A BENEFICIARY ANALYSIS OF THE COMMUNICATION PROCESS RELATIVE TO THE TEACHER-PUPIL PARADIGM OF THE PREadolescent STUDENT

by

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ABSTRACT

Teacher-student relationships are an increasingly important component of middle school education. Evidence suggests that teachers who care for their students often exhibit communication behaviors that facilitate positive relationships. This study focused on teacher-student interactions in the middle school setting as they relate to teacher-student relationships. Thirty-seven teachers and 218 sixth, seventh, and eighth grade students participated in this explanatory sequential mixed methods study. The Questionnaire on Teacher Interaction (QTI) survey was employed to measure ideal teacher communication behaviors and actual teacher communication behaviors in the middle school classroom. Multivariate analysis of variance (MANOVA) test revealed a statistically significant difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors. Follow-up analysis of variance (ANOVA) tests indicated a statistically significant difference between ideal teacher and teacher self-perceptions of communication behaviors for leadership and admonishing scores. Independent-samples t-tests revealed that teachers consider themselves to exhibit more leadership, understanding, helping/friendly and strict behaviors than their students perceived. Additionally, leadership, understanding, helping/friendly, admonishing, and strict scores between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors were also significantly different. Interviews were conducted with five
teachers and seven students to further explain quantitative results. Qualitative data from teachers and students regarding communication behaviors in the classroom were comparable in regards to leadership, understanding, and helping/friendly behaviors; however, qualitative findings disconfirmed the quantitative analysis for student/responsibility, uncertain, and dissatisfied behaviors. Implications for middle school education are discussed, including recommendations for future study with communication behaviors and teacher-student relationships.
DEDICATION

This study is dedicated to Jewel. Thank you for teaching me the true meaning of being a teacher and the importance of building relationships with my students.
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I would like to thank my family for their continued support throughout my doctoral program and especially through this dissertation process. I am thankful for my husband, Michael, who has been my biggest fan and constant supporter. Thank you to my daughters, Graci and Bradli, for being patient with me while I pursued my doctorate. Girls, this proves that no matter what obstacles are thrown in your way, you can always reach your dreams with perseverance and determination. I am also thankful for the encouragement and guidance that my parents gave me during the hard times. Your willingness to help with anything forced me to keep moving forward.

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CHAPTER 1

INTRODUCTION

There has been a great deal of focus on educational reform over the past few decades. Most recently, the Common Core Standards have been put in place to ensure that every child succeeds after high school (http://www.corestandards.org). Therefore, much focus has remained on high school education to ensure students flourish upon graduation; however, current studies conclude that middle school education can actually provide sufficient data regarding student prosperity during the high school years and beyond (Williams, Rosin, Perry, Webman, Wilson, Payne, & Woodward, 2010). Balfanz’s (2009) research points out that educators have the ability to identify students on track for academic failure in middle school so that interventions can be put in place to deter eventual high school dropout.

Based on Zinth’s (2009) findings, from 1973 to 2008 the National Assessment of Educational Progress (NAEP) reported a major increase in reading and math scores for elementary students; however, middle school students only showed a slight increase in test scores for these subjects. Likewise, science test scores provided the same results in elementary school, but scores were stagnant for 8th grades. Zinth also asserts that state assessment scores from 2006-2007 showed “8th graders in 32 states were less likely than their 4th grade counterparts to demonstrate proficiency in reading” (p. 1). The author exclaims
there is a growing need to shift educational focus towards middle grades in order to better prepare students for high school education.

According to Balfanz (2009), middle school education plays a vital role in the graduation success of all students. It is during these years that many students fail to grasp tough subjects like math and reading (Williams, Rosin, Perry, Webman, Wilson, Payne, & Woodward, 2010). Much focus could be on students who demonstrate specific at-risk indicators, such as: poor attendance, misbehavior, lack of engagement, and poor grades (Balfanz, 2009). Teachers need to build relationships with their students in order to recognize the characteristics that could possibly hinder their graduation success (Williams, Rosin, Perry, Webman, Wilson, Payne, & Woodward, 2010).

The middle school years can present many challenges to preadolescent teens (Andrews & Bishop, 2012). Adversity in the form of developmental changes, transition to a different school, and peer relationships are just some of the trials preadolescents tackle (Martinez, Aricak, Graves, Peters-Myszak, & Nellis, 2011). A healthy teacher-student relationship can provide students with a feeling of security allowing them to better express themselves, explore possibilities, and become autonomous learners (Hamre & Pianta, 2006). These bonds, although sometimes difficult to develop, can enhance students’ academic and developmental growth (Hamre & Pianta, 2006) and foster a feeling of connectedness between students and the middle school setting (Sakiz, Pape, & Hoy, 2012). The value of the bond between teachers and students is essential in keeping students academically engaged (Sakiz, Pape, & Hoy, 2012).

Teacher-student relationships are an increasingly important component of middle school education (Ryan, Shim, & Makara, 2013). Students who have a positive relationship
with an adult in middle school have a sense of belonging and security, as well as someone to trust and go to when problems arise (Bottoms, 2012). A teacher-student relationship can foster students’ intrinsic motivation and increased effort in academic subjects (Daniels & Arapostathis, 2004). Reichert and Hawley (2013) assert, “positive relationships precede desired school outcomes, including the end of obstructive, resistant behavior, increased engagement in classroom process, and increased willingness to complete assigned tasks” (p. 50). Ultimately, teacher-student relationships provide students with a sense of belonging, the ability to form and voice opinions, and the encouragement to gain independence (Barile, Donohue, Anthony, Baker, Weaver, & Henrich, 2012).

Over the past decade, researchers have investigated the role of teacher care in the classroom (Bulach, 2001; Noddings, 2005). Students are more likely to listen and be attentive towards a teacher who demonstrates care (Teven & McCroskey, 1997). Care can be defined as a relation or connection with another individual; it is not a feeling, it is an action (Noddings, 1995; 2005). Students’ perception of teacher care can be correlated with student autonomy, motivation, curiosity, and learning enjoyment (Beig, Rickelman, Jones, and Mittag, 2013).

Evidence suggests that teachers who care for their students often exhibit communication behaviors that facilitate positive relationships (Reichert & Hawley, 2013). Some of these behaviors include being friendly, attentively listening, showing recognition, and providing rewards (Bulach, 2001). Teachers that view their students as real people and hold high expectations gain the most respect from their students (McCabe, 1995).

This study focused on teacher-student interactions in the middle school setting as they relate to teacher-student relationships. Previous research provides evidence that teacher-
student relationships have an effect on students’ academic success (Anderson, Nelson, Richardson, Webb, & Young, 2011; Daniels & Arapostathis, 2005; Hamre & Pianta, 2006). Building a teacher-student relationship can be challenging (Kesner, 2000). Teachers “often underestimate the importance of their relationships with students” (Sakiz, Pape, & Hoy, 2012, p. 251) especially in middle and secondary schools. Therefore, students desire to learn from “good” teachers who portray caring behaviors and are genuinely interested in their personal well-being (Ferreira & Bosworth, 2001). This study investigated communication behaviors exhibited by teachers in a middle school setting in order to better understand factors that affect the teacher-student relationship.

**Statement of Problem**

Middle school educators have a daunting task to ensure their students are prepared for high school courses (Zinth, 2009). High schools have been the focus of much research regarding academic success (Williams, Rosin, Perry, Webman, Wilson, Payne, & Woodward, 2010). Past research indicates that educators’ place emphasis on identifying at-risk students in middle school education in order to increase high school graduation rates (Balfanz, 2009). Research studies reveal middle school students who are in danger of academic failure (i.e. high school dropouts) often have poor grades, increased absences from school, and behavioral issues (Balfanz, 2009). How can middle school educators’ sufficiently prepare their students for secondary and post-secondary academic success?

Developing a teacher-student relationship in middle school is crucial to increased student outcomes (Gehlbach, Brinkworth, & Harris, 2012). Positive relationships have been associated with achievement and motivational outcomes (Wentzel, 2002). Support from
teachers can motivate students to excel in the classroom, as well as pay more attention to their coursework (Murdock & Miller, 2003). However, weaker bonds between teachers and students in middle school can be a determent to student success. For example, Hamre and Pianta (2001) suggest that conflict between teachers and students can be related to a decrease in reading and math scores. Further, Murdock (1999) states that negative teacher-student relationships can cause students to become disengaged and isolated.

The purpose of this study was to examine teachers’ communication behaviors in a middle school setting that may facilitate a teacher-student relationship. Existing studies have noted the importance of teacher-student relationships at the university level, high school, and elementary school. Only a handful of studies on teacher-student relationships have been conducted in middle school (Anderson, Nelson, Richardson, Webb, & Young, 2011; Gehlbach, Brinkworth, & Harris, 2012; Ryan, Shim, & Makara, 2013). Educators need to recognize the influence they have on student success and strive to form a positive teacher-student relationship (Anderson, Nelson, Richardson, Webb, & Young, 2011). Therefore, this study added to existing literature on teacher and student perceptions of communication behaviors and how the behaviors facilitate teacher-student relationships in a middle school.

**Study Design**

This study followed an explanatory sequential design (Creswell & Plano Clark, 2011). Specifically, quantitative and qualitative data was gathered in two different phases. In the first phase, the researcher administered the *Questionnaire on Teacher Interaction* to students regarding communication behaviors in the middle school classroom. The researcher analyzed this survey data along with preexisting de-identified survey data gathered by the
principal during inservice days at the start of the school year. In order to clarify quantitative findings, the researcher conducted a series of teacher and student interviews in phase two to answer the following research questions:

1. What relationship exists between student and teacher perceptions of communication behaviors that affect the teacher-student relationship?
2. Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?
3. Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?
4. Is there a difference between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors in the classroom?
5. Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do middle school students and teachers perceive to be imperative in the development of teacher-student relationships?

**Significance of Study**

Prior research has indicated that teacher-student relationships are integral components of student success (Middleton & Midgley, 2002; Pianta, 1999; Pianta & Stuhlman, 2004). Noting the connection between at-risk student characteristics and academic failure (Balfanz, 2009), building a teacher-student relationship can facilitate an awareness of the need for intervention. Since little is known about developing these relationships in middle school, this
study has provided evidence of communication behaviors that affect the teacher-student bond. Therefore, this study is significant to middle school educators who wish to build a positive connection with their students.

Academic success in middle school education has been identified as an indicator for student success in high school and beyond (Balfanz, 2009). Before engaging new coming middle school students academically, educators could be reminded of simple challenges that can create a positive transition between elementary and middle school, such as time constraints and scheduling. Middle school teachers who express caring behaviors and are available for personal interaction help to ease these transitions (Hamre & Pianta, 2006, Wentzel, 1998). Relationships between middle school teachers and their students can help to “maintain students’ interests in academic and social pursuits, which in turn lead to better grades and more positive peer relationships” (Hamre & Pianta, 2006, p. 49). Therefore, this study is meaningful to middle school teachers and administrators who work closely with transitioning students so they can be aware of negative interactions that hinder student success and avoid academic failure.

This study is also significant because it utilized a mixed methodology approach. Hamre & Pianta (2006) state that relationships are bilateral; therefore, individuals’ opinions, beliefs, and perceptions can affect the type of relationship that is formed. Future studies [of teacher-student relationships] could incorporate a qualitative component to provide an outlet for students’ voices to be heard (Fraser, Aldridge, & Soerjaningsih, 2010; Fraser & Walberg, 2005). In addition, quantitative and qualitative data has unique strengths and where one is lacking, the other method can compensate (Tobin & Fraser, 1998). This study provided quantitative data to form conclusions, as well as personal viewpoints from teachers and
students to enhance our understanding of communication behaviors seen in the middle school classroom (Creswell & Plano-Clark, 2011).

This study extended current literature regarding the Questionnaire on Teacher Interaction (QTI) (Wubbels, Brekelmans, & Hooymans, 1991). Recent studies (Fraser, Aldridge, & Soerjaningsih, 2010; Liu, 2013) used survey in elementary and university classroom settings to measure teachers’ communication behaviors. These studies were conducted internationally and not in the United States; however, the QTI was considered valid in the United States from Wubbels & Levy’s (1991, 1993) study. Therefore, this study will add to the literature on utilizing the QTI to provide teacher and student perceptions of communication behaviors in a middle school setting in the United States.

In summary, previous research has indicated the importance of teacher-student relationships in an elementary setting. Yet little is known about these relationships in middle school. This study contributes to the literature on teacher-student relationships in middle school, communication behaviors that may promote teacher-student relationships, and provided current data on the perceptions of communication behaviors from the perspective of preadolescent students and middle school teachers.

**Assumptions**

1. It is assumed that students will answer interview questions honestly and to the best of their abilities.
2. It is assumed that teachers will answer interview questions honestly and to the best of their abilities.
3. It is assumed that teachers possess and understand the definition of an *ideal* teacher.
Limitations and Delimitations

1. Due to the number of students interviewed, results might not be generalizable beyond the specific population from which the sample was drawn.

2. In order to assure manageability of the collected data, the location of the study was conducted at the middle school where the researcher is currently employed.

3. Students’ opinions about their teacher communication behaviors might not be accurate due to the interviewer/interviewee relationship.

4. Due to the number of students interviewed, results might not accurately reflect opinions of all middle school students.

5. Due to the number of teachers surveyed, results might not accurately reflect opinions of all teachers regarding ideal communication behaviors in the classroom.

6. Due to the age of students interviewed, results might not be generalizable beyond the specific population from which the sample was drawn.

Clarification of Terms

Middle grades: In the context of this study, middle grades constitute students that are enrolled in sixth, seventh, or eighth grade classes in the United States public school system.

Teacher-student relationship: A bond between teachers and students where the teacher exhibits warm and caring behaviors, accepts students regardless of race and achievement, shows interest in educational and social pursuits, and is readily available for discussion. (Hamre and Pianta, 2006)

Ideal teacher: A perspective of behaviors that teachers would like to exhibit in the classroom (Wubbels, Brekelmans, den Brok, van Tartwijk, 2006).
**Teacher-student interaction:** Communication behavior portrayed by either the teacher or the student in the presence of the other (Wubbels, Brekelmans, den Brok, van Tartwijk, 2006).

**Teacher Interpersonal Interaction/Behaviors:** A series of exchanged messages (Wubbels, Brekelmans, den Brok, van Tartwijk, 2006).

**Proximity:** The level of closeness or measure of cooperation among individuals present during the process of communication (Chiew, 1994).

**Influence:** The person in charge of or directing the communication (Chiew, 1994).

**Mixed methods Design:** A study that mixes quantitative and qualitative results to better understand research problems. Additionally, this type of research includes a theoretical foundation that guides the direction of the study (Creswell & Plano Clark, 2011).

**Explanatory Sequential Design:** Method design with two phases. For example, quantitative data might be gathered in the first phase and analyzed. Results from the first phase would facilitate the second phase of qualitative interviews (Creswell & Plano Clark, 2011).

**Lunch teacher:** Students are assigned to a lunch teacher who takes them to the lunchroom. When students are not eating lunch, they are supposed to use the rest of the time as a study hall.

**Organization of Chapters**

This chapter provided a broad overview of the purpose of this study, including the background of the problem, statement of the problem, and significance of the problem. Additionally, assumptions, limitations and delimitations, along with clarification of terms were discussed.
The purpose of chapter two is to review the literature on teacher-student relationships. The first section discusses the importance of caring in the classroom. Also, literature on teacher-student relationships is presented to explain the purpose of this study. Additionally, findings from studies regarding factors that affect teacher-student relationships are provided as support. Literature regarding communication behaviors and previous studies using the Questionnaire on Teacher Interaction has been discussed in this chapter.

Chapter three is divided into four main sections about the methodology of the study. This will include a general overview of the methodology, the survey’s validity and reliability, participants and design of the study, along with detailed information about data collection in both of the quantitative and qualitative phases of the study.

Chapter four of the study will provide data and analyses from the quantitative phase and the qualitative phase of the study. The quantitative phase of the study will include survey data from the Questionnaire on Teacher Interaction. The qualitative phase will discuss themes found from teacher and student interviews. Detailed charts will be provided in this chapter to facilitate the discussion of the findings.

Chapter five will provide an overall summary of the findings based on the data analyses. Also, conclusions and implications will be discussed. Additionally, recommendations for future studies regarding teacher-student relationships will be included in this chapter.
CHAPTER TWO
LITERATURE REVIEW

The purpose of this chapter is to review the literature regarding teacher-student relationships. This chapter is divided into five main sections: ethics of care, teacher-student relationships, factors that affect teacher-student relationships, communication behaviors, and the Questionnaire on Teacher Interaction.

Ethics of Care

Caring Relation. Central to the entire discipline of teacher-student relationships is the notion of care. Based on the feminist philosophical perspective, Noddings (2012) concludes the act of caring goes far beyond just a “warm, fuzzy feeling” (p. 56). In fact, caring for others is a fundamental way of life. As stated by Goldstein (1998), caring is an interaction; it is not who you are, rather it is something you do. Further, interactions between people present an opportunity to be involved in a caring relationship. According to Noddings (2005), a caring relation is basically a connection or bond between two people. Importantly, both parties in the caring relation could positively contribute to the relationship in order to distinguish it a caring one. The purpose of a caring relation is to encourage more caring relationships and meet the needs of another person (Noddings, 2010). In an educational
setting, caring relations can be formed between teachers and students, students with their peers, and among faculty cohorts. It is important to elaborate on the definition of a caring relation in order to fully understand how these bonds can enhance the teacher-student relationship.

