 courses
		3 - 4 courses	5 or more courses
10.	Approximate G.P.A. (Grade Point Average):	

Part Two

The second part of this questionnaire asks you to respond to several instruments and scenarios. Some questions are similar to previous questions. This is necessary for statistical reasons. All responses are voluntary and confidential.

Imagined interactions (IIs) are mental interactions we have with others who are not present. People may have imagined conversations that occur in selfcontrolled daydreams or while the mind wanders. Sometimes they may occur after a real interaction has taken place. IIs may be brief or long. They may be ambiguous or detailed. They may address a number of topics or examine one topic exclusively. The interactions may be one sided, where the person imagining the discussion does most of the talking, or they may be more interactive, where both persons take an active part in the conversation.

Directions: Rank the following items on how you personally use imagined interactions.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree		Agree nor		Agree	Strongly
Disagree			Disagree			Agree

- 1. I have IIs many times throughout the week.
- 2. I often have imagined interactions *before* interacting with someone of importance.
- 3. Most of my imagined interactions are with different people.
- 4. I often have imagined interactions *after* interacting with someone of importance.
- 5. When I have imagined interactions about a conversation, they tend to be detailed and well developed.
- 6. I have recurrent imagined interactions with the same individual.
- 7. In my real conversations, I am very different than in my imagined ones.
- 8. After important meetings, I frequently imagine them.
- 9. Most of my imagined interactions are with the same person.
- 10. I usually say in real life what I imagined I would say.
- 11. My imagined interactions usually involve conflicts or arguments.
- 12. When I have imagined interactions, the other person talks a lot.
- 13. I frequently have imagined interactions.
- 14. I do not enjoy most of my imagined interactions.
- 15. When I have a real conversation that I have imagined, the actual conversation is very different than what I imagined.
- 16. After I meet someone important, I imagine my conversation with them.
- 17. I rarely imagine myself interacting with someone else.
- 18. In my real conversations, other people are very different than in my imagined ones.
- 19. My imagined interactions are quite similar to the real conversations that follow them.
- 20. I enjoy most of my imagined interactions.
- 21. It is hard recalling the details of my imagined interactions.
- 22. My imagined interactions are very specific.
- 23. My imagined interactions are usually quite unpleasant.
- 24. I talk a lot in my imagined interactions.

Directions: Continue to rank the following items on how <u>you personally</u> use imagined interactions.

	2		4	5		 7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Disagree	Disagree		Disagree		Agree	Agree

- 25. The other person has a lot to say in my imagined interactions.
- 26. My imagined interactions are usually enjoyable.
- 27. The other person dominates the conversation in my imagined interactions.
- 28. My imagined interactions usually involve happy or fun activities.
- 29. Before important meetings, I often imagine them.
- 30. I have imagined interactions with many different people.
- _____31. I dominate the conversation in my imagined interactions.
- 32. In my imagined interactions, I can "hear" what the other person says.
- 33. Before I meet someone important, I imagine a conversation with them.
- _____34. More often than not, what I actually say to a person in a real conversation is different from what I imagined I would say.
 - ____35. More often than not, what the other person says in a real conversation is different from what I imagined he or she would say.
 - ____36. When I have an imagined interaction, I often only have a vague idea of what the other persons says.
 - ____37. My imagined interactions about work tend to be on a lot of different topics

Directions: Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught in a <u>traditional (face-to-face) classroom</u>.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree		Agree nor		Agree	Strongly
Disagree	_		Disagree		-	Agree

- ___38. Imagined interactions helped me to talk about feelings or problems with the instructor.
- 39. The imagined interactions helped me understand my instructor better.
- 40. The imagined interactions helped me understand myself better.
- 41. The imagined interaction helped me clarify my thoughts and feelings with the instructor.
 - 42. The imagined interaction helped me plan what I was going to say to the instructor.
 - ____43. I had imagined interactions before having a conversation with the instructor knowing I would be evaluated.
 - _____44. The imagined interactions with my instructor helped me relieve tension and stress.
 - 45. The imagined interaction made me feel more confident when I thought I was going to actually talk with the instructor.
 - _____46 I had imagined interactions to practice what I was actually going to say to the instructor.

Directions (continued): Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught in a <u>traditional (face-to-face)</u> <u>classroom</u>. Use the following scale:

		2				 7
Very	2 Strongly	Disagree	4 Neither	Agree	Strongly	Very
Strongly Disagree	Disagree		Agree or Disagree		Agree	Strongly Agree

- 47. The imagined interactions helped me to reduce uncertainty about the instructor's actions and behaviors.
 - ____48. The imagined interactions I had with this instructor were very enjoyable.
 - 49. I was very satisfied with the conversation with this instructor
 - 50. I enjoyed the conversation.
- _____51. I relive old arguments in my mind.
- 52. It is sometimes hard to forget old arguments.
- 53. Imagining talking to someone substitutes for the absence of real communication.
- 54. I often cannot get negative imagined interactions "out of mind" when I'm not angry.
- ____55 Imagined interactions can be used to substitute for real conversations with a person.
 - 56. Imagined interactions sometimes help me manage conflict.
 - 57. By thinking about the upcoming conversation with my instructor, imagined interactions help relieve tension and stress.
- 58. Imagined interactions may be used to compensate for the lack of real face-toface communication
- 59. I do not enjoy most of my imagined interactions with my instructor.
- 60. I dominate the conversation in my imagined interactions with my instructor.
- 61. I enjoy most of my imagined interactions with my instructor
- 62. When I have imagined interactions, my instructor talks a lot
- 63. My imagined interactions with my instructor are usually quite unpleasant.
- 64. I frequently have imagined interactions with my instructor.
- 65. My imagined interactions with my instructor are usually enjoyable.
- 66. I talk a lot in my imagined interactions with my instructor.
- 67. My instructor has a lot to say in my imagined interactions.
- 68. My imagined interactions with my instructor usually involve happy or fun activities
- 69. I have recurrent imagined interactions with my instructor.
- 70. My instructor dominates the conversation in my imagined interactions.
- 71. I rarely imagine myself interacting with my instructor.
- 72. I have IIs with my instructor many times throughout the week.

