Assessment of Embedding Peer Tutors in the Basic Communication Course:
Examining Student Engagement, Classroom Climate, Affective Learning, and Communication Competence

A thesis submitted to the College of Communication and Information of Kent State University in partial fulfillment of the requirements for the degree of Masters of Arts

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Chapter I

Introduction

Several instructional methods for higher education have been implemented to help personalize student learning such as learning-communities (Zhao & Kuh, 2004), service learning projects (Bringle & Hatcher, 1996), and tutoring programs (Cohen, Kulik, & Kulik, 1982). Peer tutoring programs are types of educational programs that focus on learning from a peer learning perspective (Topping, 2005). Peer tutoring is defined as “people from similar social groupings, who are not professional teachers, helping each other to learn and learning themselves by teaching” (Topping, 1996, p. 322). Peer tutoring programs adapt instruction to student needs (Gaustad, 1993), provide the student with emotional support (Connell, 1995), and promote students’ self-involvement in their learning (Rudduck & Flutter, 2000). Although these benefits are important, peer tutoring programs traditionally are setup as extra, out-of-class, supplemental instruction programs (Falchikov, 2001). Students who are unaware, too busy, or unmotivated to engage in these programs do not receive the benefits of peer learning when it is implemented as an out-of-class experience. However, adapting peer tutoring programs as an in-class teaching tool by embedding peer tutors within the classroom may combat some of the missed opportunities of personalized instruction for students. This thesis is dedicated to comparing a traditional classroom environment without embedded peer tutors with a classroom environment with embedded peer tutors and exploring the relationship differences they may have with the concepts of student engagement, classroom climate, affective learning, and communication competence.

Higher Education Retention and Attrition Problems

In recent years, American colleges and universities have been experiencing problems
with funding, student attrition, and graduation rates. The American Council on Education, a Washington-based non-profit for higher education officials, states that colleges and universities are entering into very difficult financial times and providing access to a high quality higher education degree is becoming more difficult (Marklein, 2008). Increased student attrition rates are in part the outcome of decreases in state funding for universities and increases in student tuition rates (Blaum, 2005). Between 2003 and 2008, the cost of attrition for first-year undergraduates who did not continue on to their second-year was a combined 1,627.7 billion in grant dollars (Schneider, 2010). Moreover, the graduation rate for the students that do continue to their second year is 50 percent, or one out of two students (American College Testing Program, 2010).

Declining retention and graduation rates may be due, in part, to increases in class size. Instructing more students in a class may also lead to decreases in personalized instruction for students. The projection for student enrollment for 2018 is a steady increase to 20.6 million from 2007 with the report of 18.2 million (Hussar & Bailey, 2009). As class sizes increase, big lecture classes are common for many core classes at colleges and universities. Although teaching more students at once seems like an appropriate method to producing more graduates, lecture classes that focus on the immediate goal of course content mastery do not address long term learning goals, including institutional commitment, social support, and student involvement, leading to increased risk of student attrition (Lotkowski, Robbins, & Noeth, 2004).

Classes that consist of larger lecture-based methods can minimize more student-centered practices, like small groups and discussion (Miller & Groccia, 1997). Instructors may choose to lecture as the primary method for larger classes because of the lack of time for individual, in-depth discussions or personalized feedback about course concepts. In larger classes, instructors
do more work for student learning than the students do through self-dialogue, making student engagement more difficult to achieve (Huerta, 2009). Students in smaller classes have increased visibility to the instructor and can be seen as an individual with a greater expectation to be prepared and participate. Larger classes allow students the ability to be invisible and they promote the avoidance of student participation (Finn, Pannozzo, & Achilles, 2003).

The problem for college departments is how to attract and retain students to the discipline while satisfying students’ academic, social, and emotional needs, in addition to keeping demands on costs, instructors, and facilities low. With the number of students per class increasing (Topping, 1996) and the available amount of instructional staff not being able to meet this inflation without sacrificing some aspects of personalized instruction, departments seek other instructional ways to combat these problems. One such progressive instructional method that is highly utilized in K-12 schools is peer tutoring.

**Peer Tutoring Overview**

Peer tutoring is traditionally a type of supplemental instructional technique that utilizes academically experienced students to connect and facilitate additional learning and personalization of content to students. Peer tutoring is unique in that it provides several positive outcomes at multiple levels. The needs of administration (e.g., cost-benefit management), instructors (e.g., positive instructor evaluations), and students (i.e., learning, social, and emotional) can be met with programs of peer tutoring. The use of peer tutors help ease demands for better assessment and accountability, provide financial support for administrators, provide classroom utility support for instructors, lead to decreases in student dropout rates (House & Wohlt, 1990), and offer personalized instruction and relational support for students (Miller, 2000; Mino & Butler, 1997; Topping & Ehly, 1998). Overall, students benefit from peer tutors
by increased retention of the content (Kulik, Kulik, & Cohen, 1979) and a higher enjoyment and affect for the material (Goodlad, 1998). However, the majority of students who voluntarily attend and benefit from tutoring programs are students who are already well prepared, have greater cognitive and skill abilities, and are more experienced in college (Maxwell, 1990).

Peer tutoring can be more cost effective than computer-assisted learning or increasing the school day and in some instances the use of peer tutors has been four times more cost effective than reducing a class size (Levin, Glass, & Meister, 1987). Peer tutoring also provides personalized adjustments in instruction, content, and pace to students learning styles, in addition to deeper levels of development in educational outcomes (Gaustad, 1993; Waldeck, 2007). Moreover, the peer tutors also benefit from interactions with students. Tutors benefit by increases in knowledge and their own ability to communicate (Falchikov, 2001). Peer tutors also gain an increased ability to organize information, supporting long-term retention and assisting in the development of deeper comprehension of information (Cohen, 1986). The peer tutors develop stronger abilities of instruction, leadership, presentation skills, and interpersonal skills as well (Ehly & Larsen, 1980; Falchikov, 2001; Topping, 1996, 2005).

Why is it that students struggle to graduate despite the wide availability of peer tutoring programs? Perhaps the traditional use of peer tutoring programs as out-of-class, additional instruction may prevent many students from immediate access to the benefits of these services. Many peer tutoring programs are implemented with the primary goal to target at-risk students (Ehly & Larsen, 1980; Falchikov, 2001). Despite one in two college students having a disability (69.4% recognized as a learning disability) (Staklis, 2010), at-risk labels may stigmatize rather than help students (Somers, 1988). Social stigma may keep students from participating in out-of-class peer tutoring programs (Kail & Trimbur, 1987; Wright, 2003). Another reason could be due
to the economic financial slump, causing students not to have extra time for additional instructional practices besides that of the classroom due to working to support their education. For example, the National Center for Education Statistics and Institute of Education Sciences report that 74.8% of students work part or full time while enrolled in college, with the average being 29 hours a week (Staklis, 2010). Moreover, peer tutoring programs not directly connected to the immediate classroom could be seen as abstract, therefore they could be easily forgotten by the student.

With colleges and departments having increases in student enrollment, peer tutoring as an in-class, supplemental instructional method may be a superior alternative to traditional peer tutoring programs. Having peer tutors as an immediate instructional tool within the classroom could increase student engagement, classroom climate, affective learning, and communication competence, provided that the peer group is the single most powerful influence in undergraduate education (Newcomb & Wilson, 1966). Increases in student-student rapport correlate with more student in-classroom participation (Frisby & Martin, 2010). Increases in student-student rapport can also increase positive peer climates in the classroom, which can predict achievement, belongingness, and academic efficacy (Nelson & DeBacker, 2008). Having peer tutors available in the classroom may create a more personalized and positive expectation for all students to consider interacting with a peer tutor. In-class peer tutors may also provide busy students with more instruction, overcoming possible social stigma placed attached to seeing a peer tutor because the instructor can validate the usefulness of peer tutors by incorporating them into the daily classroom interactions.

Less research exists about programs utilizing peer tutors as integrated into daily class sessions. The peer tutoring program implemented in the introductory communication course in
the communication department at Kent State University follows this tutoring process. This program puts experienced, undergraduate communication majors back into the introductory communication course as peer tutors. These peer tutors are assigned a small number of students with whom they monitor, interact with, and personalize course content to the entire semester. Along with clarifying content questions and activities, these peer tutors provide social and emotional support for the students in the course.

The Kent State University Communication Studies department’s peer tutoring program provides additional support for both academic and nonacademic student needs. However, because this program is unique, more inquiry and evaluation for academic, social, and emotional outcomes is needed. For example, with peer tutors being a part of both sides of the classroom, how do students perceive a classroom environment that utilizes peer tutors as a daily classroom tool in comparison with students who experience the traditional classroom environment? How do these types of classrooms compare in levels of positive classroom climate? How does involving a peer tutor in the classroom correlate with students’ perceptions of their engagement, affective learning, and communication competence within the classroom when compared to traditional classroom settings? This thesis explores the answers to these questions.

Instructor and student relationship enhancement can have positive implications on student participation (Frisby & Myers, 2008; Frisby & Martin, 2010). Integrating peer tutors into the classroom environment may foster more student-to-student and student-to-teacher interactions and promote increased dialogue and interaction in the learning process. Instructor behaviors influence increases in students’ participation and affect for the course (Dallimore, Hertenstein, & Platt, 2004; Frymier, 1994; Myers, 1995) and the development of positive classroom relationships (Anderson & Carta-Falsa, 2002; Frymier & Houser, 2000). However, there is a lack
of research that measures the influence that instructor behaviors and peer tutor behaviors can have together on students’ perceptions of the overall classroom climate (Dwyer et al., 2004; Frisby & Myers, 2008).

Study Concept Overview

**Student engagement.** Student engagement is increasing in importance for higher education (Handelsman, Briggs, Sullivan, & Towler, 2005) and newer generations of students are demanding more in-class participation and interaction from their classroom experience (Howe & Strauss, 2000). The conceptualization of student engagement that has been suggested as most useful contains three components: behavioral engagement, emotional engagement, and cognitive engagement (Fredicks, Blumenfeld, & Paris, 2004).

Behavioral engagement has been defined as students’ participation and involvement in academic and social activities. Emotional engagement has been defined as students’ affect toward the classroom and components within it, such as the instructor, course content, activities, and other students. Cognitive engagement has been defined as students’ investment into the course, which encompasses student use of thoughtfulness and the willingness to put forth effort to comprehend, learn, and master complex ideas and skills (Fredicks et al., 2004). Overall, engagement has shown to have important, positive outcomes for students. Students who are more engaged in their learning environment are more satisfied with their overall college experience (Zhao & Kuh, 2004), are perceived by instructors as being twice as successful than other students (Klem & Connel, 2004), and are more likely to be retained (Lotkowski et al., 2004).

Classroom environments have a critical influence on student engagement.

**Classroom climate.** Positive classroom environments, or climates, are largely influenced by classroom relationships. Classroom climate has been defined as a construction of the social
and psychological components enacted in the classroom, such as supportive and defensive communication (Rosenfeld, 1983). Researchers have argued that the instructor-student relationship is an important type of interpersonal relationship and positive communication between the instructor-student correlates with increased student involvement (Frymier & Houser, 2000), leading to increased student engagement (Topping, 1996). Use of peer tutors in the classroom may be one way to encourage and promote more interaction between students and instructor in addition to increased interaction with other university students likely to be perceived as peers.

Dwyer, Bingham, Carlson, Prisbell, Cruz, and Fus (2004) argue that student-to-student connectedness should be considered when analyzing a positive classroom climate. In addition, the researchers state that a connected classroom facilitates students’ perceptions of a cooperative and supportive environment. Instructors can facilitate these perceptions through communication. Instructors who communicate supportively increase students’ emotional engagement and decrease students’ feelings of boredom, anxiety, and frustration (Skinner, Furrer, Marchland, & Kindermann, 2008). When communication between individuals becomes more interpersonally supportive, respect and trust develop. Trust leads students to feel safer about asking questions, requesting feedback, or seeking more clarity, while decreases in trust keep students from interacting or asking questions for fear of being perceived as unintelligent (Frymier & Houser, 2000). However, lecture-based classes enable students to blend into the crowd and become less individually observable (Finn et al., 2003), which could lead to the instructor having a greater chance to overlook students. Thus, opportunities for enhancing classroom climate and relational development are more difficult to ensure in larger classes.

Most departments have an introductory course that may be the only course selected for
non-majors and sometimes advanced as liberal education courses. This introductory course is an opportunity to inspire and recruit new majors to the discipline. Moreover, it is most likely that the chance for instructors to make a connection with students to the subject, getting them to care about it, and find importance with it for their future career goals can come in this introductory course. In other words, introductory courses give the instructor a chance to influence students’ affective learning.

**Affective learning.** Affective learning has been defined as “changes in interest, attitudes, and values, and the development of appreciation and adequate adjustment” (Bloom, 1956, p. 7) and more specific to the classroom, “students’ internalization of positive liking toward instructional content and subject matter” (Waldeck, Plax, & Kearney, 2010, p. 171). Affective learning is positively correlated with cognitive learning (i.e., acquisition of knowledge) and behavioral learning (i.e., development of physical skills) (Christophel, 1990; Frymier, 1994). Positive instructor-student communication and relationships influence affective learning (Bloom, Hasting, & Madaus, 1971; Eiss, 1969; Nussbaum & Scott, 1980). Most importantly, affect influences frequency of participation (Frisby & Myers, 2008) and the likelihood that a student will take future courses in the content area (McCroskey, 1994). Along with students’ affective learning outcomes, students’ communication skill outcomes are important to higher education success.

**Student communication competence.** Students’ perceived communication competence is constructed on impressions of self or other’s communication effectiveness and appropriateness (Rubin, 1985; Spitzberg & Cupach, 1989). Instructor interaction has been the primary focus for exploring potential influences on students’ communication competence (Ellis, 1995; Rubin, Rubin, & Jordan, 1997), while very little research has examined the influences of peer
interactions on the development of communication competence. However, because speech and communication competence is a top priority for student behavioral assessment (Sellnow & Martin, 2010), identifying positive influences to increase students’ communication competence is vital to introductory communication course success. Understanding how peer communication influences the development of perceived communication competence is important. Moreover, instructional communication research needs to explore further the impact of peer tutors in the classroom.

**Social Cognitive Theory and Peer Tutoring Overview**

Social Cognitive Theory (SCT) is a framework that has been used to explain how students utilize agencies during their learning processes within a classroom environment. SCT (Bandura, 1986, 1989, 2001) states that human behavior is a dynamic, triadic, and reciprocal interaction of person, behavior, and environment factors, or agencies. These agencies can be framed to a pedagogical paradigm to explain student learning and behavior (Kim & Baylor, 2006). To explore the influence of in-class peer tutors, SCT will be utilized. Specifically, the concept of social modeling within SCT will be used to explore how peer tutors may role model affective, cognitive, and behavior learning components precipitating increases in students’ positive classroom communication, affect for the discipline, and communication competence.

Utilizing peer tutoring as a method of instruction is growing in its adoption in higher education and effective communication techniques can further enhance its implementation into the classroom (Falchikov, 2001; Topping, 1996). Therefore, the focus of this study is to explore the comparison of traditional classroom environments to classroom environments where peer tutors are integrated in the class. Specifically, this study will explore the differences each environment has in association with student engagement, classroom climate, affective learning,
and communication competence. The hope is to further instructional communication literature by understanding how implementing peer tutors as an integrated instructional component within introductory classrooms affects student engagement, classroom climate, affective learning, and communication competence. To better understand the specific reasons that student variables are affected within the classroom, the incorporation of SCT (specifically, the peer modeling component) is utilized. Finally, this study should give arguments for whether or not utilizing in-class, peer tutors is a superior method for an introductory course than traditional instructional methods.
Chapter II

Review of Literature

The review of literature contains three major sections. First, Social Cognitive Theory (Bandura, 1986, 1989, 2001, 2005) is reviewed and analyzed for the use of its modeling component as the guiding framework of this study. Second, peer tutoring literature is reviewed and benefits of such programs are identified, specifically in cohesion with Bandura’s (1986) concept of peer modeling. In addition, Kent State University’s peer tutoring program is described and its unique importance is recognized as the primary context for this study. Finally, literature on the importance of student engagement, classroom climate, affective learning, and communication competence is explored, analyzed within a peer tutoring partnership, and research questions and hypothesis are proposed at the conclusion of each section.

Social Cognitive Theory

Social cognitive theory (SCT) (Bandura, 1986, 1989, 2001, 2005) characterizes human behavior as a triadic and mutual collaboration of person, behavior, and environment agencies. First, person agency involves an individual’s efficacy or control over the value and conditions of their life. Second, behavior agency involves an individual’s actions that are influenced by the perceptive constructs of their actuality, specifically encoded information from witnessed modeling, and personal principles and expectations. Finally, environment agency includes elements of an individual’s current physical, social, and symbolic influences. Based on aspects of SCT, social learning and development literature has focused on the influential outcomes of social modeling and instruction processes.

Modeling has strong impacts on changing an individual’s behavior (Bandura, 1986). More specifically, peer modeling has been posited to be the strongest influence on student
behaviors (Strain, 1981). Peer models are recognized as having instructional capabilities that older instructors do not possess, such as utilizing similar cognitive abilities to individualize instruction to students (Bruffee, 1980; Cohen, 1986), and thus are accompanied into educational processes as peer tutors.

**Observational learning and social modeling.** An important aspect of social cognitive theory is learning through observation of social modeling. Bandura (1986) states that modeling is recognized as “one of the most powerful means of transmitting values, attitudes, and patterns of thoughts and behavior” (p. 48). Powerful modeling influences can simultaneously change observers' behavior, thought patterns, emotional reactions, and evaluations (Rosenthal & Bandura, 1978). In addition, observers can acquire cognitive skills and new patterns behavior by observing the verbal modeling and performance of others (Bandura, 2005; Meichenbaum, 1984). Observational learning is shown when models exhibit novel patterns of thought or behavior that observers do not already possess but, following observation, they can produce in similar form (Bandura, 1971; Bandura & Jeffrey, 1973; Rosenthal & Zimmerman, 1978). Models of similarity may be efficient to use for behavior change, such as peer models.