**Characteristics of Care.** A caring relationship is characterized as having three distinct steps: engrossment, motivational displacement, and reciprocity (Goldstein, 1998; Noddings, 2010; Owens & Ennis, 2005). When a caring encounter occurs, the one-caring and cared-for enter engrossment where the one-caring accepts the cared-for feelings and acknowledges a need. The effect of this encounter is motivational displacement which happens when the one-caring’s personal viewpoint is replaced with the one cared-for’s viewpoint. According to Goldstein (1998), the most important part of the caring relationship is during the engrossment and motivational displacement phase. Bergman (2004) explains this phase as “emptying ourselves of attention to our own situation, at least for the moment, so as to make room to take in the existential condition of the other” (p. 151). If the need is recognized by both the one-caring and the cared-for, reciprocity transpires which ends the caring encounter. This is the most important part of a caring encounter because the cared-for recognizes that the one-caring is concerned about their wellbeing (Noddings, 2002b). An example of this occurrence could be when a student approaches a teacher with a concern or problem. The teacher acknowledges the student’s needs and then attempts to understand the concern or problem through the eyes of the student. Once the student acknowledges the one-caring’s care, the caring encounter is complete. By engaging in these three steps, the teacher can then determine the best response to the concern or problem (Goldstein, 1998).
Needs of the Cared-For. In order to build a caring relationship it is important to identify the needs of the cared-for. Noddings (2005) states that humans have a variety of needs which include: expressed needs, inferred needs, internal needs, and overwhelming needs. Expressed needs come from the cared-for and are usually identified through behavior or words. Inferred needs, on the other hand, come from the one-caring which can become problematic if the one-caring does not enter into motivational displacement of the caring encounter. Furthermore, the work goes on to say that “most of the needs identified by educators for learners may be classified as ‘inferred’ needs; that is, although they are said to be the ‘needs of the learners’, they are not needs expressed by the learners themselves” (Noddings, 2005, p. 149). She continues by explaining that internal needs and overwhelming needs are difficult for the one-caring to identify and understand. These needs might not be expressed by the cared-for. An example of an internal need could be a student who has a need to be successful, but pretends that success is unimportant. On the other hand, a student who has been neglected might experience an overwhelming need of love and safety. This student might find learning difficult because they are most concerned with hiding emotional wounds. Teachers need to be aware of the different needs of their students so they can have caring encounters; thus, building a teacher-student relationship.

Caring in the Classroom. Noddings (2010) ethics of care focuses on providing students with a moral education that promotes caring relationships. In the classroom, teachers usually play the one-caring part while students are the cared-for. However, it is important to teach students how to care in order for them to become the one-caring in the future.
(Noddings, 2005a). Teachers can accomplish this task through modeling, dialogue, practice, and confirmation (Bergman, 2004; Noddings, 2010; Owens & Ennis, 2005).

In the classroom, teachers can demonstrate caring by modeling what it means to care. This can be done by creating caring relations with their students, providing caring experiences, and enhancing the curriculum to reflect on models in history, fiction, or biographies. For example, teachers can promote a caring community by allowing all the students in the classroom to get to know each other. On more of an individual level, teachers can demonstrate care by building a caring relationship with a student (Owens & Ennis, 2005).

Dialogue is an important aspect of caring relationships. Owens & Ennis (2005) define dialogue as “talking and listening, sharing and responding” (p. 395). As stated by Bergman (2004), dialogue can enhance the caring relation by through the building of knowledge about the other, as well as showing empathy, understanding, and appreciation. Noddings (2010) suggests that teachers use dialogue as a means of understanding and expressing students’ needs. For example, a teacher can use dialogue to express caring words at the beginning of school to encourage care in the classroom. On the other hand, the use of dialogue can facilitate discussion about students’ needs, especially on an individual level.

Practicing how to care is an appropriate way of becoming the one-caring. Teachers can provide a safe environment of learning how to provide care to others (Bergman, 2004; Noddings, 2010; Owens & Ennis, 2005). For example, Noddings (2010) states that allowing students to participate in group work activities can encourage caring relations. Further, Bergman (2004) asserts that permitting students to be a part of service work in the community and local hospitals can facilitate caring relations. These experiences might
cement the importance of caring and transition students from being the cared-for to the one-caring in the future (Owens & Ennis, 2005).

In the classroom, teachers can provide confirmation to students who demonstrate caring relations with their peers or other adults. Noddings (2010) expresses confirmation as an uplifting tool in bettering the other. The act of validation in the classroom builds trust between the teacher and the student plus enhances their overall relationship (Owens & Ennis, 2005). The act of confirmation can be seen when a teacher facilitates a student in the decision making process. The teacher can do this by pointing out different outcomes that might occur once the decision has been made.

In summary, the ethics of care is an important aspect of building a teacher-student relationship. By recognizing that students have needs and then implementing Noddings’ three step processes, teachers can build trust with their students and express caring relations. Ultimately, teachers are providing safe opportunities for students to learn how to become the one-caring instead of the cared-for.

**Teacher-Student Relationships**

Teacher-student relationships are an important component in the educational system, and play a key role in promoting student success. When a teacher puts forth the effort to cultivate a relationship with students, it is most likely that students will exhibit increased motivational skills and student outcomes (Allen, Gregory, Mikami, Lun, Hamre, & Pianta, 2013; Ferreira & Bosworth, 2001; Gehlbach, Brinkworth, & Harris, 2012; Tosolt, 2009; Woolley, Strutchens, Gilbert, & Martin, 2010). A qualitative study by Daniels and Arapostathis (2005) indicated that teachers who deeply understand the academic needs of
their students and strive to make a connection with them could ultimately provide support needed for increased student achievement. Kesner’s (2000) study suggests the expectations teachers hold can impact student academic achievement or IQ scores. Allen, Gregory, Mikami, Lun, Hamre, and Pianta (2013) found teachers “ability to establish a positive emotional climate, their sensitivity to students’ needs, and their structures of their classroom and lessons in ways that recognize adolescents’ needs for a sense of autonomy and control” (p. 92) aided in the increase of student learning outcomes. Furthermore, the researchers recognized an increase in motivation of students whose teachers provided emotional support.

Evidence suggests that teacher-student relationships can have a positive impact on student success; however, it has been noted that middle school students often experience many changes throughout this time of their lives. For example, Martinez, Aricak, Graves, Peters-Myszak, and Nellis (2011) declare that many changes often occur during early adolescence. These researchers state that factors such as “developmental changes, school transitions and experiences, and social influences” have an impact on students’ way of functioning in the new school setting (p. 526). A report by the Carnegie Council on Adolescent Development (CCAD, 1989), Turning Points, analyzed middle school settings and found that

far too many young people will not make the passage through early adolescence successfully. Their basic human needs – caring relationships with adults, guidance in facing sometimes overwhelming biological and psychological changes, the security of belonging to constructive peer groups, and the perception of future opportunity – go unmet at this critical stage of life (p. 20).

The transition between elementary school and middle school often can be overwhelming to incoming middle school students. During this time, adolescents are physically, emotionally, and socially changing (Martinez, Aricak, Graves, Peters-Myszak, &
Nellis, 2011). Holas and Huston (2012) claim that previous research has found middle schools to have lower achievement levels than elementary schools. They maintain that a decrease in the quality of classroom instruction, teacher-student relationships, and an increase school size could be some factors for this assumption. Andrews and Bishop (2012) provide evidence that challenges such as “figuring out where math class was held, making sure to be ready for PE, coping with constant change of subjects, and getting around the school” (p. 9) can produce a large amount of stress for incoming middle school students. Further, the researchers state that teachers may increase students’ anxiety if they do not identify with students’ concerns during this time. Baker and Narula’s (2012) study found schools that foster a connectedness between students and the faculty/staff might reduce student anxieties. Implications from the study suggest that adults involved in the school could make an effort to foster teacher-student relationships. The researchers stated teacher-student relationships might decrease bullying, as well as increase students’ “feelings of respect and connectedness” (p. 19) towards adults and peers.

Most teachers pride themselves on implementing research-based teaching strategies to enhance their current curriculum. Even though these practices are imperative to student learning, building a teacher-student relationship at the beginning of the school year could enhance the classroom climate so that learning can take precedence over classroom management. To build these bonds, both students and teachers must be perceived as “caring” individuals (Tosolt, 2009). Marchland and Skinner (2007) indicate that students are more likely to ask for assistance from teachers who are supportive and available.

Much research has shown that teachers are key to student success in the classroom. However, what positive characteristics do teachers convey towards students that facilitate a
positive relationship? Daniels and Arapostathis (2005) questioned high school students’ perceptions of care in the classroom. Four high school boys provided valuable knowledge for educators to ponder regarding their role in students’ educational experiences. One finding implied that positive teacher-student relationships motivated students to participate in class. Other characteristics of a respectable teacher-student relationship were trust, advocacy, and encouragement. On the contrary, those students who found their teacher to be demanding and controlling often resisted in developing a relationship with their teacher. Hamre and Pianta (2006) purport teacher-student relationships “help maintain students’ interests in academic and social pursuits, which in turn lead to better grades and more positive peer relationships” (p. 49).

A recent study by Tosolt (2009) added valuable information on the importance of teacher-student relationships and characteristics of a caring teacher through the eyes of minority students. Tosolt surveyed sixth grade students from several different middle schools located in a mid-western state. The students were divided into minority groups: White or Caucasian (71.3%), Black or African American (13.5%), Asian (12.0%), Multiracial (11.3%), Middle Eastern (8.7%), Latino or Hispanic (6.3%), American Indian or Alaskan Native (6.3%), and Native Hawaiian or Pacific Islander (0.6%). Students rated seventeen different perceptions of behaviors that are characteristic of a caring teacher. These views were categorized into three different themes (interpersonal caring, academic caring, and fairness caring) and were compared to the students’ ethnic group. The study found that cultural and ethnic backgrounds have an effect on students’ perceptions of classroom happenings. For example, some students felt their teachers that told jokes, provided choices, quickly graded work, and correctly articulated their name were believed to care about their
wellbeing. Additionally, minority students believed a caring teacher often greeted them at the classroom door, provided compliments, and exhibited excellent classroom management skills. Importance should be given to the development of a teacher-student relationship; however, teachers need to pay careful attention to how their students perceive a “caring” teacher.

Ferreira and Bosworth (2001) interviewed over 100 middle school students regarding their definition of a caring teacher. According to the findings, a caring teacher portrays behaviors such as “helping with work, explaining work, checking for understanding, encouraging, maintaining an orderly classroom atmosphere, and providing fun activities” (p. 26). Furthermore, the students stated that a caring teacher was respectful, regarded students as separate individuals, participated in students’ outside activities, and exhibited characteristics of a good listener. Interestingly, Hamre & Pianta (2006) state that teachers who get to know their students on a personal level (e.g., their interests outside of school) encourage positive communication and demonstrate care.

**Factors that Affect the Teacher-Student Relationship**

**Student Behavior.** With respect to teacher-student relationships, it is important to note possible factors that hinder the formation of these connections. A recent study conducted by Rudasill, Reio, Stipanovic, and Taylor (2010) sought to identify factors that affected the teacher-student relationship in an elementary school setting. Constructs such as difficult temperament, risky behavior, and demographics were compared using data from the NICHD Study of Early Child Care and Youth Development (2010). Findings from this study indicate the student’s temperament can have a strong correlation with the type of teacher-
student relationship formed in elementary school. Daniels and Arapostathis’ (2004) qualitative findings agree with the NICHD study reporting that student behavior can have an effect on how the student performs in the classroom. For example, one student said that if he felt antagonized by the teacher, he would retaliate by not completing tasks. However, if student felt support from their teachers, they would participate in classroom discussions and/or activities. Hence, when it comes to student behavior, the teachers stated that “a delicate balance exists between authority figure and advocate” (p. 52) when it comes to building a teacher-student relationship.

**Gender.** Gender could be a barrier when teachers try to foster relationships with their students. Kimmel (2008) denotes that boys have more difficulties in schools academically, socially, and emotionally. However, Reichert and Hawley (2013) disagree with this claim. They point out most boys are high-achieving students that usually succeed regardless of their socioeconomic status, ability, or school they attend. The researchers point out “positive relationships [with teachers] precede desired school outcomes, including the end of obstructive, resistant behavior, increased engagement in classroom process, and increased willingness to complete assigned tasks” (p. 53). This research provides sufficient evidence for future professional development programs to focus on building relationships with reluctant, disengaged males.

**Time/schedule constraint.** The amount of time middle school teachers spend with their students can also impact the development of a teacher-student relationship (Ryan, Shim & Makara, 2013). In elementary school, teachers can spend up to seven hours a day with the
same students each week. This time allows teachers and students to build connections with each other, often providing students with a sense of security and wellbeing. However, in the middle school setting, teachers might only spend 55 minutes a day with any specific student; therefore, making it more difficult to foster positive relationships. Students can spend up to six or seven hours of the school day with six or seven different teachers (Hamre & Pianta, 2006). Such a time restraint may make it more challenging for a teacher to build connections with his or her students (Ryan, Shim, & Makara, 2013). Therefore, in order to build relationships in the middle school setting, teachers have to make an extra effort to connect with their students, any which way they can. For example, Baker and Naula (2012) stated that some teachers in middle school meet with their students during lunch to discuss academic and social needs. Hamre & Pianta (2006) maintain that middle schools should closely review their school schedule and possibly find extra time for teachers and students to build connections.

School culture and classroom environment are strong predictors of student achievement across K-12 schools (Allen, Gregory, Mikami, Lun, Hamre, & Pianta, 2013). The structure of the school day in a middle school setting can often be difficult for the formation of positive teacher-student relationships (Hamre & Pianta, 2006). One remedy to this challenge, explained in Felner, Favazza, Shim, & Brand’s (2001) study is to provide consistent time (e.g., homeroom) for teachers and students to meet daily. Researchers found this structure can foster support for students, provide continuity, and offer a sense of community. Based on the results, after the school implemented this schedule their students either maintained or increased achievement levels and decreased discipline referrals.
**Communication Behaviors.** Research focusing on teacher-student relationships has implied its importance in the success of all students. However, building this relationship requires both teachers and students to communicate in and outside of the classroom. Communication skills can become problematic for various reasons, such as cultural barriers, personalities, and previous attachments. These issues should be identified and addressed for a proper teacher-student relationship to be formed. Previous studies indicate that variables such as socioeconomic status and adolescent development can trigger discipline concerns, as well as force communication barriers between teachers and students (Tosolt, 2009). Student attitudes, decisions, and actions are caused by the direct influence of their cultures and beliefs (Lewis, Enciso, & Moje, 2009).

Eupena’s (2012) study regarding teacher communication behaviors found a direct effect toward student learning in the classroom. She concludes that teacher interaction in the classroom is an important element of the learning environment. Further, this component is central in building relationships between teachers and students. Additionally, Eupena (2012) explains that teachers tend to modify classroom practices “based on observation and knowledge of their students’ different backgrounds, interests, abilities, skills, knowledge, family circumstances and peer relationships” (p. 161). These modifications might seem minimal to most, but for students it shows that the teachers care about them.

Interactions between teachers and students are crucial in the formation of teacher-student relationships (Tosolt, 2009). Ferreira and Bosworth’s (2001) study found that teachers who exhibit warm behaviors and show genuine concern for their students often build positive relationships with them. Hamre and Pianta (2006) maintain that students who believe their teachers care about them are often motivated in class and participate in lessons
and classroom discussions. Further, Ferreira and Bosworth’s study provides middle school students’ viewpoint of caring behaviors, which include “helping with work, explaining work, checking for understanding, encouraging, maintaining an orderly classroom atmosphere, and providing fun activities” (p. 26). However, we must consider the viewpoints of students with different demographics in order to clearly define caring behaviors. Tosolt’s (2009) study confirmed that minority groups perceived caring behaviors differently; therefore, one must further examine the opinions of caring teacher behaviors across diverse cultures.

A positive teacher-student relationship can be built when students view teachers as having a confident personality, portraying leadership skills, and listening to students’ comments, questions, and concerns (Fraser, Aldridge, & Soerjaningsih, 2010; Wubbels, Levy, & Brekelmans, 1997). Eupena (2012) studied teacher communication behaviors in a science classroom and how those traits correlated to student attitudes. She found that student attitudes in regard to learning science were affected by the amount of praise, non-verbal support, control in the classroom, and the teacher’s ability to make science challenging. Additionally, demographic groups like culture, gender, ability, interest, and peer relationships perceived communication behaviors to be different than other groupings. For example, Hamre and Pianta (2006) stated that girls often relate to their teachers easier than boys. They explain “boys are at a greater risk of relational difficulties in schools” (p. 51). Hence, teachers must create a classroom environment conducive to learning so student gender, cultures, abilities, interests, and behavior issues do not hinder the formation of a teacher-student relationship.