Directions: Please circle the number toward either word that best represents your feelings about your instructor when they taught in a <u>traditional classroom</u>:

Please circle the number that corresponds to the word that best describes the teaching style of your instructor:

73.	Immediate	1	2	3	4	5	6	7	Not Immediate
74.	Cold	1	2	3	4	5	6	7	Warm
75.	Unfriendly	1	2	3	4	5	6	7	Friendly
76.	Close	1	2	3	4	5	6	7	Distant

Please circle the number that corresponds to the word that best describes your perception of your instructor's level of interest in teaching this English course:

77.	Motivated	1	2	3	4	5	6	7	Unmotivated
78.	Interested	1	2	3	4	5	6	7	Uninterested
79.	Involved	1	2	3	4	5	6	7	Uninvolved
80.	Not stimulated	1	2	3	4	5	6	7	Stimulated
81.	Inspired	1	2	3	4	5	6	7	Uninspired
82.	Unchallenged	1	2	3	4	5	6	7	Challenged
83.	Unenthused	1	2	3	4	5	6	7	Enthused
84.	Excited	1	2	3	4	5	6	7	Not excited
85.	Aroused	1	2	3	4	5	6	7	Not aroused
86.	Not fascinated	1	2	3	4	5	6	7	Fascinated
87.]	Looks forward	1	2	3	4	5	6	7	Dreads it
88.	Important	1	2	3	4	5	6	7	Unimportant
89.	Useful	1	2	3	4	5	6	7	Useless
90.	Helpful	1	2	3	4	5	6	7	Harmful

Directions: Below are a series of descriptions of things some teachers have been observed saying in some classes. Please respond to each of the statements in terms of the way you perceive your teacher communicating towards you or others in the class. For each item, indicate how often your teacher responds this way when teaching. Use the following scale:



___91. Uses personal examples or talks about experiences she/he has had outside of class.

- 92. Asks questions or encourages students to talk.
- _____93. Gets into discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture plan.
- 94. Uses humor in class.
- _____95. Addresses students by name.
- _____96. Addresses me by name.
- 97. Gets into conversations with individual students before or after class.
- 98. Has initiated conversations with me before, after, or outside of class.
- 99. Refers to class as "our" class or what "we" are doing.
 - 100. Provides feedback on my individual work through comments on my papers, oral discussions, etc.

Directions (repeated from previous page): Below are a series of descriptions of things some teachers have been observed saying in some classes. Please respond to each of the statements in terms of the way you perceive your teacher communicating towards you or others in the class.

For each item, indicate how often your teacher responds this way when teaching. Use the following scale:



- _____101. Calls on students to answer questions even if they have not indicated that they want to talk.
 - 102. Asks students how they feel about an assignment, due date, or discussion topic.
- 103. Invites students to telephone or meet with him/her outside of class if they have questions or want to discuss something.
- 104. Asks questions that solicit viewpoints or opinions.
- 105. Praises students' work, actions, or comments.
- _____106. Will have discussions about things unrelated to class with individual students or with the class as a whole.
- 107. Prefers to be addressed by her/his first name by the students.

Directions: In this series of questions we would like you to describe how your instructor communicates. Think about his/her behavior in general rather than about specific situations. Use the following scale:

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree		Agree or		Agree	Strongly
Disagree			Disagree			Agree

- 108. My instructor has a good command of the language.
- 109. My instructor is sensitive to the needs of others.
- _____110. My instructor typically gets right to the point.
- _____111. My instructor pays attention to what her/his students say to her/him.
- 112. My instructor can deal with students effectively.
- 113. My instructor is a good listener.
- 114. My instructor's writing is difficult to understand.
- 115. My instructor expresses his or her ideas clearly.
- _____116. My instructor is difficult to understand when she or he speaks.
- 117. My instructor says the right thing at the right time.
- 118. My instructor is easy to talk to.
- _____119. My instructor usually responds to messages (phone calls, emails, etc.) quickly.

Directions: Use the following scale to answer these two questions:



1	2	3	4	5	6	7
Very	Likely	Somewhat	Don't	Somewhat	Unlikely	Very
Likely		Likely	Know	Unlikely		Unlikely

120. Willingness to take another class with this instructor in a traditional face-to-face format.

121. Willingness to take a class with this instructor in a distance/online format.

Directions: Please respond to the following questions regarding the frequency of contact you have had with your instructor/professor.

1	2	3	4	5	6	7
Never	1-2	3-4	5-6	6-7	7-9	more than
	times	times	times	times	times	10 times

122. I have emailed my instructor.

- _____123. My instructor has emailed me.
- <u>124</u>. I have telephoned my instructor.
- 125. My instructor has telephoned me.
- 126. My instructor and I have interacted via discussion board.
- 127. I have contacted my instructor via traditional mail.
- 128. My instructor has contacted me via traditional mail.
- 129. I have visited my instructor in his/her office.
- 130. I have seen my instructor (in person or a photo); I know what he/she looks like.
- 131. I have attended a face-to-face class session with this instructor.
- 132. I have taken other classes with this instructor online.
- 133. I have taken other classes with this instructor in a face-to-face format.

Directions: Please write the number of the response that best answers the following questions on the line next to the corresponding question.

134. What is your preferred method of interaction with your instructors?

Discussion board(1)	Email(2)
Traditional mail (3)	Telephone(4)
Face-to-face (office)(5)	Comment on digital dropbox(6)

135. Which method of interaction do you use when you are looking for your instructor's undivided attention?

Discussion board(1)	Email(2)
Traditional mail (3)	Telephone(4)
Face-to-face (office)(5)	Comment on digital dropbox(6)

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Please complete the following questions about you personally as accurately as possible. Type the number that answers each item on the line next to the appropriate question Demographics:

1.	Biological Sex:	Male(M)	Female(F)
2.	Age		
3.	Enrollment Status:	Senior(1) Sophomore(3) Graduate(5)	Junior(2) Freshman(4) Other (specify)
4.	Country of Origin:	United States(1)	Other (specify)
5.	If your country of o number of as many	rigin is the United States, pleas as apply):	e specify your ethnicity (type the
		African American(1)	Asian American(2)
		European American/ White(3)) Latino/a(4)
		Middle Eastern American(5)	Native American(6)
		Pacific Islander(7)	Other (specify)
6.	Academic Major:	(specify)	
7.	English courses con	npleted satisfactorily (C or Bett	er) excluding this class:
		None(1)	1 - 2 courses(2)
		3 - 4 courses(3)	5 or more courses(4)
8.	Distance learning co class:	ourses completed satisfactorily	(C or Better) excluding this
		None(1)	1 - 2 courses(2)
		3 - 4 courses(3)	5 or more courses(4)
9.	Distance learning co	ourses taken for credit:	
		0 courses (1)	1 - 2 courses(2)
		3 - 4 courses(3)	5 or more courses(4)
10.	Approximate G.P.A	. (Grade Point Average):	

Part Two

The second part of this questionnaire asks you to respond to several instruments and scenarios. Some questions are similar to previous questions. This is necessary for statistical reasons. All responses are voluntary and confidential.

Imagined interactions (IIs) are mental interactions we have with others who are not present. People may have imagined conversations that occur in selfcontrolled daydreams or while the mind wanders. Sometimes they may occur after a real interaction has taken place. IIs may be brief or long. They may be ambiguous or detailed. They may address a number of topics or examine one topic exclusively. The interactions may be one sided, where the person imagining the discussion does most of the talking, or they may be more interactive, where both persons take an active part in the conversation.