Social cognitive and learning literature indicates that peer models are influential parts of the classroom. Schunk (1987) defines a peer model as an individual “who is roughly equivalent in development to the observer” (p. 149) and “an individual whose behaviors, verbalizations, and expressions are attended to by the observer and serve as cues for subsequent modeling, and modeling to behavioral change that derives from observing others” (p. 149). The use of peer modeling programs have been found to improve writing skills (Braaksma, Rijlaarsdam, Bergh, & van Hout-Wolters, 2004), increase student self-perceptions of academic competence (Altermatt, Pomerantz, Ruble, Frey, & Greulich, 2002), promote on-task behaviors (Richards, Heathfield, &
Jenson, 2010), and enhance self-efficacy and self-regulation in reading and writing (Orange, 1999; Schunk & Zimmerman, 2007). Few studies have focused on peer modeling within instructional communication research (Beatty, Plax, & Kearney, 1985; Hutchinson & Neuliep, 1993). However, the potential of peer modeling influences on student learning and social behaviors needs more exploration.

This study applies social cognitive theory to the classroom environment in order to understand the influence of peer tutors as student models on impacting how other students may elevate the perspectives, attitudes, and capabilities to those modeled by the peer tutors who are communication major degree seeking juniors and seniors with some of the highest GPAs in the major. Peer tutors can be a role model for appropriate and effective communication and student behaviors, attitudes, and values (Ehly & Larsen, 1980). In addition, students can gain increases in knowledge and skill attainment quicker and more effectively by observing and learning from a peer model (Bandura, 1986). One tactic peer tutors can use to help students achieve this is through exhibiting critical thinking skills and questions (Cohen, 1986; Paterson & Elliott, 2006). Moreover, peer tutors individualize instruction by observing students’ affective and cognitive learning processes and adapting the material and message delivery to meet the level of these processes (Hume et al., 1996; Lepper, Woolverton, Mumme, & Gutner, 1993). As such, social cognitive theory, through observational learning and modeling, serves as the foundations for the research questions and hypotheses advanced in this section. The next section explores peer tutoring programs and how this research blends with a social cognitive theory perspective on student modeling.

**Peer Tutoring**

Topping (2005) characterized peer tutoring as consisting of three dimensions: tutoring
relationship roles, the intense focus on course content support, and the structure or procedure for the tutoring interaction. Peer tutoring traditionally involves students teaching other students as a supplement to regular classroom instruction (Falchikov, 2001; Topping, 1996). Sharpley and Sharpley (1981) reviewed peer tutoring research and reported peer tutoring increases student abilities in mathematics, language skills, foreign languages, critical thinking, grammar, social science, sexuality and birth control, creative writing, and reading comprehension. Throughout this section, the categories of peer tutoring will be identified, comparisons of peer tutoring programs to traditional instruction will be reported, benefits for students, peer tutors, and instructors are explored, and how social cognitive theory research applies to peer tutors and modeling. Finally, the peer tutoring program in context will be described and evaluated for the purpose of this study.

**Categories of peer tutoring and outcomes.** Four main categories of peer tutoring are identified in the literature. The first category of peer tutoring includes a dyad or group of individuals from the same-level of expertise or development, within the same-institution or cohort, and who have equal-status roles (Falchikov, 2001). In other words, the student and peer tutor are of the same academic level or experience, in the same classroom or school, and are of the same relationship status as the other. For example, a method called reciprocal peer teaching involves randomly paired students who test or study with each other in preparation for a class test or assignment (Fantuzzo, Dimeff, & Fox, 1989). Outcomes of this type of peer tutoring have resulted in higher examination scores and lowered subjective distress than control groups (Griffin & Griffin, 1998).

The second category of peer tutoring includes a dyad or group of individuals from the same-level of expertise or development, within the same-institution or cohort, and who have
unequal-status roles prescribed by the instructor (Falchikov, 2001). This type of peer tutoring involves the tutor and student being of the same level of achievement or age, in the same class or discipline, but having a fixed-role relationship introduced by the instructor and establishes the permanent role of the tutor. This particular category of peer tutoring has had mixed results in terms of educational outcomes. Fremouw & Feindler (1978) explored this category of peer tutoring in comparison to a member of the faculty as the tutor for a group of students and found that the achievement of both groups did not have significant differences. However, other research concludes that when tutors give more information and students ask more clarifying and main point questions, higher assessment scores result (McKellar, 1986).

The third category of peer tutoring includes a dyad or group of individuals with cross-level areas of expertise or development, from the same-institution or cohort, and who have unequal-status roles because of the existing differences of expertise (Falchikov, 2001). This category of tutoring is when tutors have higher levels of achievement, usually have mastered the content and course prior to becoming a tutor, and the relationship between the tutor and student is a fixed-role relationship with the tutor holding the instructional power. A form of this category is the use of proctors in the classroom, which has been popular in the personalized instruction literature. Traditionally, proctors would work individually with students on the same course with the goal of achieving a mastery level of the course material (Keller, 1968). In addition, the proctors would administer tests and provide constructive feedback to their students. Outcomes of this type of peer tutoring have shown to benefit the instruction growth of the proctor and the content retention and examination performance of the students (Kulik, Kulik, & Cohen, 1979). Moreover, classes involving proctors out performed traditionally instructed classes.

The final category of peer tutoring includes a dyad or group of individuals with cross-
level areas of expertise or development, from two institutes or schools (Falchikov, 2001). This type of peer tutoring includes programs with students who act as tutors for different schools and educational facilities than peer tutors. For example, the Primlico Connection explored the outcomes of a program involving 12 engineering students who would travel to a local school to tutor students on the subjects of mathematics, science, and design technology with the goal of creating a stronger interest in the subjects for the students (Goodlad, 1998). By evaluating the outcomes of the surveys, open-ended questions, and interviews, results indicated that students had an increased interest in the subject, found instruction easier to follow, more enjoyable, and learned more. The tutors experienced an increase in communication skills, having a better understanding of working with people of different economic statuses, learning abilities and styles, and having a reinforcement of their knowledge of the content. The actual instructors reported their own lessons being easier to teach, teaching as more enjoyable, and perceived increases in their own openness to learning from students in general (Goodlad, 1998).

The majority of research that compares peer-tutored students to traditionally-instructed students results in added achievements and value from engaging with peer tutors. Students who receive added instruction from peer tutors, on average, have higher final course grades, reflect fewer rates of D, F, and course withdrawals, and even graduate at a higher rate than students who do not receive added instruction from peer tutors (Topping & Lindsay, 1992; Topping & Whiteley, 1990; Wilcox & Koehler, 1996; Wolfe, 1987). Wilcox and Koehler (1996) report higher means in final course grades for tutored-students than for non-tutored students, with higher percentages of A and B grades, and fewer percentages of D, F, and course withdrawals. In addition, students who were peer-tutored in comparison to students who were not had higher rates of reenrollment the next semester and higher rates of graduation in a six-year period. This
method of instruction has also been proven reliable from other subject area’s research, such as biology (Miller & Groccia, 1997), English and writing (Bruffee, 1980), speech and communication (Reiser, 1984; Seiler & Fuss-Reineck, 1986), and history (Wolfe, 1987). Overall, peer tutoring results in increased academic gains for students when compared to traditional instruction.

Peer tutors are influential and helpful to students in ways that regular instructors may not be able to assist. While instructors may be perceived as providers of the content needs of students (Frisby & Martin, 2010), a peer tutor is more likely to be perceived as a helper, friend, or intellectual companion because of their similar age or status to students, which enhances the peer tutor’s ability to identify with students needs and feelings (Bruffee, 1980). Cohen (1986) posits that since the peer tutors are so close in age with the students, and their cognitive framework is closer to the students’, they can explain the material with more clarity and with more relevance to other students. Bruffee (1984) extends this argument by suggesting that peer tutoring introduces students to the collaborative learning process by utilizing peer tutors as communities of knowledgeable peers that “create referential connections between symbolic structures and reality” (p. 96), or the student’s individual reality. In addition to academic support, peer tutoring programs benefit students in socially and emotionally.

Extant research indicates that students who report feeling socially isolated report that they gain valuable social skills from peer tutors. Gumpel and Frank (1999) developed a cross-age peer tutoring program to increase social skills in sixth grade and kindergarten boys who identified with being socially isolated and rejected. The peer tutors were the sixth grade boys who were instructed to tutor the kindergarten boys by utilizing a specific training sequence. The sixth grade boys were trained to identify and teach five steps of social competence to the kindergarten boys:
1. Identify social discrimination; 2. Think of possible behavior options; 3. Enter into social interaction; 4. Self-monitor throughout interaction; and; 5. Observe environmental reactions. The more peer tutoring interactions the boys had the higher positive social skill increases occurred for all boys (Gumpel & Frank, 1999). This study implies that support for relational skills can be an outcome of peer tutoring.

Topping (2005) posited in his model of peer learning that affect can be a powerful component benefited from peer tutoring relationships. The model explains that a trusting relationship between peers, when neither holds a position of authority, could facilitate a student’s comfort to self-disclose their ignorance or misconception of content, which gives the peer tutor the opportunity to analyze and correct it. Positive affect toward teachers, school, the subject, peers, and toward the students themselves can occur as a result of tutoring programs (Topping, 2005).

Moreover, peer tutoring can help students with emotional and psychological needs that pertain to academic settings. Students who engage with structured peer tutoring dyads report feeling decreases in task-related anxiety in comparison to students who work independently (Fantuzzo, Riggio, Connelly, & Dimeff, 1989; O'Donnel, Danserea, Hall, & Rocklin, 1987). For example, Fantuzzo et al. (1989) compared strategies of peer tutoring in order to explore how each relates to psychological and academic achievement outcomes. Students who worked in dyadic peer tutoring structures had higher scores than students that worked alone. Furthermore, students who used a structured format also had higher scores than students who did not. Finally, students who were in a structured groups experienced greater decreases in social anxiety and fear of evaluation in comparison to students who worked in unstructured groups (Fantuzzo et al., 1989).
Peer tutoring not only benefits students, but research has found that peer tutors also benefit from the relationship. Peer tutors are able to gain a deeper understanding of different paradigms of learning for existing knowledge from peer tutoring programs, which is often called learning by teaching (Topping, 1996). Students who learn material with the intention to teach it to peers experience a greater increase in intrinsic motivation, their own conceptual learning scores, and overall engagement in their environments in comparison to students who learn material with no intention to teach it to someone else (Benware & Deci, 1984). Peer tutors benefit in cognitive developments of teaching by having the duties of monitoring, detecting changes, analyzing, correcting, and managing misunderstandings and progress of the student’s learning (Topping, 2005). Having this awareness over another person’s educational needs could give peer tutors a sense of responsibility and accountability toward aspects of being an academic model for students who are otherwise overlooked in programs that do not include peer tutors.

Peer tutors of all abilities can help be a model of success for students. Being in either tutoring provides benefits to all students involved with the process, regardless of role (Scruggs & Mastropieri, 1998). All individuals involved in peer tutor programs experience improvement in their attitudes about curriculum and their interactions with partners outside of tutoring sessions. Having a peer tutor who is close to the same cognitive abilities (Cohen, 1986), who has slightly more knowledge of the subject, and who is similar to the students tutored enables the students to be seen as more credible to students because of successful achievement role modeling (Cohen, Kulik & Kulik, 1982; Topping, 2000; Topping & Ehly, 1998). More time for personalized and individual feedback for each student occurs when the ratio of students to peer tutors is reduced. Topping (1996) notes that “modelling and attributional feedback are important here – perhaps peer tutoring can go some ways towards combating the dependency culture associated with
superficial learning” (p. 325). McKeachie (2002) insists that an effective peer tutor can be a model of useful strategies and skills as well as a teacher.

Peer tutors are tools that can simultaneously benefit the instructor as well as the students. Topping (1996) suggests that the use of peer tutors can provide economic advantages for instruction by being able to teach more students, teach them more effectively, and ease the workload burdens for faculty. In addition, he posits that peer tutoring can be politically beneficial for students as well by delegating the learning management to the learners democratically, which provides a space for students to empower themselves and decrease dependent learning attitudes. Most of the advantages that peer tutoring programs provide instructors and students comes from the overall utilization of peer tutors as individual and personalized learning facilitators.

Effective tutors personalize academic and environmental needs of students learning. Extra interaction in a one-on-one session can help personalize student course-related learning, which facilitates adjustments to college (McKeachie, 2002). Peer tutors may be able to provide support for these adjustments more comfortably for the student than instructors can. Students who are more confused about content or material are more likely to ask peers for help than they are to ask faculty for more help (Frymier & Houser, 2000; McKeachie, 2002). Peer tutors understand student problems, are interested in students’ lives and personalities, and are less likely to take a role of authority than are faculty (Moust & Schmidt, 1995). Students claim that peer tutors personalize course material to their learning needs when they provide immediate feedback and better applications of knowledge and skills to new situations (Topping, 1996).

For example, Seiler and Fuss-Reineck (1986) reported in a study that used proctors, a term for peer tutors in in-class peer tutoring programs of ‘Personalized System of Instruction’ (PSI) (Keller, 1968), gives the students an individualized supervisor to give immediate feedback
after exams or speeches, as well as track the student’s background, achievements, and learning growth. Gray, Buerkel-Rotherfuss, and Yerby (1986) explored the difference between affective, cognitive, and performance outcomes with PSI-based models of peer tutoring and traditional lecture-based models of instruction for basic courses in communication. They surveyed five sections of the course that were PSI-based (n=160) and 38 sections of the course that were lecture-based (n=742) exploring student perceptions of their liking for the course, learning in the specific course communication areas, improvement in personal communication skills, levels of speech anxiety, and levels of retention on the final exam. Overall, students in the PSI-based sections in comparison to students in lecture-based sections reported higher levels of learning, liking for the course, and liking for the course format, as well as increased levels of skills for personal development and increased likelihood they would recommend this course to others (Gray et al., 1986).

Areas of faculty development have benefited from instructor interaction with peer tutors. Peer tutors can help instructors by giving verification on student learning comprehension (Arendale, 2002). In addition, instructors can collaborate with peer tutors for new ideas on delivering material during lessons. Instructors who have utilized peer tutors reported incorporating materials created and used in peer tutoring sessions into classroom lectures and having peer tutors provide feedback on student comprehension of course concepts (Wolfe, 1987). Peer tutoring can allow instructors to utilize their time to focus more on content development and instructional clarity (Moust & Schmidt, 1995). However, peer tutors may have unique influences on students by acting as peer models within the classroom (Bandura, 1986; Ehly & Larsen, 1980).

**Peer tutors and modeling.** Peer modeling provides many beneficial outcomes for
students. A student can gain a quicker and more effective understanding of concepts through peer modeling methods. Modeling is important when the behavior to be learned is novel and requires social cues (Bandura, 1986). In addition, even if the behavior may be learned through different means, learning through role models shortens the knowledge attainment process. Bandura (1986) notes that “the capacity to learn by observation enables people to acquire rules for generating and regulating behavioral patterns without having to form them gradually by tedious trial and error” (p. 19). Utilizing classroom models to avoid repetitive attempts of trial and error and to produce knowledge or skill attainment and change in a shorter period, such as a semester, may be helpful for meeting efficiency goals in education systems.

Peer models can be agents of behavioral change within the classroom. Peer models can assist in producing more altruistic behavior, postponement of seeking gratification, expressions of affection, discussions of particular topics, creative thinking capabilities, and engagement in acceptable actions (Bandura, 1986). Peer model expression of emotional reactions stimulates emotional arousal in students. When emotions are vicariously aroused in concurrence with certain contexts, individuals, or events, observers begin to develop anticipatory affective reactions towards these associations (Berger, 1962).

For instance, if a student observes another student enjoying and enthusiastically participating in classroom discussions, the affect may transfer from the model student to the observing student. This affective transfer may cause the observing student preemptive feelings of enjoyment and enthusiasm for future classroom discussions. Overall, peer models can influence others as teachers, inhibitors, dis-inhibitors, facilitators, attention arousers, enhancers, and affect stimulators (Bandura, 1986).

Students’ self-efficacy (a person’s belief in their own competence) is a strong influence
on subsequent skill performance (Covington & Omelich, 1979; Schunk, 1983, 1984) and modeling may help facilitate this process. For example, Schunk and Gunn (1985) explored the influence of modeling the importance of task strategy and positive achievement beliefs on students’ self-efficacy and skill development. Three groups of students were involved in math skills training programs.

The first group of students had a model that demonstrated division strategies and emphasized the importance of using task strategies. The second group of students had a model demonstrate division strategies and emphasized the importance of positive achievement beliefs. Finally, the third group of students had a model demonstrate division strategies and emphasized both importance of task strategies and positive achievement beliefs. Overall, the students who had the model demonstrate skills while promoting the importance of task strategies as well as the importance of positive achievement beliefs had higher self-efficacy reports than any of the other conditions (Schunk & Gunn, 1985). Moreover, students with higher levels of self-efficacy had higher reports of subsequent skillful performance. Peer tutors can be models for students that include positive instructor and peer influences.

Peer tutors may be used as positive examples of peer models for students within the classroom. Ehly and Larsen (1980) claim that the modeling aspect of the tutoring process may be the most important influence on inducing change in a student. In addition, they argue that students are able to observe a peer student who stays continuously focused on learning material, approaches learning in a competent and enthusiastic fashion, and is interested in helping the student with their learning process. Moreover, students will observe skills and behaviors from this model that they will more than likely begin to exhibit, leading to these skills and behaviors transferring into other academic contexts and increasing students’ educational success (Ehly &
Larsen, 1980).

Furthermore, students have been found to develop higher self-efficacy after observing a peer model perform a task. Schunk (1984) offers that the reason for this findings is because modeling implicitly expresses that the students are competent enough to successfully accomplish the same sequence of behaviors as peer tutors, thus promoting self-efficacy. This sense of efficacy conveyed through observation is validated later as students successfully perform the task. Peer tutors are able to monitor and course content to students’ individual learning needs and model strategies that assist in course comprehension.

Peer tutors can also personalize and adapt material and instructional delivery to students by monitoring, recognizing, and responding to the affective and cognitive states of students. Peer tutors can adapt tutoring strategies to a student’s affective state by assigning challenges and difficulties to the tasks or assignments rather than to student ability (Lepper et al., 1993). This decreases students’ negative emotions toward oneself or the learning process. Moreover, peer tutors adapt to students’ affective states by varying curiosity, control, and challenge throughout the learning process to keep student motivation levels high (Lepper et al., 1993). Peer tutors may also increase student affect by helping students avoid errors or mistakes through performance modeling. Bandura (1986) notes that “because people can learn approximately what to do through modeling before they perform any behavior, they are spared the costs and pain of faulty effort” (p. 47).

Moreover, peer tutors can adapt tutoring strategies and accommodate the student’s cognitive state. By observing the student’s behaviors and diagnosing the student’s cognitive level, peer tutors then construct their instruction, problem solving techniques, and dialogue from point of view of the student (Hume, Michael, Rovick, & Evens, 1996). Adaptive modeling
processes help tutors to determine what tactics to utilize during learning based on social interactions and experiences with the student (Derry & Potts, 1998).