In order to provide the appropriate environment favorable toward building positive relationships, teachers should critically think about communication behaviors they exhibit in
and outside of the classroom. These behaviors, either positive or negative, could possibly impact the type of relationship built between teachers and students. For example, if a teacher shows caring behaviors, then the student is more likely to desire a relationship with the teacher (Tosolt, 2009). On the other hand, if the teacher is demanding and negative, then the student will most likely not want to build a relationship with the teacher (Tosolt, 2009). Wubbels, Brekelmans, den Brok, & van Tartwijk (2006) believe that teacher behaviors can be viewed as a form of communication; therefore, the communicative systems approach can provide possible explanations of how behaviors affect the teacher-student relationship.

**Communicative Systems Approach**

Over the past thirty years, Wubbels, Brekelmans, den Brok, & van Tartwijk (2006) have studied interpersonal relationships between teachers and students in a secondary setting using the Communicative Systems approach. This method assumes that communication is constantly occurring, whether it is audible or through body language. The focus of this method is on the consequences of people’s actions and how they relate to the content of the communication.

Key tenets of the communicative systems approach focus on the content/relation aspect, levels of communication, and the notion of circularity. Content of communication refers to the specific information that is being conveyed; however, the relation facet informs one on how to react to the content. Three levels of communication make up the systems of communication. The first, message, is a single unit of content and relation. The second level, interaction, is a series of content/relation messages. Lastly, pattern, is when the interaction level becomes predictable. Circularity emphasizes that “someone’s behavior influences
someone else and that the behavior of the second person on his or her in turn influences the first” (Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006, p. 4). For example, a friendly smile from the teacher could induce a student to smile back. The same circular occurrence can also have a negative impact on behavior. Before employing this theory to identify types of communication behaviors between teachers and students, it is necessary to examine the Model for Interpersonal Teacher Behavior, which looks at teacher and student perceptions of communication in the classroom.

**Model for Interpersonal Teacher Behavior**

The communications systems approach explains the passage of content from one person to another, in addition to the reactions about that content. This theory was used to develop the Model for Interpersonal Teacher Behavior (Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006). This model is based on Timothy Leary’s (1957) research regarding interpersonal personalities. Leary’s model utilizes a coordinate system with two basic dimensions – Dominance-Submission and Hostility-Affection – to explain interpersonal personalities. Wubbels, Brekelmans, den Brok, & van Tartwijk (2006) designed the Questionnaire on Teacher Interaction (QTI) to assess teacher and student perceptions of communication behaviors. The questionnaire identifies pattern level communication, as defined by the communication systems approach, between teachers and students in the classroom.
Questionnaire on Teacher Interaction

The validated survey, *Questionnaire on Teacher Interaction* (QTI) (see Appendix A), developed by Wubbels, Creton, and Hooymers’ (1985) in The Netherlands, identifies communication behaviors between teachers and students in an educational setting. This survey provides teachers with a snapshot view of student perceptions of teacher communication behaviors in the classroom that promote teacher-student relationships (Wubbels, Levy, & Brekelmans, 1997). Fraser and Walberg (2005) compared many studies and found the QTI survey to be a good predictor of positive teacher-student relationships, student success, and attitudes. An article written by Fraser and Walberg (2005) finds the QTI is an appropriate tool to use in the classroom because it “is a feedback instrument to be used by teachers in guiding improvements in their classroom relationships with their students” (p. 108). Further, the researchers show that the QTI’s solid foundation between the systems theory of communication (Watzlawick, Beavin, & Jackson) and Leary’s (1957) two dimensional model of teacher interactions provide a solid theoretical foundation. The QTI has been cross-validated in at least three different countries (The Netherlands, USA, and Australia) and translated in to at least 15 languages (Fraser & Walberg, 2005).

A recent study conducted by Liu (2013) utilized the QTI to identify student perceptions of their teachers in an upper elementary setting. Results of the research concluded that students who perceive their teachers as caring are more likely to pursue a relationship with them. Also, teachers believed that interactions with their students were positive; however, results indicated that students did not have the same feeling. Liu states that teachers can use this data to facilitate change in the way they communicate with their students facilitating the formation of a positive teacher-student relationship. Fisher, Fraser, &
Cresswell (1995) agree with Liu, stating the QTI can be an excellent tool to make teachers aware of behaviors exhibited in the classroom. Further, teachers can use the data to “reflect on their own performance, particularly in relation to their relationships with their students” (p. 12).

Knine & Atputhasamy (2005) studied teacher management styles of 25 preservice teachers. The QTI was given to preservice teachers and their students during the internship phase of teacher education. Results indicated significant differences between preservice teacher beliefs of their behaviors in the classroom and their student’s perceptions of behaviors seen in the classroom. Based on the study’s results, the QTI is an appropriate tool for teachers to administer to students to monitor teacher behaviors in the classroom in hopes to enhance teacher classroom management techniques.

Fraser, Aldridge, and Soerjaningsih (2010) used the QTI to enhance teacher effectiveness in a university setting. Moreover, the researchers sought to validate the survey for Indonesian educators, develop a description of a computer-based course based on student-teacher interactions, and “investigate associations between students’ perceptions of instructor-student interactions and the student outcomes of achievement and attitude” (p. 21). Results from the study indicated high reliability and validity of the QTI. Students taking the course described their teacher as exhibiting leadership skills, helpful, friendly, and understanding. Further, the implications from the study suggest that teachers who wish to enhance student learning should demonstrate “leadership and understanding behaviors and less uncertain behavior in their classrooms” (p. 31).

Fraser and Walberg (2005) synthesized previous research studies using the *Questionnaire of Teacher Interaction*. Their findings conclude the QTI is a valuable
instrument to identify interpersonal behaviors between teachers and students. Further, Fraser and Walberg stated the majority of studies on learning environments used the QTI to gather teacher and student perceptions about behaviors in the classroom. They also noted this instrument was highly recommended because of its ability to use participants’ perceptions of the classroom environment, especially insight from the student’s point of view. A major advantage of this survey has shown it to be “economical, practical, and non-intrusive” as compared to others of the same nature (p. 104).

Fisher, Fraser, and Cresswell (1995) explained how teachers could use the data from the QTI as a guide for future professional development. Since the QTI provides a snapshot view of the classroom learning environment, teachers can actually examine interpersonal behaviors that might occur without their knowledge. For example, one teacher’s students revealed that she was friendly and understanding; however, leadership was not a strong strength of hers. Interestingly, another teacher with the least amount of experience was perceived to be strict with rules and consequences, but seemed uncertain about content. It is important to note that the inexperienced teacher rated herself as being uncertain with content. Therefore, with this knowledge, teachers can be aware of behaviors they exhibit and make building a relationship with their students more of a priority instead of an unintentional occurrence.

This chapter has provided an in-depth discussion of teacher-student relationships, factors that affect these connections, and communication behaviors. Teacher-student relationships play an important role in student success. Teachers who understand the needs of their students and attempt to build a connection with them could ultimately facilitate reinforcement for increased student achievement (Daniels & Arapostathis, 2005). However,
in order for teacher-student relationships to occur, teachers should be aware of physical, emotional, and mental changes that occur during early adolescence. These factors plus adjustment in school setting and time differences should be taken in to consideration when teachers strive to build connections with their students (Hamre & Pianta, 2006). It has been noted that a major tenet of teacher-student relationships is communication, which is necessary for learning to occur. Many teachers display caring behaviors as a form of communication; on the other hand, some teachers neglect to show concern for their students. Previous studies have provided quantitative and qualitative data regarding communication behaviors in the classroom that promote a positive teacher-student relationship (Tosolt, 2009); however, little is known how this data changed interactions in the classroom setting.

How can middle school teachers implement positive communication behaviors learned from teacher-student interactions allowing students to feel secure in their presence? Noting that communication is key to building a relationship, utilizing the communicative systems approach as a theoretical framework can provide researchers with the foundation needed towards assessing behaviors that encourage positive interaction. Therefore, the next chapter will discuss methodology used to determine communication behaviors between teachers and students in a middle school setting.
CHAPTER THREE

METHODOLOGY

The purpose of this study was to identify teacher communication behaviors in the middle school setting in hopes of understanding specific behaviors that facilitate a positive teacher-student relationship. This chapter has been divided into four parts. The first part provides a brief overview of the study, highlighting the background of the researcher and study design. The second section of this chapter presents valuable research data on the Questionnaire on Teacher Interaction survey. An in-depth discussion about the sequential explanatory mixed methods design along with the research questions is the third component of this chapter. Lastly, the fourth section provides explicit details regarding the design of the study.

Background of the Researcher

The idea for this study materialized two years ago after this author spent several months teaching in a middle school setting. My class, Family and Consumer Sciences (FACS), is an elective and therefore, the pressure for students to perform is more relaxed as compared to other high-stakes content area courses. These students enjoy an informal setting as they participate in both individual and group studies, which allows for more social
interactions. I am fortunate to have the time to identify students who seem discouraged, sad or troubled, as well as those with oppositional behavior problems. I feel drawn into their lives and from that draw I have grown passionate about finding a way to break through students’ barriers. I now challenge myself to foster a relationship, to make a connection with all of my students.

As an experienced teacher who had never taught in this setting before, I was curious about middle school students’ developmental changes, the socioeconomic make-up of the school where I teach, and variances in personalities among our faculty and staff. Therefore, I approached the school principal about these issues. After much discussion about differences between students and teachers (and knowing that I was a doctoral student), he asked me to conduct research regarding teacher-student relationships in the middle school setting. After much reading, I found a lack of literature regarding teacher-student relationships in the middle school, which facilitated my desire to conduct this study.

Instrument

**Questionnaire on Teacher Interaction.** Wubbels, Creton, and Hooymayers’ (1985) developed The Questionnaire on Teacher Interaction (QTI) survey to assess teachers’ interpersonal behaviors in the classroom setting. The questionnaire includes three separate surveys that are geared toward teacher ideal communication behaviors, teacher self-perceptions of communication behaviors, and students’ perceptions of teachers communication behaviors. Eight interpersonal behaviors of the teacher can be determined from survey results, which include leadership, helping/friendly, understanding, student
responsibility/freedom, uncertain, dissatisfied, admonishing, and strict. Figure 1 explains behaviors that coordinate with each sector.

<table>
<thead>
<tr>
<th>If the teacher is Dominant</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Then the teacher shows <em>strict</em> OR <em>leadership</em> behavior</td>
<td></td>
</tr>
<tr>
<td><strong>Strict statements:</strong></td>
<td><strong>Leadership statements:</strong></td>
</tr>
<tr>
<td>Strict</td>
<td>Talks enthusiastically about subject</td>
</tr>
<tr>
<td>Have to be silent in the classroom</td>
<td>Explains things clearly</td>
</tr>
<tr>
<td>Tests are hard</td>
<td>Holds our attention</td>
</tr>
<tr>
<td>Standards are very high</td>
<td>Knows everything that goes on in the classroom</td>
</tr>
<tr>
<td>Severe when marking papers</td>
<td>Good leader</td>
</tr>
<tr>
<td>Students are afraid</td>
<td>Acts confidently</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If the teacher is Cooperative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Then the teacher shows <em>understanding</em> and <em>helping/friendly</em> behavior</td>
<td></td>
</tr>
<tr>
<td><strong>Understanding statements:</strong></td>
<td><strong>Helping/Friendly statements:</strong></td>
</tr>
<tr>
<td>Trusting</td>
<td>Helps students with work</td>
</tr>
<tr>
<td>Students don’t agree with teacher, they can talk about it</td>
<td>Friendly</td>
</tr>
<tr>
<td>Willing to explain things again</td>
<td>Someone students can depend on</td>
</tr>
<tr>
<td>Students have something to say, teacher will listen</td>
<td>Sense of humor</td>
</tr>
<tr>
<td>Realizes when students don’t understand</td>
<td>Can take a joke</td>
</tr>
<tr>
<td>Patient</td>
<td>Classroom is pleasant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If the teacher is Submissive</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Then the teacher shows <em>uncertain</em> behavior OR allows <em>student responsibility</em> and/or <em>freedom</em> behavior</td>
<td></td>
</tr>
<tr>
<td><strong>Uncertain statements:</strong></td>
<td><strong>Student responsibility and/or freedom statements:</strong></td>
</tr>
<tr>
<td>Seems uncertain</td>
<td>Students can decide some things for class</td>
</tr>
<tr>
<td>Hesitant</td>
<td>Students can influence the teacher</td>
</tr>
<tr>
<td>Teacher acts as if she/he doesn’t know what to do</td>
<td>Teacher lets students fool around in class</td>
</tr>
<tr>
<td>Teacher lets students boss her/him around</td>
<td>Teacher lets students get away with a lot</td>
</tr>
<tr>
<td>Teacher is not sure what to do when students fool around</td>
<td>Teacher gives us a lot of free time</td>
</tr>
<tr>
<td>It’s easy to make a fool out of the teacher</td>
<td>Teacher is lenient</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If the teacher has Opposition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Then the teachers show <em>dissatisfied</em> or <em>admonishing</em> behavior</td>
<td></td>
</tr>
<tr>
<td><strong>Dissatisfied statements:</strong></td>
<td><strong>Admonishing statements:</strong></td>
</tr>
<tr>
<td>Teacher thinks students cheat</td>
<td>Teacher gets angry unexpectedly</td>
</tr>
<tr>
<td>Teacher thinks students don’t know anything</td>
<td>Teacher gets angry quickly</td>
</tr>
<tr>
<td>Teacher puts students down</td>
<td>Teacher is too quick to correct students when they break a rule</td>
</tr>
<tr>
<td>Teacher thinks students can’t do things well</td>
<td>Teacher is impatient</td>
</tr>
<tr>
<td>Teacher seems dissatisfied</td>
<td>It is easy to pick a fight with the teacher</td>
</tr>
<tr>
<td>Teacher is suspicious</td>
<td>The teacher is sarcastic</td>
</tr>
</tbody>
</table>

*Figure 1.* Interpersonal Behaviors associated with QTI Scale. Adapted from Fisher, Fraser, & Cresswell, 1995.
Fisher, Fraser, and Cresswell (1995) state that the “QTI can be used to provide teachers with a picture of their ideal teacher, how they see themselves and how their students them” (p. 12). Hence, teachers can identify which behaviors are imperative for the formation of positive teacher-student relationships. The ideal teacher questionnaire asks teachers to rate how they would like to behave in the classroom using a Likert scale. For example, teachers would rate never, 1, 2, 3, or always to the following statement, “The teacher would have a sense of humor.” The teacher self-perceptions questionnaire uses the same Likert scale for this statement, “I have a sense of humor.” The third survey, students’ perceptions of teachers’ communication behaviors utilizes the same Likert scale to answer “This teacher has a sense of humor.” The fourth survey asks students to rate ideal teachers’ communication behaviors. For example, students would rate the following statement, “The teacher has a sense of humor,” using the same Likert scale. Once the survey is scored, scales that have the highest score point to evidence of that specific behavior in the classroom. See Appendix A to view the entire QTI survey.

The QTI survey was based on Leary’s (1957) Model for Interpersonal Teacher Behavior as a theoretical framework for interpreting and analyzing data. Leary’s model is divided into a coordinate system with two major dimensions: Proximity (Cooperation-Opposition) and Influence (Dominance-Submission). The Proximity dimension explains the degree of closeness or cooperation between the communicators. The Influence dimension identifies the communicator and the amount of communication that is occurring. See Figure 1 for a pictorial representation of this coordinate system. Figure 2 depicts several communication behaviors that teachers could portray in the classroom.
Each sector is labeled which describes where the behavior lies on the coordinate system. For example, a teacher could portray leadership and helping/friendly behaviors (DC); however, either the Dominance or Cooperation aspect could predominate the other depending on the amount of behavior that is being described.

The QTI has been a leading survey for teacher-student relationships and has been translated into at least 15 languages (Fraser & Walberg, 2006). To date, over 72 doctoral students have utilized this questionnaire for their dissertation research. Of those, 58 of the studies were conducted in the United States in a collegiate, secondary, and middle school
setting. Many of the studies focused on a specific subject or student population (Britt, 2013; Hunter, 2003).

Fraser, Aldridge, and Soerjaningsih’s (2010) study sought to identify interpersonal interactions and student outcomes at the university level. Findings from the students’ perceptions survey indicated acceptable reliability levels of .65 to .83 using Cronbach’s alpha for each sector (leadership, helping/friendly, understanding, student responsibility, uncertain, dissatisfied, admonishing, and strict). Findings from their study replicate previous research regarding university faculty members and interactions with their students in Korea, Australia, Brunei, and Singapore; therefore, this study is valid and reliable.