Directions: Rank the following items on how you personally use imagined interactions.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree		Agree nor		Agree	Strongly
Disagree			Disagree			Agree

- 1. I have IIs many times throughout the week.
- 2. I often have imagined interactions *before* interacting with someone of importance.
- 3. Most of my imagined interactions are with different people.
- 4. I often have imagined interactions *after* interacting with someone of importance.
- 5. When I have imagined interactions about a conversation, they tend to be detailed and well developed.
- 6. I have recurrent imagined interactions with the same individual.
- 7. In my real conversations, I am very different than in my imagined ones.
- 8. After important meetings, I frequently imagine them.
- 9. Most of my imagined interactions are with the same person.
- 10. I usually say in real life what I imagined I would say.
- 11. My imagined interactions usually involve conflicts or arguments.
- 12. When I have imagined interactions, the other person talks a lot.
- 13. I frequently have imagined interactions.
- 14. I do not enjoy most of my imagined interactions.
- 15. When I have a real conversation that I have imagined, the actual conversation is very different than what I imagined.
- 16. After I meet someone important, I imagine my conversation with them.
- 17. I rarely imagine myself interacting with someone else.
- 18. In my real conversations, other people are very different than in my imagined ones.
- 19. My imagined interactions are quite similar to the real conversations that follow them.
- 20. I enjoy most of my imagined interactions.
- 21. It is hard recalling the details of my imagined interactions.
- 22. My imagined interactions are very specific.
- 23. My imagined interactions are usually quite unpleasant.
- 24. I talk a lot in my imagined interactions.

Directions: Continue to rank the following items on how <u>you personally</u> use imagined interactions.

 1	2	3	4	5	6	 7
Very Strongly Disagree	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Very Strongly Agree

- 25. The other person has a lot to say in my imagined interactions.
- 26. My imagined interactions are usually enjoyable.
- _____27. The other person dominates the conversation in my imagined interactions.
- 28. My imagined interactions usually involve happy or fun activities.
- 29. Before important meetings, I often imagine them.
- 30. I have imagined interactions with many different people.
- _____31. I dominate the conversation in my imagined interactions.
- 32. In my imagined interactions, I can "hear" what the other person says.
- 33. Before I meet someone important, I imagine a conversation with them.
- _____34. More often than not, what I actually say to a person in a real conversation is different from what I imagined I would say.
 - ____35. More often than not, what the other person says in a real conversation is different from what I imagined he or she would say.
 - ____36. When I have an imagined interaction, I often only have a vague idea of what the other person says.
 - ____37. My imagined interactions about school tend to be on a lot of different topics

Directions: Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught an <u>online class</u>. Use the following scale:

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	_	Agree nor	-	Agree	Strongly
Disagree	_		Disagree		-	Agree

- 38. Imagined interactions helped me to talk about feelings or problems with the instructor.
- 39. The imagined interactions helped me understand my instructor better.
- 40. The imagined interactions helped me understand myself better.
- 41. The imagined interaction helped me clarify my thoughts and feelings with the instructor.
 - 42. The imagined interaction helped me plan what I was going to say to the instructor.
- _____43. I had imagined interactions before emailing my instructor knowing I would be evaluated.
 - _____44. The imagined interactions with my instructor helped me relieve tension and stress.
- 45. The imagined interaction made me feel more confident when I thought I was going to actually talk with the instructor.

Directions (continued): Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught an <u>online class</u>. Use the following scale:

	2					 7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Disagree	Disagree		Agree nor Disagree		Agree	Agree

- _____46 I had imagined interactions to practice what I was actually going to say to the instructor.
- 47. The imagined interactions helped me to reduce uncertainty about the instructor's actions and behaviors.
 - __48. The imagined interactions I had with this instructor were very enjoyable.
- ____49. I was very satisfied with my interaction with this instructor.
- _____50. I enjoyed the interaction.
- 51. I relive old arguments in my mind.
- 52. It is sometimes hard to forget old arguments.
- 53. Imagining talking to someone substitutes for the absence of real communication.
- _____54. I often cannot get negative imagined interactions " out of mind" when I'm not angry.
- 55 Imagined interactions can be used to substitute for real conversations with a person.
- 56. Imagined interactions sometimes help me manage conflict.
- 57. By thinking about upcoming interactions with my instructor, imagined interactions help relieve tension and stress.
- _____58. Imagined interactions may be used to compensate for the lack of real face-to-face communication
- 59. I do not enjoy most of my imagined interactions with my instructor.
- 60. I dominate the conversation in my imagined interactions with my instructor.
- 61. I enjoy most of my imagined interactions with my instructor
- 62. When I have imagined interactions, my instructor talks a lot
- 63. My imagined interactions with my instructor are usually quite unpleasant.
- 64. I frequently have imagined interactions with my instructor.
- 65. My imagined interactions with my instructor are usually enjoyable.
- 66. I talk a lot in my imagined interactions with my instructor.
- 67. My instructor has a lot to say in my imagined interactions.
- 68. My imagined interactions with my instructor usually involve happy or fun activities
- 69. I have recurrent imagined interactions with my instructor.
- 70. My instructor dominates the conversation in my imagined interactions.
- 71. I rarely imagine myself interacting with my instructor.
- 72. I have IIs with my instructor many times throughout the week.

Directions: Please type the number toward either word that best represents your feelings about your instructor when they taught in an <u>online class</u> on the line next to each adjective.

Please type the number that corresponds to the word that best describes the teaching style of your instructor:

73. Immediate	1	2	3	4	5	6	7	Not Immediate
74. Cold	1	2	3	4	5	6	7	Warm
75. Unfriendly	1	2	3	4	5	6	7	Friendly
76. Close	1	2	3	4	5	6	7	Distant

Please type the number that corresponds to the word that best describes your perception of your instructor's level of interest in teaching this English course:

77. Motivated	1	2	3	4	5	6	7	Unmotivated
78. Interested	1	2	3	4	5	6	7	Uninterested
79. Involved	1	2	3	4	5	6	7	Uninvolved
80. Not stimulate	1	2	3	4	5	6	7	Stimulated
81. Inspired	1	2	3	4	5	6	7	Uninspired
82. Unchallenged	1	2	3	4	5	6	7	Challenged
83. Unenthused	1	2	3	4	5	6	7	Enthused
84. Excited	1	2	3	4	5	6	7	Not excited
85. Aroused	1	2	3	4	5	6	7	Not aroused
86. Not fascinate	1	2	3	4	5	6	7	Fascinated
87. Dreads it	1	2	3	4	5	6	7	Looks forward to it
88. Important	1	2	3	4	5	6	7	Unimportant
89. Useful	1	2	3	4	5	6	7	Useless
90. Helpful	1	2	3	4	5	6	7	Harmful

Directions: Below are a series of descriptions of things some teachers have been observed saying in some classes. Please respond to each of the statements in terms of the way you perceive your teacher communicating towards you or others in the class. For each item, indicate how often your teacher responds this way when teaching online. Use the following scale:



- ____91. Uses personal examples or talks about experiences she/he has had outside of class.
- 92. Asks questions or encourages students to talk.
- 93. Gets into online discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture.
 - 94. Uses humor online.
- 95. Addresses students by name.
- 96. Addresses me by name.
- 97. Interacts with individual students in online discussion boards.
- 98. Has initiated online interactions with me in online discussion boards.
- 99. Refers to class as "our" class or what "we" are doing.
- 100.Provides feedback on my individual work through comments on my papers, emails, etc.