Effective questioning allows peer tutors to engage in more effective adaptive modeling processes. Questions can serve as guides to the activation of relevant concepts and mental models (Chi, 2000). These concepts support the cognitive process of information integration by developing stronger connections, which produces better student comprehension of the material and overall student learning (Craig, Sullins, Witherspoon, & Gholson, 2006). However, lower achieving students tend to ask more procedural questions than critical thinking questions (Good, Slavings, Harel, & Emerson, 1987), which some researchers argue instructors should model for students to achieve greater increases in competence (Pearson & West, 1991) and encourage student initiative and self-regulatory learning (Crasnich & Lumbelli, 2005). Peer tutors can model critical thinking skills by asking questions that guide students through their own mental mapping and behavioral processes and that focuses learning toward a level of mastery understanding or skill (Cohen, 1986; Paterson & Elliott, 2006).

The previous literature on peer tutoring and social cognitive theory suggests that fellow undergraduate students integrated into the classroom can impact those students they work with in a variety of ways through role modeling. The next section explores the features of the peer tutoring program reflected in the current study and then examines how peer tutor-based and non-peer tutor-based sections of an introductory communication course may result in differences in student engagement, classroom climate, affective learning, and communication competence.

**Kent State University’s Communication Studies PSI program.** Recently, the school of Communication Studies at Kent State University adopted a revised version of Keller’s (1968) Personalized System of Instruction (PSI). The revisions of the PSI program may have specific
benefits from embedding peer tutors within the classroom stemming from increases in positive classroom relationships, individualized instruction and course support, as well as efficiency in the student learning progress in the introductory communication course. The purpose of this section is to review the Personalized System of Instruction and explore the adaptations the KSU communication department has applied to the PSI model utilized in the introductory communication course.

**Keller’s personalized system of instruction.** The model of Personalized System of Instruction was created as an alternative to tradition lecture-based instruction. Keller (1968) claims to have developed the idea for this system during the World War II when he was training for Signal Corps personnel in the reception of Morse-code signals. In the training, Keller observed peer teachers as personalized guides for trainees with the duties of regulating content progress, clarifying concepts and theory, demonstrating proper skill technique, administering tests, and providing grades or evaluations. The training officer (who was the facilitator or supervisor) dealt with matters more of logistics, such as instruction of training manuals, construction of the lesson plans and guides, being in charge of the evaluation progress of the students, selecting the tutors (or peer teachers), and writing reports and evaluations of the training sessions (Keller, 1968). A few years later, Keller and a few colleagues piloted the first course using the model of Personalized System of Instruction, or PSI.

PSI is claimed to be one of the most prominent mastery-based teaching models and has a large adoption history in higher education (Keller, 1968; Kulik et al., 1979). The key features of the Keller plan include unit mastery, students’ self-paced learning, motivational lectures, emphasis on written word, and utilization of peer tutors for personalized instruction. The first PSI principle is unit mastery, which states that students must demonstrate mastery of each unit of
course content before being allowed to proceed to the next unit. The second PSI principle is self-pacing, which states that students are allowed to proceed through the course, and units, at their own learning pace. The third PSI principle is lecturing for motivation purposes, which states that instead of lectures methods utilized primarily for content or information delivery, lectures are used for demonstrational and motivational purposes instead. The fourth PSI principle is emphasizing the written word, which states that textual materials, such as study guides, online units, text books, power points, and the like, are primarily used for course content or information delivery. The final principal of PSI is the use of proctoring, which states that proctors, or peer tutors, are implemented into the classroom to governing student learning, scoring exams or speeches, delivering immediate feedback, and provide personalized learning support.

Like most mastery learning programs, the majority of these components are not new. Programs that implement the foundation of PSI are characterized with their use of specified instructional goals, small-step sequential materials, repeat testing until achievement of mastery level, immediate peer feedback, and emphasis on rewarding success instead of emphasis on punishment for error (Sherman, 1992). The most important difference between other mastery programs compared to PSI programs is the utilization of peer tutors to personalize instruction, feedback, and classroom support for students (Fox, 2004; Keller, 1968; Kulik et al., 1979). Moreover, the addition of another classroom relationship may influence students’ perceptions of the overall communication environment.

Some communication research has explored the utilization of the PSI model in the classroom (Buerkel-Rotherfuss, Gray, & Yerby, 1993; Gray et al., 1986; Seiler, 1983; Seiler & Fuss-Reineck, 1986). However, there is a need for more recent communication research that explores the social and emotional benefits that embedded peer tutors provide for the classroom
environment. The PSI sections of the introductory communication course have a three-tiered hierarchy of relationships, while the traditional lecture-based sections have just the instructor-student relationship. The peer tutor is generally an upper-level student who has taken the class before and completed it at a mastery level (Keller, 1968). PSI embodies the use of peer relationships and communication to enhance the mastery learning process. The use of peer tutors provides students with an additional, more individualized instructor to enhance immediate feedback after exams or speeches, as well as monitor students’ experience, achievements, and learning growth (Seiler & Fuss-Reineck, 1986). An important focus of this study is to explore influences peer tutors may have the academic and social needs of students, not necessarily deal with a student mastery-based approach to teaching the course.

COMM 15000 personalized system of instruction. KSU’s introductory communication course (COMM 15000) has two classroom instructional methods: lecture-based and PSI-based classroom models. The PSI-based model was piloted in the introductory communication course during the Fall, 2009 semester and was developed based on the Keller Plan and Mastery Learning Model with adaptations (COMM 15000 PSI Internship, 2011). KSU’s PSI program has been revised in certain ways to increase students’ optimal learning levels and decrease potential conflict. This program specifically concentrates on training and utilizing peer tutors as personalized tools for development and additional instruction of course content and classroom interactions to increase students’ understanding of communication skill application, classroom activity processes, and theoretical frameworks. Peer tutors, however, do not provide direct grade evaluations or stop students’ progression through the course to the next unit until mastery occurs. They simply work in conjunction and tandem with the course instructor to reinforce and connect with students from a student support perspective.
In addition, instructors are then more able to monitor student learning, develop better classroom lessons and materials, and efficiently move the class through more units of communication content. Most importantly, students are given more frequent and individualized opportunities to learn and practice communication concepts with utilization of peer tutors. Although KSU’s peer tutors are utilized as personalized student learning instruments, another revision restricts the grading proponents, to avoid conflict and enhance trust between peer tutors and students, to only the instructors of the class and not the peer tutors. Students are more able to trust and confide in peer tutors about mistakes or misunderstandings when the pressure of authoritative accountability is lifted from peer tutors duties. Moreover, there are several student benefits for embedding peer tutors inside the classroom and utilizing them with students with teaching in smaller breakout sessions occurring in each class session at relevant times.

Peer tutors aid students through the introductory communication course in multiple, individualized ways. First, peer tutors are grouped to only five to six students, which provide students more one-on-one interactive learning with a knowledgeable communication major. Not only does this lessen students’ anxiety about asking questions in front of an entire class, but it also provides more intimate facilitation from an individual who has previously mastered the content currently being learned by the students. Second, peer tutors are trained to monitor students’ learning progress, evaluate the learning needs of students, and revise the message of the content in order to make it more relevant to the students. Students should have increases in clarity and understanding of communication materials and processes because peer tutors adjust their instruction to create meaningful learning sets specific to each student. Each group of peer tutors assigned to a specific class meets weekly with the instructor to plan for their facilitation and interaction during the class sessions in the following week. This reduces uncertainty and the
potential for conflicting information or perspectives from instructors versus peer tutors. Both are in frequent weekly contact beyond the class instructional sessions.

Finally, peer tutors decrease the chances for students’ misunderstandings or communication performance errors due to the increased amounts of immediate, personal feedback during the learning process. Students receive more immediate feedback by observing peer tutors model appropriate communication skills and learning methods, as well as by peer tutors coaching students during speech practices, writing outline rough drafts, and classroom activities. There is less chance to make mistakes when students do not have to delay asking about misunderstandings. Although the PSI model has positive outcomes for students, peer tutors experience academic and career skill developmental gains as well.

Peer tutors further develop their knowledge of communication by developing skills in organization, communicating feedback, training, leadership, and mentoring. Peer tutors also develop interpersonal communication skills by creating relationships with students to support a more comfortable environment for students to participate and learn at mastery levels. Social support is important for students away from home for the first time or who may be first-generation college attendees, from minority backgrounds, who have English proficiency limitations, with lower socioeconomic statuses, or face hindrances toward being socially accepted (National Survey of Student Engagement, 2004). Although peer tutors acquire career skills, they also acquire gains from their responsibilities as teachers.

The PSI peer tutors have administrative and mentoring duties they must perform within the introductory communication course. The administrative duties include taking attendance, assisting students with registration and navigation of the website, reminding students of testing assignment deadlines, speaking schedules, monitoring students' attendance, attending weekly
training meetings, and assisting with recruiting new tutors go to and majors. The peer tutors mentoring duties include answering student questions, assisting with learning activities, aiding with planning and preparing students speeches, providing quick and efficient communication and feedback with students via e-mail and face-to-face, mediating student problems and issues to the instructor, and being a student model for the school of communication studies. Along with meeting administrative and mentor duties, peer tutors must also meet academic expectations as a student.

Peer tutors earn internship, independent study, or practicum credits being communication majors. In order to satisfy these academic expectations, peer tutors must satisfy academic requirements. Ways in which to satisfy these requirements include peer tutors attending assigned introductory classes and weekly training meetings with the class instructor throughout the entire semester, completing daily classroom journals, utilize the weekly training notebook, completing a midterm reflection, and completing final observations/reflection papers. Additional practicum requirements may include completion of projects and submission of midterm and final visual design artifacts (including flyers, programs, and photography, etc.).

Overall, the PSI method was developed as an alternative method of instruction to the traditional lecture (teacher-centered) based classrooms. In addition, PSI was created to facilitate ideas that students should be rewarded and not penalized, learn the content through multiple perspectives, and be saturated in an increased amount of interpersonal communication within the classroom (Keller, 1968). Moreover, this system focuses on a learning environment that supports each students’ learning needs, communicates intrinsic motivation to learn, and promotes immediate dyadic conversation between students and peer tutors to ensure verbal competence in understanding content. Most importantly, PSI is an interactive learning model that is strongly
enriched with interpersonal communication.

Although the use of the PSI system has been positively associated with a large amount of instructional variables, less is known about specific reasons that account for these gains. Therefore, one purpose of this study is to explore SCT’s ability to explain for instructional gains based on the tenet of modeling behaviors. The use of SCT is appropriate as researchers’ past utilization of the theory have demonstrated its explanatory power across behavioral, cognitive, and affective variables. To better understand how PSI systems influence these three different types of student variables, the present study focuses on student engagement, classroom climate, affective learning, and communication competence.

**Student Engagement**

Student engagement has become increasingly important for the evaluation of higher education quality. Data from 1983 to 1997 examining if education reform during this time frame impacted student engagement practices demonstrated no significant increases to student engagement as a result of more cooperative learning and active learning programs in place (Koljatic & Kuh, 2001). Today, substantially more attention has been placed on student engagement in higher education. However, others have suggested that there are several reasons for the recent focus on student engagement due to its possible relationship to academic motivation and achievement (Fedricks et al, 2004). This section is dedicated to providing a brief overview and conceptualization of student engagement and its categories, as well as the positive outcomes associated with the construct. Moreover, the relationships between student engagement, classroom environment, and peer tutors will be explored.

**Student engagement overview and outcomes.** Student engagement is a multidimensional concept, which includes some form of performance, affective, and cognitive
element (Fedricks et al., 2004). Handelsman et al. (2005) are among the few researchers to focus on student engagement in higher education, specifically for individual college courses and especially for required lower division courses. In addition, the purpose for this micro-level focus is due to the researchers claim that this level in education is where faculty “have the most control and could make the most – or at least the most immediate – difference” (p. 185). By utilizing an inductive method to data obtained by asking undergraduates and faculty what engaged students feel, do, and think, Handelsman and colleagues (2005) conceptualized four categories of student engagement in higher education: skills engagement, emotional engagement, participation or involvement engagement, and performance engagement.

First, skills engagement is a category of student engagement defined as practicing skills that “include general learning strategies that one can utilize to attain intrinsic and extrinsic rewards and may be related to the level of academic challenge” (Handelsman et al., 2005, p. 186). Examples of skills engagement include student note taking, consistent studying, being prepared for class, course effort, and attending class regularly. Students who come prepared to class have increases in motivation (Junn, 1994) and have greater positive outcomes with academic performance and retention (Robbins, Lauver, Le, David, Langley, & Carlstom, 2004). Students who take notes, increase their achievements on test scores (Titsworth, 2001; Titsworth & Kiewra, 2004) and encode information into memory better than students who do not take notes (Kiewra, Dubois, Christain, McShane, Meyerhoffer, & Roskelley, 1991). Greater attendance correlates with instructor perceived motivation from students (Devadoss & Foltz, 1996), which could be observed as student effort. Overall, the more skills engagement students perform the more likely they are to attain a higher education degree with in a six-year period (Svanum & Bigatti, 2009).
Second, emotional engagement is a category of student engagement defined as “student engagement through emotional involvement with the class material” (p. 186) and has similarities with affective learning components (Handelsman et al., 2005). Examples of emotional engagement include making the course content individually relevant, applying the course content in life, making the course interesting, and having a desire to learn the material. Students who perceive the course content to be relevant to them have higher levels of state motivation to engage in learning (Keller, 1987). Students have greater liking for the course and instructor when the instructor is perceived as highly encouraging and supportive (Klem & Connell, 2004). Students have increases in emotional engagement when they feel a greater sense of relatedness with their peers and instructor (Furrer & Skinner, 2003) and a greater sense of belonging with the classroom environment (Osterman, 2000). Overall, students who have greater interest and liking for the course are more internally motivated toward course content and a desire to learn (Patrick, Skinner, & Connell, 1993).

Third, participation or interaction engagement is a category of student engagement defined as “participation in class and interactions with instructors and other students” (Handelsman et al., 2005, p. 187) and involves the categories of preparation, contribution to discussion, group skills, communication skills, and attendance (Dancer & Kamvounias, 2005). Examples of participation or interaction engagement include asking clarifying and correcting questions to the instructor, having fun in class, participating in small group discussions or active and collaborative learning, and out-of-class contact with the instructor. Students who participate and are involved benefit by increases in satisfaction and persistence rates (Astin, 1999). Dancer and Kamvounias (2005) claim that student who participate develop their communication skills as interaction and cooperation skills with their peers. Students who participate in class have
increases in motivation (Junn, 1994), areas of learning (Weaver & Qi, 2005), critical thinking and higher level cognitive skills (Crone, 1997; Smith, 1977), and perceive themselves as having a growth in character (Kuh & Umbach, 2004).

Lastly, performance engagement is a category of student engagement defined as “student engagement through levels of performance in the class” (p. 187) and “appears to relate to extrinsic motivation and to performance goals rather than learning or mastery goals” (Handesman et al., 2005, p. 187). Examples of performance engagement include working toward getting a good grade, doing well on tests, self-efficacy to learn, and do well in the course. Students perceived as highly performance engaged may be seen as orderly, responsible, and highly observant of class requirements and directions (Pollio & Beck, 2000). In addition, students who are strongly performance engaged see positive achievements in grades as a necessity for admission to college, graduate school, and attaining a good career. Moreover, some instructors, students, and employers see evaluations as adequate measurements of student knowledge, learning, and motivation (Milton, Pollio, & Eison, 1986), although these claims have yet to be reliable (Pollio & Beck, 2000).

Student engagement is associated with positive academic outcomes, including achievement and persistence in school. Students who have higher levels of engagement have better grades and achievement scores in verbal, reading, and mathematic areas (Skinner, Wellborn, & Connell, 1990), as well as greater in-depth understanding and synthesis of course materials (Nystrand & Gamoran, 1991). Students who participate in class have been found to be more emotionally engaged as well as identifying stronger with the educational environment than students who participate less (Finn, 1989). Teachers show more involvement and support with students who they perceive to be more engaged (Skinner & Belmont, 1993). Perhaps most
importantly, a higher level of engagement in students increases the likelihood of success in college (National Survey of Student Engagement, 2004, 2007; Svanum & Bigatti, 2009) and decreases student attrition for the university (Lotkowski et al., 2004).

For example, Svanum and Bigatti (2009) explored student engagement in a single course and the impact it had to students’ subsequent college success, or degree obtainment. The academic performance data collected over a 5-6 year period included degree attainment, semester of graduation or last semester of enrollment, and final GPA of last semester enrolled. Student engagement in a single course positively influenced overall degree attainment. Students with higher reports of student engagement in the course were 1.5 times more likely to graduate, did so a semester earlier, and had higher final GPA scores than students with lower reports of student engagement (Svanum & Bigatti, 2009). Overall, the outcomes that arise from higher levels of student engagement have been positive. Thus, it is important to identify factors that can influence increases in student engagement.

Promotion of student engagement is highly dependent on different components of the classroom. To increase student engagement and decrease student attrition, it has recently been suggested that universities incorporate academic and non-academic factors that foster a “socially inclusive and supportive academic environment that addresses the social, emotional, and academic needs of students” (Lotkowski et al., 2004, p. viii). Peer tutors may be able to address many of these needs in unique ways. Student engagement is higher in classrooms with supportive teachers and peers, challenging and valid tasks, opportunities for student choice, and adequate structure (Fredricks et al., 2004). Students who have supportive and caring interpersonal relationships in the academic environment report increases in student engagement (Ryan & Patrick, 2001; Skinner & Belmont, 1993), affecting increases in positive attitudes, and
values and attendance with school (Klem & Connell, 2004; Voelkl, 1995). The more a student feels involved in the social context of the classroom the more that student will engage with the course (Skinner et al., 1990), resulting in greater student retention (Lotkowski et al., 2004).

Interpersonal interactions are the most influential factors to student engagement (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996). Research has shown that instructors have influence over student engagement and participation. Instructors who instill attitudes in students to interact and facilitate affect for learning in the classroom may help students increase their emotional engagement (Handelsman et al., 2005). Greater teacher clarity and organization increases student participation, knowledge acquisition, and critical thinking skills (Miller, Demoret, & Wadkins, 2009). Collaborative and active learning environments provide more chances for course-related interactions between students, which enhance student engagement (Tinto, 1997). The influences of instructors on students has been the primary focus for existing research, but more current research on interactions in the classroom examine peer influences on students (Frisby & Martin, 2010).