Mellor and Moore’s (2003) pilot study using the QTI indicated similar findings of each sector’s reliability levels using Cronbach’s alpha as compared to the previous studies mentioned. Reliability levels on Cronbach’s alpha ranged in the “acceptable” to “good” levels from 0.66 to 0.87 for student’ perceptions of teacher communication behaviors. Further, these findings are congruent with similar findings from Wubbels, Creton, Levy, & Hooymayers (1993), providing evidence of reliability. Table 1 provides reliability levels of Cronbach alpha for each scale based on Fisher, Fraser, and Cresswell’s (1995) study regarding the use of the QTI for professional development of teachers in the USA.
Table 1

*Alpha Reliabilities for QTI Scales for Students and Teachers from Fisher, Fraser, and Cresswell (1995)*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Students/Teachers</th>
<th>Alpha Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Students</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.75</td>
</tr>
<tr>
<td>Helping/Friendly</td>
<td>Students</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.74</td>
</tr>
<tr>
<td>Understanding</td>
<td>Students</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.76</td>
</tr>
<tr>
<td>Student Responsibility/freedom</td>
<td>Students</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.82</td>
</tr>
<tr>
<td>Uncertain</td>
<td>Students</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.79</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>Students</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.75</td>
</tr>
<tr>
<td>Admonishing</td>
<td>Students</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.81</td>
</tr>
<tr>
<td>Strict</td>
<td>Students</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>0.84</td>
</tr>
<tr>
<td>Sample Size</td>
<td>Students</td>
<td>1606</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
<td>66</td>
</tr>
</tbody>
</table>

Notes: N=1606 students and 66 teachers

**Study Design**

**Participants.** This study presents quantitative and qualitative viewpoints regarding communication behaviors exhibited by teachers in the middle school setting. The study was conducted in a medium-sized town in central Alabama. The school population consisted of 206 sixth grade students, 212 seventh graders, and 203 eighth grade students enrolled for the 2013-2014 academic year (N=621 students). The school employed eight sixth grade teachers, six seventh-grade teachers, four eighth-grade teachers, nine elective teachers, and 10 special education teachers (N=37 teachers). Some of the teachers (i.e., content and elective)
overlapped grade levels because of the lack of funding for more teaching units. Two surveys were given to teachers in this study. All of the teachers took the first survey and 81% of the teachers chose to participate in the second survey. There was a 34% response rate for student surveys. Table 2 presents overall demographic data.

Table 2

<table>
<thead>
<tr>
<th>Demographics for QTI Survey</th>
<th>Male</th>
<th>Female</th>
<th>African American</th>
<th>Caucasian</th>
<th>Hispanic</th>
<th>Asian American</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>320</td>
<td>301</td>
<td>224</td>
<td>353</td>
<td>29</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Teachers</td>
<td>5</td>
<td>32</td>
<td>3</td>
<td>34</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Explanatory Sequential Mixed Methods Design**

One of the most straightforward mixed methods designs for educational research is the explanatory sequential design (Creswell & Plano-Clark, 2011). This methodology is used when the researcher intends to use both quantitative and qualitative data to answer the research questions. It is important to gather both types of data in order to provide teacher and student viewpoints of communication behaviors seen in the classroom.

The explanatory sequential design was conducted in two phases. Phase one consisted of gathering quantitative data through questionnaires or surveys and phase two focused on qualitative interview questions that facilitated a better understanding of phase one data results. Once data was collected from phase one, the researcher analyzed the data using descriptive statistics, inferential statistics, factor analysis, and MANOVA. Findings from phase one facilitated the researcher in designing interview questions for phase two. The qualitative data was analyzed using standard coding to determine primary themes (Kvale & Brinkmann, 2009). Once both types of data were analyzed, the researcher interpreted the
results and connected them ensuring the qualitative results aided in understanding the quantitative results.

Priority was placed on phase one (quantitative results) at the beginning of the study. Phase two (qualitative results) provided clarification of the quantitative results (Cresswell & Plano-Clark, 2011). See Figure 3 for a flowchart of the basic procedures utilized for this study.

**Step 1 - Design and Implement Quantitative Strand**
- Developed Quantitative Research Questions
  - Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?
  - Is there a difference between teacher communication behaviors and student perceptions of communication behaviors in the classroom?
  - Is there a difference between ideal teacher communication behaviors and ideal student perceptions of communication behaviors in the classroom?
- Identify quantitative sample
  - Teachers and Students
- Collect data
  - Retrieved preexisting deidentified teacher survey data from principal
  - Questionnaire on Teacher Interaction Survey - Teachers and Students
- Analyze quantitative data using descriptive statistics, inferential statistics, t-tests, and MANOVA

**Step 2 - Use Strategies to Follow From the Quantitative Results**
- Determined which results will be explained
  - Significant results for 8 communication behaviors - leadership, helping/friendly, understanding, student responsibility/uncertain, dissatisfied, admonishing, and strict
- Used quantitative results to refine qualitative questions

**Step 3 - Design and Implement the Qualitative Strand**
- Qualitative Research Question
  - Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do middle school students and teachers perceive to be imperative in the development of teacher-student relationships?
- Received permission from teachers and students
- Purposefully selected a qualitative sample that helped explain the results
  - Teachers and students who marked "yes" to follow-up interviews
- Collected open-ended data with protocols informed by the quantitative results
- Analyzed the qualitative data using coding

**Step 4 - Interpret the Connected Results**
- Summarized and interpreted the quantitative results
- Summarized and interpreted the qualitative results
- Discussed to what extent and in what ways the qualitative results help to explain the quantitative results

*Figure 3. Flowchart of Explanatory Sequential Design. Adapted from Creswell & Plano-Clark, 2011.*
The following research questions were addressed in this study utilizing the explanatory sequential mixed methods design:

1. What relationship exists between student and teacher perceptions of communication behavior that affect the teacher-student relationship?
2. Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?
3. Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?
4. Is there a difference between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors in the classroom?
5. Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do middle school students and teachers perceive to be imperative in the development of teacher-student relationships?

The first research question served as an overarching question for the entire study. The combined quantitative and qualitative results from this question will be addressed in chapter five. Quantitative statistical analyses were used to answer questions two through four and qualitative analysis was used to analyze the fifth research question. Data analysis for questions two through four can be found in chapter four. The following section provides specific steps the researcher used to answer each research question.
Data Collection and Analysis

This study followed a sequential explanatory mixed methods design (Creswell & Plano-Clark, 2011). The overall purpose of using this type of methodology was to utilize qualitative data to explain quantitative results. The following sections will explain data collection and analysis as they pertain to each research question.

Quantitative Phase One

This study aimed to answer the overarching research question, what relationship exists between student and teacher perceptions of communication behavior that affect the teacher-student relationship? In order to answer this question, the researcher utilized five sources of data: preexisting de-identified survey data from teachers (using the Questionnaire on Teacher Interaction) previously collected by the school principal for professional development purposes; one teacher and two student surveys from the Questionnaire on Teacher Interaction and qualitative interviews with five teachers and seven students. A thorough discussion of findings and interpretation of the data for this question is addressed in chapter five.

The second question of this study, is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom, was formed from a discussion about teacher-student relationships between the researcher and the principal. Therefore, the principal decided to survey faculty members about their perceptions of ideal communication behaviors they exhibit in the classroom using the Questionnaire on Teacher Interaction (QTI). The survey asked teachers to rate using a 5-point Likert scale (never, 1, 2, 3, or always) statements based on ideal teacher
communication behaviors in the classroom. An example statement from this survey was “An ideal teacher would talk enthusiastically about her/his subject” (Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006). The principal intended on utilizing the preexisting de-identified survey data results as a guide for future faculty professional development opportunities.

The QTI was administered to 37 faculty members in August 2013 using a paper/pencil format. Data analysis from this survey did not provide sufficient evidence of ideal communication behaviors exhibited in the classroom. Therefore, the principal asked the researcher to further explore teacher and student perceptions of communication behaviors in the classroom. The second QTI survey about teacher self-perceptions of communication behaviors was conducted in November 2013 to the same faculty members using the online survey format, Survey Monkey. Thirty teachers chose to partake in this survey. Out of the participants, three of the surveys were missing data from ten or more survey items; therefore, they were deleted.

Data analysis was performed using a multivariate analysis of variance (MANOVA) test. This statistical analysis was chosen since there were two dependent categorical variables (teacher ideal and self-perceptions) and eight independent variables (leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, and strict). Several required assumptions were met for MANOVA in order to identify the differences between the means for both surveys, which were:

1. Sample was representative of the population where generalization was made.
2. The level of measurement of two or more dependent variables must be continuous.
3. Normal distribution of each dependent variable must approximate a normal curve.
4. Sample size greater than the dependent variables.
5. Equal variances of dependent variables across independent variable groups. Levene’s test of equality of variances used to identify this assumption.

6. Relationship between dependent variables is linear. This was tested using Bartlett’s test of sphericity to identify if dependent variables are significantly correlated.

7. Homoscedasticity, which implies the covariances of dependent variables across all levels of independent variables are equal. Box’s M test was used to evaluate this assumption.

8. Multicollinearity is assumed, which means the relationship between dependent variables is too high (Abu-Bader, 2011).

Factor analysis was conducted to identify significant independent variables. Results from these statistical tests facilitated in the development of teacher and student interview questions for phase two of this study.

Cultures, ethnicities, behavior concerns, and academic challenges are just some of the concerns that teachers deal with on a daily basis. Distinctive groups of students comprehend communication behaviors differently; therefore, it is imperative to acquire data from individual students based on their beliefs about teacher-student relationships (Newberry, 2010). To enhance the data gathered from teachers’ surveys, the QTI was administered to middle school students to answer this research question: Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?

The researcher used convenience sampling to invite middle school students from the study site to participate in the survey. All participants were reminded that taking the survey was completely voluntary. Prior to conducting the student survey, permission from the
middle school principal, Assistant Superintendent of Instruction for the school system, Institutional Review Board (IRB), and parents’ of students was granted. Students took the QTI survey based on communication behaviors in the classroom through the online program, Survey Monkey. The researcher administered the survey during students’ elective class. The students were not penalized (by grades or any other form of discipline) if they chose not to take the survey. Approximately 30% of the entire student population took the survey.

The majority of middle school students have many teachers throughout the school day. Therefore, the survey was based on communication behaviors exhibited by their lunch intervention teacher. Every student in the school is assigned to a lunch teacher. This teacher might be an academic or elective teacher of the same grade. For example, a seventh grade student was paired with a seventh grade lunch teacher. In this class, students go to lunch, complete make-up work, or participate in classroom discussions on character education. The lunch intervention teacher served as a mentor, tutor, and classroom management specialist.

An independent t-test was conducted to identify the mean differences between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom. Based on Abu-Bader (2006), the assumptions that must be met in order to fail to reject the null hypothesis for the independent t-test. These assumptions include

1. the dependent variable must be measured at the interval or ratio level of measurement,
2. distribution of the dependent variable must be approximately normal,
3. sample size should be large enough to compare two group means (30 or more is usually sufficient),
4. the independent variable must be dichotomous,
5. data for both groups must be collected at the same time, and
6. variances of both groups on the dependent variable should be equal (p. 151-152).

A Shapiro-Wilks test was used to confirm the assumption of normality was not violated. The researcher also examined skewness, kurtosis, histograms, and normal Q-Q plots to assess
normality. The assumption of homogeneity of variance across the two groups for the dependent variable was met by examining Leven’s F Test for Equality of Variances in the t-test output. Final results from this statistical analysis were used to guide the researcher in the development of teacher and student interview questions regarding communication behaviors and teacher-student relationships.

Question four sought to identify the differences between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors. Mean differences were determined using results from the preexisting de-identified secondary survey data (teacher ideal communication behaviors) and the student survey (teacher ideal communication behaviors from the student perspective). An independent t-test was conducted using SPSS. As noted in question three’s data analysis, the same assumptions were analyzed by the researcher. Results from this analysis facilitated the design of teacher and student interview questions for phase two of this study.

**Qualitative Phase Two**

A qualitative component was added to this survey to support quantitative findings, while also allowing teachers and students to further explain their answers (Creswell & Plano-Clark, 2011). Phase two of the sequential explanatory mixed methods design involved stating the qualitative research question, purposefully selecting the sample, collecting data based on the quantitative results, and data analysis (Creswell & Plano-Clark, 2011). The qualitative portion of this study intended to identify which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain,
dissatisfied, admonishing, or strict) as described by the QTI that middle school students and teachers perceive to be imperative in the development of teacher-student relationships.

Qualitative interviews were conducted with sixth, seventh, and eighth grade teachers and students who previously took the QTI survey. All teacher and student participants had the choice to take part in the interviews; however, thirty-two teachers and 150 students declined to participating, leaving a response rate of 14% of teachers and 28% of students who desired to participate in the survey. Due to time constraints, five teachers and seven students were interviewed for this study. Creswell and Plano-Clark (2011) recommend that the researcher use a smaller sample size for the qualitative phase of the study; therefore, this smaller size is considered acceptable. Importance was given towards gathering sufficient data to further explain quantitative results. Interviews lasted approximately 20 minutes.

Fink (2009) states that researchers will gather data from participants who are willing and available. For this reason, several biases could occur that could skew the data. For example, when asking a student to complete a survey based on a specific teacher’s communication behaviors, the student could have previous altercations with the teacher or already have a positive, secure relationship with the teacher. For this reason, the researcher took note of possible biases from previous experiences, either positive or negative.

Kvale and Brinkmann (2009) assert “good interview questions should contribute thematically to knowledge production and dynamically to promoting a good interview interaction” (p. 131). Further, Glesne (2011) states that questions should be “drawn from the respondents’ lives” (p. 105). Since the researcher has prior knowledge of teacher-student relationships and communication behaviors, asking brief and simple probing, direct, structured, interpreting, and follow-up questions was not problematic. The teacher interview

46
questions were based on data from teacher and student QTI surveys. The survey results implied a difference in means between *teacher self-perceptions* and *student perceptions* of admonishing communication behaviors. Therefore, the researcher formulated interview questions about showing anger in the classroom. For example, one question asked teachers to describe a time when they showed anger towards a student or the class. From the student interviews, the researcher asked students to describe a time when they thought the teacher did not like them, or was angry with them.

Seven interviews with sixth, seventh, and eighth grade students were conducted and transcribed by the researcher. Concept-driven coding (Kvale & Brinkmann, 2008) based on the communication scales (i.e., strict, leadership, understanding, helping/friendly, uncertain, responsibility/freedom, dissatisfied, and admonishing) provided additional evidence of communication behaviors found in the middle school classroom setting. Creswell and Plano-Clark (2011) emphasize coding to be a core feature in the analysis of qualitative data. They state that codes can be broken into words, phrases, sentences or even paragraphs. Once data is divided into smaller units and assigned a label, researchers can then identify themes. For this study, the researcher used the communication scales to guide the coding structure.

Student interviews were transcribed and coded using MAXQDA 11 computer software. Codes were based on the eight sectors from the *QTI*: leadership, understanding, admonishing, uncertain, helping/friendly, student responsibility/freedom, dissatisfied, and strict. These sectors were identified as categories in the MAXQDA 11 program. Subcategories were also identified and utilized for coding procedures. Table 3 provides a detailed description of each category and subcategory.
<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
</tr>
</thead>
</table>
| Leadership              | Talks enthusiastically about subject  
                          | Explains things clearly  
                          | Holds our attention  
                          | Knows everything that goes on in the classroom  
                          | Good leader  
                          | Acts confidently |
| Understanding           | Trusting  
                          | Students don’t agree with teacher, they can talk about it  
                          | Willing to explain things again  
                          | Students have something to say, teacher will listen  
                          | Realizes when students don’t understand  
                          | Patient |
| Admonishing             | Teacher gets angry unexpectedly  
                          | Teacher gets angry quickly  
                          | Teacher is too quick to correct students when they break a rule  
                          | Teacher is impatient  
                          | It is easy to pick a fight with the teacher  
                          | The teacher is sarcastic |
| Uncertain               | Seems uncertain  
                          | Hesitant  
                          | Teacher acts as if she/he doesn’t know what to do  
                          | Teacher lets students boss her/him around  
                          | Teacher is not sure what to do when students fool around  
                          | It’s easy to make a fool out of the teacher |
| Helping/Friendly        | Helps students with work  
                          | Friendly  
                          | Someone students can depend on  
                          | Sense of humor  
                          | Can take a joke  
                          | Classroom is pleasant |
| Student Responsibility/Freedom | Students can decide some things for class  
                          | Students can influence the teacher  
                          | Teacher lets students fool around in class  
                          | Teacher lets students get away with a lot  
                          | Teacher gives us a lot of free time  
                          | Teacher is lenient |
| Dissatisfied            | Teacher thinks students cheat  
                          | Teacher thinks students don’t know anything  
                          | Teacher puts students down  
                          | Teacher thinks students can’t do things well |
Teacher seems dissatisfied
Teacher is suspicious

Strict
Have to be silent in the classroom
Tests are hard
Standards are very high
Severe when marking papers
Students are afraid

Triangulation is a form of analytical verification that allows the researcher to establish if the quantitative findings actually replicate the situation and are supported by the evidence (Guion, Diehl, & McDonald, 2011). The benefits of using triangulation as a form of data analysis can include: increased assurance in research data; ability to create original understandings of the phenomenon; exposing new findings; challenging theories; and providing comprehensible knowledge of the problem. Further, “triangulation can be used to deepen the researchers’ understanding of the issues and maximize their confidence in the findings of qualitative studies” (p. 3). For this study, the researcher determined the accuracy of the interview data by triangulating student and teacher samples, as well as interviewing multiple people within each group. Results of all data was compared to establish validity.