Directions (repeated from previous page): Below are a series of descriptions of things some teachers have been observed saying in some classes. Please respond to each of the statements in terms of the way you perceive your teacher communicating towards you or others in the class.

For each item, indicate how often your teacher responds this way when teaching. Use the following scale:



- _____101. Requires students to answer questions even if they have not indicated that they want to respond.
 - 102. Asks students how they feel about an assignment, due date, or discussion topic.
- 103. Invites students to telephone or meet with him/her if they have questions or want to discuss something.
- 104. Asks online questions that solicit viewpoints or opinions.
- 105. Praises students' work, actions, or comments.
- _____106. Will have online discussions about things unrelated to class with individual students or with the class as a whole.
- 107. Prefers to be addressed by her/his first name by the students.

Directions: In this series of questions we would like you to describe how your instructor communicates. Think about his/her behavior in general rather than about specific situations. Use the following scale:

 1	2	3	4	 5	6	 7
Very Strongly Disagree	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Very Strongly Agree

- 108. My instructor has a good command of the language.
- 109. My instructor is sensitive to the needs of others.
- _____110. My instructor typically gets right to the point.
- 111. My instructor pays attention to what her/his students email to her/him.
- 112. My instructor can deal with students effectively.
- 113. My instructor is a good listener.
- _____114. My instructor's writing is difficult to understand.
- _____115. My instructor expresses his or her ideas clearly.
- 116. My instructor is difficult to understand when she or he emails us.
- _____117. My instructor responds with the right thing at the right time.
- _____118. My instructor is easy to interact with.
- 119. My instructor usually responds to messages (phone calls, emails, etc.) quickly.

Directions: Use the following scale to answer these two questions:



1	2	3	4	5	6	7
Very	Likely	Somewhat	Don't	Somewhat	Unlikel	Very
Likely		Likely	Know	Unlikely		Unlikely

120.Willingness to take a class with this instructor in a traditional (face-to-face) format.

121. Willingness to take another class with this instructor in a distance/online format.

Directions: Please respond to the following questions regarding the frequency of contact you have had with your instructor/professor.

1	2	3	4	5	6	7
Never	1-2	3-4	5-6	6-7	7-9	more than
	times	times	times	times	times	10 times

_____122. I have emailed my instructor.

- _____123. My instructor has emailed me.
- 124. I have telephoned my instructor.
- _____125. My instructor has telephoned me.
- 126. My instructor and I have interacted via discussion board.
- _____127. I have contacted my instructor via traditional mail.
- 128. My instructor has contacted me via traditional mail.
- 129. I have visited my instructor in his/her office.
- _____130. I have seen my instructor (in person or a photo); I know what he/she looks like.
- 131. I have attended a face-to-face class session with this instructor.
- 132. I have taken other classes with this instructor online.
- 133. I have taken other classes with this instructor in a face-to-face format.

Directions: Please write the number of the response that best answers the following questions on the line next to the corresponding question.

134. What is your preferred method of interaction with your instructors?

Discussion board(1)	Email(2)
Traditional mail (3)	Telephone(4)
Face-to-face (office)(5)	Comment on digital dropbox(6)

____135.Which method of interaction do you use when you are looking for your instructor's undivided attention?

Discussion board(1)	Email(2)
Traditional mail (3)	Telephone(4)
Face-to-face (office)(5)	Comment on digital dropbox(6)

APPENDIX B: FINAL STUDY INSTRUMENT

Study Title: Imagined Interactions, Communication Competence, and Immediacy in Traditional and Distance Classes

Performance Site: Northwestern State University

Principal Investigator: Tammy L. Croghan 314 G Kyser Hall Northwestern State University (318) 357-6462 office phone croghant@nsula.edu email address

The purpose of this study is to assess individual perception of differences in communicative interactions in different educational environments. This research aims to improve instructional strategies. Only the principal investigator will have access to these questionnaires which will have the consent form removed before any data is entered. While the results of this study may be published, no identifying information will be released. There is no known risk to the participants that exceeds normal daily risk. Participants must be 18 years of age or older. **Participation is completely voluntary. Participants may choose not to participate or withdraw from the study at any time without any adverse consequences (nonparticipation will have no impact on student's grade).** Any questions about this research or your rights as a participant should be directed to the principal investigator listed above.

By signing below, you understand and agree to participate in the study described above.

Signature of Participant

Date

If you wish to receive a copy of the results of this study please supply the following information:

E-mail address

Please complete the following questions about you personally as accurately as possible.

100

Demographics:	Demog	graph	ics:
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1.	Biological Sex:	Male	Female
2.	Age:		
3.	Enrollment Status:	Senior	Junior
		Sophomore	Freshman
		Graduate	Other (specify)
4.	Country of Origin:	United States	Other (specify)
5.	If your country of orig	in is the United States, please specify you	r ethnicity (circle as
	many as appry).	African American	Asian American
		European American/ White	Latino/a
		Middle Eastern American	Native American
		Pacific Islander	Other (specify)

- 6. Academic Major:
- 7. Number of **<u>college-level</u>** English courses completed satisfactorily (C or Better) excluding this class (if never use 0).
- 8. Number of <u>college-level</u> distance learning or online courses taken for credit (if never use 0):
- 9. Number of **<u>college-level</u>** distance learning or online courses completed satisfactorily (C or Better) (if never use 0).
- 10. Approximate G.P.A. (Grade Point Average):

Part Two

The second part of this questionnaire asks you to respond to several instruments and scenarios. Some questions are similar to previous questions. This is necessary for statistical reasons. All responses are voluntary and confidential.

Imagined interactions (IIs) are mental interactions we have with others who are not present. People may have imagined conversations that occur in selfcontrolled daydreams or while the mind wanders. Sometimes they may occur after a real interaction has taken place. IIs may be brief or long. They may be ambiguous or detailed. They may address a number of topics or examine one topic exclusively. The interactions may be one sided, where the person imagining the discussion does most of the talking, or they may be more interactive, where both persons take an active part in the conversation.