Peer interaction has a strong influence on students feelings of interpersonal relatedness (Furrer & Skinner, 2003) and belonging in the classroom (Osterman, 2000), which have direct correlations with student engagement. Increases in peer relatedness can combat negative feelings such as boredom, anxiety, frustration, and pressure, while a sense of belonging can increase student enthusiasm, interest, and willingness to participate in class activities (Fredricks et al., 2004). In addition, students who feel more peer relatedness, increase their behavioral and emotional engagement for the class (Furrer & Skinner, 2003). Moreover, students with a stronger sense of belonging in the classroom experience increases in student engagement and participation and decreases in dropout rates (Osterman, 2000).
Literature has shown the importance of increasing student engagement in higher education. In addition, there are academic and social factors that influence the levels and types of student engagement, which have implications on student achievement, learning outcomes, and motivation. However, macro-level changes to increase student engagement may be too time consuming, financially heavy, or are implemented as remedial programs for struggling students and may not be compatible for the institution or student (Pascarella et al., 2006). In addition, even college departments may find it difficult to facilitate engagement due to students having control over their choice of discipline and desired interactions.

However, the micro-level of the introductory communication course classroom may be the environment that the most control for facilitating student engagement and reversing student attrition occurs (Miller et al., 2009). Overall, literature suggests that interpersonal interactions (Frisby & Martin, 2010; Handelsman et al., 2005) and active learning environments, such as learning communities and tutoring programs, influence and facilitate student engagement (Pascarella et al., 1996; Tinto, 1997). Embedding peer tutors within the classroom may be a more effective method to increase student engagement and meet student academic and relational needs.

**Peer tutors and student engagement.** Peer tutors may help make course content more individualized and relevant to students, which could enhance their level of student engagement for the course content. The motivation for students to engage in the classroom increases when course content is relevant to the students (Keller, 1987). Moreover, the way in which to deliver course content can determine how students see it as relevant (Frymier & Shulman, 1995). It has been suggested that faculty involve students in the course design to enhance relevancy by adapting content to the goals of students (Shulman & Luechauer, 1993). Using peer tutors as the
delivery method for making course content most relevant to other students may be the most accurate and direct system to facilitate student engagement.

Accordingly, the personalized system of instruction (Keller, 1968) promotes the use of peer tutors for student feedback and helps with discussion of material. In addition, peer tutors in PSI programs are students who previously mastered the course material and are similar in age with the current students taking the course. With similarities in learning development and age, peer tutors have the ability to translate course content to students in ways that an older instructor may not be able to. Moreover, peer tutors can help build on the students existing knowledge by filtering and personalizing material, which enhances mastery of content (Falchikov, 2001; Keller, 1968; Topping, 2001). Classes that focus on course content mastery also need to address long term learning goals, such as student involvement (Lotkowski et al., 2004), which personalizing course content can encourage. Along with individualized instruction and content relevancy, peer tutors may be able to keep students on task longer.

Students may get more one-on-one instruction from peer tutors and increase their overall time spent engaged on a task. Learning from a peer increases engagement and victorious practice, fluency, and automaticity for skills being learned (Topping, 2005). A peer tutor can monitor student progress and give immediate feedback to the student while working on a task or assignment, which can keep the student engaged longer by decreasing chances for confusion and frustration because of mistake and error making (Arreaga-Mayer, 1998; Delquadri, Greenwood, Stretton, & Hall, 1983). Increases in student participation, academic responses, and student attention on the task have been reported with the use of peer tutors.

For example, Greenwood, Dinwiddie, Terry, Wade, Stanley, Thibadeau, and Delquadri (1984) explored the achievement outcomes of teacher versus peer tutoring instruction for
spelling test performances. Instructors from five different classes were trained to implement a peer tutoring instructional method at various weekly intervals throughout the semester. Direct observations, weekly subject tests, and standardized achievement tests were utilized as the study’s measures. Individual academic responses (including writing, academic talk, reading aloud, and reading silently) were more than twice as high in levels of frequency during the peer tutoring weeks than during the teacher-only weeks. In addition, the peer tutoring intervals produced superior weekly achievements and had the largest gains in pretest-posttest scores for the content areas in which peer tutoring was utilized the longest (Greenwood et al., 1984). Increasing the amount of participation of a student may help facilitate student responsibility for his or her own learning.

Peer tutors have been found to promote students self-involvement with their own learning (Rudduck & Flutter, 2000). Goldschmid and Goldschmid (1976) connect peer tutoring to student engagement, noting that peer tutors “may be particularly relevant when one seeks to maximize the student’s responsibility for his own learning and active participation in the learning process, and to enhance the development of skills for cooperation and social interaction” (p. 29). Students who discuss class content and assignments with their peers prior to the class discussions increase their involvement for those class discussions (Fassinger, 1995; Wade, 1994). Peer tutors can increase critical thinking and communication skills for students during these peer discussions by prompting student responses (Ehly & Larsen, 1980) and asking more helpful questions, utilizing the peer tutor’s prior mastery of the class material in combination with their ability to deliver this material with a similar cognitive process like the student’s (Falchikov, 2001).

Overall, student engagement is important for two main reasons. Nationally, administrators use the concept of student engagement to measure the quality of higher education
at universities and colleges. Additionally, the student engagement measure reflects the needs and characteristics of the students who attend those universities and colleges. One strong influence on student engagement is interpersonal interaction within the classroom. Instructor influence in the classroom has been widely studied, while research concerning peer influence has only recently begun to be explored. Peer tutors can role-model high levels of engagement, given they are majors in communication, are upper-level students, have higher GPAs, and have taken on the opportunity and increased responsibility to serve as a peer tutor. Peer tutors, however, have yet to be examined as a source of peer influence for student engagement in the classroom, even though positive outcomes are plausible. Give the above arguments, hypothesis one suggests incorporating peer tutors into the classroom will significantly influence student engagement:

$$H_1: \text{Students in peer tutor-based sections of the introduction to human communication course will exhibit significantly higher levels of student engagement than will students from non-peer tutor-based sections of the introduction to human communication course.}$$

**Classroom Climate**

Several factors can influence learning processes and experiences in the classroom. A classroom climate is affected by factors such as individual personality traits or dispositions, orientations or attitudes (McKinney, McKinney, Franiuk, & Schweitzer, 2006), communication behaviors (Frymier, 1994; Mazer & Hunt, 2008; Myers, 1995; Myers & Rocca, 2001), pedagogical methods (Gillen, Wright, & Spink, 2011), and the psychological or physical environment (Lotkowski et al, 2004; Smith, Kopfman, & Ahyun, 1996). Positive classroom climates are important for students to experience because students do not learn well without positive perceptions and attitudes of the classroom (Marzano, 1992) and are less likely to
participate in activities and discussions (Fassinger, 1995). Instructional communication research has mainly focused on classroom climate in terms of instructor-student communication (Dwyer et al., 2004).

Student-student interactions exert an influence on positive classroom climates, students’ in-class involvement, and overall enjoyment and liking of the course (Frisby & Martin, 2010; Johnson, 2009; McKinney et al., 2006; Sidelinger & Booth-Butterfield, 2010). However, less research explores in-class peer tutors as an influence on classroom climate. Peer tutors have both roles as students as well as personalized instructors, thus the importance of understanding how they affect the overall classroom environment is essential. The following section examines the conceptualization of classroom climate, details classroom climate influences and outcomes, and examines how peer tutors may further enhance students’ perceptions of classroom climate occurring in their introductory communication course.

**Classroom climate overview and outcomes.** In large part, communication research has defined classroom climate through a teacher-centered lens. Myers (1995) framed classroom climate through students’ perceptions on “how well teachers establish an environment in which mutual interaction is valued, encouraged, or supported” (p. 193). Darling and Civikly (1987) claimed that climate is characterized through teacher-student communication and determined by the needs of teachers and students. Confirming interactions between instructors and students help to set the communication climate, which allows individuals to feel recognition and acknowledgement (Cissna & Sieburg, 1981), and has been established as the major guideline for exploring classroom climate (Myers & Rocca, 2001; Rosenfeld & Jarrard, 1985). Students’ perceptions of positive classroom climates depends on the instructors behavior that values, encourages, and supports the development of a mutually interactive environment (Myers, 1995).
However, students’ climates may also be affected by “the need to establish and defend personal worth and social stability in the eyes of both teachers and peers” (Myers, 1995, p. 193). Although these instructional communication variables favor research about instructor behaviors to the perception of students, the classroom has other relational influences, such as diverse types of student-to-student interaction involving peer tutors.

Increasingly, researchers have explored classroom interactions from more than just the instructor-student perspective. Although instructors have played the critical role of modeling supportive behaviors and shaping interactions in the classroom (Fassinger, 2000; Johnson, 2009), classroom influences also include student-to-student relationships and the modeling therein.

Students also seek peer communication embodied by openness, respect, and support (Anderson & Carta-Falsa, 2002). Dwyer et al. (2004) posit that a connected classroom climate involves “student-to-student perceptions of a supportive and cooperative communication environment” (p. 267). Students have identified that supportive peers in the classroom are essential to enhancing the participate environment (Dallimore et al., 2004). Connectedness focuses on the interactions that happen between peers in the classroom. These interactions correlate with behavioral learning outcomes, such as increased student participation (Frisby & Martin, 2010). Students who participate more in class have higher levels of motivation and critical thinking skills, and interpersonal and group communication skills (Rocca, 2010).

Although instructor and student behaviors have been measured as individual influences, classroom climate is a multidimensional framework (Marshall, 2004), which should be considered a group phenomenon that can affect students’ involvement (Fassinger, 2000). In addition, classroom climate influences students’ overall perceptions of a supportive community environment (Sidelinger & Booth-Butterfield, 2010). A multifaceted conceptualization of
classroom climate would be more efficient for overall classroom measures. Rosenfeld (1983) conceptualized a classroom climate as a construction of the social and psychological components, such as supportive and defensive communication, enacted in the classroom. Supportive climates tend to have increased incidents of behaviors such as equality, empathy, and spontaneity whereas defensive climates are characterized with ego-threatening behaviors (Stuart & Rosenfeld, 1994) such as superiority, neutrality, and strategy (Gibbs, 1961; Hays, 1970).

Supportiveness is the larger influence on how students perceive the classroom climate (Rosenfeld, 1983). Students’ perceptions of a classroom climate are greatly influenced by a students’ amount of liking for the class. For example, students who have a greater liking of classes with instructors who use more empathic behaviors, such as being open and honest about reasons for classroom assignments, showing interest in students’ problems, being able to see class content through a student-centered lens, and treating students as equals (Rosenfeld, 1983).

Additionally, students have a greater disliking of classes with instructors who use more of defensive behaviors, such as not explaining reasons for assignments, manipulation of students, and being close-minded. Further research has confirmed the validity of these findings given the correlations between students’ perceptions of positive classroom climates and affinity-seeking strategies (Myers, 1995), use of positive slang (Mazer & Hunt, 2008) and self-disclosure (Mazer, Murphy, & Simonds, 2007). Instructor facilitation of student-centered learning methods is another way students perceive a supportive classroom environment.

Instructors who encourage positive and respectful relationships often view learning as something teachers and students do together (Mottet & Beebe, 2006). This has been described as a student-centered approach (Chall, 2000). This relational perspective draws upon contemporary models of communication in which meaning is mutually created and shared between individuals.
(Mottet & Beebe, 2006). Moreover, student-centered environments reflect more positive classroom climates because student-centered environments let students use their own knowledge, experiences, backgrounds, and feelings about the content (Marzano, 1992).

Furthermore, student attitudes toward student-centered classrooms are positively related to feelings of mutual respect, encouragement for self-motivated learning, and increases in critical thinking skills (Wohlfarth, Sheras, Bennett, Simon, Pimentel, & Gabel, 2008). In addition, Whittington and Raven (1995) found that students preferred student-centered classrooms (instructor utilizes group discussion/demonstrations and encourages students to define both the activity and the process) to instructor-centered classrooms (instructor seeks efficiency through lecture or focuses instruction more upon subject matter than students). Along with instructors, peers can influence the classroom climate.

Additionally, peers also affect the perceived supportiveness of the classroom. For example, Johnson (2009) found that student-student supportive interactions have a positive correlation with student liking and attitude toward course, approach behaviors toward the course, and intention to take additional courses with similar content. In addition, these positive relationships were verified beyond the measure of instructor nonverbal immediacy, which is consistently associated with increases in student affective learning (Allen, Witt, & Wheeless, 2006). Gillen, Wright, and Spink (2011) explored aspects of the classroom environment that students perceive as important in creating a positive climate for learning. Students felt that developing supportive relationships with peers in the classroom was third most important to their ideal classroom climate, while relationships with instructors was fifth most important.

Moreover, Trickett, and Moos (1974) emphasize the importance of connection in the classroom by explaining how friendships between students provide further learning support, such
as assisting each other with assignments and enjoying the collaboration process. Overall, learning environments and instructional relationships that promote mutual respect (Ryan & Patrick, 2001), cooperation (Miller, Demoret, & Wadkins, 2009), trust, and support (Frymier & Houser, 2000; Willemsys, Gallois, & Callan, 2003), increase student affective and cognitive learning, student satisfaction, student motivation, feelings of acceptance and inclusion, autonomy for learning, and perceptions of positive classroom climates.

Overall, research has shown that positive teacher-student and student-student relationships in the classroom are important for a positive classroom climates and student learning outcomes (Frisby & Martin, 2010; Frymier & Houser, 2000; Ryan & Patrick, 2001). In addition, positive classroom climates tend to be more student-centered approaches to learning (Chall, 2000; Gillen et al, 2011). Students have increased positive attitudes toward student-centered environments, such as collaboration, (Wohlfarth et al., 2008) and strongly prefer these methods to teacher-centered classrooms, such as direct lecture course (Whittington & Raven, 1995). Although positive classroom relationships and student-centered environments (i.e., peer collaboration) can be facilitated separately within the classroom, utilizing these concepts together should increase their efficiency toward student affective and behavioral learning (Cornelius-White, 2007). Peer tutors may provide students with additional positive, student-centered relationships, as well as enhance positive climates when embedded into the classroom.

Peer tutors and classroom climate. Peer tutors may increase students’ feelings of belonging and relatedness (connectedness) to the classroom. Belonging needs can be met by satisfying the desire for frequent, affectively enjoyable interactions and having these interactions “take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare” (Baumeister & Leary, 1995, p. 497). A more positive peer climate predicts
achievement, belongingness, and academic efficacy (Nelson & DeBacker, 2008). Imbedding peer tutors into the course to be used in every class gives students dependable and frequent interactions with knowledgeable and relatable peers. Students may also feel a stronger sense of connectedness through increases in positive involvements.

Peer tutors can facilitate positive involvements in the classroom among students. Osterman (2000) states that when students “experience positive involvement with others, they are more likely to demonstrate intrinsic motivation, to accept the authority of others while at the same time establishing a stronger sense of identity, experiencing their own sense of autonomy, and accepting responsibility to regulate their own behavior in the classroom consistent with social norms” (p. 331). Student learning is enriched in comfortable and trusting environments that contain supportive relationships where students can learn with and from each other (McCombs, 2004). Student-centered learning environments foster student acceptance and empathy, which peer tutors can communicate and support (Cornelius-White, 2007).

Peer tutors can facilitate student-centered, positive classroom climates while filling the role as course mentor for the student. Student perceptions of personalized instruction are associated with participating in a mentoring relationship, which correlates with affective and cognitive learning (Waldeck, 2007). Peer tutors may be able to meet the social and supportive needs of students, which correlate with mentorship perceptions.

For example, Willemyns et al. (2003) examined mentee perceptions of trust, power, and mentoring (another form of tutoring) in relationships within different contexts, including education. Certain communication characteristics produced a greater perception of a positive mentoring relationship. The communication characteristics found included characteristics of positive classroom climates, such as emotional and instrumental support, empathy, trust,
praise/value, positive face, and inclusion (Willemyns et al., 2003). Even though mentors have an experienced status compared to the mentee (or student), the role of the peer tutor is not to project an authority status like the course instructor.

Peer tutors may be able to increase students’ sense of positive classroom climate due to their similarity in status as a student and their increased presence of supportive and cooperative interactions with students as a peer, in addition to the knowledge as a course peer tutor. Peer tutors’ cooperative status may increase student perceptions of shared control because peer tutors may empower students to be a part of the learning process through individualized instruction that is attuned to the needs of the student (Falchikov, 2001; Frymier, Shulman, & Houser, 1996; Topping, 2001). In addition, students may trust and disclose their misunderstandings to peer tutors due to lessened fear of being judged as unintelligent by a peer and not by a regular instructor (McKeachie, 2002; Topping, 2005). Moust and Schmidt (1994) argue that students feel peer tutors better understand their problems and show more personal interest in their overall well-being than instructors, which may increase students feelings of intimacy.

Developing positive relationships within a classroom environment is important for students’ overall college success and learning outcomes. Supportive communication facilitates positive interpersonal relationships for students (Frymier & Houser, 2000). Student-to-student connectedness involves classroom environments that student perceive as communicatively supportive and cooperative (Dwyer et al., 2004). Moreover, because the peer climate can predict student feelings of belongingness, achievement, and academic ability (Nelson & Debacker, 2008), it is important to ensure increases in student positive relationship involvement. Peer tutors that are embedded academic and relational tools within the classroom may help to satisfy students’ support and connectedness needs. Additionally, peer tutors care more about the
students’ education, as well as their own, by engaging in the opportunity to become a peer tutor (Topping, 2001; Wheldall & Colmar, 1990). As such, their work with a small group of students on an on-going basis throughout the semester incorporates more interaction and support into the classroom environment. Therefore, hypothesis two suggests that classes incorporating peer tutors will influence student perceptions of overall classroom climate:

\[ H_2: \] Students in peer tutor-based sections of the introduction to human communication course will exhibit significantly higher levels of an overall positive classroom climate than will students from non-peer tutor-based sections of the introduction to human communication course.

**Affective Learning**

Though conventionally viewed as separate, communication, emotion, and learning are intertwined in the classroom (Dewey, 1944). Students’ emotional response to learning may have a detrimental impact on their educational success. Students who associate negative emotions with learning may experience increases in student disengagement, withdrawal, and failure in school (Skinner, Furrer, Marchland, & Kindermann, 2008). Grossberg (2009) posits that emotional triggers can alter how an individual uses former knowledge to make decisions. In other words, students who experience positive emotions during learning may transfer those positive feelings when deciding to engage in similar learning environments or course content, such as committing to a major or registering for future classes.