Summary

Research has indicated that academic success in middle school can predict secondary and post-secondary achievement. Evidence also suggests that teacher-student relationships are powerful components of all educational experiences. Much research has denoted the importance of these relationships; however, there is a gap in literature explaining if communication behaviors affect the connection between teachers and students in middle school. Both survey and interview data was gathered in order to provide teachers and students opinions about these relationships in the middle school setting. Answers to the
Research questions in this study provided pertinent data regarding communication behaviors in the middle school classroom that could enhance the teacher-student relationship. The next chapter will discuss the results of both quantitative and qualitative data.
CHAPTER FOUR

RESULTS

This study sought to identify teacher and student perceptions of communication behaviors relative to the teacher-student relationship in a middle school setting. The first research question (What relationship exists between student and teacher perceptions of communication behavior that affect the teacher-student relationship?) serves as an overarching question for the entire study; therefore, it will be answered in chapter five of this dissertation. However, this chapter will present the results of this study based on the following research questions:

2. Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?

3. Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?

4. Is there a difference between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors in the classroom?

5. Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do middle
school students and teachers perceive to be imperative in the development of teacher-student relationships?

In reporting the findings to each research question, the chapter will be divided into the following three sections: (1) demographics; (2) quantitative data and analysis; and (3) qualitative data and analysis.

**Demographics**

The Questionnaire on Teacher Interaction (QTI) survey has four variations that focus on (survey 1) ideal teacher communication behaviors, (survey 2) teacher self-perceptions of communication behaviors, (survey 3) student perceptions of ideal teacher communication behaviors, and (survey 4) student perceptions of teacher communication behaviors. The first survey was administered by the principal to thirty-seven (n=37) faculty members at the beginning of the 2013-2014 academic year. No personal identifiers were collected on this survey.

The second survey was administered to the same group of teachers. This survey asked teachers to provide self-perceptions of communication behaviors they exhibit in the classroom. However, only thirty (n=30) teachers chose to participate in this survey. After reviewing the data, three participants did not answer ten or more survey questions; therefore, they were eliminated. Out of the 27 teachers remaining, 21 (67.7%) were female and six (19.4%) were male. Teachers were asked to provide the amount of years of experience in the classroom. Out of the respondents, 12.9% of the teachers had been teaching 1-3 years, 12.9% of the teachers have taught 4-6 years, 19.4% of the teachers were in the classroom for 7-10 years, and 48.4% of the teachers taught for 11 years and beyond.
The third survey was administered to six, seventh, and eighth grade students. This survey asked students to identify *ideal* teacher communication behaviors. A total of 220 (n=220) students chose to participate in the survey. After reviewing the data, 13 participants were eliminated due to missing data. Out of the 207 remaining, 57.2% (127) were female and 41.9% (93) were male. Furthermore, 40.1% (89) were sixth graders, 31.5% (70) were seventh graders, and 27% (60) were eighth graders.

The students who participated in the third survey had the opportunity to take the fourth survey at the same time. This survey asked students to identify teacher communication behaviors based on their lunch teacher. This teacher is responsible for taking the students to the lunchroom, along with helping students with other work or supervising students during the study hall time. A total of 218 (n=218) students chose to participate in this survey. After reviewing the data, three of the participants were eliminated due to missing data. Out of the 215 remaining, 61.9% (135) were female and 36.7% (80) were male. Further, 34.9% (76) were sixth graders, 36.7% (80) were seventh graders, and 27.1% (59) were eighth graders.

Data analysis was conducted after gathering the surveys. Cronbach’s alpha was used to determine the reliability of each independent variable (leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, and strict). Factor analysis was performed to determine item-to-total correlations, as well as eigenvalues. Independent *t*-tests and MANOVA was used to compare means.

**Quantitative Results**

**Instrument Validity and Reliability.** The QTI is comprised of eight independent variables that describe different communication behaviors: leadership, understanding,
admonishing, uncertain, helping/friendly, student responsibility/freedom, dissatisfied, and strict. The survey consists of 6 items describing each sector of communication behaviors for a total of 48 items. Exploratory factor analysis was conducted to provide validity of the instrument using principal components analysis with a varimax, orthogonal rotation. Principal component analysis was useful to identify underlying dimensions of variables in construct validity. Of the 48 items selected, there were two components extracted using an eigenvalue of 1.00 or greater. The first component accounted for 34.555% of the variance and the second component accounted for 32.027% of the variance. Reliability coefficients for the two components were as follows: (a) Component 1, Negative Communication Behaviors, .825, and (b) Component 2, Positive Communication Behaviors, .891. Correlation coefficients for the components are found in Table 4.
Table 4

**Reliability Coefficients for the Two Components**

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item-Total Statistics for Component 1, Negative Communication Behaviors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertain score</td>
<td>3.5837</td>
<td>4.770</td>
<td>.546</td>
<td>.370</td>
<td>.825</td>
</tr>
<tr>
<td>Admonishing score</td>
<td>3.2686</td>
<td>3.445</td>
<td>.742</td>
<td>.564</td>
<td>.735</td>
</tr>
<tr>
<td>Dissatisfied score</td>
<td>3.4624</td>
<td>3.541</td>
<td>.782</td>
<td>.614</td>
<td>.714</td>
</tr>
<tr>
<td>Strict score</td>
<td>2.5299</td>
<td>4.229</td>
<td>.559</td>
<td>.375</td>
<td>.820</td>
</tr>
<tr>
<td>Cronbach’s Alpha = .83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Item-Total Statistics for Component 2, Positive Communication Behaviors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership score</td>
<td>7.4454</td>
<td>6.403</td>
<td>.826</td>
<td>.776</td>
<td>.836</td>
</tr>
<tr>
<td>Understanding score</td>
<td>7.6201</td>
<td>5.533</td>
<td>.883</td>
<td>.809</td>
<td>.810</td>
</tr>
<tr>
<td>Helping/Friendly score</td>
<td>7.5000</td>
<td>5.596</td>
<td>.869</td>
<td>.777</td>
<td>.816</td>
</tr>
<tr>
<td>Student responsibility/Freedom score</td>
<td>8.9141</td>
<td>8.257</td>
<td>.501</td>
<td>.299</td>
<td>.941</td>
</tr>
<tr>
<td>Cronbach’s Alpha = .89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After examination of the principle components, a two-factor solution was retained, which provided the best simple structure. The loadings were all above .67, which present evidence to the construct validity of the instrument. The underlying elements identified by each component were negative communication behaviors and positive communication behaviors. Principal component factor analysis is presented in Table 5.
Table 5

*Principal Component Factor Analysis of the QTI with Varimax Rotation*

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership score</td>
<td>-.427</td>
<td>.779</td>
</tr>
<tr>
<td>Understanding score</td>
<td>-.476</td>
<td>.806</td>
</tr>
<tr>
<td>Uncertain score</td>
<td>.789</td>
<td>-.009</td>
</tr>
<tr>
<td>Admonishing score</td>
<td>.802</td>
<td>-.383</td>
</tr>
<tr>
<td>Helping/Friendly score</td>
<td>-.407</td>
<td>.825</td>
</tr>
<tr>
<td>Student Responsibility/Freedom score</td>
<td>.076</td>
<td>.673</td>
</tr>
<tr>
<td>Dissatisfied score</td>
<td>.870</td>
<td>-.190</td>
</tr>
<tr>
<td>Strict score</td>
<td>.711</td>
<td>-.026</td>
</tr>
</tbody>
</table>

*Note.* Extraction method: Principal components

Research question one (What relationship exists between *student* and *teacher* perceptions of communication behaviors that affect the teacher-student relationship?) served as an overarching question for the entire study. Findings from this question are thoroughly discussed in Chapter five. The following paragraphs address findings from research questions two through five.

**Research Question 2.** Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?

A multivariate analysis of variance (MANOVA) test was conducted to identify the difference in means between the ideal teacher communication behaviors survey and the teacher self-perceptions of communication behaviors survey. This statistical method was chosen because there are eight categorical independent variables (communication scales previously defined by the QTI: leadership, understanding, uncertain, admonishing, helping/friendly, student responsibility/freedom, dissatisfied, and strict) and two dependent variables (ideal teacher and teacher self-perceptions).
A multivariate analysis of variance (MANOVA) was examined to determine the effect of dependent variables (ideal teacher and teacher self-perceptions surveys) on the independent variables (leadership, understanding, uncertain, admonishing, helping/friendly, student responsibility/freedom, dissatisfied, and strict). Preliminary assumption checking revealed that data was not normally distributed, as assessed by Shaprio-Wilk test \( p > .05 \). The data was positively skewed; therefore, a logarithmic \((\log_{10})\) transformation was applied and the tests of Normality showed normal distributed scores \( p > .05 \). Case 26 was deleted due to missing data from ten or more survey questions. There were linear relationships, as assessed by scatterplots and no multicollinearity. There was a statistically significant difference between the ideal teacher communication behaviors survey and the teacher self-perceptions of communication behaviors survey on the combined dependent variables, \( F(24, 1001) = 5.894, p < .0005; \) Wilks' \( \Lambda = .682; \) partial \( \eta^2 = .120 \). Follow-up univariate ANOVAs were conducted to identify differences in means using a Bonferroni adjusted \( \alpha \) level. Tukey post-hoc tests showed a difference between the means for leadership scores \( p = .025 \) and admonishing scores \( p = .011 \). Table 6 provides significant univariate effects for ideal teacher and teacher self-perceptions of communication behaviors.
Table 6

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<th>Independent Variable</th>
<th>df</th>
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<td>Self</td>
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<td>2.91 3.72</td>
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*Note. α < 0.00625.*

**Research Question 3.** Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?

An independent-samples t-test was conducted to determine mean differences between the dependent variables (teacher self-perceptions and student perceptions) and the independent variables (leadership, understanding, uncertain, admonishing, helping/friendly, student responsibility/freedom, dissatisfied, and strict). There were 27 teacher participants and 209 student participants. Homogeneity of variance was violated likely due to the large difference in group sizes, as assessed by Shapiro-Wilk’s test; therefore, the Welch-Satterthwaite correction to the degrees of freedom t-test was used to identify the differences.
in means (https://statistics.laerd.com). To account for inflation of Type I error, only \( p \) values for 0.00625 (0.05/8) were considered significant.

The independent t-test revealed statistically significant differences between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors for leadership scores, \( t(123.672) = 3.730, p < .0005; \) understanding scores, \( t(123.672) = 3.730, p < .0005; \) helping/friendly scores, \( t(99.614) = 6.094, p < .0005; \) and strict scores, \( t(85.169) = 3.093, p = .003. \) Table 7 provides mean differences for teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors.

Table 7

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Note: \( \alpha < 0.00625 \), *denotes significance
**Research Question 4.** Is there a difference between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors in the classroom?

An independent-samples t-test was run to determine if there were differences between the dependent variables (*ideal teacher* and *student perceptions* of ideal teacher) communication behaviors and independent variables (leadership, understanding, uncertain, admonishing, helping/friendly, student responsibility/freedom, dissatisfied, and strict). There were 37 teacher participants and 212 student participants. Homogeneity of variance was violated because of sample sizes, as assessed by Shapiro-Wilk’s test; therefore, the Welch-Satterthwaite correction to the degrees of freedom t-test was used to identify the differences in means. To account for inflation of Type I error, only *p* values for 0.00625 (0.05/8) were considered significant.

Table 8

Differences in Means between Ideal Teacher Perceptions and Student Perceptions of Ideal Teacher Communication Behaviors

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<td>SD</td>
<td>t</td>
<td>df</td>
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Note: α < 0.00625, *denotes significance

The quantitative phase of this study provided teacher and student survey data of teacher communication behaviors that exist in a middle school setting. The second phase of this study focused on qualitative data, specifically from middle school teachers and students. The following paragraphs will present the findings from the teacher and student interviews. An analysis of these findings will be further discussed in chapter five.

Qualitative Results

Research Question 5. Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do
middle school students and teachers perceive to be imperative in the development of teacher-student relationships?

**Student Interviews**

A semi-structured interview protocol was developed at the beginning of the study (for IRB purposes) to answer research question five. Interview questions were aligned with the eight sectors from the QTI: leadership, understanding, admonishing, uncertain, helping/friendly, student responsibility/freedom, dissatisfied, and strict. After reviewing quantitative data results from student QTI surveys, the interview protocol was altered to provide further explanation of the survey results. The refined interview protocol for students is provided in the Appendix.

Survey participants had the opportunity to participate in the interviews; however, only seven students received parent permission to participate. Out of the seven student participants, three were in eighth grade, three were in seventh grade, and one student was in sixth grade. Interviews were conducted in the researcher’s classroom and lasted approximately 20 minutes. The interviews were audio recorded for transcription purposes only. It is important to note that I knew of or taught many of the students interviewed. This might have made the interviewees more comfortable with discussing teacher communication behaviors or teacher-student relationships.

Overall findings revealed the majority of the students view their teachers as being helping and friendly. However, there was much discussion about angry behaviors seen from a few of the students. Interestingly, none of the students discussed uncertain behaviors seen
from their teachers. The next section provides detailed qualitative data from the student interviews based on the coding structure referred to in chapter three.

**Analysis of Categories and Subcategories**

Analysis of student perceptions of teacher communication behavior: Leadership. Data for this category emerged as students discussed their perceptions of leadership communication behaviors in the classroom. The following subcategories were identified as prominent behaviors seen in the classroom: explains things clearly, holds our attention, and talks enthusiastically about the subject.

An example of explaining things clearly from one student was “they never really leave you behind especially when you are hardworking and you still have obstacles they will always help to bring you back up.” Under the same subcategory, another student stated, “Oh gosh, like they explain it, they don’t make you feel like you know everything.” Other students believed their teacher held their attention by having “fun, someone that like they do like fun stuff in their class and explain stuff.” Positive comments regarding teacher communication behavior about subject matter was also prevalent throughout the student interviews. An example of this quality is when the student said a caring teacher “would be up-to-date about his/her subject.”

Analysis of student perceptions of teacher communication behavior: Understanding. Data for this category emerged as students discussed their perceptions of leadership communication behaviors in the classroom. The following subcategories were identified as prominent behaviors seen in the classroom; if students have something to say, the teacher will listen and the teacher is willing to explain things again.
Several comments regarding teachers listening to students emerged from the student interviews. One student stated “I can always come up to her if I have an issue and she will give me advice about something and I’ll use it and it helps, a lot.” Another student explained that teachers listen “when I’m having trouble with something and they are helping me or if I need someone to talk to I can go to that teacher.” Yet, another student stated that the teacher she had a positive relationship with is “nice and she listens and she’s not like very smart-alecky.”

Several students explained scenarios regarding teachers who are willing to provide further explanations if misunderstanding occurred. One student stated “Um, well one time I had a problem in math for my A+ they [teachers] both came over there and kinda seemed concerned, but uh Mrs. Roberts gives me a dictionary and help[ed] me look it up.” Another student explained that her teacher will [provide explanations] but not right away. She won’t come to my rescue right when I raise my hand and anything like that. She does help me when I need help. Like write a question on the board and she’ll help me out and the whole class also.

Further, another student added “Well, like they [teachers] are always helpful, they never really leave you behind especially when you are hardworking and you still have obstacles they will always help to bring you back up.”

Analysis of student perceptions of teacher communication behavior: Admonishing.

Data for this category emerged as students discussed their perceptions of admonishing communication behaviors in the classroom. The following subcategories were identified as prominent behaviors seen in the classroom: the teacher gets angry unexpectedly, the teacher gets angry quickly, the teacher is sarcastic, and the teacher is quick to correct students when rules are broken.
Admonishing behaviors include those that show caution, reprimand, or anger. One student explained that his lunch teacher is “all cocky and angry and he just bursts out and gets mad at you.” Another student added that his teacher showed sarcastic behaviors by “always calling you out or making fun of you.” In addition, a student stated some teachers are sarcastic when “they are mean to you and make you sit up front; they find every possible way to embarrass you.”

Many students concluded that teachers are quick to get angry, especially if a rule is broken. One student stated that his lunch teacher “has anger issues, he gets angry quickly.” Another student added when rules are broken, his lunch teacher “um, he yells at them and throws things. He will call the office and write them up, even if they talk.” Another student provided a scenario from when his teacher was quick to get angry about a broken rule:

Um, well I was walking in the line and he’s always calling people gay and everything, so I was walking in the line, it was me and Jesse and Jesse was in front of me and we were walking and I had to kinda walk out on the side and he said ‘You need to hold his hand or something?’ and told me to go to the back of the line and all that.

Analysis of student perceptions of teacher communication behavior:

Helping/Friendly. Data for this category emerged as students discussed their perceptions of helping/friendly communication behaviors in the classroom. The subcategories identified as prominent behaviors seen in the classroom were friendly and the teacher helps students with work.

One student stated that a friendly teacher would be one who “like always talks to you and she knows you can do it and she believes in you.” Another student added, “Ms. Hamilton helps me all the time. She gives me ideas. She’s always telling me how to do it and stuff.” One seventh grade boy characterized a friendly teacher as one who “won’t treat you like a
baby but they will help you with stuff and be nice to you.” In addition, a student added her lunch teacher shows friendly behaviors by “coming up to me and asking me how I’m doing and do I need any help with anything.”