Directions: Rank the following items on how you personally use imagined interactions.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree nor	-	Agree	Strongly
Disagree	C		Disagree		-	Agree

- 1. I have IIs many times throughout the week.
- 2. I often have imagined interactions *before* interacting with someone of importance.
- 3. Most of my imagined interactions are with different people.
- 4. I often have imagined interactions *after* interacting with someone of importance.
- 5. When I have imagined interactions about a conversation, they tend to be detailed and well developed.
- 6. I have recurrent imagined interactions with the same individual.
- 7. In my real conversations, I am very different than in my imagined ones.
- 8. After important meetings, I frequently imagine them.
- 9. Most of my imagined interactions are with the same person.
- 10. I usually say in real life what I imagined I would say.
- 11. My imagined interactions usually involve conflicts or arguments.
- 12. When I have imagined interactions, the other person talks a lot.
- _____13. I frequently have imagined interactions.
- _____14. I do not enjoy most of my imagined interactions.
- _____15. When I have a real conversation that I have imagined, the actual conversation is very different than what I imagined.
- 16. After I meet someone important, I imagine my conversation with them.
- 17. I rarely imagine myself interacting with someone else.
- 18. In my real conversations, other people are very different than in my imagined ones.
 - 19. My imagined interactions are quite similar to the real conversations that follow them.
- 20. I enjoy most of my imagined interactions.
- _____21. It is hard recalling the details of my imagined interactions.
- _____22. My imagined interactions are very specific.
- 23. My imagined interactions are usually quite unpleasant.
- 24. I talk a lot in my imagined interactions.

Directions: Continue to rank the following items on how <u>you personally</u> use imagined interactions.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree or	-	Agree	Strongly
Disagree	C		Disagree		-	Agree

- 25. The other person has a lot to say in my imagined interactions.
- 26. My imagined interactions are usually enjoyable.
- 27. The other person dominates the conversation in my imagined interactions.
- 28. My imagined interactions usually involve happy or fun activities.
- 29. Before important meetings, I often imagine them.
- 30. I have imagined interactions with many different people.
- 31. I dominate the conversation in my imagined interactions.
- 32. In my imagined interactions, I can "hear" what the other person says.
- 33. Before I meet someone important, I imagine a conversation with them.
- _____34. More often than not, what I actually say to a person in a real conversation is different from what I imagined I would say.
 - ___35. More often than not, what the other person says in a real conversation is different from what I imagined he or she would say.
 - ____36. When I have an imagined interaction, I often only have a vague idea of what the other persons says.
- _____37. My imagined interactions about work tend to be on a lot of different topics

Directions: Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught in a <u>traditional (face-to-face) classroom</u>.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	_	Agree nor	-	Agree	Strongly
Disagree	-		Disagree		-	Agree

- _____38. Imagined interactions helped me to talk about feelings or problems with the instructor.
- 39. The imagined interactions helped me understand my instructor better.
- 40. The imagined interactions helped me understand myself better.
- 41. The imagined interaction helped me clarify my thoughts and feelings with the instructor.
 - 42. The imagined interaction helped me plan what I was going to say to the instructor.
- 43. I had imagined interactions before having a conversation with the instructor knowing I would be evaluated.
- 44. The imagined interactions with my instructor helped me relieve tension and stress.
- 45. The imagined interaction made me feel more confident when I thought I was going to actually talk with the instructor.
 - ___46 I had imagined interactions to practice what I was actually going to say to the instructor.

Directions (continued): Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught in a <u>traditional (face-to-face)</u> <u>classroom</u>. Use the following scale:

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree or	-	Agree	Strongly
Disagree	C		Disagree		-	Agree

- 47. The imagined interactions helped me to reduce uncertainty about the instructor's actions and behaviors.
- ____48. The imagined interactions I had with this instructor were very enjoyable.
- 49. I was very satisfied with the conversation with this instructor
- 50. I enjoyed the conversation.
- 51. I relive old arguments in my mind.
- 52. It is sometimes hard to forget old arguments.
- 53. Imagining talking to someone substitutes for the absence of real communication.
- 54. I often cannot get negative imagined interactions "out of mind" when I'm not angry.
- __55 Imagined interactions can be used to substitute for real conversations with a person.
- 56. Imagined interactions sometimes help me manage conflict.
- 57. By thinking about the upcoming conversation with my instructor, imagined interactions help relieve tension and stress.
- 58. Imagined interactions may be used to compensate for the lack of real face-toface communication
- 59. I do not enjoy most of my imagined interactions with my instructor.
- 60. I dominate the conversation in my imagined interactions with my instructor.
- 61. I enjoy most of my imagined interactions with my instructor
- 62. When I have imagined interactions, my instructor talks a lot
- 63. My imagined interactions with my instructor are usually quite unpleasant.
- _____64. I frequently have imagined interactions with my instructor.
- 65. My imagined interactions with my instructor are usually enjoyable.
- 66. I talk a lot in my imagined interactions with my instructor.
- _____67. My instructor has a lot to say in my imagined interactions.
- 68. My imagined interactions with my instructor usually involve happy or fun activities
- 69. I have recurrent imagined interactions with my instructor.
- 70. My instructor dominates the conversation in my imagined interactions.
- _____71. I rarely imagine myself interacting with my instructor.
- 72. I have IIs with my instructor many times throughout the week.

Part Three

Directions: Please circle the number toward either word that best represents your feelings about the statement.

Please circle the number that corresponds to the word that best describes <u>your</u> overall motivation toward your education in general:

73.Motivated	1	2	3	4	5	6	7	Unmotivated
74.Important	1	2	3	4	5	6	7	Unimportant
75.Useful	1	2	3	4	5	6	7	Useless
76.Helpful	1	2	3	4	5	6	7	Harmful

Please circle the number that corresponds to the word that best describes <u>your</u> level of interest in taking this English course:

77.Motivated	1	2	3	4	5	6	7	Unmotivated
78.Interested	1	2	3	4	5	6	7	Uninterested
79.Involved	1	2	3	4	5	6	7	Uninvolved
80.Not stimulated	1	2	3	4	5	6	7	Stimulated
81.Don't want to stu	ldy 1	2	3	4	5	6	7	Want to study
82.Inspired	1	2	3	4	5	6	7	Uninspired
83.Unchallenged	1	2	3	4	5	6	7	Challenged
84.Uninvigorated	1	2	3	4	5	6	7	Invigorated
85.Unenthused	1	2	3	4	5	6	7	Enthused
86.Excited	1	2	3	4	5	6	7	Not excited
87.Aroused	1	2	3	4	5	6	7	Not aroused
88.Not fascinated	1	2	3	4	5	6	7	Fascinated
89.Looks forward to	it 1	2	3	4	5	6	7	Dreads it