Instructional communication research explores student emotions through concepts such as student affective learning (Andersen, 1979; McCroskey, 1994). Communication and interactions that may influence students’ affective learning are important to identify because students’ affect has strong connections with students’ motivation, cognitive learning, and
behavioral intent (Krathwohl, Bloom, & Masia, 1964; Rodriguez, Plax, & Kearney, 1996). The following section explores the conceptualization of affective learning, details affective learning influences and outcomes, and examines the relationship of affective learning and the concepts of peer tutors, student engagement, classroom climate, and communication competence.

**Affective learning overview and outcomes.** Affective learning is conceptualized as “changes in interest, attitudes, and values, and the development of appreciation and adequate adjustment” (Bloom, 1956, p. 7) as well as, “students’ internalization of positive liking toward instructional content and subject matter” (Waldeck et al., 2010, p. 171). Moreover, these beliefs, attitudes, and values relate to the knowledge and behavioral skills students acquire in the course (McCroskey, 1998). Krathwohl and colleagues (1964) posit that there are affective components within all levels of higher cognitive learning and that instructors utilize affective and cognitive learning goals concurrently and interchangeably. Along with the cognitive learning, student motivation also has close relation to affective learning. Students’ affective learning is catalyst for student motivation and related to achieving increases in cognitive and self-regulation learning outcomes (Christophel, 1990; Frymier, 1994; Richmond, 1990; Rodriguez et al., 1996).

Classroom behaviors that influence students’ affective learning include interactions with instructors and peers. Students’ affective learning increases when interacting with instructors who are verbally and nonverbally immediate within the classroom (Andersen, 1979; Witt et al., 2004). For example, Richmond (1990) explored instructor use of immediacy behaviors and the impact these behaviors have on students’ perceptions of cognitive learning, motivation, and affect and intent toward instructor, content, and course promoted behaviors. Students’ affect and intent, as well as cognitive learning, positively correlated with students’ motivation at the end of the semester.
Furthermore, students’ affect and intent toward the instructor had the strongest relationship with students’ motivation and students’ had the greatest amount of liking for immediate instructors who smiled at the class and individual students frequently, moved around the classroom while teaching, seemed physically relaxed, and used vocal expressiveness during lessons as opposed to instructors who did not (Richmond, 1990). Overall, students have increases in affective learning with instructors they perceive as more confirming (Goodboy & Myers, 2008), caring (Teven, 2007; Teven & McCroskey, 1997), and honest and trustworthy (Frymier & Houser, 2000). Peer behaviors influence affective learning as well.

Recently, communication researchers have argued that peer relationships should be explored for the important influences they may have on student learning outcomes (Dwyer et al., 2004; Frisby & Myers, 2008). For example, Frisby and Martin (2010) examined students’ perceptions of instructor and peer interpersonal relationships within the classroom and the affect it had on their perceptions of student participation, and cognitive and affective learning. Both types of relationships are positively correlated with the overall classroom connected environment, which is positively correlated with student affect toward course content and likelihood of taking a similar course.

Moreover, a student’s relationship with their instructor is more likely to increase perceptions of affective learning than student relationships with classmates (Frisby & Martin, 2010). However, Johnson (2009) found that connectedness between students in the classroom predicts variation in affect toward the course, intent to engage in behaviors advocated in the course, and intent to enroll in course with similar subject matter.

**Peer tutors and affect.** Students learn more efficiently and have increases in affect toward the course and course content when collaborating with peers as opposed to working alone
(Allen & Plax, 2002). Peer tutors promote collaborative learning environments by providing peer support, immediate feedback, and personalized instruction with course content (Buerkel-Rothfuss et al., 1993; Falchikov, 2001; McKeachie, 2002; Topping, 1996). In addition, peer tutors model positive affect for the course and, in comparison to the lecture-format, students reflected higher levels of liking for the peer tutor-format within introductory communication courses and would recommend it to others (Gray et al., 1986). Peer tutors who have declared communication as a major are likely to model to students high levels of affect for communication courses. Given social cognitive theory’s arguments about modeling (Bandura, 1986), hypothesis three explores the impact of embedded peer tutors on course affect in comparison to non-peer tutor-based sections of the basic course:

\[ H_3: \text{Students in peer tutor-based sections of the introduction to human communication course will exhibit significantly higher levels of affective learning than will students from non-peer tutor-based sections of the introduction to human communication course.} \]

**Student engagement and affect.** Student engagement may have strong connections to students’ affective learning. Students’ affect influences frequency of class participation (Frisby & Myers, 2008; Rocca, 2010) and the likelihood that a student will take future courses in the content area (McCroskey, 1994). Students who participate more in class have higher levels of motivation and critical thinking skills, and interpersonal and group communication skills (Rocca, 2010). Students who are more emotionally engaged in a class see the course content as personally relevant, interesting, and applicable to life scenarios (Handelsman et al., 2005). Emotionally engaged students have increased intrinsic desire to learn the material and tend to like the course more than students who are not emotionally engaged (Patrick et al., 1993).
Students increase their level of engagement when they perceive the relationships within the classroom as supportive and caring (Ryan & Patrick, 2001). In addition, supportive and caring classroom interactions influence students’ positive attitudes, beliefs, and involvement with the course (Klem & Connell, 2004). Given the above arguments, hypothesis four is as follows:

\[ H_4: \text{Students’ level of engagement will be positively related to students’ perceptions of affective learning.} \]

**Classroom climate and affect.** Positive classroom interactions and relationships influence affective learning (Bloom et al., 1971; Eiss, 1969; Frisby & Martin, 2010; Johnson, 2009; McKinney et al., 2006; Nussbaum & Scott, 1980; Sidelinger & Booth-Butterfield, 2010). Instructors who positively influence classroom environments tend to embody and facilitate value, encouragement, and supportiveness toward the development of a reciprocally interactive climate (Myers, 1995). Teacher confirmation behaviors, such as responding to student questions and demonstrating interest in students (Ellis, 2000), allows students to feel recognition and acknowledgement (Cissna & Sieburg, 1981).

However, student-to-student connectedness (a part of classroom climate) was found to be the mediator between teacher confirmation behaviors and student involvement within the class (Sidelinger & Booth-Butterfield, 2010). Moreover, positive classroom climates, when additionally evaluating peer influence, are positively related to students’ liking and overall attitude toward the course, self-involvement in the course, and intent to enroll in additional courses with similar content and structure (Johnson, 2009). Furthermore, this finding is unique in that it contributed a variance of affect when excluding the influences of instructor nonverbal immediacy, giving stability to the argument that classroom climates also include student-to-student connectedness. Given the above arguments, hypothesis five is as follows:
H₃: Students’ perceptions of a positive classroom climate will be positively related to students’ perceptions of affective learning.

**Student Communication Competence**

For successful completion of a college degree, communication researchers argue that students must have at least the minimal level of speaking, listening, classroom management, and interpersonal communication skills (Rubin, 1982). National employer surveys state that they seek interpersonal, public presentation, and teamwork skills but report that college graduates are lacking these skills (National Association of Colleges and Employers, 2008). Ways in which the basic communication course research has experimented with increasing student communication competence include different delivery systems or mediums, instructional designs, and supplemental programs (Sellnow & Martin, 2010).

Although instructional communication research supports claims that instructor communication behaviors primarily influence student communication competence (Ellis, 1995; Rubin, Rubin, & Jordan, 1997), some research has explored peer influences on students self-perceived communication competence (Fortney, Johnson, & Long, 2001). However, little research has explored the influence of in-class peer tutors on students self-perceived communication competence. This section describes the concept of communication competence and other communication concepts that influence communication competence. Finally, this section explores how peer tutors may increase students self-perceived communication competence within the introductory human communication course.

**Communication competence overview and outcomes.** The definition and utilization of communication competence has been a long-standing debate within communication literature. McCroskey and McCroskey (1988) posit that communication competence can be measured, in
turn defined, in four ways: (1) objective observation; (2) subjective observation; (3) self-report; and (4) receiver report. However, the majority of communication research operationalizes the self-report and subjective observation as measures of communication competence. The self-report evaluation recognizes communication competence with items that are determined on a priori, or trait basis. On the other hand, the subjective observation evaluation involves the speaker performing an assigned communicative task, which trained observers will score based on communication competence behaviors for that task, also known as a state basis. Researchers have successfully measured communication competence as a trait concept (Cegala, 1981) and a state concept (Rubin, 1982).

However, to satisfy this dichotomous evaluation situation, McCroskey and McCroskey (1988) argue the conceptualization that communication competence is “adequate ability to pass along or give information; the ability to make known by talking or writing” (p. 109). Moreover, Rubin (1990) recognizes McCroskey and McCroskey’s (1988) research and extends the definition by positing that communication competence “is knowledge about appropriate and effective communication behaviors, development of a repertoire of skills that encompass both appropriate and effective means of communicating, and motivation to behave in ways that are viewed as both appropriate and effective by interactants” (p. 96). Along with its development, research has explored ways in which student self-perceived communication competence is influenced by other concepts.

Self-perceived communication competence influences students’ decisions to engage in communication interactions (McCroskey & McCroskey, 1988) and willingness to communicate (McCroskey & Richmond, 1990). A student’s motivation to engage in communication interactions is important from a self-efficacy standpoint. Individuals make decisions for
interaction based on their own self-perceptions of communication competence rather than the individuals’ actual competence (McCroskey & McCroskey, 1988). Thus, it is important to understand what can influence a student’s decision toward interaction. Students who have high communication competence also have greater levels of willingness to communicate (Teven et al., 2010). Moreover, willingness to communicate is assumed to be the mediator for communication competence in the majority of instructional communication literature.

Willingness to communicate is a person’s predisposition for communicating with others. Individuals with high levels of willingness to communicate possess higher levels of self-esteem and are less likely to alienate themselves or show communication avoidance (Beatty, 1987). In addition, students who are more willing to communicate are perceived as more likely to succeed by instructors (McCroskey & Daly, 1976) and more accepted and socialized by peer groups (Richmond et al., 1985). More importantly, students who are more willing to communicate are significantly more likely to participate in class (Chan & McCroskey, 1987). It is important to understand what classroom influences can affect these changes.

Classroom instruction influences student self-perceived communication competence. Classroom instruction about communication effectiveness results in a decrease in students’ communication apprehension (Kelly, Duran, & Stewart, 1990) and an increase in students’ self-perceived communication competence (Rubin, Welch, & Buerkel, 1995). Although some college courses provide a small amount of communication skills training, the introductory human communication course may provide the brunt of skill training for students. Rubin et al. (1997) explored the impact of student enrollment in the communication basic course based on students’ levels of communication apprehension and communication competence. Specifically, the researchers explored the influence of basic communication skills training and knowledge on
decreasing communication apprehension and increasing communication competence in students. Students experienced significant increases in their self-perceived communication competence and significant decreases in communication apprehension after enrollment and fulfillment of a basic communication course (Rubin et al., 1997). Along with classroom instruction, certain instructor behaviors influence students’ levels of communication competence.

Instructor immediacy has been linked to communication competence. For example, instructors with high immediacy enhance instruction, help decrease levels of anxiety in students with high communication apprehension, and increase students’ level of communication competence (Ellis, 1995). Students who perceive their instructor as more nonverbally immediate are more likely to engage in communication behaviors learned from that instructor (Witt et al., 2004). Instructor nonverbal immediacy has been found to increase students’ in-class involvement (willingness to talk), which is positively correlated with students’ out-of-class involvement (self-regulated learning) (Sidelinger, 2010). Instructors who display positive teacher confirmation behaviors (responding to questions, showing interest in students, and interactive teaching methods) increase perceptions of student-to-student connectedness and students’ willingness to talk (Sidelinger & Booth-Butterfield, 2010). A student’s willingness to communicate is positively correlated with students’ self-perceived communication competence (Teven et al., 2010). Although research has explored classroom and instructor influences on students’ self-perceived communication competence, little research explores peer influences on students’ self-perceived communication competence.

Fortney et al. (2001) explored the differences between students who had compulsive communicators in their class and students who did not have compulsive communicators in their class and the relationship that had with the students’ self-perceived communication competence.
Overall, students who reported having compulsive communicators in their class had smaller increases in self-perceived communication competence than students who did not have compulsive communicators in their class. Students compare themselves to others and are more than likely to evaluate themselves as less competent when the other students are abnormally high in compulsive communication traits, when perceived as a social norm (Fortney et al., 2001). Understanding how peer communication may influence student-perceived communication competence is important.

**Peer tutors and communication competence.** Students may experience an increase in their communication competence because of the relational support facilitated by peer tutors. McCroskey and McCroskey (1998) posit that students feel more competent when communicating with friends or acquaintances (as opposed to strangers), as well as communicating in interpersonal contexts (as opposed to public contexts). In-class peer tutors are meant to provide students with frequent, supportive and positive interactions, which increase students’ sense of belonging, connection, and involvement (Baumeister & Leary, 1995; Nelson & DeBacker, 2008; Osterman, 2000) and decrease students’ perceptions of loneliness (Mouratidis & Sideridis, 2009). In other words, peer tutors can be utilized as a friend or acquaintance in the classroom. Furthermore, environments that foster relational, student-centered learning methods also facilitate the development of supportive and cooperative relationships (Mottet et al., 2006). This could be perceived as creating a context in which students communicate interpersonally. Peer tutors may also provide support for student communication apprehension.

Student-centered learning methods, such as personalized instruction, may help students increase communication competence through multiple feedback opportunities. Peer tutors
increase the amount of immediate feedback students receive and decrease the likelihood for confusion or mistakes (Falchikov, 2001; Topping, 1996). Avoiding failure may decrease a student’s fear of negative consequences and increase their self-perceived communication competence (Rippetoe & Rogers, 1987; Rubin et al., 1997). Moreover, students in peer tutor-based sections may observe someone who is similar, peer tutors, perform communicative behaviors more effectively and result in greater role modeling behaviors, increasing their own effectiveness of interacting competently (Zimmerman & Dialessi, 1973). In other words, peer tutors can be peer models of communication competence.

Peer tutors can promote positive self-perceptions of students’ communication competence by modeling and encouraging appropriate and acceptable communication behaviors. Spitzberg (1983) posits that competence is dependent on appropriate and effectiveness and that communication is functional. Peer tutors are students that have experienced and mastered the content of the course the student is currently learning from (Buerkel-Rothfuss et al., 1993). This means that peer tutors have the knowledge and skill for what constitutes as appropriate and effective communication behavior, which the student is trying to attain. Knowledge and performance of skill for what is appropriate increases a student’s efficacy (Spitsberg, 1983). Peer tutors can facilitate learning and sharpen performance skills in students by modeling cognitive and communication skills (Bandura, 1986) and coaching students through performance of these skills (Falchikov, 2001). Given the above arguments, hypothesis six suggests incorporating peer tutors into the classroom will significantly influence students self-perceived communication competence:

\[ H_6: \] Students in peer tutor-based sections of the introduction to human communication course will exhibit significantly higher levels of self-perceived communication
competence than will students from non-peer tutor-based sections of the introduction to human communication course.

**Communication competence and affect.** Students who have greater levels of communication competence are more willing to communicate in class (Teven, Richmond, McCroskey, & McCroskey, 2010). These students are perceived by instructors as more successful (McCroskey & Daly, 1976) and are more likely to be socially accepted by their peers (Richmond, Beatty, & Dyba, 1985). Students high in communication competence are psychologically and communicatively involved (Cegala, 1984) and emotionally engaged in the classroom (Handelsman et al., 2005), thus have increases in liking for the course (Patrick et al., 1993). Although communication research provides evidence for concepts that are associated with communication competence, such as willingness to communicate (McCroskey & Richmond, 1990) and communication apprehension (Rubin & Graham, 1988), there is little research that directly explores students’ self-perceived communication competence and affective learning. Given the above arguments, research question one is as follows:

R₁: How do students’ self-perceptions of communication competence relate to students’ perceptions of affective learning?

**Conclusion**

Social cognitive theory (Bandura, 1986) emphasizes learning through interacting with other individuals. Instructional communication research has given heed to the fact that positive instructor-student interactions exert greater benefits for student learning. However, it is important to study all types of relationships within the classroom for a better understanding of optimal student learning. Peer tutoring interactions and influences are important areas to study within the classroom because of the major positive outcomes for instructors, students, and the
peer tutors themselves. In addition, literature has shown the importance of increasing student engagement, positive classroom climates, affective learning, and communication competence for students’ success in college. The review of literature has implied that peer tutoring, through the social cognitive theory lens of peer modeling, may have positive influences on each of these important concepts. Future research may help to clarify the effect of embedded peer tutors as unique instructional methods within the classroom. The next section will describe the design, participants, procedures, and measuring instruments of this study.
Chapter III
Methodology

Participants

Following approval from the Institutional Review Board, participants within this quasi-experimental study were gathered from a purposeful convenience sample of students enrolled in the basic communication course at a large Midwestern university. Participants were recruited through advertisement of their course instructors. Participants were volunteers and received minimal course credit for participation. To participate, students who volunteered had to be at least 18 years old and enrolled in the basic communication course. Participants were designated as either students in a peer-tutor section (i.e., the experimental group) or in a non-peer tutor section (i.e., the control group), which constitutes a posttest-only nonequivalent group pre-experimental design (Frey, Botan, & Kreps, 2000).

There were 417 student participants included whose ages ranged from 17 to 54 ($M = 19.49$, $SD = 3.02$) and report of biological sex was 258 female ($n = 258$) and 147 male ($n = 147$). The participants’ report of their ethnicity was 78.4% ($n = 333$) as Caucasian, 6.1% ($n = 26$) as Black or African American, 5.4% ($n = 23$) as Asian or Asian American, 1.6% ($n = 7$) Hispanic or Latino, .7% ($n = 3$) as American Indian or Alaska Native, and 3.1% ($n = 13$) as multi-ethnic. Participants’ reports of student classification were grouped as first year ($n = 210$), sophomore ($n = 117$), junior ($n = 61$), senior ($n = 17$). Twenty students did not provide demographic information.

Embedded peer tutor sections. Peer tutor-based sections included a three tier interaction system with one course instructor, four peer tutors, and 20-26 students. All sections of the introduction to communication course with embedded peer tutors were sampled. Fifty-seven
participants \( (n = 57) \) enrolled in the PSI group agreed to volunteer for this study. There were a total of 129 possible students who could have participated in the study resulting in a response rate of 44.2%. Participants’ ages ranged from 18 to 23 \((M = 19.15, SD = 1.45)\) and their report of biological sex was 33 (57.9%) female and 22 (38.6%) males. Two did not report their sex. The participants’ report of their ethnicity was 44 (77.2%) as Caucasian; 3 (5.3%) as Black or African American; 4 (7.0%) as Asian or Asian American; 1 (1.8%) Hispanic or Latino; 1 (1.8%) as American Indian or Alaska Native; and; 2 (3.5%) as multi-ethnic. Participants’ reports of student classification included 28 (49.1%) as first years; 16 (28.1%) as sophomores; 9 (15.8%) as juniors; and; 2 (.03%) as seniors. Two students did not provide demographic information.