The largest subcategory out of the helping/friendly category was discourse on teachers helping students with their work. One student stated a helping teacher would detect if you need help with work or something like that they will help you and they notice, instead of making you go up to them and then they like worry about your grades and ask you about all of that.

Another student explained helping teachers will “ask if I need help, if there is anything missing I need to do it or they will try to help me get my grades up higher.” One seventh grade student described a time when a teacher provided extra help: “My grades were like going down, they put like the failing people or the people with low grades in a group and actually did raise my grades up, especially in math.” However, one student explained that her lunch teacher “would actually help you with the work as long as you tried to do it.”

Analysis of student perceptions of teacher communication behavior: Student Responsibility/Freedom. Data for this category emerged as students discussed their perceptions of a caring teacher. The following subcategories were identified as prominent behaviors seen in the classroom, the teacher gives us a lot of free time and the teacher is lenient.

The student responsibility/freedom category provided an explanation of communication behaviors students would like to see from their teachers. The fact that students desire more free time emerged from two student interviews. One student explained a lenient teacher would be “that one teacher that let’s me do anything I want, like go to the restroom when I want. I can ask to go anywhere I want and she let’s me go anywhere.”
Another student desired more free time in the classroom. She stated a caring teacher would be one who “let you use your phone and stuff.”

*Analysis of student perceptions of teacher communication behavior: Dissatisfied.*

Data for this category emerged as students discussed their perceptions of unhappy teachers. The following subcategories were identified as prominent behaviors seen in the classroom: teacher puts students down, the teacher thinks students can’t do anything well, and the teacher thinks students don’t know anything.

One student provided a scenario about his dissatisfied lunch teacher. The researcher asked if his lunch teacher would help him if he had a question or problem. The student replied

> I haven’t asked for help but other people have asked and Codie went up there and asked him for something and he yelled at him because he didn’t have something copied down the first time and he threw a book at the board cause he accidently (the boy) erased some words on the board.

Some of the students interviewed provided data about teachers believing students do not do anything well. One student explained this by stating his relationship with his lunch teacher was

> Not that good. She’s my math teacher and I don’t understand anything she’s saying. And when she’s trying to explain something I don’t understand anything. And last time I got in trouble I got in trouble for no apparent reason, because I didn’t understand something.

One of the research questions asked students to explain how they know if a teacher did not like them. One student explained

> they will always be like, um, they act like they are better or something like that or perfect, they act like you should get something the first time, you shouldn’t do something that you know you aren’t supposed to do but they didn’t tell you you aren’t supposed to do it.

Another student stated he knew when a teacher didn’t like him when
you ask them something and they like treat you different than the other students. They wouldn’t pay attention to maybe what you are saying. If you raise your hand they won’t call on you because you might be saying something stupid.

*Analysis of student perceptions of teacher communication behavior: Strict.* This category emerged as students discussed their perceptions of strict communication behaviors in the classroom. The subcategory most prevalent was students are afraid of the teacher. For example, one student stated she was afraid of her lunch teacher because she “will just start screaming for no reason.” Another student said she never raised her hand in class because “I’m kinda scared to ask her a question and stuff.” Further, one student added she didn’t feel comfortable around her lunch teacher “because I’m afraid I’m going to do something out of line and I’m going to get in trouble for it even though it was just a little thing.”

**Teacher Interviews**

A semi-structured interview protocol was developed at the beginning of the study (for IRB purposes) to answer research question five. Interview questions were aligned with current literature regarding caring teachers and teacher-student relationships. Additionally, questions were included about teacher perceptions of characteristics of an *ideal* student and of student characteristics at the study site. After reviewing quantitative data results from student *QTI* surveys, questions were included to provide further explanation of uncertainty and anger behaviors seen in the classroom. The refined interview protocol for teachers is provided in the Appendix.

Survey participants had the opportunity to participate in the interviews; however, only five teachers decided to participate. Table 9 provides teacher demographics.
Table 9

*Teacher Demographics*

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Subject Area</th>
<th>Teacher Experience (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher A</td>
<td>7th Special Education</td>
<td>2</td>
</tr>
<tr>
<td>Teacher B</td>
<td>6th-8th Special Education</td>
<td>1</td>
</tr>
<tr>
<td>Teacher C</td>
<td>6th Math</td>
<td>20</td>
</tr>
<tr>
<td>Teacher M</td>
<td>6th-8th Gifted Education</td>
<td>25</td>
</tr>
<tr>
<td>Teacher L</td>
<td>6th Social Studies</td>
<td>9</td>
</tr>
</tbody>
</table>

Interviews were conducted in the researcher’s classroom and lasted approximately 20 minutes. The interviews were audio recorded for transcription purposes only.

Qualitative interviews were transcribed and coded using MAXQDA 11 computer software. Interview protocol for teachers and students was different; therefore, initial codes were identified based on teacher interview questions. These codes were grouped to form categories. Following the initial coding procedure, subcategories were formed. Table 10 displays categories and subcategories for teacher interviews.
Table 10

Teacher Qualitative Categories and Subcategories

<table>
<thead>
<tr>
<th>Categories</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Care</td>
<td>Example of Teacher Care</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Helping</td>
</tr>
<tr>
<td></td>
<td>Asking Questions</td>
</tr>
<tr>
<td></td>
<td>Listening</td>
</tr>
<tr>
<td>Teacher-Student Relationships</td>
<td>Importance of Teacher-Student Relationships</td>
</tr>
<tr>
<td></td>
<td>Teachers as Authority Figures</td>
</tr>
<tr>
<td></td>
<td>Developing Relationships with Students</td>
</tr>
<tr>
<td></td>
<td>Maintaining Relationships with Students</td>
</tr>
<tr>
<td>Ideal Student Characteristics</td>
<td>Student Character traits</td>
</tr>
<tr>
<td>Characteristics of students at school site</td>
<td>Authority</td>
</tr>
<tr>
<td></td>
<td>Discipline</td>
</tr>
<tr>
<td>Anger</td>
<td>Scenarios</td>
</tr>
<tr>
<td>Uncertain</td>
<td>Scenarios</td>
</tr>
</tbody>
</table>

Overall findings from teacher interviews revealed the importance of establishing a teacher-student relationship in middle school. Teachers had similar definitions of showing care in the classroom. Additionally, teachers’ descriptions of student characteristics at the school site were also similar. The following sections provide qualitative data to support these assumptions.

Analysis of Categories and Subcategories

Analysis of teacher perceptions of Teacher Care. Data from this category emerged as interviewees described a caring teacher. One teacher explained a caring teacher is one who simply “listens to her students.” Another teacher felt that listening was an important characteristic. She agreed by stating “Well a caring teacher is going to be one of those people
who will listen to the students. If they have a problem they know that they can come to me in private.” Another teacher added “um, a caring teacher is a teacher who goes above and beyond for her students and is helpful. She (or he) helps them succeed in every way – socially, emotionally, physically, academically.” Interestingly, one teacher stated a caring teacher should have high expectations, among other qualities. She stated a caring teacher would be someone who has expectations of his/her students, as well as an understanding that each student will reach these expectations at a different time. Someone who will know their students and will recognize when there is something that is not right going on in the students life that is spilling over into the students school life. Finally someone who will have high standards of character and discipline given from their students.

Another teacher believes a caring teacher should “wear many hats.” For example,

I think a caring teacher is one that knows the role and responsibility of a teacher. Being able to guide students with consistency, fair grading, but yet pay particular attention, personalize, as the students’ needs arise. I think the caring teacher would have more of a student centered classroom instead of a teacher centered classroom that has consistent discipline, so that it’s organized chaos.

The following subcategories emerged as teachers provided their opinion of a caring teacher: examples of teacher care, positive, helping, asking questions and listening. Some teachers provided examples of how they show care to their students. One teacher explained her behavior system:

There’s little things I do for the kids. I do these punch cards as a reward system. It’s not something they get every day and they don’t get rewarded for expected behavior, it’s for unexpected behavior. When they do things that is not actually asked of them but it sticks out.

Another teacher explained she shows care by “making each student feel like I see them every day. Saying good morning/good afternoon can make a world of difference.” Another teacher
holds high expectations. She added “I think I show students that I care because I don’t lower the bar just because it’s a challenge for them.”

Many teachers expressed the importance of being positive as a way to express care to their students. One teacher expressed she remains positive by remembering, “that even though my students have bad days I should never make my bad days their problem.” Further, she said she tries “keep it [problems] at the door and walk in happy and ready for a new day. Each day should start with a clean slate.” Another teacher added she remains positive by being “in a good mood and staying positive for them and being consistent.”

Analysis of teacher perceptions of Teacher-Student Relationships. Interviewees described teacher-student relationships to be an important aspect of education. One teacher replied “I feel in order to be an effective educator you have to have a relationship with your students to know things as simple as different learning styles, or who will be able to sit next to each other.” Another teacher believed teacher-students relationships allow her to “build on students strengths and identify the weaknesses early on and help them grapple with that.” One teacher added that teacher-students relationships are “important because I may be the only one in their life that actually cares about them.”

The following subcategories emerged from the discussion about teacher-student relationships: teachers as authority figures and developing and maintaining teacher-student relationships. Several interviewees expressed the importance of being an authority figure to middle school students. One teacher explained

Too often I believe teachers are ready to become the friend of the student rather than the authority figure they are supposed to be. Again, with my special population, the kids are very manipulative. They’ve learned how to play teacher against mom, mom against dad, etc. If they don’t have an authority figure saying this is right, this is wrong, they become very confused. Without a solid moral base from someone who has the answer (teacher) or someone who can lead them in the direction to get the
Discussion about teacher-student relationships prompted discourse about developing and maintaining relationships. A teacher simply expressed she developed a relationship with her students “by interacting with them on a daily basis, by asking questions about their lives.” One teacher provided a scenario of a time she developed a relationship with a new student. She said

I had one come in this year and was very unhappy about being in this class. By the end of the week, he loved it because he realized that we’re gonna work, but we also get some time to just get to know you and play games that help us learn about each other.

Another teacher explained, “relationships take time and respect on both sides for it to matter.” Additionally, this teacher expressed “some students will come in, in the beginning of the year and crave a relationship while others will have to feel you out.” To sum up this discussion, the teacher recommended “through openness with your students and no favoritism you will eventually have a relationship with all your students. A teacher expressed that maintaining this relationship can be done through “being fun with them, open with them, and telling them stories about my personal life so they can see that I’m not just somebody behind the desk, I’m a little crazy like them.” Another teacher maintains relationships with her students by “walking in happy and ready for a new day and consistently make what happened the day before stay in the day before. Each day should start with a clean slate.” Ultimately, according to one teacher, the best way to maintain a relationship with middle school students is to build trust with your students. She said, “if your students do not trust you or do not think you care about them they don’t care about themselves. I try to establish that with all of my kids.”
Analysis of teacher perceptions of “Ideal” Student Characteristics. Teachers were asked to describe their “ideal” student. Many teachers provided specific character traits of an ideal student. For example, one teacher stated “an ideal student would be one who always has their work, has a happy home life, and is self-motivated.” Another teacher expressed “the ideal student would be someone who works hard, tries hard. They don’t have to make the best grades, cares for others and goes above and beyond because they want to do good.” Another teacher simply stated an ideal student was one who was willing to learn. However, another teacher added, “There is no ideal student. They each come with great qualities and ones that you would rather not see. If there were some character traits that I would like to see they would be respect, honesty, and trust-worthiness.”

Analysis of teacher perceptions of Student Characteristics at School Site. Teachers were prompted to provide details of student character traits at the school where they teach. Further, they gave accounts as to why they believed it was hard to develop relationships with students at the school. One teacher expressed that students have “attitudes toward authority, they have been taught that teachers are against them.” Another teacher added we do have some students at this school that have no discipline. That does make it hard when you try to get to know them and break the seal and get them to trust you. They don’t have the respect, discipline, and they just don’t care.

Again, authority is an issue when developing or maintaining relationships with students at this school. For example, one teacher expressed “the students at this school have an underlying pull to resist authority, so with it comes disrespect and hostility.”

Analysis of teacher perceptions of communication behaviors: Anger. Based on QTI results, anger communication behaviors were overrepresented. Therefore, a question was developed to get the teacher’s point-of-view about anger behaviors in the classroom. One
teacher explains she gets angry many times throughout the day. For example, she gets
irritated when “the majority of the class didn’t have their work or were extremely talkative or
a particular day.” To show this anger, she says “I wear my feelings on my face, when I walk
in students can tell if I’m angry or happy, I usually do not have to verbally tell them.”
Another teacher expresses her anger by speaking “sternly and letting them know that I was
sad that they were choosing to not follow directions.” Another teacher expressed that her
facial expressions are a sure sign she is upset. She said she has this “dead look on my face.”
Additionally, this teacher
gets upset very easily, so I will sit at my desk and won’t look at them, then they say
‘Mrs. C, are you ok? What’s wrong?’ Sometimes it’s not necessarily the whole class
that’s made me mad, it might be one kid that continuously does something that just
you know they know better they just don’t do it.

However, one teacher chooses to cool down before discussing behavioral issues with a
student instead of yelling at the students. She simply asks them to step into the hallway,
which in turn
allows me to have a cool down in the classroom. That’s basically what I do. I just
send them out and have a break, I would rather not yell at them, especially while I’m
mad. I’d rather have a break and then we can talk about it calmly.

Analysis of teacher perceptions of communication behaviors: Uncertain. Based on
QTI survey results, uncertain communication behaviors were underrepresented. Therefore, a
question was developed to identify if teacher demonstrated uncertain behaviors in the middle
school classroom. Several teachers provided scenarios of a time when they felt uncertain
making decisions in the classroom. For example, one teacher expressed uncertainty about one
specific student’s behavior.

I guess it would be one student who you know has never gotten in trouble; he’s
always great wonderful, perfect little sweet child. It’s hard to get on to him because
you know it’s just their disability and the other students are like if I did that I would
get in trouble. That’s when you kinda feel uncertain on how to handle the situation because they don’t react to everything.

Another teacher stated they felt uncertain making the appropriate decision when a child tried to threaten her life. Another teacher feels uncertain every day. To combat this feeling, she does “a lot of self-reflection.” She also “has conversations with [her] students.” For example, she asks “What’s going right, how can I do this differently, and what do you like about the class.” Ultimately, this gives her students “a chance to open up and talk about me.”

Summary

This chapter has detailed the results from the quantitative phase and qualitative phase for the following research questions:

2. Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?

3. Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?

4. Is there a difference between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors in the classroom?

5. Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do middle school students and teachers perceive to be imperative in the development of teacher-student relationships?

During the first quantitative phase of the study, MANOVA analysis revealed that student perceptions of leadership, understanding, helping/friendly, admonishing, and strict
communication behaviors were significantly different than teacher perceptions of these communication behaviors. In order to fully explore these differences, interviews were conducted with individual teachers and student in the qualitative phase two of the study.

During the qualitative phase of the study, student perceptions of teacher communication behaviors revealed the following essential themes relative to the teacher-student paradigm in middle school: helping/friendly, admonishing, and understanding. Additionally, teacher perceptions of communication behaviors revealed that teachers strive to develop and maintain teacher-student relationships through active listening to students, helping with work, remaining positive, and building trust.

Chapter five provides a more in depth discussion of the quantitative and qualitative findings and offers implications for middle school teachers who strive to foster a relationship with their students. Additionally, future research on teacher-student relationships in the middle school setting is discussed.
CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Past research suggests teacher-student relationships are an imperative component of middle school education (Ryan, Shim, & Makara, 2013). Connections between teachers and students can foster intrinsic motivation and increased effort in academic subjects (Daniels & Arapostathis, 2004). According to Reichert and Hawley (2013), caring teachers often exhibit communication behaviors that facilitate teacher-student relationships. The importance of these relationships can result in lowering high school dropout rates and improved college preparation for students.

The purpose of this study was to identify teacher communication behaviors in the middle school setting in hopes of better understanding the importance of teacher-student relationships and the potential to reduce academic failure. Previous studies have revealed that middle school education has a direct impact on secondary and post-secondary success (Balfanz, 2009; Zinth, 2009). Unfortunately, little is known about teacher-student relationships in the middle school setting; therefore, this study addresses a significant gap in the literature regarding teacher-student relationships, caring teachers, and communication behaviors relative to the middle school education.
Findings

This study was based on the overall research question: What relationship exists between student and teacher perceptions of communication behaviors that affect the teacher-student relationship? The following inferences can be drawn from the data and analyses of this study:

1. A MANOVA analysis of the QTI survey revealed significant differences in leadership, understanding, uncertain, admonishing, and helping/friendly scores between *ideal* teacher and *teacher self-perceptions* of communication.

2. An independent samples t-test revealed significant differences in means for leadership, understanding, helping/friendly, and strict scores between *teacher self-perceptions* and *student perceptions* of teacher communication behaviors.

3. An independent samples t-test revealed significant differences in means for leadership, understanding, helping/friendly, and admonishing scores between *ideal* teacher and *student perceptions* of ideal teacher communication behaviors.

4. Qualitative data from student interviews disclosed that students desire to have a relationship with teachers who exhibit leadership, understanding, and helping/friendly communication behaviors.