Please circle the number that corresponds to the word that best describes the teaching style of your <u>instructor</u>:

90. Immediate	1	2	3	4	5	6	7	Not Immediate
91. Cold	1	2	3	4	5	6	7	Warm
92. Unfriendly	1	2	3	4	5	6	7	Friendly
93.Close	1	2	3	4	5	6	7	Distant

Please circle the number that corresponds to the word that best describes the level of interest of your <u>instructor</u> in teaching this English course:

94.Motivated	1	2	3	4	5	6	7	Unmotivated
95.Interested	1	2	3	4	5	6	7	Uninterested
96.Involved	1	2	3	4	5	6	7	Uninvolved
97.Not stimulated	1	2	3	4	5	6	7	Stimulated
98.Don't want to stu	dy 1	2	3	4	5	6	7	Want to study
99. Inspired	1	2	3	4	5	6	7	Uninspired
100.Unchallenged	1	2	3	4	5	6	7	Challenged
101.Uninvigorated	1	2	3	4	5	6	7	Invigorated
102.Unenthused	1	2	3	4	5	6	7	Enthused
103.Excited	1	2	3	4	5	6	7	Not excited
104.Aroused	1	2	3	4	5	6	7	Not aroused
105. Not fascinated	1	2	3	4	5	6	7	Fascinated
106. Looks forward	to it	2	3	4	5	6	7	Dreads it

Part Four

Directions: Below are a series of descriptions of things some teachers have been observed saying in some classes. Please respond to each of the statements in terms of the way you perceive your teacher communicating towards you or others in the class. For each item, indicate how often your teacher responds this way when teaching. Use the following scale:

1	2	3	4	5
Never	Rarely	Occasionally	Often	Very Often

- 107. Uses personal examples or talks about experiences she/he has had outside of class.
- 108. Asks questions or encourages students to talk.
- _____109. Gets into discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture plan.
 - 110. Uses humor in class.
- ____111. Addresses students by name.
- 112.Addresses me by name.
- 113.Gets into conversations with individual students before or after class.
- 114.Has initiated conversations with me before, after, or outside of class.
- 115.Refers to class as "our" class or what "we" are doing.
- _____116.Provides feedback on my individual work through comments on my papers, oral discussions, etc.
- 117. Calls on students to answer questions even if they have not indicated that they want to talk.
- _____118. Asks students how they feel about an assignment, due date, or discussion topic.
 - ____119. Invites students to telephone or meet with him/her outside of class if they have questions or want to discuss something.
- 120. Asks questions that solicit viewpoints or opinions.
- 121. Praises students' work, actions, or comments.
- _____122. Will have discussions about things unrelated to class with individual students or with the class as a whole.
 - 123. Prefers to be addressed by her/his first name by the students.

Directions: In this series of questions we would like you to describe how your instructor communicates. Think about his/her behavior in general rather than about specific situations. Use the following scale:

 1	2	3	4	 5	6	 7
Very Strongly Disagree	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Very Strongly Agree

- 124. My instructor has a good command of the language.
- 125. My instructor is sensitive to the needs of others.
- 126. My instructor typically gets right to the point.
- 127. My instructor pays attention to what her/his students say to her/him.
- 128. My instructor can deal with student effectively.
- _____129. My instructor is a good listener.

Directions: Continue to describe how your instructor communicates. Use the following scale:

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	U	Agree or	U	Agree	Strongly
Disagree	C		Disagree		e	Agree

- 130. My instructor's writing is difficult to understand.
- 131. My instructor expresses his or her ideas clearly.
- 132. My instructor is difficult to understand when she or he speaks.
- 133. My instructor says the right thing at the right time.
- 134. My instructor is easy to talk to.
- 135. My instructor usually responds to messages (phone calls, emails, etc.) quickly.

Part Five

Directions: Please respond to the following questions regarding the approximate number of times that you have used a specific medium to contact your instructor/professor (if never use 0):

- 136. I have emailed my instructor.
- 137. My instructor has emailed me.
- 138. I have telephoned my instructor. 139. My instructor has telephoned me.
- 140. My instructor and I have interacted via discussion board.
- ____141. I have contacted my instructor via traditional mail.
- 142. My instructor has contacted me via traditional mail.
- 143. I have visited my instructor in his/her office.
- 144. I have seen my instructor (in person or in photograph); I know what he/she looks like.

Directions: Please give the approximate number of times that you have had these experiences with your current instructor/professor (if never use 0):

- 145. I have attended a face-to-face class session with this instructor.
- 146. I have taken other classes with this instructor online.
- 147. I have taken other classes with this instructor in a face-to-face format.

Directions: Please write the number of the response that best answers the following question on the line next to the corresponding question:

148. What is your preferred method of interaction with your instructors?

Discussion board(1)	Email(2)
Traditional mail (3)	Telephone(4)
Face-to-face (office)(5)	Comment on digital dropbox(6)

Directions: Please write the number of the response that best answers the following question on the line next to the corresponding question:

_____149.Which method of interaction do you use when you are looking for your instructor's undivided attention?

Discussion board(1)	Email(2)				
Traditional mail (3)	Telephone(4)				
Face-to-face (office)(5)	Comment on digital dropbox(6)				

Directions: Use the following scale to answer the last two questions:

1	2	3	4	5	6	7
Very	Likely	Somewhat	Don't	Somewhat	Unlikely	Very
Likely		Likely	Know	Unlikely		Unlikely

150. Willingness to take another class with this instructor in a traditional face-to-face format.

151. Willingness to take a class with this instructor in a distance/online format.

Please complete the following questions about you personally as accurately as possible. Type the number that answers each item on the line next to the appropriate question

Demographics:

1.	Biological Sex:	Male(1)	Female(2)
2.	Age		
3.	Enrollment Status:	Senior(1)	Junior(2)
		Sophomore(3)	Freshman(4)
		Graduate(5)	Other (specify)
4.	Country of Origin:	United States(1)	Other (specify)
5.I: 	f your country of orig number of as many as	gin is the United States, please s apply):	specify your ethnicity (type the
		African American(1)	Asian American(2)
		European American/ White(3)) Latino/a(4)
		Middle Eastern American(5)	Native American(6)
		Pacific Islander(7)	Other (specify)
6.	Academic Major:	(specify)	
7.N	Number of <u>college-lev</u> this class (if n	vel English courses completed s lever use 0):	satisfactorily (C or Better) excluding
8.N	Number of <u>college-lev</u> 0):	vel distance learning or online c	courses taken for credit (if never use
9.N	Number of <u>college-lev</u> or Better) (if i	vel distance learning or online on the one of the one o	courses completed satisfactorily (C

10. Approximate G.P.A. (Grade Point Average):

150

Part Two

The second part of this questionnaire asks you to respond to several instruments and scenarios. Some questions are similar to previous questions. This is necessary for statistical reasons. All responses are voluntary and confidential.