**Non-embedded peer tutor sections.** Non-peer tutor-based sections of the introductory course incorporate a relationship of one course instructor to 20-26 students. The remaining 10 sections of the introduction to human communication course as non-embedded peer tutor sections were surveyed as the control group. Three hundred and sixty participants \( (n = 360) \) enrolled in the remaining non-embedded peer tutor sections volunteered to participate in this study. Participants’ ages ranged from 17 to 54 \((M = 19.55, SD = 3.19)\) and their report of biological sex included 225 (62.5%) female and 125 (34.7%) males. The participants’ report of their ethnicity included 289 (80.3%) as Caucasian; 23 (6.4%) as Black or African American; 19 (5.3%) as Asian or Asian American; 6 (1.7%) as Hispanic or Latino; 2 (.6%) as American Indian or Alaska Native; and; 11 (3.1%) as multi-ethnic. Participants’ reports of student classification included 182 (50.5%) first years; 101 (28.0%) sophomores; 52 (14.4%) juniors; and; 15 (.04%) seniors. Ten students did not provide demographic information.

**Procedures**

Midway through the fall, 2011 semester students enrolled within the introduction to
human communication course were solicited to participate in an online survey through the communication research online participation system (CROPS) in two ways. The first way participants were solicited was by their course instructor and the second way was through a mass invitational email, which was performed by the research director of the online system. In order to secure as many students within the embedded peer tutor sections, the section instructors were requested to inform students that evaluative research was being conducted on their experiences within the peer tutor-based section and then asked students to be a part of this research project as one of their required research participation experiences (see Appendix B: embedded peer tutor-based sections). Instructors also voluntarily circulated a direct email from the researcher as a final attempt to gather data specifically from the peer tutor-based sections, which included direct links and guidelines for the survey.

For the control group sections, the primary investigator made an adapted and personalized announcement for the non-embedded peer tutor-based sections (see Appendix B: non-embedded peer tutor-based sections). Again, students enrolled within these introduction to human communication courses provided an opportunity to complete an online survey through the communication research online participation system in two ways. The first way participants were solicited was by their course instructor and the second way was through a mass invitational email, which was performed by the research director of the online system. Non-peer tutor-based sections were not given the second attempt email from the researcher due to the large number of participants who completed the survey during the first attempt.

Participants were notified that they had to complete the survey in order to earn research participation credit for the introductory human communication course. Participants were directed to Qualtrics.com, which contained a full explanation of the study and consent form. After
participants provided consent, the survey was administered through Qualtrics.com and participants were asked to register their instructor’s name, days and times their class meets, their peer tutor’s name (if applicable), and their own name and email address at the end of the survey in order to earn the minimal research participation credit associated with the course. Directions emphasized that participation in the research survey was voluntary, responses were confidential, and participants could terminate participation at any time without penalty. Upon completing the survey, participants were given credit for participation in the study. Participants were told that their instructor would not have any access to their responses at any time. Pseudonyms were used immediately after collection of the data to keep the data anonymous so that the primary investigator did not know which instructors that students evaluated in the survey.

The participants were notified that it would take approximately 30 minutes to complete the survey instruments. The survey included demographic questions (see Appendix A). The survey included the Student Course Engagement Questionnaire (Handelsman et al., 2005), a revised version of the Connected Classroom Climate Inventory (Dwyer et al., 2004), the Affective Learning Scale (Andersen, 1979; Gorham, 1988; Richmond, 1990), and the Communication Competency Self-Report Questionnaire (Rubin, 1985). After the students completed the survey, they were debriefed and thanked, as well as credited for their voluntary participation.

Measures

The survey instruments included four measures: the Student Course Engagement Questionnaire (Handelsman et al., 2005), a revised version of the Connected Classroom Climate Inventory (Dwyer et al., 2004), the Affective Learning Scale (Andersen, 1979; Gorham, 1988; Richmond, 1990), and the Communication Competency Self-Report Questionnaire (Rubin,
In addition to the four measures, items collecting demographic information and basic information regarding their peer tutoring usage were incorporated in the survey (Appendix A).

**Student engagement course questionnaire.** Student engagement was measured by the Student Course Engagement Questionnaire (Handelsman et al., 2005; see Appendix C). The measure contains 23 items. Participants evaluated their level of engagement by indicating the extent the following behaviors, thoughts, and feelings describe them in the current course utilizing five-point Likert scales from 1=not at all characteristic of me to 5=very characteristic of me. The subscales included skills engagement, emotional engagement, participation/interaction engagement, and performance engagement. Sample items from the skills engagement subscale include: “Putting forth effort,” and “Staying up on the readings.” Sample items from the emotional engagement subscale include: “Applying course material to my life,” and “Finding ways to make the course material relevant to my life.” Sample items from the participation/interaction engagement subscale include: “Asking questions when I don’t understand the instructor,” and “Participating actively in small-group discussions.” Sample items from the performance engagement subscale include: “Getting a good grade,” and “Doing well on the tests.” Previous studies utilizing this questionnaire have shown acceptable internal reliabilities, which have ranged from .76 to .82 (Handelsman et al., 2005), with an overall score of .94 (Floyd, Harrington, & Santiago, 2009). The scale had reliability in the current study (Cronbach’s \( \alpha = .91, M = 3.65, SD = 0.53 \)).

**Connected classroom climate inventory.** Classroom climate was measured with the revised Connected Classroom Climate Inventory (Dwyer et al., 2004; Johnson, 2009; see Appendix D). The scale contains 18 items. Participants evaluated their perceptions of classroom climate by indicating their agreement level on interaction behaviors with others in the classroom
utilizing a five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. The scale is a uni-dimensional instrument. Sample revised items include: “I feel a sense of security in my class,” “The individuals in my class engage in small talk with one another,” and “The individuals in my class feel comfortable with one another.” Previous studies utilizing this inventory have demonstrated high reliability an overall score of .94 (Dwyer et al., 2004). The scale had reliability in the current study (Cronbach’s $\alpha = .95, M = 3.98, SD = 0.54$).

**Affective learning scale.** Affective learning was measured with the Affective Learning Scale (Andersen, 1979; Gorham, 1988; McCroskey, 1994; Richmond, 1990; see Appendix E) which contained 16-items. Participants reported their evaluations of affective learning using seven-point bipolar scales assessing the concept/idea for the particular class. The first eight items on affect for course behaviors and content matter were evaluated using judgments such as: good/bad, worthless/valuable, fair/unfair, and positive/negative. Sample items of the first two subscales include: “Behaviors recommended in the course,” and “Content/subject matter of the course.” The last eight items on future behavior likelihood were evaluated using judgments such as: likely/unlikely, impossible/possible, probable/improbable, and would not/would. Sample items of these last two subscales include: “Your likelihood of actually enrolling in another course of related content if your schedule so permits,” and “In ‘real life’ situations, your likelihood of actually attempting to engage in behavior recommended in this course.” Previous studies utilizing this scale demonstrate internal reliabilities ranging from .82 to .96, with an overall score of .92 (Johnson, 2009). The scale had reliability in the current study (Cronbach’s $\alpha = .93, M = 5.48, SD = 1.09$).

**Communication competency self-report questionnaire.** Communication competence was measured with the Communication Competency Self-Report Questionnaire (Rubin, 1985;
see Appendix F). The measure contains 19 items. Participants evaluated their perceived communication competence in terms of their own communication behaviors with others utilizing a five-point Likert scale from 1=never to 5=always. Sample items from the communication competency self-report questionnaire include: “When speaking with someone, the words I use say one thing while my face and tone of voice say something different,” “I know when I’m hearing a fact and when I’m hearing someone’s personal opinion,” “When professors make suggestions in class on how I can improve, I understand the suggestions,” and “When speaking with others, I have to ask a question several times, in several ways, to get the information I want.” Previous studies demonstrate internal reliabilities for an overall score of .87 (Rubin, 1985). The scale had reliability in the current study (Cronbach’s $\alpha = .84$, $M = 3.70$, $SD = 0.42$).

**Data Analysis**

In order to compare levels of student engagement between peer tutor based sections of the introductory course and non-peer tutor based sections of the introductory course (hypothesis one), five t-tests were conducted, including: one overall student engagement t-test and four t-tests for each student engagement sub-dimension. To examine the comparison of peer tutored students’ to non-peer tutored students’ perceptions of overall positive classroom climate (hypothesis two), one t-test was conducted. To compare levels of affective learning between peer tutored students and the non-peer tutored students (hypothesis three), five t-tests were conducted, including: one overall affective learning t-test and four t-tests for each affective learning sub-dimension.

To explore the correlation of student engagement, classroom climate, and communication competence to students’ affect learning, each concept was tested through computing a series of correlations and constructing a correlation matrix. To explore the relationship between student
engagement and affective learning (hypothesis four), a series of correlations were computed, including: correlations for all four subscales of student engagement to affective learning and one overall correlation between student engagement and affective learning. To examine the relationship between classroom climate and affective learning (hypothesis five), a series of correlations were computed, including: correlations between classroom climate and the sub-dimensions of affective learning and one correlation for the overall scales as well.

In order to compare levels of communication competence between peer tutored students and the non-peer tutored students (hypothesis six), one independent t-test was conducted. Finally, research question one explored the relationship between communication competence and affective learning. This relationship was tested through a series of correlations, including: correlations between communication competence and the sub-dimensions of affective learning and a correlation between the overall scales of communication competence and affective learning.
Chapter IV

Results

The first hypothesis posited that students in peer tutor-based sections would exhibit significantly higher levels of student engagement in comparison to students from non-peer tutor-based sections of the introduction to human communication course. To test this hypothesis, five independent t-tests were conducted, revealing no significant differences between scores of students in control groups and students in experimental groups when measuring their overall student engagement scores, \( t(409) = -0.90, p = 0.37 \); skills engagement, \( t(400) = -1.20, p = 0.23 \); emotional engagement, \( t(407) = -0.67, p = 0.50 \); participation/interaction engagement, \( t(407) = -0.05, p = 0.96 \); and performance engagement, \( t(403) = -1.69, p = 0.09 \). Overall, students within the peer tutor-based sections of the introduction to human communication course had similar levels of engagement and there were no significant differences in means \( M = 3.59, SD = 0.52 \) to students from the non-peer tutor-based sections \( M = 3.66, SD = 0.53 \). Table 1 contains the means and standard deviations for all sub-measure scores for the two types of classes. Thus, hypothesis one was not supported.

<table>
<thead>
<tr>
<th>Measures</th>
<th>PSI</th>
<th>Non-PSI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n M (SD)</td>
<td>n M (SD)</td>
</tr>
<tr>
<td>Student Engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills</td>
<td>56 3.78 (.55)</td>
<td>346 3.88 (.55)</td>
</tr>
<tr>
<td>Emotional</td>
<td>56 3.23 (.80)</td>
<td>353 3.30 (.77)</td>
</tr>
<tr>
<td>Participation/Interaction</td>
<td>56 3.41 (.70)</td>
<td>353 3.41 (.66)</td>
</tr>
<tr>
<td>Performance</td>
<td>55 4.02 (.57)</td>
<td>350 4.18 (.63)</td>
</tr>
<tr>
<td>Overall</td>
<td>56 3.59 (.52)</td>
<td>355 3.66 (.53)</td>
</tr>
</tbody>
</table>

The second hypothesis posited that students in peer tutor-based sections would exhibit significantly more positive perceptions of an overall classroom climate in comparison to students from non-peer tutor-based sections of the introduction to human communication course. To test
this hypothesis, one independent $t$-test was conducted, revealing no significant differences between the scores of students in peer tutor and non-peer tutor based sections of the introductory course in terms of a more positive classroom climate, $t(405) = 1.63, p = .10$. Overall, students from the peer tutor-based sections of the introduction to human communication course exhibited similar perceptions of a positive classroom climate ($M = 4.09, SD = 0.52$) to students from the non-peer tutor-based sections ($M = 3.96, SD = 0.54$). Thus, hypothesis two was not supported.

The third hypothesis posited that students from peer tutor-based sections would exhibit significantly more positive perceptions of affective learning in comparison to students from non-peer tutor-based sections of the introduction to human communication course. To test this hypothesis, five independent $t$-tests were conducted, revealing no significant differences between the scores of students in peer tutor and non-peer tutor based sections of the introductory course in terms of their overall affective learning, $t(406) = -1.14, p = .25$; affect for course behaviors, $t(405) = -.39, p = .70$; affect for course content/subject matter, $t(406) = .15, p = .88$; the likelihood to engage in course behaviors, $t(406) = -1.33, p = .18$; and the likelihood to enroll in similar future classes, $t(406) = -1.88, p = .06$. Overall, students within the peer tutor-based sections of the introduction to human communication course had similar perceptions of overall affective learning ($M = 5.32, SD = 1.17$) in comparison to students in the non-peer tutor-based sections ($M = 5.50, SD = 1.07$). Table 2 contains the means and standard deviations for all sub-measure scores for the two types of classes. Thus, hypothesis three was not supported.
Table 2

*Affective Learning Measure Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Measures</th>
<th>PSI</th>
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<th>Non-PSI</th>
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<tbody>
<tr>
<td></td>
<td>n</td>
<td>M (SD)</td>
<td>n</td>
<td>M (SD)</td>
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<tr>
<td>Affective Learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Behaviors</td>
<td>55</td>
<td>5.98 (1.25)</td>
<td>352</td>
<td>6.04 (1.05)</td>
</tr>
<tr>
<td>Course Content/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject Matter</td>
<td>55</td>
<td>5.83 (1.36)</td>
<td>353</td>
<td>5.80 (1.14)</td>
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<tr>
<td>Engagement Likelihood</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Course Behaviors</td>
<td>55</td>
<td>5.54 (1.42)</td>
<td>352</td>
<td>5.78 (1.22)</td>
</tr>
<tr>
<td>Enrollment Likelihood</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future Courses</td>
<td>55</td>
<td>3.94 (1.69)</td>
<td>353</td>
<td>4.41 (1.77)</td>
</tr>
<tr>
<td>Overall</td>
<td>55</td>
<td>5.32 (1.17)</td>
<td>353</td>
<td>5.50 (1.07)</td>
</tr>
</tbody>
</table>

The fourth hypothesis posited that students’ exhibited perceptions of engagement would be positively related to their reports of affective learning. Results of the correlation tests revealed no significant relationships between affective learning and (1) overall student engagement, 

\[
r(405) = -.00, p = .46; (2) \text{ skills engagement}, r(396) = -.02, p = .32; (3) \text{ emotional engagement},
\]

\[
r(403) = .02, p = .36; (4) \text{ participation/interaction engagement}, r(403) = .01, p = .45; \text{ and (5) performance engagement, } r(399) = .01, p = .41.
\]

Overall, students’ reported perceptions of their engagement in the course (\(M = 3.65, SD = 0.53\)) did not relate to their reported perceptions of affect for the course (\(M = 5.48, SD = 1.09\)). Table 3 contains the correlation matrix for the two variables and their dimensions. Thus, hypothesis four was not supported.
**Table 3**  
*Student Engagement and Affective Learning Measures Correlation Matrix*

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. S-SE</td>
<td>-</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. E-SE</td>
<td>.58**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. P/I-SE</td>
<td>.63**</td>
<td>.62**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. P-SE</td>
<td>.49**</td>
<td>.32**</td>
<td>.41**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. SE-Tot</td>
<td>.88**</td>
<td>.81**</td>
<td>.85**</td>
<td>.60**</td>
<td>-</td>
<td></td>
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<td>9. FE-A</td>
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S-SE = Skills Student Engagement; E-SE = Emotional Student Engagement; P/I-SE = Participation/Interaction Student Engagement; P-SE = Performance Student Engagement; SE-Tot = Student Engagement Total; CB-A = Course Behaviors Affect; CC-A = Course Content Affect; BE-A = Behavior Engagement Affect; FE-A = Future Enrollment Affect; A-Tot = Affective Learning Total.

**p < .01.**

The fifth hypothesis posited that students’ feelings of classroom climate would be positively related to their levels of affective learning. To test this hypothesis, five correlations were computed. Results of the tests revealed no significant associations between students’ feelings of classroom climate and their overall affective learning, $r(405) = .03, p = .25$; their course behaviors affective learning sub-scores, $r(404) = .06, p = .13$; their course content/subject matter affective learning sub-scores, $r(405) = -.01, p = .46$; their course behaviors engagement likelihood affective learning sub-scores, $r(404) = -.01, p = .46$; and their learning future enrollment likelihood affective sub-scores, $r(405) = .04, p = .22$. Overall, students’ report of classroom climate ($M = 3.98, SD = 0.54$) showed no significant relationships with their affective learning levels ($M = 4.48, SD = 1.09$). Table 4 contains the correlation matrix for the two variables and their sub-dimensions. Thus, hypothesis five was not supported.
The sixth hypothesis posited that students in peer tutor-based sections would exhibit significantly higher levels of perceived communication competence than would students from non-peer tutor-based sections of the introduction to human communication course. To test this hypothesis, an independent sample t-test was conducted on the variable for students from the two types of classes. Results of the test revealed no significant differences in students overall levels of perceived communication competence between students in peer tutor based sections and students in non-peer tutor based sections of the introduction to human communication course, \( t(66.67) = .13, p = .89 \). Overall, students from the peer tutor-based sections of the introduction to human communication course demonstrated similar levels of perceived communication competence \( (M = 3.71, SD = 0.48) \) to students from the non-peer tutor-based sections of the course \( (M = 3.71, SD = 0.41) \). Thus, hypothesis six was not supported.

Research question one asked how students’ reports of perceived communication competence would relate to their affective learning reports. To answer this question, five correlations were conducted, revealing no significant relationships between students’ reports on perceived communication competence and overall affective learning, \( r(405) = -.03, p = .62 \); course behaviors affect, \( r(404) = .02, p = .77 \); course content/subject matter affect, \( r(405) = -.06, p = .22 \); the likelihood of engaging in course behaviors, \( r(404) = -.01, p = .93 \); and the likelihood of enrolling in similar future courses, \( r(405) = -.06, p = .24 \). Overall, students’ reports of
perceived communication competence \((M = 3.71, SD = 0.42)\) did not relate to their affective learning reports \((M = 5.49, SD = 1.09)\). Table 5 contains the correlation matrix for the two variables and their dimensions.