5. Qualitative data from student interviews revealed that admonishing and strict behaviors negatively affect the teacher-student relationship in the middle school setting.

This explanatory sequential mixed methods study was divided into two specific phases to answer the overall question. In each phase, specific questions were posed in order to investigate the differences in *student perceptions* of communication behaviors and *teacher
perceptions of communication behaviors that affect the teacher-student relationship. The following sections address the overall findings from each phase of the study.

**Quantitative Findings**

The quantitative phase of this mixed-methods study was designed to address the following research questions:

2. Is there a difference between ideal teacher communication behaviors and teacher self-perceptions of communication behaviors in the classroom?

3. Is there a difference between teacher self-perceptions of communication behaviors and student perceptions of teacher communication behaviors in the classroom?

4. Is there a difference between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors in the classroom?

In order to answer these questions, it was necessary to measure student perceptions of communication behaviors and teacher perceptions of communication behaviors found in the middle school setting. The Questionnaire on Teacher Interaction (QTI) survey was utilized to measure four different viewpoints of communication behaviors seen in the classroom. Two of the surveys focused on ideal teacher communication behaviors from a teacher and student perspective. Two of the surveys focused on actual teacher communication behaviors perceived in the classroom from the teacher and student vantage point. Thirty-seven teachers participated in the ideal teacher communication behaviors survey, 30 teachers chose to partake in the teacher self-perception of communication behaviors survey, and 218 students chose to participate in both student surveys.
Multivariate analysis of variance (MANOVA) tests identified significant univariate effects for leadership, understanding, uncertain, admonishing, and helping/friendly scores between *ideal* teacher communication behaviors and *teacher self-perceptions* of communication behaviors in the middle school setting. This statistical method was chosen because there are eight independent variables (leadership, understanding, uncertain, admonishing, helping/friendly, student responsibility/freedom, dissatisfied, and strict) and two dependent variables (ideal and teacher self-perceptions).

Follow-up analysis of variance (ANOVA) tests were conducted to identify specific differences in communication behaviors. Results indicate a statistically significant difference between *ideal teacher* and *teacher self-perceptions* of communication behaviors for leadership and admonishing scores. An analysis of this could be that teachers believe the *ideal* teacher would exhibit more leadership qualities such as: explaining things clearly, acting confidentially, holding attention, and talking enthusiastically about his/her subject, instead of showing anger behaviors. These findings are similar to a study conducted by Wubels, Brekelmans, Creton, & Hooymayers (1990), which revealed that teachers desired to increase leadership skills and exhibit less angry behaviors in the classroom. To date, a minimal number of research studies have utilized the *ideal teacher* and *teacher self-perceptions* of communication behaviors surveys in the middle school setting; therefore, it is difficult to compare this study’s findings to others.

An independent-samples t-test was conducted to determine the differences in communication behaviors between *teacher self-perceptions* and *student perceptions* based on the eight independent variables as previously discussed. From the survey, teachers consider themselves to exhibit more leadership, understanding, helping/friendly and strict behaviors
than their students perceived. These findings are congruent with past research regarding teacher communication behaviors (Khine & Atputhasamy, 2003; Fraser, Aldridge, & Soerjaningsih, 2010; Wubbels, Levy, & Brekelmans, 1997).

An independent-samples t-test was conducted to identify the differences in communication behaviors between ideal teacher communication behaviors and student perceptions of ideal teacher communication behaviors. Again, the same eight constructs were tested to identify the differences in means. Findings revealed a significant difference in means between leadership, understanding, helping/friendly, admonishing, and strict scores. Out of these findings, students’ mean scores for admonishing behavior was significantly higher than teachers’ scores. This could be due to the fact that students perceive all teachers to portray anger or impatient behaviors. These conclusions are congruent with the findings from Henderson, Fisher, and Fraser’s (1994) international study, along with Britt’s (2013) recent dissertation study.

**Qualitative Findings**

The qualitative phase of this study was centered around the following question:

Which of the eight communication behaviors (i.e., leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict) as described by the Questionnaire on Teacher Interaction (QTI) do middle school students and teachers perceive to be imperative in the development of teacher-student relationships?

Interview questions were based on student and teacher survey results from the QTI. Interviews were conducted with seven middle school students and five middle school teachers. Each interview was audio recorded for transcription purposes only. The computer
program, MAXQDA 11 was used for coding interview data. Student surveys were coded using the QTI’s eight communication behavior sectors (leadership, helping/friendly, understanding, student responsibility/freedom, uncertain, dissatisfied, admonishing, or strict). Teacher interviews were coding using current research findings regarding teacher-student relationships along with data from teacher QTI surveys. Categories and subcategories were revealed as the coding procedure occurred.

Results from student interviews revealed that teachers exhibit positive communication behaviors in the classroom. Of the eight categories, teachers who exhibited helping/friendly, understanding, and leadership qualities often had positive relationships with their students. Subcategories under the helping/friendly group revealed that students are connected to teachers who help them with their work, are friendly, and have a pleasant classroom environment. This finding parallels current research about positive teacher-student relationships (Anderson, Nelson, Richardson, Webb, & Young, 2001; Hamre & Pianta, 2006). Under the understanding category, teachers who were willing to listen, explain things again, and realize when students need extra help often have a positive rapport with their students. The leadership category identified important subcategories that affect the teacher-student relationship. These include teachers talking enthusiastically about his/her subject, explaining things in a clear manner, and holding students attention. These important aspects of positive communication behaviors were also relevant in Daniels and Arapostathis (2005) study regarding student voices and motivation.

Results from the student interviews also revealed negative communication behaviors that teachers exhibit in the classroom. Data emerged from the admonishing and dissatisfied QTI behavior scales. For example, teachers who seem angry and impatient might make
students feel uncomfortable; therefore, making the relationship between teacher and student difficult. Also, students who believe their teachers put students down, act suspicious, and think they cheat might not have the desire to develop a relationship with their teachers.

Findings from teacher interviews revealed that teacher-student relationships are an important element of middle school education. Positive categories such as teacher care, developing and maintaining relationships, and ideal student character traits were prevalent among teacher interviews. On the other hand, discussion regarding discipline, authority, and student culture was also evident. Teachers believed these characteristics made it difficult to build relationships with their students. Some teachers even discussed that parenting plays an important role in the development of the teacher-student relationship. For example, one teacher believed that parents talk negatively about teachers in front of their children, which could hinder the development of teacher-student connections.

**Mixing the Data**

The current study followed an explanatory sequential mixed methods design. It is important to interpret the overall findings from this study in order to fully understand the results. Creswell and Plano-Clark (2011) offer specific strategies for analyzing and interpreting mixed methods research. The authors express that one specific question should be answered when quantitative and qualitative data is merged: “To what extent do the qualitative results confirm the quantitative results?” (p. 164). This question will be answered in the following paragraphs (Creswell & Plano-Clark, 2011).

QTI scores from the teacher self-perceptions survey and student perceptions of teacher communication behaviors survey found leadership, understanding, and
helping/friendly behaviors to be significantly different. However, qualitative interviews disconfirmed this analysis. This was an interesting finding, since the reason for this study stemmed from a conversation between a student and me about unfriendly teachers. I thought that the survey results about helping/friendly teachers would be extremely different, along with the qualitative data. However, many students provided examples about teachers who were willing to go the extra mile.

Many students mentioned that their teachers’ enthusiasm towards the subject they taught was extremely high. One student explained how her teacher would break down the content making sure students were grasping the material. A teacher actually commented on this teaching strategy and stated that her goal was to ensure students understood the lesson before she moved on to the next objective. Several teachers commented on how they spent time with students, listening to their problems and trying to understand their concerns. One student discussed a time when the teacher noticed she needed new clothes and actually bought her some and gave them to her. She felt so loved and was appreciative that the teacher took time out of her schedule and own money to purchase something she needed. These qualitative examples show that many teachers at our school care for their students. The differences in means for the survey data could be due to the amount of surveys collected or that teachers and students were afraid to answer the interview questions honestly.

*Teacher self-perceptions* and *student perceptions* of admonishing and strict behaviors differed based on the survey results. The differences in means suggest that students believe their teachers display more angry and strict behaviors more than the teachers believed. Qualitative results for these behaviors align with the quantitative findings. Students provided sufficient data to show that significant anger behaviors do occur from teachers in the
classroom. For example, one student reported being yelled at for breaking rules, talking in the classroom, and getting out of line in the hallway from the same teacher. This student has a reputation in the school to be a trouble-maker and instigator. He does not respond to teachers yelling in his face and tends to shut down when he gets in trouble. After much discussion, he provided details about his personal life, which provided possible explanations about his behavior at school. Sadly, he reported that teachers just did not understand him; his hobbies, his home-life, or his friends. Therefore, he sees teachers as the “enemy” who are always looking for a way to punish him.

On the other hand, teachers’ comments on anger behaviors in the classroom were minimal, stating they would sit quietly at his/her desk if they were upset or just sent students to the hallway until each person calmed down. As an employee of this school, I have seen several students sitting in the hallway; however, I believe this form of discipline fails to correct the negative behavior. Also, there have been many discussions with teachers about students’ negative behavior and ways that the teachers dealt with their behavior. Many teachers get frustrated and send the students to the office. Unfortunately, this action does not provide teachers with the opportunity to get to the root of the problem.

There are several possible explanations why teachers might have provided these results to the questions about anger behaviors. First, teachers might want the researcher to believe they exhibit positive classroom management strategies instead of exhibiting harsh behaviors. Secondly, teachers might want to portray themselves as a patient, caring teacher who rarely becomes frustrated with their students. Lastly, these comments might be accurate, as many teachers might strive to be a positive influence in their classroom, instead of modeling negative behaviors.
Students commented on being afraid of getting in trouble (strict behaviors) in the classroom. However, there were little to no comments about strictness in the classroom from teachers. It is difficult to explain this result, but it might be related to the fact that there was not an interview question that directly asked teachers to describe their strict behaviors in the classroom. Instead, the researcher focused on questions that prompted discourse about showing care towards students and building relationships. For example, teachers were asked to provide their definition of a caring teacher. Several teachers stated that caring teachers are ones who listen to their students and strive to understand their needs and concerns. One teacher added that she makes every effort to remain positive in the classroom and attempts to build relationships with her students because she “may be the only one in their life that actually cares about them.” Knowing these students personally, I can attest to the fact that they desire to have positive mentors in their life to support them and care for them. Spending just two to three minutes of uninterrupted quality time has facilitated positive relationships with several of my own students. Many of the students that other teachers deem “difficult” often show respect to me. I enjoy the challenge of breaking their wall and truly getting to know them as a person, not a student or a number.

The QTI survey indicated there was no significant difference in teacher self-perceptions and student perceptions of teacher communication behaviors for the following independent variables: student responsibility/freedom, uncertain, and dissatisfied. However, qualitative findings do not align with these results. For example, teachers reported that they allow their students the freedom for peer socialization. Students might believe their teachers rarely provide time for peer interaction in class. In my own classes, I try to provide extra time for peers to communicate with each other; however, my class is an elective and I do not have
the pressure to teach a great deal of content or ensure that students can succeed on standardized testing. Student interviews also revealed that they rarely had the opportunity to voice opinions about interesting content or were allowed the freedom to research different ideas. For example, one project in my class allows students to choose a specific restaurant to research. Even thought the ultimate goal is for them to learn how to conduct research, they are able to have some freedom to learn about specific foods that they enjoy. By doing this, they seem to stay on task and enjoy the project. Allowing students to research interested topics might increase the amount of time on task or facilitate the development of a teacher-student relationship. The QTI survey also indicated there was no significant difference in teacher self-perceptions and student perceptions of uncertain teacher communication behaviors. However, two teachers went in to great detail about specific times they felt uncertain about making discipline decisions or dealing with home life situations. For example, one teacher reported feeling uncertain when disciplining one student who you know has never gotten in trouble; he’s always great wonderful, perfect little sweet child. It’s hard to get on to him because you know it’s just their disability and the other students are like if I did that I would get in trouble. That’s when you kinda feel uncertain on how to handle the situation because they don’t react to everything.

When teachers take the opportunity to truly get to know their students, discipline might be easier and positive student behavior might increase (Hamre & Pianta, 2006). Therefore, teacher-student relationships might decrease the amount of teacher uncertainty in the classroom. Student interviews, on the other hand, did not reveal data for this communication behavior. This discrepancy could be attributed to students being unaware of the fine details that teachers face daily in the classroom. Another possible explanation is that students do not
pay attention to teacher communication behaviors unless the situation directly affects them or their circumstances.

The *QTI* survey also indicated there was no significant difference in *teacher self-perceptions* and *student perceptions* of dissatisfied teacher communication behaviors. Interview results revealed that students believe the majority of the teachers think students are unintelligent. Students might have made this assumption from previous experiences with teachers who do not demonstrate care in the classroom or neglect to show positive communication behaviors. Factors such as different cultures, personalities, and/or beliefs can have an effect on these behaviors (Tosolt, 2009), which might make students believe their teachers have a negative opinion about their academic abilities. Also, students might have expressed this statement because they were focused on a teacher they did not like or thinking about a class they did not understand. However, one teacher stated that her students were very bright and she strives every day to challenge their thinking. She might have said this because she often teaches the gifted students and sets high expectations in her classroom.

Having spent much time in the school where the study was conducted, I can attest to the fact that many teachers go above and beyond to ensure their students understand content and grasp skills. Some teachers hold after-school tutoring sessions for students who are failing math. Others use their break time to work with students who are at-risk for academic failure.

This analysis confirms that many teachers at this school site care for their students. Teachers gladly devote their time and money to ensuring the students have what need to succeed – either personally or in the classroom. The majority of the students believed their teachers truly cared for their wellbeing and wanted them to succeed. It is unfortunate that some of the teachers refused to participate in the interview; especially those that students
disclosed anger scenarios about or expressed that they had dissatisfied behaviors. Although there were some discrepancies in the quantitative and the qualitative data, the findings from this study can provide recommendations for future studies or practice that hope to identify teacher communication behaviors in order to better understand the teacher-student relationship in the middle school setting.

**Limitations**

Although this study has successfully demonstrated that middle school students desire to build connections with teachers who demonstrate positive communication behaviors, several key limitations must be discussed. The most important limitation lies in the fact that the researcher is employed at the school where the study was conducted. That means that the researcher has had some type of contact with the participants. This might have caused teachers to feel pressured to take the survey or participate in the interview. In addition, students might have altered the descriptions of teacher communication behaviors in fear that the students’ depictions might have been exposed to that teacher. Future research should be aware of these biases and adjust the protocol where necessary.

One source of weakness in this study which could have affected the measurements of teacher-student interactions in the middle school setting was the sample size and population. Although the MANOVA and independent t-tests identified statistical differences between teacher and student means, the unequal sample sizes could have limited the power of the statistical tests. Thus, the results of these tests cannot be generalizable. Additionally, this research was conducted in one middle school in central Alabama. The majority of teacher
participants were female; therefore, this limitation might be an issue because it does not accurately reflect the opinions and beliefs of male middle school teachers.

Most importantly, an issue that was identified during the data collection phase was the fact that teacher care and teacher-student relationships can be a sensitive topic. Educators seem to have different opinions about their position as a teacher, mentor, and coach. Some of the novice teachers believed that teacher-student relationships were an integral part of their job; however, veteran teachers believed the opposite. Many of the teachers that students provided interview data for declined to participate in the interview process. A possible explanation for this may be linked to the sensitivity of the subject. Students also seemed hesitant about discussing teacher communication behaviors. This could be due to the fact that they were nervous about the interview process or scared that their teacher would find out what they had reported. In any case, caution must be applied to future research studies about teacher-student relationships due to the sensitivity and different opinions of this topic.

**Recommendations for Further Study**

This study sought out to examine teachers’ communication behaviors in a middle school setting that may facilitate a teacher-student relationship. Limitations from this study express the need for future research in this area. Recommendations for future studies are discussed in the following paragraphs.

The evidence from this study suggests that middle school students desire to build relationships with teachers who display leadership, helping/friendly, and understanding behaviors. In order to authenticate this assumption, more research is needed to better understand if the findings from this study can be generalizable. Diverse viewpoints from
middle school teachers and students would provide additional quantitative and qualitative data to add to the existing literature on teacher-student relationships and communication behaviors. Additionally, it is important for researchers to study these constructs in a middle school where they have little or no affiliation. This might reduce the amount of teacher and student anxiety during the data collection phase of the study.

A further study could assess teacher communication behaviors and teacher-student relationships by focusing on one or two classrooms from six, seventh, and eighth grade. Surveys could be administered two times during the study as a “pre/post” analysis to see if teacher behaviors change throughout the year. Also, researchers could conduct random observations to provide an enhanced snapshot of actual teacher behaviors, instead of relying on students to provide the qualitative data. Data from this study could be used to formulate professional learning communities among teacher cohorts that focus on building relationships with middle school students or altering behaviors that negatively affect the teacher-student relationship.