Imagined interactions (IIs) are mental interactions we have with others who are not present. People may have imagined conversations that occur in selfcontrolled daydreams or while the mind wanders. Sometimes they may occur after a real interaction has taken place. IIs may be brief or long. They may be ambiguous or detailed. They may address a number of topics or examine one topic exclusively. The interactions may be one sided, where the person imagining the discussion does most of the talking, or they may be more interactive, where both persons take an active part in the conversation.

Directions: Rank the following items on how you personally use imagined interactions.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree nor	-	Agree	Strongly
Disagree	C		Disagree		-	Agree

- 1. I have IIs many times throughout the week.
- 2. I often have imagined interactions *before* interacting with someone of importance.
- 3. Most of my imagined interactions are with different people.
- 4. I often have imagined interactions *after* interacting with someone of importance.
- 5. When I have imagined interactions about a conversation, they tend to be detailed and well developed.
- 6. I have recurrent imagined interactions with the same individual.
- 7. In my real conversations, I am very different than in my imagined ones.
- 8. After important meetings, I frequently imagine them.
- 9. Most of my imagined interactions are with the same person.
- 10. I usually say in real life what I imagined I would say.
- 11. My imagined interactions usually involve conflicts or arguments.
- 12. When I have imagined interactions, the other person talks a lot.
- _____13. I frequently have imagined interactions.
- _____14. I do not enjoy most of my imagined interactions.
- _____15. When I have a real conversation that I have imagined, the actual conversation is very different than what I imagined.
- 16. After I meet someone important, I imagine my conversation with them.
- 17. I rarely imagine myself interacting with someone else.
- 18. In my real conversations, other people are very different than in my imagined ones.
 - ____19. My imagined interactions are quite similar to the real conversations that follow them.
- 20. I enjoy most of my imagined interactions.
- 21. It is hard recalling the details of my imagined interactions.
- 22. My imagined interactions are very specific.
- 23. My imagined interactions are usually quite unpleasant.
- 24. I talk a lot in my imagined interactions.

Directions: Continue to rank the following items on how <u>you personally</u> use imagined interactions.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree or	-	Agree	Strongly
Disagree	-		Disagree		-	Agree

- 25. The other person has a lot to say in my imagined interactions.
- 26. My imagined interactions are usually enjoyable.
- 27. The other person dominates the conversation in my imagined interactions.
- _____28. My imagined interactions usually involve happy or fun activities.
- 29. Before important meetings, I often imagine them.
- 30. I have imagined interactions with many different people.
- 31. I dominate the conversation in my imagined interactions.
- 32. In my imagined interactions, I can "hear" what the other person says.
- 33. Before I meet someone important, I imagine a conversation with them.
- _____34. More often than not, what I actually say to a person in a real conversation is different from what I imagined I would say.
 - ___35. More often than not, what the other person says in a real conversation is different from what I imagined he or she would say.
 - ____36. When I have an imagined interaction, I often only have a vague idea of what the other persons says.
- _____37. My imagined interactions about work tend to be on a lot of different topics

Directions: Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught in an <u>online classroom</u>.

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	_	Agree nor	-	Agree	Strongly
Disagree	-		Disagree		-	Agree

- 38. Imagined interactions helped me to talk about feelings or problems with the instructor.
- 39. The imagined interactions helped me understand my instructor better.
- 40. The imagined interactions helped me understand myself better.
- 41. The imagined interaction helped me clarify my thoughts and feelings with the instructor.
 - 42. The imagined interaction helped me plan what I was going to say to the instructor.
- 43. I had imagined interactions before having a conversation with the instructor knowing I would be evaluated.
- 44. The imagined interactions with my instructor helped me relieve tension and stress.
- 45. The imagined interaction made me feel more confident when I thought I was going to actually talk with the instructor.
 - ___46 I had imagined interactions to practice what I was actually going to say to the instructor.

Directions (continued): Rank the following items on how <u>you personally</u> use imagined interactions with the instructor/professor when they taught in an <u>online classroom</u>. Use the following scale:

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree or	-	Agree	Strongly
Disagree	C		Disagree		-	Agree

47. The imagined interactions helped me to reduce uncertainty about the instructor's actions and behaviors.

- 48. The imagined interactions I had with this instructor were very enjoyable.
- 49. I was very satisfied with the conversation with this instructor
- 50. I enjoyed the conversation.
- 51. I relive old arguments in my mind.
- 52. It is sometimes hard to forget old arguments.
- 53. Imagining talking to someone substitutes for the absence of real communication.
- 54. I often cannot get negative imagined interactions "out of mind" when I'm not angry.
- __55 Imagined interactions can be used to substitute for real conversations with a person.
- ____56. Imagined interactions sometimes help me manage conflict.
- 57. By thinking about the upcoming conversation with my instructor, imagined interactions help relieve tension and stress.
- 58. Imagined interactions may be used to compensate for the lack of real face-toface communication
- 59. I do not enjoy most of my imagined interactions with my instructor.
- 60. I dominate the conversation in my imagined interactions with my instructor.
- 61. I enjoy most of my imagined interactions with my instructor
- 62. When I have imagined interactions, my instructor talks a lot
- 63. My imagined interactions with my instructor are usually quite unpleasant.
- _____64. I frequently have imagined interactions with my instructor.
- 65. My imagined interactions with my instructor are usually enjoyable.
- 66. I talk a lot in my imagined interactions with my instructor.
- _____67. My instructor has a lot to say in my imagined interactions.
- 68. My imagined interactions with my instructor usually involve happy or fun activities
- 69. I have recurrent imagined interactions with my instructor.
- 70. My instructor dominates the conversation in my imagined interactions.
- _____71. I rarely imagine myself interacting with my instructor.
- 72. I have IIs with my instructor many times throughout the week.

Part Three

Directions: Please circle the number toward either word that best represents your feelings about the statement.