Table 5

*Communication Competence and Affective Learning Correlation Matrix*

<table>
<thead>
<tr>
<th>Measure</th>
<th>CMCP</th>
<th>CB-A</th>
<th>CC-A</th>
<th>BE-A</th>
<th>FE-A</th>
<th>A-Tot</th>
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<td>.00</td>
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CMCP = Communication Competence; CB-A = Course Behaviors Affect; CC-A = Course Content Affect; BE-A = Behavior Engagement Affect; FE-A = Future Enrollment Affect; A-Tot = Affective Learning Total.
Chapter V
Discussion

The goal of this study was to explore peer tutoring relationships within the classroom to better understand how peer interactions might influence the classroom environment and student learning. More specifically, this study examined the influence that peer tutors may have on students’ reports of student engagement, classroom climate, affective learning, and communication competence when embedded within the introduction to human communication course versus sections without peer tutors embedded within the introduction to human communication course. Moreover, this study examined the relationship between students’ levels of engagement, affective learning, classroom climate, and communication competence for a more accurate understanding of how these variables might be related to one another. The results of this study revealed that students in peer tutor-based sections of course had similar evaluations as students in non-peer tutor-based sections of the course in terms of their levels of student engagement, classroom climate, affective learning, and communication competence. In addition, the results showed that students’ levels of engagement, classroom climate, and communication competence were not related to their levels of affective learning. The findings and implications of this study contribute to the understanding of communication and peer tutoring relationships within the classroom.

Overall, this study provides practical contributions to understanding of the impact of the role of peer tutors in the introductory human communication course. This section explores four specific areas informed by this thesis. First, this discussion examined the tests of difference between the PSI and Non-PSI based sections of the introduction to human communication course. Second, the associations between students’ levels of engagement, classroom climate,
communication competence, and affective learning are examined. Third, the theoretical implications section assessed the viability of SCT as a framework for analyzing peer-modeling in the classroom. Finally, this discussion explored the pedagogical implications for the introduction to human communication course, students, peer tutors, and instructors along with the limitations of the present study.

**PSI vs. Non-PSI: Student Engagement, Classroom Climate, Affective Learning, and Communication Competence**

The primary purpose of this study was to ascertain if there were significant differences between students from peer tutor-based classes in comparison with students within non-peer tutor-based classes on their levels of engagement (H1), classroom climate (H2), affective learning (H3), and communication competence (H6). Results of the study indicated no significant differences in students’ reports across this range of communication variables. Collectively, the results obtained in this study provide implications for instructional communication research concerning the use of peer tutors in introduction to human communication classrooms, theoretical implications for Social Cognitive Theory (Bandura, 1986), and pedagogical implications for the use of peer tutors in the classroom overall.

The first hypothesis stated that students’ level of engagement in the course with students in peer tutor based sections of the introductory human communication course would be significantly more positive than levels of engagement with students in the non-peer tutor based sections. The results indicated no significant differences in the perceptions of student engagement between the PSI or non-PSI groups suggesting that students’ engagement is not affected by the sheer presence or lack of peer tutors suggesting that students’ level of engagement is not influenced by the presence of peer tutors. A possible explanation for why this
study did not find significant differences in students within PSI based sections of the introduction to human communication course as opposed to students in non-PSI based sections is that the small class size of the course may have contributed to both student groups’ high levels of engagement. Finn et al. (2003) observed in their meta-analysis of research concerning student behavior and small class sizes (i.e., less than 30 students) that students exhibit increased pro-social behavior in small vs. large sized classes leading to increased levels of student engagement. Due to both groups being embedded within small class sizes, students’ overall positive reports on their classroom experience may be a function of their feeling a “psychological sense of community” (Finn et al., 2003, p. 352) based on their ability to have positive interactions whether one-on-one with instructors or mediated through peer tutors. This explanation is further supported by students’ high reports of student engagement, regardless of placement into PSI or non-PSI groups. Moreover, extant literature in communication examining the differences between PSI and non-PSI classes (Gray et al., 1986; Reiser, 1984; Seiler & Fuss-Reineck, 1986) utilized large classes (i.e., classes with 30+ students in them), which may account for the differences found in previous studies that were not found in the current study.

The second hypothesis stated that students in the PSI based sections of the introduction to human communication course would exhibit significantly more perceptions of a positive classroom climate in comparison to the students in the non-PSI based sections. The results indicated no significant differences between the PSI or non-PSI based sections of the course. These results suggest that students’ perceptions of positive classroom climates are not influenced by the presence of peer tutors. However, the average report from both groups reflected similarly high positive levels of classroom climate. These results may indicate that other factors, expectations, or orientations may have had an influence on the classroom climate. It may be the
case that students’ levels of classroom climate may be influenced by the ways students identify and prioritize their learning needs and in what ways students prefer these learning needs to be satisfied within the classroom.

For example, students who view themselves as consumers of the educational process rather than co-constructors may be more likely to view classroom interactions from an individualistic standpoint (McMillan & Cheney, 1996); meaning students may have learning goals that they perceive can be met through individual instructional interactions with just the course instructor. Additionally, their interactions with instructors may be motivated more by functional needs (i.e., learning more about assignments) rather than relational needs (i.e., seeking a personal relationship) within the classroom (Martin, Myers, & Mottet, 1999). Previous studies support that students rate the referential functional communication skill (i.e., the ability to successfully relay class content clearly and relevantly) as instructors’ most important functional communication skill (Frymier & Houser, 2000), suggesting that students may be more concerned with getting clear and correct content information rather than with creating interpersonal relationships with other students within the classroom.

Overall, students who view themselves and the other members of the classroom as individual customers of the educative process may perceive the classroom climate as an overall positive environment as long as functional communication needs are being satisfied by the course instructor. However, this does not imply that other student needs are of less importance to all students. Future research in the area of peer tutor-embedded course instruction may want to investigate other possible factors that could directly or indirectly impact the relational classroom climate such as student, peer tutor, and instructor classroom interactions (Colvin, 2007; Frymier & Houser, 2000), students’ motives to communicate (Martin et al., 1999), and student consumer
attitudes toward their educational, classroom goals (McMillan & Cheney, 1996).

The third hypothesis stated that students in the PSI based sections of the introduction to human communication course would experience significantly different levels of affective learning in comparison to the students in the non-PSI based sections. The results indicated no significant differences between the PSI or non-PSI based sections, suggesting that students’ level of affective learning was not affected by the presence or lack of peer tutors. A possible explanation for why no significant differences were found in students within PSI based sections of the introduction to human communication course as opposed to students in non-PSI based sections may be that students’ desire for course content may be met by virtue of being in a small class.

For example, Finn et al. (2003) observed that instructors of small classes spend less time engaging in classroom maintenance behaviors and are able to cover a larger amount of classroom content than those in large classes. Instructors may be relaying an adequate amount of course content to satisfy students’ needs, thus resulting in both sections’ experiences of higher scores in regard to affective learning. Thus, instructors’ ability to deliver an adequate amount of information may not necessitate the aid of peer tutors in the content dissemination process. However, the results demonstrate that the utilization of peer tutors in the classroom is not harmful to those involved. The average scores for both student groups were quite high; indicating that both groups positively assessed and liked the course, regardless of added peer facilitation. Peer tutors did not lower students’ liking or enjoyment of the class.

The sixth hypothesis stated that students of the PSI based sections of the introduction to human communication course would be significantly different based on their levels of perceived communication competence in comparison with students from the non-PSI based sections. The
results indicated no significant differences between the PSI or non-PSI based sections suggesting that students’ level of communication competence was not affected by the presence or lack of peer tutors. A possible explanation for why this study did not find significant differences between students in PSI based sections and students in non-PSI based sections may be that students may possess predominant, pre-existing biological temperaments. It was posited that peer tutors could be utilized as peer models (Schunk, 1987) that may influence changes in students’ behavior and performance, cognitive patterns, emotional responses, and evaluations (Rosenthal & Bandura, 1978). However, alternative communication research paradigms may help explain why there were no communication competence differences between students in PSI and non-PSI sections of this study.

For example, McCroskey and Beatty (2000) claim that theories of social learning (i.e., social modeling) have been based on research that has accounted for little variances in human communication behavior. Therefore, they propose an alternative framework that bases a biological communication standpoint labeled the ‘communibiological paradigm,’ which states that “inborn, neurobiological structures are responsible for communication behavior and associated processes” (p. 2) and that “the influence of cultural, situational, or environmental stimuli are comparatively trivial, estimated at about 20/o of the determinant of behavior” (McCroskey & Beatty, 2000, p. 2).

Based off of neurobiological subsystems of human emotion, the communibiological paradigm proposes that human communication behaviors are influenced by the neurobiological descriptions of extraversion, neuroticism, and psychoticism, which are inherited traits. Moreover, they state that because extraversion, neuroticism, and psychoticism are temperaments instilled within humans from birth and make up most of the personality, it is almost impossible to
influence any kind of change on these emotional instincts. However, belief and knowledge systems can be influenced through social learning because the neurological functions of the prefrontal cortex (i.e., the ability for abstract thought, planning, social behavior, and planning) have the ability to change through instructional communication (McCroskey & Beatty, 2000). In other words, understanding and evaluating content or subject matter is a function that can be developed and influenced by interactions with others. However, producing behavioral skill change, such as decreasing communication apprehension or increasing communication competence, is inherently controlled by human emotional instinct and is a permanent temperament. Thus, peer tutors may not be able to socially influence students’ pre-existing temperaments toward their own communication competence but they can influence students’ understanding of the content.

**Relationships of Student Engagement, Classroom Climate, and Communication Competence with Affective Learning**

This study hypothesized that student engagement and classroom climate would be positively correlated with affective learning. In addition, the study also explored the relationships between perceived communication competence and affective learning. The results revealed that students’ level of overall engagement (H4), classroom climate (H5), and communication competence (RQ1) were not significantly related to students’ level of affective learning. There are three possible explanations for these findings.

First, student engagement may not be related to affective learning because some students may have predominant, pre-existing student orientations that may overshadow other emotional connections to classroom content. Pollio and Beck (2000) state that there are two major types of orientations students may have toward their education: learning-oriented (LO) and grade-
oriented (GO). Learning-oriented students view personal growth and educational enrichment as the primary goals of the classroom (Eison, Pollio, & Milton, 1982; Pollio & Beck, 2000). In addition, learning-oriented students see grades as a relevant goal or as a valid means of assessing personal or educational successes. Grade-oriented students see the aspects of the classroom in terms of what effects they can have on their grade, value instructional practices that facilitate easier grade achievement, and view activities that are unrelated to course grades as inconvenient and irrelevant to learning (Eison et al., 1982; Pollio & Beck, 2000).

Moreover, there are distinct personality differences between learning-oriented and grade-oriented students. Eison et al. (1982) state that learning-oriented students show greater interest in new ideas and intellectual concepts, prefer to look for new relationships and possibilities over concrete facts, and hold the most positive educational attitudes. However, they stated that grade-oriented students show a strong desire to do the right thing and act in conventional ways, have the highest levels of tension and anxiety, view ideas as concrete and established, report the lowest level of internal locus of control, and have low scores on academic attitude measures.

Because some students may come into the classroom with a predetermined orientation toward grades rather than learning goals, the ways in which they engage with the course content may be only to earn a positive evaluation from the course overall. Thus, grade-oriented students may engage with course content due to goals that are entirely separate from their liking or interest for the course content.

Second, classroom climate may not be related to affective learning because some students may enact the student-as-consumer metaphor, or see themselves as customers of their educational process (McMillan & Cheney, 1996). Students may have different and more predominant consumer goals toward obtaining educational success. Receiving clearly
communicated content (or the product) may be valued higher by students than receiving positive interpersonal interactions within the classroom (Frymier & Houser, 2000). Moreover, as affective learning measures students’ changes in interest, attitudes, and values by internalizing positive liking toward instructional content and subject matter (Bloom, 1956; Waldeck et al., 2010) and positive classroom climate measures how supportive and defensive communication is enacted in the classroom (Rosenfeld, 1983), these two concepts may be seen as two distinct modes of evaluation for the course as a whole. Students may assess the content of the course separately than the interactions within the classroom environment.

Finally, although students’ communication competence was not significantly related to students’ affective learning, the implications of these results may not be entirely negative. However, the results may have identified that students’ reports on their levels of communication competence did not have a negative influence on students’ reports of their levels of affective learning. Although students reported themselves as having slightly above the midpoint score in terms of their communication competence ($M = 3.71, SD = 0.42$), students’ reports on their affective learning toward the introduction to human communication course was consistently higher in all areas of affect. Students reported distinctly high levels of their overall affective learning for the course ($M = 5.48, SD = 1.09$) and in all sub-categories of affective learning; affect for recommended behaviors in the course ($M = 6.03, SD = 1.08$), affect for course content or subject matter ($M = 5.81, SD = 1.17$), future likelihood of engaging in recommended course behaviors ($M = 5.75, SD = 1.25$), and future likelihood of enrolling in another course of similar content ($M = 4.35, SD = 1.80$). These findings give insight into how the Communication Studies department at Kent State University may continue to develop their introductory human communication course in ways that may positively influence students’ liking and evaluation
toward learning and developing important communication skills, appreciation for communication content and theory, and possibly choosing to continue in communication courses. Although this study did not test for PSI and non-PSI group differences with student reports of perceived communication competence in relation to student reports of affective learning, it is important to note that students in non-PSI sections in comparison to students in PSI sections did have slightly higher average in both of these categories. Future research may seek insight into the potential relationships between PSI and non-PSI student reports of perceived communication competence and affective learning.

Overall, the peer tutor program used by the Communication Studies department at Kent State University seems to be successful for students in both peer-tutor based and non-peer tutor based classrooms. Future researchers may wish to investigate KSU Communication Studies department’s basic communication course structure and instructional techniques to understand the specific mechanisms that account for students’ high reports on the variables examined in the present study. The results of the present study suggest that KSU Communication Studies program’s training given to instructors, use of peer tutors in the classroom, and course design shows promise as a model for other programs to use when constructing their own basic course curricula.

**Theoretical Implications**

The results of the current study provide important insights into Social Cognitive Theory (Bandura, 1986) as a theoretical framework for future instructional research. It should be noted that the results of the current study do not indicate that the tenet of social modeling in SCT is unfounded, but only that students’ use of social modeling through peer tutoring does not produce significantly higher scores when compared to students who do not have peer tutors. The high
mean scores across the variables regardless of the presence of peer tutors suggests that social modeling may be only one factor that may contribute to students’ classroom experiences. Therefore, the purpose of this section is to advocate for a more holistic use of SCT as well as provide analysis into one way that SCT’s tenets could be fruitfully applied using the Instructional Belief Model (IBM) (Weber, Myers, & Martin, 2011).

Social Cognitive Theory is based upon the assumption that individuals’ behavior is a dynamic, triadic, and reciprocal interaction of person, behavior, and environment agencies (Bandura, 1986, 1989, 2001). The agency that was examined in the present study was behavior agency, which has been defined as the actions that one takes that are influenced by the cognitive constructs of one’s reality, selectively encoded information from observed modeling and instruction, personal values, beliefs, and expectations (Bandura, 2001). This agency includes factors such as interactions, intentional activity, and participation. Behavior agency correlates to the concept of social modeling, which “enables people to get resources or expertise of others to accomplish what they desire” (Kim & Baylor, 2006, p. 579). However, there are two other types of agency that make up SCT: (1) Person agency, which has been defined as a person’s notion of their capacity to exercise control over the quality and nature of their life; and; (2) Environment agency, which are factors of one’s immediate physical, social, and symbolic surrounding influences (Bandura, 2001). The purpose of the present study was only to explore if peer tutors, who contribute to behavior agency, influenced students in the classroom to such a degree as to elicit significantly higher scores across the variables examined. However, because the other two agencies were not accounted for within the current research, it is possible that students’ person and environmental agencies influenced their reports within this study. Utilizing additional
instructional communication theoretical approaches alongside SCT may lead to finding more explicable results for this line of research.

For instance, future researchers utilizing tenets of SCT could attempt to obtain a more holistic approach to investigate students’ classroom experiences by using the IBM (Weber et al., 2011). IBM’s primary premise is that teacher behaviors, course-specific structural issues, and student characteristics combine to influence students’ instructional beliefs, which then mediate student learning outcomes. The IBM is based upon five different psycho-communicative variables within instructional communication research. The first-order constructs of this model involve variables of teacher behaviors (e.g., clarity, immediacy, nonverbal immediacy, etc.), course-specific structural issues (e.g., classroom justice, assignment congruence, etc.), and student characteristics (e.g., conscientiousness, state/trait motivation, etc.). The second-order construct of this model involve students’ instructional beliefs (e.g., students’ self-efficacy judgments, interest in the course, belief in their ability to succeed in the course, etc.). The third-order construct of the model involves students’ learning outcomes (e.g., affective learning, cognitive learning, and behavioral learning). The use of the first and second order constructs could possibly account for the behavior, person, and environmental agencies of SCT, allowing future researchers the opportunity to better understand the unique contributions of each of these variables upon students’ learning, as well as creating a clearer understanding of how peer tutors may fit into this process. Additionally, the use of the IBM may account for students’ pre-existing psychological traits, allowing future researchers to encompass components of the communibiological paradigm (McCroskey & Beatty, 2000). The ability to account for the social, psychological, and biological factors of student would greatly enhance instructors’ abilities to create an optimum learning environment.
Pedagogical Implications

The results of the current study are examined for their pedagogical implications for students, peer tutors, and instructors as well as the limitations to offer possible avenues for future research. The pedagogical implications of the study indicate how students, peer tutors, and instructors can and do benefit from peer tutor programs. Although this study did not examine all three types of individuals, it is important to note the contributions that each make to the peer tutor program as well as identify how future research and pedagogy could benefit from examining their classroom interactions. In addition, this study did not examine the potential influence KSU’s introduction to human communication course may have on students’ high reports of student engagement, classroom climate, and affective learning. Future instructional communication research may also benefit by exploring potential environmental, contextual, and educational affects the introduction to human communication course from KSU may have on the overall learning and communication of the basic course classroom.