Please circle the number that corresponds to the word that best describes <u>your</u> overall motivation toward your education in general:

73.Motivated	1	2	3	4	5	6	7	Unmotivated
74.Important	1	2	3	4	5	6	7	Unimportant
75.Useful	1	2	3	4	5	6	7	Useless
76.Helpful	1	2	3	4	5	6	7	Harmful

Please circle the number that corresponds to the word that best describes <u>your</u> level of interest in taking this English course:

77.Motivated	1	2	3	4	5	6	7	Unmotivated
78.Interested	1	2	3	4	5	6	7	Uninterested
79.Involved	1	2	3	4	5	6	7	Uninvolved
80.Not stimulated	1	2	3	4	5	6	7	Stimulated
81.Don't want to stu	ıdy 1	2	3	4	5	6	7	Want to study
82.Inspired	1	2	3	4	5	6	7	Uninspired
83.Unchallenged	1	2	3	4	5	6	7	Challenged
84.Uninvigorated	1	2	3	4	5	6	7	Invigorated
85.Unenthused	1	2	3	4	5	6	7	Enthused
86.Excited	1	2	3	4	5	6	7	Not excited
87.Aroused	1	2	3	4	5	6	7	Not aroused
88.Not fascinated	1	2	3	4	5	6	7	Fascinated
89.Looks forward to	it 1	2	3	4	5	6	7	Dreads it

Please circle the number that corresponds to the word that best describes the teaching style of your <u>instructor</u>:

90. Immediate	1	2	3	4	5	6	7	Not Immediate
91. Cold	1	2	3	4	5	6	7	Warm
92. Unfriendly	1	2	3	4	5	6	7	Friendly
93.Close	1	2	3	4	5	6	7	Distant

Please circle the number that corresponds to the word that best describes the level of interest of your <u>instructor</u> in teaching this English course:

94.Motivated	1	2	3	4	5	6	7	Unmotivated
95.Interested	1	2	3	4	5	6	7	Uninterested
96.Involved	1	2	3	4	5	6	7	Uninvolved
97.Not stimulated	1	2	3	4	5	6	7	Stimulated
98.Don't want to stu	ıdy 1	2	3	4	5	6	7	Want to study
99. Inspired	1	2	3	4	5	6	7	Uninspired
100.Unchallenged	1	2	3	4	5	6	7	Challenged
101.Uninvigorated	1	2	3	4	5	6	7	Invigorated
102.Unenthused	1	2	3	4	5	6	7	Enthused
103.Excited	1	2	3	4	5	6	7	Not excited
104.Aroused	1	2	3	4	5	6	7	Not aroused
105. Not fascinated	1	2	3	4	5	6	7	Fascinated
106. Looks forward	to it	12	3	4	5	6	7	Dreads it

Part Four

Directions: Below are a series of descriptions of things some teachers have been observed saying in some classes. Please respond to each of the statements in terms of the way you perceive your teacher communicating towards you or others in the class. For each item, indicate how often your teacher responds this way when teaching. Use the following scale:

1	2	3	4	5
Never	Rarely	Occasionally	Often	Very Often

- 107. Uses personal examples or talks about experiences she/he has had outside of class.
- 108. Asks questions or encourages students to talk.
- _____109. Gets into discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture plan.
 - 110. Uses humor in class.
- 111. Addresses students by name.
- 112.Addresses me by name.
- 113.Gets into conversations with individual students before or after class.
- 114.Has initiated conversations with me before, after, or outside of class.
- 115.Refers to class as "our" class or what "we" are doing.
- _____116.Provides feedback on my individual work through comments on my papers, oral discussions, etc.
- 117. Calls on students to answer questions even if they have not indicated that they want to talk.
- _____118. Asks students how they feel about an assignment, due date, or discussion topic.
 - ____119. Invites students to telephone or meet with him/her outside of class if they have questions or want to discuss something.
 - 120. Asks questions that solicit viewpoints or opinions.
- 121. Praises students' work, actions, or comments.
- _____122. Will have discussions about things unrelated to class with individual students or with the class as a whole.
 - 123. Prefers to be addressed by her/his first name by the students.

Directions: In this series of questions we would like you to describe how your instructor communicates. Think about his/her behavior in general rather than about specific situations. Use the following scale:

 1	2	3	4	 5	6	 7
Very Strongly Disagree	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Very Strongly Agree

- 124. My instructor has a good command of the language.
- 125. My instructor is sensitive to the needs of others.
- 126. My instructor typically gets right to the point.
- 127. My instructor pays attention to what her/his students say to her/him.
- 128. My instructor can deal with student effectively.
- 129. My instructor is a good listener.

Directions: Continue to describe how your instructor communicates. Use the following scale:

1	2	3	4	5	6	7
Very	Strongly	Disagree	Neither	Agree	Strongly	Very
Strongly	Disagree	-	Agree or	-	Agree	Strongly
Disagree	C		Disagree		-	Agree

- 130. My instructor's writing is difficult to understand.
- 131. My instructor expresses his or her ideas clearly.
- 132. My instructor is difficult to understand when she or he speaks.
- 133. My instructor says the right thing at the right time.
- 134. My instructor is easy to talk to.
- _____135. My instructor usually responds to messages (phone calls, emails, etc.) quickly.

Part Five

Directions: Please respond to the following questions regarding the approximate number of times that you have used a specific medium to contact your instructor/professor (if never use 0):

- 136. I have emailed my instructor.
- 137. My instructor has emailed me.
- 138. I have telephoned my instructor.
- 139. My instructor has telephoned me.
- 140. My instructor and I have interacted via discussion board.
- 141. I have contacted my instructor via traditional mail.
- 142. My instructor has contacted me via traditional mail.
- 143. I have visited my instructor in his/her office.
- ____144. I have seen my instructor (in person or in photograph); I know what he/she looks like.

Directions: Please give the approximate number of times that you have had these experiences with your current instructor/professor (if never use 0):

- 145. I have attended a face-to-face class session with this instructor.
- _____146. I have taken other classes with this instructor online.
- _____147. I have taken other classes with this instructor in a face-to-face format.

Directions: Please write the number of the response that best answers the following question on the line next to the corresponding question:

___148. What is your preferred method of interaction with your instructors?

Discussion board(1)	Email(2)		
Traditional mail (3)	Telephone(4)		
Face-to-face (office)(5)	Comment on digital dropbox(6)		

Directions: Please write the number of the response that best answers the following question on the line next to the corresponding question:

149.Which method of interaction do you use when you are looking for your instructor's undivided attention?

Discussion board(1)	Email(2)		
Traditional mail (3)	Telephone(4)		
Face-to-face (office)(5)	Comment on digital dropbox(6)		

Directions: Use the following scale to answer the last two questions:

	2	3		5		7
Very Likely	Likely	Somewhat Likely	Don't Know	Somewhat Unlikely	Unlikely	Very Unlikely

_____150. Willingness to take another class with this instructor in a traditional face-to-face format.

151. Willingness to take a class with this instructor in a distance/online format.

VITA

Tammy L. (Kelley) Croghan is a doctoral candidate at Louisiana State University majoring in communication studies with a minor in human resource education and workforce development. Her area of concentration is communication theory. Her research interests include: organizational communication, instructional communication, and intrapersonal communication, specifically imagined interactions. She is a member of the International Communication Association, National Communication Association, and the Southern States Communication Association. Presently, Tammy L. Croghan is an assistant professor in the Department of Language and Communication at Northwestern State University in Natchitoches, Louisiana.