How students benefit. Although students’ reports across the variables examined in this study did not register differences based on their placement into peer tutor or non-peer tutor based sections, it is important to note that students’ high reports indicate that students within the Kent State University introduction to human communication sections find the classes to enable opportunities for student-student rapport, more comfortable and interpersonal classroom climates, and increase the amount of interaction abilities for more in-class participation. Previous research demonstrates that increases in student-student rapport correlate with more student in-classroom participation (Frisby & Martin, 2010), which can predict achievement, belongingness, and academic efficacy (Nelson & DeBacker, 2008). Thus, it is important to note that students’ report that the program is overall beneficial to their affective, cognitive, and behavioral learning.
Future research concerning students in peer tutor programs should address the primary limitation of this study by utilizing a longitudinal design. Although the cross-sectional data of this study has provided tentative evidence that students report high scores across the variables utilized despite their peer tutor or non-peer tutor group status, it is important to evaluate if students’ gains over the semester significantly differed based on their group status. By evaluating the gains over time, researchers would be better equipped to find the specific mechanisms that would account for students’ affective, cognitive, and behavioral learning in the classroom. Additionally, such research would provide instructors insight for how to best utilize peer tutors as a learning resource for students.

**How peer tutors benefit.** In addition to the benefits accrued by students, extant research shows that peer tutors benefit from the tutoring process as well. Although this study did not examine how peer tutors benefit from the system, previous research indicates that the process of peer tutoring increases peer tutors’ content and mastery knowledge, while also developing their capacity to communicate or explain that knowledge better to others (Falchikov, 2001). Peer tutors gain an increased ability to organize information, supporting long-term retention and assisting in the development of deeper comprehension of information (Cohen, 1986). Peer tutors obtain enhanced cognitive and social skills from individualizing and tailoring communication while giving students direction and guidance with assignments, concept acquisition, or problem solving and rule based educational tasks (Rogoff, 1990). The process of generating collaboration and dialogue, having beliefs and ideas challenged, and working toward reaching equilibration is necessary for stimulating cognitive change (Topping & Ehly, 1998). Moreover, these processes are essential to the tutoring and learning relationship because they require the use of argument and persuasion.
Peer tutors benefit from switching their role from that of a learner to that of a classroom facilitator of knowledge, which provides them with more opportunities to interact with other students and instructors. The more interactions peer tutors have with their peers and instructors, the more likely they are to report greater learning and cognitive growth, deeper maturity, higher educational aspirations, greater persistence, increased moral development, and higher cultural awareness. In fact, Dunworth (2010) found that native English speaking peer tutors’ instruction toward the English language development of staff who had English as an additional language (EAL) reported developing a greater level of intercultural sensitivity and a more empathic understanding of the issues faced by EAL students and staff.

These studies clearly demonstrate the benefits of the peer tutor system for peer tutors as well as provide avenues for future research. Future studies concerning peer tutors should explore how peer tutors narrate their own role in the tutor-tutee relationship. Specifically, by researchers investigating the ways in which peer tutors narrate about developing their peer tutor identity throughout the course experience may aid instructors utilizing peer tutors to develop effective techniques for managing and mentoring peer tutors. Additionally, examining the development of peer tutors’ instructional skills through peer-tutor to student communication would aid researchers in understanding the relationship between tutors and tutees as well as provide knowledge that could be used to improve existing peer tutor programs. Subsequent research could ascertain if peer tutors’ reports of their own affective, cognitive, and behavior learning in the course are significantly different from major degree-seeking students who do not take advantage of this internship. A longitudinal design could examine the gains in peer tutors’ reports over the semester, which could aid instructors in how they use peer tutors in the classroom.
How instructors benefit. Instructors may also benefit from utilizing peer tutors as additional facilitators in and out of the classroom. Although this study did not examine how instructors benefit from the system, previous research indicates peer tutoring complements didactic or direct teaching and independent study, either of which, if unremitting, can strain cognitive endurance (Topping & Ehly, 1998). Working in a small group, pairs, or during instructor presentations, students can ask clarifying questions the moment they have them, proving the opportunity for peer tutors to identify and help students with practice correcting mistakes or misunderstandings. Another way peer tutors can be beneficial to instructors is that they can be utilized specifically to fulfill the roles of student models, peer advisers, and classroom facilitators, rather than directly address curriculum content (Kochenour, Jolley, Kaup, Patrick, Roach, & Wenzler, 1997). Such varied uses of peer tutors offers instructors more opportunities for course and professional development. Moreover, instructors may even utilize peer tutors as student perspectives to collaborate on course development. In addition to providing classroom utility support for instructors, peer tutors can also help students with unique comprehension matters, decreasing the chance of student drop rates (House & Wohlt, 1990; Miller, 2000). Sutherland (2009) argues that instructors should recognize peer tutors’ lack of instructive and subject knowledge, while maintaining and nurturing their vigor, understanding, and familiarity to the undergraduate student experience. Overall, the utilization of peer tutors can be beneficial to course instructors in ways that expand to the classroom as a holistic process.

The results of these studies indicate how important the peer tutor and instructor relationship is for the classroom. Future research could examine the communicative strategies used by peer tutors and instructors to create and maintain their personal and professional relationships with each other over the semester to ascertain effective relationship maintenance.
strategies. Future studies examining the influence of peer tutors might control for instructors’
influence in the classroom environment. Research has shown how important instructors’
demonstration of variables such as credibility (McCroskey & Teven, 1999; Teven & McCroskey,
1997) is to students’ reports of levels of affective and cognitive learning (Frymier & Thompson,
1992; Teven & McCroskey, 1997) indicating that future research might attempt to isolate peer
tutors’ unique contribution to those of instructor effectiveness to better understand their efficacy
in the classroom.

Limitations and Future Research

Future studies should address how classroom size may influence the unique
contributions of peer tutors in the classroom. In the present study, class size may account for
some of the results’ lack of significance, suggesting that it may be critical to examine. The
possibility that small class size uniquely influences students’ affective, cognitive, and behavioral
learning has not received a large amount of scholarly attention in instructional communication
research. Future research that addresses this gap in the literature would aid future scholars in
understanding what communicative, along with environmental or contextual, factors contribute
to an ideal learning environment.

Continued examination of the effectiveness of peer tutors may also be aided by
continuing to gather data from the peer-tutored students in the Kent State University introduction
to human communication course. A rolling database design may increase the power and ability
to detect differences between the two groups of students. Additionally, the design might continue
to gather participants from peer-tutored sections to explore how averages stabilize with a larger
group for comparison.

Moreover, future research could also take into account how peer tutors’ learn in engaging
in their regular duties. Having an understanding of how peer tutors learn to develop their communication techniques, what ways they use these techniques, and how interactions with students being tutored cause changes or conscious modifications in peer tutors communication methods would help future instructors become more effective mentors to peer tutors. Lastly, due to the overall high averages of this study, future research could explore how KSU’s Communication Studies department develops and structures their introductory course program in ways that may have a possible influence on positive learning outcomes of students aside from relational aspects of the class.

Conclusion

This study was conducted to examine how peer interactions might influence the classroom environment and student learning. Overall, the results indicated that although the reported means for both groups were high, the differences between peer tutor and non-peer tutor based sections were non-significant. Additionally, the results showed that students’ level of engagement, classroom climate, and communication competence did not have any relationship to students’ levels of affective learning. Although students, peer tutors, and instructors have been found to benefit from the use of peer tutors, more research is required to understand the relationship shared among these three types of individuals in the classroom. Overall, the results obtained in this study suggest that KSU Communication Studies department’s introduction to human communication course is highly successful in both peer tutor and non-peer tutor classes. These findings may suggest that the training given to instructors, the use of peer tutors, and the course design contribute to students’ reports that the course is an extremely positive learning experience. By continuing to examine the effectiveness of peer tutor programs, researchers can help ensure that an optimal social and learning environment is facilitated for future students.
Appendix A

Demographic and Descriptive Information

1. What is your course instructor’s name:__________________________________

2. What is the sex of your course instructor: Female Male

3. What are the days and times your class meets:___________________________

4. Your Name:________________________________________________________

5. Email Address:_____________________________________________________

6. Sex: Female Male

7. Ethnicity (check the one option that best describes you):
   American Indian or Alaska Native
   Hawaiian or Other Pacific Islander
   Asian or Asian American
   Black or African American
   Hispanic or Latino
   Caucasian
   Multiethnic

8. What was your age on your last birthday:_______

9. Class Standing:
   First year
   Sophomore
   Junior
   Senior

10. What is your GPA as of last semester:___________

11. Approximately how many hours a week do you work:_______________
12. What is the college/school that hosts your primary major:
   College of Architecture and Environmental Design
   College of Arts
   Arts and Sciences, College of
   College of Business Administration
   College of Communication and Information
   School of Digital Sciences
   College of Education, Health and Human Services
   Honors College
   College of Nursing
   College of Public Health
   Regional College
   College of Technology
   Undeclared

13. What is your marital status:
   Married
   Divorced
   Widowed
   Separated
   Never been married/Single
   A member of an unmarried couple

14. Do you receive any school aid:
   Yes-Grants
   Yes-Scholarship
   Yes-Grants AND Scholarship
   No-Receive support from outside source
   No-Self reliant

15. Please indicate your mother’s highest level of education:
   Some high school
   High school diploma/GED
   Some college
   Associate degree
   Bachelor’s degree
   Graduate degree

Please indicate your father’s highest level of education:
   Some high school
   High school diploma/GED
   Some college
   Associate degree
   Bachelor’s degree
   Graduate degree
16. Are you a first generation college student:  Yes  No

17. Is the amount of time you spend completing homework for classes:
   Insufficient
   Semi-insufficient
   Sufficient
   More than needed
   Far more than needed

**Directions:** Please indicate the degree to which you agree with the following statements about class attendance

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Attending class sessions is important to mastering the course goals and objectives</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>19. It is okay to skip a few class sessions or work day or presentation days</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>20. Reading textbook materials can substitute if needed for attending class</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>21. I find nothing wrong with not going to class if I am overly tired or unmotivated</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
<tr>
<td>22. Class attendance is a priority</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
<td>〇</td>
</tr>
</tbody>
</table>

23. How many classes of your Introduction to Human Communication course have you missed: __________

24. How satisfied are you with the instruction in this class:
   Very Dissatisfied
   Dissatisfied
   Neutral
   Satisfied
   Very Satisfied

25. What would be your likelihood of recommending this class to other students:
   Very Unlikely
   Unlikely
   Undecided
   Likely
   Very Likely

26. Have you ever used the university’s tutorial services?  Yes  No
a. If not, have you ever wanted to use the university’s tutorial services?
   Yes  No

b. If so, how many visits did you have with tutors in the last semester?_________

27. Have you ever been referred to the university’s tutorial services?
   Yes  No

28. What is your course’s in-class peer tutor’s name*: ____________________________

29. What is the sex of your in-class peer tutor*: Female  Male

*Note: Questions 28 and 29 will only be available to students within the embedded peer tutor-based sections of the introductory course.
Appendix B

Recruiting Script: Pre-CROPS Sign-Up (Comm. 15000 Students)

COMM. 15000 Students,

Currently, the School of Communication Studies has reserved one research participation study for the assessment of your COMM15000 class. We invite you to be a participant for this study. However, you are not required to participate in this study. This particular study is being conducted to evaluate the impact of instructional techniques on students’ experiences in this class. Toward the matter of privacy, please be aware that your instructor will not see or handle any information that you provide for this research and your decision to not complete the survey will not impact your grade. Your participation is entirely voluntary. However, to receive research participation credit, you must complete the survey.

Completing the study is worth 15 research credit points for your COMM. 15000 course. The study will take approximately 25 to 30 minutes to complete. Please know that any information you provide will only be handled by the study’s primary researcher and that your answers will remain confidential. Your COMM15000 instructor has the information on how to locate and sign up for research participation studies located on the CROPS website (http://et.kent.edu/comm/). You can sign up for this present research study on the CROPS website over the next week. Then, on the close date of this study in CROPS, an e-mail link will be sent to you to complete the study. Your participation would be greatly valued and appreciated.

To be eligible for the study you must be at least 18 years old and currently enrolled in a section of Kent State University’s COMM 15000 introductory course. You may withdraw your participation to participate in the study without penalty at any time.

After completion of the survey, you will be asked to provide your name and e-mail address for the provision of 15 research credit points for your Introduction to Human Comm. course. This information will be stored separately from your survey responses so you will not be able to be connected back to your responses. All information you provide on the survey will remain completely confidential and contact information will be destroyed after the awarding of the research points. If you are not completing this study for research points, you may leave the contact information blank. However, you will not be awarded research points without providing your contact information. The study has been approved by the Kent State University Institutional Review Board. If you have any questions about the study, feel free to contact the investigator, Ms. Kathryn B. Golsan (kgolsan@kent.edu) or Dr. Jeffrey T. Child (jchild@kent.edu). You can also contact the IRB office at (330) 672-2704.

Thanks again,

Kathryn B. Golsan
Primary Researcher & Master’s Candidate
Kent State University
School of Communication Studies, PO Box 5190, Kent, OH 44242
Appendix C

Student Course Engagement Questionnaire (Handelsman et al., 2005)

Directions: Please read the following sentence and then answer the following situations using this sentence:

To what extent do the following behaviors, thoughts, and feelings describe you, in this course?

Please rate each situation using the following scale and circling your best answer:

<table>
<thead>
<tr>
<th>Not at all characteristic of me</th>
<th>Not really characteristic of me</th>
<th>Moderately characteristic of me</th>
<th>Characteristic of me</th>
<th>Very characteristic of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Making sure to study on a regular basis 1 2 3 4 5
2. Putting forth effort 1 2 3 4 5
3. Doing all the homework problems 1 2 3 4 5
4. Staying up on the readings 1 2 3 4 5
5. Looking over class notes between classes to make sure I understand the material 1 2 3 4 5
6. Being organized 1 2 3 4 5
7. Taking good notes in class 1 2 3 4 5
8. Listening carefully in class 1 2 3 4 5
9. Coming to class every day 1 2 3 4 5
10. Finding ways to make the course material relevant to my life 1 2 3 4 5
11. Applying course material to my life 1 2 3 4 5
12. Finding ways to make the course interesting to me 1 2 3 4 5
13. Thinking about the course between class meetings 1 2 3 4 5
14. Really desiring to learn the material 1 2 3 4 5
15. Raising my hand in class 1 2 3 4 5
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Asking questions when I don't understand the instructor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>Having fun in class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>Participating actively in small-group discussions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>Going to the professor's office hours to review assignments or tests or to ask questions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>Helping fellow students</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>Getting a good grade</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>Doing well on the tests</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>Being confident that I can learn and do well in the class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix D

Revised Connected Classroom Climate Inventory (Dwyer et al., 2004; Johnson, 2009)

**Directions:** Please indicate the extent to which you agree or disagree with each statement in relation to your current Introduction to Human Communication course. Please circle one number on each set of scales using this ranking system:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I feel a sense of security in my class.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. I have common ground with individuals in my class.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. I feel a strong bond with individuals in my class.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Individuals in my class share stories and experiences with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Individuals in my class are friendly with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

6. Individuals in my class respect one another._

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
7. I feel included in class discussions in my class.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

8. Individuals in my class are courteous with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. Individuals in my class praise one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

10. Individuals in my class are concerned about one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. Individuals in my class smile at one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

12. Individuals in my class engage in small talk with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

13. Individuals in my class are non-judgmental with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

14. Individuals in my class laugh with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

15. Individuals in my class are supportive of one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
16. Individuals in my class show interest in what one another is saying.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

17. Individuals in my class cooperate with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

18. Individuals in my class feel comfortable with one another.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix E

Affective Learning Scale

(Andersen, 1979; Gorham, 1988; McCroskey, 1994; Richmond, 1990)

Directions: Please respond to the following scales in terms of the section of the Introduction to Human Communication in which you are currently enrolled. Circle one number on each set of bipolar scales to indicate your judgment or evaluation of the concept/idea about this particular class. Note that in some cases the most positive number is a “1” while in other cases it is a “7.”

1. Behaviors recommended in the course:

<table>
<thead>
<tr>
<th>Good</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worthless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Valuable</td>
</tr>
<tr>
<td>Fair</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Unfair</td>
</tr>
<tr>
<td>Positive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Negative</td>
</tr>
</tbody>
</table>

2. Content/subject matter of the course:

<table>
<thead>
<tr>
<th>Bad</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Worthless</td>
</tr>
<tr>
<td>Unfair</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Fair</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Positive</td>
</tr>
</tbody>
</table>

3. In “real life” situations, your likelihood of actually attempting to engage in behaviors recommended in the course:

<table>
<thead>
<tr>
<th>Likely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impossible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Possible</td>
</tr>
<tr>
<td>Probable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Improbable</td>
</tr>
<tr>
<td>Would Not</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Would</td>
</tr>
</tbody>
</table>

4. Your likelihood of actually enrolling in another course of related content if your schedule so permits:

<table>
<thead>
<tr>
<th>Unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Impossible</td>
</tr>
<tr>
<td>Improbable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Probable</td>
</tr>
<tr>
<td>Would</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Would Not</td>
</tr>
</tbody>
</table>
Appendix F

Communication Competence Self-Report (CCSR) Questionnaire (Rubin, 1985)

**Directions:** This questionnaire is composed of statements concerning YOUR communication with other people. Please indicate how each statement reflects YOUR own communication behavior by marking if it applies to you:

<table>
<thead>
<tr>
<th></th>
<th>(1) NEVER</th>
<th>(2) SELDOM</th>
<th>(3) SOMETIMES</th>
<th>(4) USUALLY</th>
<th>(5) ALWAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I mispronounce a lot of words.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>When speaking with someone, the words I use say one thing while my face and tone of voice say something different.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>When giving a speech, I speak clearly and distinctly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>When giving a speech, I can be persuasive when I want to be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>When I speak with others, my ideas are clearly and concisely presented.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>When giving a speech, I thoroughly express and fully defend my positions on issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>I am unable to tell whether or not someone has understood what I have said.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>I know when I’m hearing a fact and when I’m hearing someone’s personal opinion.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>When professors make suggestions in class on how I can improve, I understand the suggestions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>I understand the assignments that are given orally in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>When I tell others about a class lecture I’ve heard, my version leaves out some important items.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
12. When I have to introduce myself in a class, I am able to fully and concisely describe my interests and let others know who I am.

13. When speaking with others, I have to ask a question several times, in several ways, to get the information I want.

14. I have to answer a question several times before others seem satisfied with my answer.

15. I find it difficult to express my satisfaction or dissatisfaction about a course to the professor.

16. When I explain something to someone, it tends to be disorganized.

17. When I give directions to another person, the directions are accurate.

18. When I try to describe someone else’s point of view, I have trouble getting it right.

19. I am able to give a balanced explanation of differing opinions.
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