The Questionnaire on Teacher Interaction (QTI) survey is a reliable and valid tool to identify teacher communication behaviors; however, future studies should refrain from using the ideal teacher and student perceptions of ideal teacher communication behaviors survey. The concept of an “ideal” teacher is difficult to grasp, especially for students. For example, a statement from the student questionnaire on ideal teacher communication behaviors asks students to rate if the ideal teacher acts as if he/she does not know what to do in the classroom. Many of the students who took this survey found these statements to be confusing. It was difficult for them to describe the “perfect” teacher. Therefore, data from the ideal teacher survey neglects to provide specific communication behaviors seen in the
middle school classroom. Future studies could utilize the teacher self-perceptions and student perceptions QTI survey to identify specific teacher communication behaviors.

Results from this study suggest that further research needs to be conducted to explore middle school teachers and students understanding of student responsibility/freedom, uncertain and dissatisfied communication behaviors. Data from these studies could facilitate a further explanation of the differences between teacher self-perceptions and student perceptions of teacher communication behaviors and possibly how these behaviors affect teacher-student relationships. Interested researchers could accomplish this task by observing middle school classrooms along with interviewing middle school teachers and students.

Taken together, the results from this study suggest that students aspire to learn from caring teachers that demonstrate positive communication behaviors. Previous research has identified factors that affect the teacher-student relationship, such as student behavior, gender, and time/schedule constraint. Even though these constructs are central to the development of a teacher-student relationship, future studies could investigate teacher and student personality traits to identify specific characteristics that facilitate the relationship. For example, teachers who model caring behaviors, promote a caring community, and provide caring experiences (Noddings, 2010) might have a positive disposition. It would be interesting to note how personalities can affect the bond between middle school teachers and students.

In conclusion, the purpose of this study was to assess teachers’ communication behaviors in a middle school setting that may support a teacher-student relationship. Results of this mixed methods study indicated that middle school teachers exemplify positive and negative communication behaviors. Future research endeavors could focus on expanding this
study in locations with varied teacher and student demographics, employ classroom observations, and concentrate on specific behaviors that may facilitate the teacher-student relationship. Overall, it would be interesting for researchers to identify teacher and student personality traits that encourage the development of a relationship.

**Recommendations for Practice**

**Middle School Education.** Evidence from this study suggests that middle school students desire to build relationships with teachers who display helping/friendly, understanding, and leadership behaviors. Further, these behaviors could entice students to believe their teachers care about them. The notion of care is central to the development of teacher-student relationships. In fact, Goldstein (1998) exclaims that caring is an interaction; it is not who you are, rather it is what you do that makes a difference. Therefore, the challenge for school administrators is to answer the following question: “How do we teach educators to care?”

According to Noddings (2005), a caring relation is defined as a connection or bond between two individuals. One of the parties is considered to be the one-caring, and the other person is the one being cared-for. The purpose of a caring relation is to meet the needs of the other person and to encourage the one cared-for to create other caring relations (Noddings, 2010). In order to teach educators how to care for their students, school administrators must play the role of the one-caring and teachers should be considered as the cared-for. Experiences and guidance from the school administrators and teacher leaders could promote future caring relations as teachers transition from the cared-for to the one-caring in the
classroom. This task can be accomplished by implementing a professional development program that focuses on teacher care and positive communication behaviors.

Professional development is a vital component of the education profession. It offers teachers an opportunity to once again take on the role of a learner and identify new strategies and skills that they might incorporate in their classroom practices. To the novice teacher, such development can be instrumental in building a classroom confidence, thus preventing early burnout; whereas the more experienced teacher might gain a renewed sense of excitement in their profession.

There are many different types of professional development: workshops, book studies, college courses, web-based videos, and much more. Many schools are forming professional learning communities (PLCs) to increase student learning through the advancement of teacher practices (Vescio, Ross, & Adams, 2007). Professional learning communities efforts center around changing teachers’ beliefs and attitudes about current classroom practices, along with providing encouragement and feedback to build confident teachers who are knowledgeable about content, skills, and strategies that can be embedded in teaching practices (Guskey, 2002; Hirsh, 2011; Hord, 2009). Therefore, a PLC would be an effective vehicle to address teacher care and the importance of developing teacher-student relationships in the middle school setting. It also provides a safe environment for administrators (one-caring) to demonstrate care for teachers (cared-for) so that teachers can evolve into the one-caring for their students.

PLCs are comprised of five main characteristics: shared values, learning, reflective dialogue, collaboration, and teacher practices (DuFour, 2004; Hord, 2009; Kruse, Louis, & Bryk, 1995; Vescio, Ross, & Adams, 2007). It is important for the success of the program
that faculty and staff develop a shared mission together for the professional community (Roberts & Pruitt, 2009); however, personal beliefs and values about teacher-student relationships and care should be identified first. Each PLC member could accomplish this task by composing a personal teaching philosophy (Perez, 2000), which would facilitate discourse about teaching styles, beliefs, and values.

The second characteristic of a PLC is collective focus on learning. Questions like, “What does our data tell us about teacher-student relationships?,” and “In what areas should we concentrate on the most?” could be discussed. It is necessary for administration and teachers to identify types of data they will use as a baseline for these discussions. From this study, we found that the Questionnaire on Teacher Interaction (QTI) survey can be a valuable tool in identifying teacher communication behaviors in the middle school setting. The QTI could be administered several times a year to provide an accurate description of behaviors that students observe in the classroom.

Another important aspect of PLCs that Roberts and Pruitt (2009) report is the use of reflective dialogue. Administrators and teacher leaders should engage in conversations about what caring looks like in the classroom (Tosolt, 2009). Fisher, Fraser, and Cresswell’s (1995) study concluded that data from the QTI assessment was useful for self-reflection on behaviors that teachers displayed in the classroom. Additionally, findings from their study revealed that the QTI could be beneficial for starting conversations in PLCs about teaching strategies for enhancing teacher-student relationships. This discussion can focus on behaviors that teachers demonstrate throughout the day, along with student behaviors that possibly interfere with the development of a relationship.
A significant component of a PLC is to challenge teachers’ ways of thinking towards teacher care and teacher-student relationships. Middle school teachers might be more focused on the content they teach instead of classroom management strategies or communication behaviors (Sakiz, Pape, & Hoy, 2012). Therefore, collaborating with cohorts, specialists, and administrators about teacher care and teachers-student relationships might encourage teachers to alter the way they communicate with their students. This part of the PLC process allows teachers and administrators to share techniques and strategies, make decisions regarding results of student data, and identify ways to enhance the teacher-student relationship. For example, a study conducted by Henfield and Washington (2012) examined white teachers’ experiences with African American students. The white teachers found it difficult to tackle problems with “diversity, race, and racism” (p. 157). Evidence from this study suggests that teachers should collaborate with specialists and peers on difficult topics to provide enriching school experiences for all students. It is imperative that teachers participate in collaboration to foster change in beliefs and values; however, school administrators must be willing to support these efforts and encourage autonomy, facilitate opportunities, and provide the time necessary for these meetings to occur (Roberts & Pruitt, 2009).

Professional learning communities can provide administrators and teachers the opportunity to identify shared values and goals, learn new teaching strategies and classroom management behaviors, and collaborate with peers and specialists. Educators could implement this gained knowledge throughout their classroom practices so that their beliefs and values about teacher care and teacher-student relationships can be altered (Gehlbach, Brinkworth, & Harris, 2012). Throughout this time, teachers should be aware of
communication behaviors they exhibit towards different cultures and student demographics (i.e., ESL, gifted, behaviorally challenged) since these student characteristics might require different relational interactions (Newberry, 2010). Furthermore, middle school teachers who display warmth and acceptance towards their students might facilitate regular personal communication, which could possibly foster positive teacher-student relationships (Hamre & Pianta, 2006). School administrators and teacher leaders could participate in discourse about teaching practices during the PLC meetings. This discussion could provide feedback and encouragement for teachers who are struggling in this area.

According to DuFour, Eaker, and DuFour (2005), there are three major challenges that schools face when implementing a PLC. The first and most difficult challenge is that the faculty and staff need to “develop a deeper, shared knowledge of learning community concepts and practices” (p. 10). In addition, these concepts and practices could be demonstrated throughout the school for the transformation of beliefs and values to actually occur. Secondly, teachers must recognize that a PLC is hard work and it will take time and substantial effort to change old habits into new ones. Lastly, the challenge focuses on school culture and shared beliefs. In order to successfully implement a PLC, faculty and staff need to transform their “beliefs, assumptions, expectations, and habits” (p.11). The transformation of beliefs, although difficult, can transpire, as teachers begin to think of themselves as a community of learners instead of teachers in isolation.

**Teacher Education Programs.** The ultimate goal of teacher education programs (TEPs) is to provide future teachers with the qualifications necessary to effectively educate students. Historically, most universities design their teacher education program around a
conceptual framework. The University of Alabama’s College of Education’s framework asks “future practitioners in all areas to develop an informed understanding of the nature and purposes of education; to engage in the ongoing processes of reflection and dialogue that are at the heart of professional practice” (http://education.ua.edu/about/conceptual-framework/).

Pre-service teachers who desire to work with older students usually obtain a secondary education degree from an accredited university. This degree allows teachers to educate students from sixth – twelfth grade. TEPs offer courses to prepare their students for the education profession; such as classroom management, content pedagogy, and technology. These courses provide pre-service teachers with the skills necessary to become competent middle or high school educators.

However, middle school education often presents many challenges to preadolescent teens, such as developmental changes, transitioning to a new school, and peer relationships (Andrews & Bishop, 2012). These trials can possibly have an effect on middle school students’ personalities and behaviors (Martinez, Aricak, Graves, Peters-Myszak, & Nellis, 2011). Further, middle school education plays a vital role in identifying students who are at-risk for academic failure (Balfanz, 2009). Therefore, how can teacher education programs properly prepare secondary pre-service teachers to address the challenges that middle school students face?

Teacher education programs could revisit their secondary program courses and identify ways they can encourage pre-service teachers in developing positive relationships with their future students. These courses could be taught by professors who have classroom experiences in middle school so that pre-service teachers gain valuable knowledge specific towards preadolescent students. To ensure unity among the faculty, secondary professors
with the least amount of experience in the middle school setting could participate in professional development geared towards building relationships with middle school students. Knowledge gained from professional development programs and current professor experience can enhance secondary courses and provide pre-service teachers with confirmed strategies that foster teacher-student relationships in a middle school setting.

Additionally, pre-service teachers could have the opportunity to address their own personal beliefs and assumptions about teaching middle school students. Pre-service teachers could utilize this time to develop their personal teaching philosophy, which could possibly direct them towards teaching the appropriate age level that best fits their personality. During this time, TEPs can also provide current research about the importance of teacher-student relationships, along with providing the appropriate steps to building positive relationships with middle school students.

Another way TEPs can encourage pre-service teachers to build teacher-student relationships is by allowing them to spend more time in a middle school classroom. In fact, education students could complete two significant clinical placements; one in middle school and one in high school. The chance to spend time with these students could help pre-service teachers identify which age levels they are most comfortable teaching. This time would also provide the opportunity for pre-service teachers to collaborate with middle and high school teachers regarding challenges they face with their students. Pre-service teachers need to be able to answer the question, “Can I handle behaviors, insecurities, or maturity issues that middle school students often display?” The ultimate goal of the student internship is to supply pre-service teachers with valuable experiences in middle and high school so that they
can make an informative decision on where their teaching style fits in the educational process.

Lastly, TEPs could ensure that pre-service teachers take a child development course that focuses on the needs of preadolescent children. Noddings (2005) states teachers could be aware of their students’ needs in order to have caring relations, which facilitates the teacher-student relationship. The development course could focus on specific factors that facilitate or inhibit the caring relations so that pre-service teachers are aware of the challenges they might face when demonstrating care towards their students. For example, people from different cultures and demographics might discipline their children differently. Therefore, pre-service teachers need to be aware of these differences as they become the disciplinarian in the classroom. Also, this course could be used to inform pre-service teachers how to deal with difficult behaviors or attitudes, especially those that middle school students express in the classroom.

In summary, teacher education programs have the ability to completely prepare pre-service teachers for the education profession. In doing so, TEPs could revisit their programs to ensure that pre-service teachers have the opportunity to participate in discourse about teacher-student relationships, read valuable research about the importance of building these relationships, and spend time observing middle school students in the classroom setting. Hopefully, these suggestions can be implemented throughout teacher education programs to make certain that secondary pre-service teachers are fully prepared to teach middle or high school students.
Conclusion

The focus of this study was to identify teacher communication behaviors in a middle school setting that could possibly enhance the teacher-student relationship. Evidence from this study suggests that middle school students desire to build connections with teachers who portray positive communication behaviors. In order to transform teachers’ beliefs and values about teacher-student relationships, school administrators and teacher leaders could incorporate professional learning communities that focus on caring behaviors and practices. Support from school administrators, in the form of care, can offer teachers the time and space needed to reflect upon previous experiences and work through the difficult stages of creating a positive relationship with their students (Newberry, 2010).

Caring for students and building teacher-student relationships could have a significant impact on middle school students’ academic success (Perez, 2000). Teachers who take the time to connect with their students on a personal level might be able to recognize at-risk behaviors associated with failure (Balfanz, 2009; Hamre & Pianta, 2006). Further, these relationships can foster a sense of security for students so that they can better express themselves, explore future possibilities, and become autonomous learners (Hamre & Pianta, 2006). Ultimately, teachers who exhibit positive communication behaviors towards their students are demonstrating care, which could possibly encourage students to establish future caring relationships with others.
REFERENCES


We make statistics easy. The ultimate IBM® SPSS® guides. (SPSS Tutorials and Statistical Guides) https://statistics.laerd.com

Welch, B. L. (1947). The generalization of "Student's" problem when several different population variances are involved. *Biometrika, 34*(1–2), 28–35


APPENDIX

Questionnaire on Teacher Interaction

Your Ideal Teacher Questionnaire

The following questionnaire asks for your view of an ideal teacher's behaviour. Think about your ideal teacher and keep this ideal teacher in mind as you respond to these sentences.

The questionnaire has 48 sentences about the ideal teacher. For each sentence, circle the number corresponding to your response. For example:

Never 0 1 2 3 4

The teacher would express herself/himself clearly. 0 1 2 3 4

If you think that ideal teachers always express themselves clearly, circle the 4. If you think ideal teachers never express themselves clearly, circle the 0. You also can choose the numbers 1, 2 and 3 which are in-between. If you want to change your answer, cross it out and circle a new number. Thank you for your cooperation.

1. The teacher would talk enthusiastically about her/his subject. 0 1 2 3 4
2. The teacher would trust students. 0 1 2 3 4
3. The teacher would seem uncertain. 0 1 2 3 4
4. The teacher would get angry unexpectedly. 0 1 2 3 4
5. The teacher would explain things clearly. 0 1 2 3 4
6. If students did not agree with the teacher, they could talk about it. 0 1 2 3 4
7. The teacher would be hesitant. 0 1 2 3 4
8. The teacher would get angry quickly. 0 1 2 3 4
9. The teacher would hold the students' attention. 0 1 2 3 4
10. The teacher would be willing to explain things again. 0 1 2 3 4
11. The teacher would act as if she/he did not know what to do. 0 1 2 3 4
12. The teacher would be too quick to correct students when they broke a rule. 0 1 2 3 4
13. The teacher would know everything that goes on in the classroom. 0 1 2 3 4
|   | The teacher would listen. | The teacher would let the students take charge. | The teacher would be impatient. | The teacher would be a good leader. | The teacher would realize when students did not understand. | The teacher would not be sure what to do when students fooled around. | It would be easy to have an argument with the teacher. | The teacher would act confidently. | The teacher would be patient. | It would be easy to make a fool out of the teacher. | The teacher would make mocking remarks. | The teacher would help students with their work. | Students could decide some things in the teacher's class. | The teacher would think that students cheat. | The teacher would be strict. | The teacher would be friendly. | Students could influence the teacher. | The teacher would think that students did not know anything. | Students would have to be silent in the teacher's class. | The teacher would be someone students can depend on. | The teacher would let students decide when they would do work in class. | The teacher would put students down. | The teacher's tests would be hard. | The teacher would have a sense of humor. | The teacher would let students get away with a lot in class. | The teacher would think that students can't do things well. | The teacher's standards would be very high. | The teacher could take a joke. | The teacher would give students a lot of free time in class. | The teacher would seem dissatisfied. | The teacher would be severe when marking papers. | The teacher's class would be pleasant. | The teacher would be lenient. | The teacher would be suspicious. | Students would be afraid of the teacher. |
|14.| 0 | 1 | 2 | 3 | 4 | 15.| 0 | 1 | 2 | 3 | 4 | 16.| 0 | 1 | 2 | 3 | 4 | 17.| 0 | 1 | 2 | 3 | 4 | 18.| 0 | 1 | 2 | 3 | 4 | 19.| 0 | 1 | 2 | 3 | 4 | 20.| 0 | 1 | 2 | 3 | 4 | 21.| 0 | 1 | 2 | 3 | 4 | 22.| 0 | 1 | 2 | 3 | 4 | 23.| 0 | 1 | 2 | 3 | 4 | 24.| 0 | 1 | 2 | 3 | 4 | 25.| 0 | 1 | 2 | 3 | 4 | 26.| 0 | 1 | 2 | 3 | 4 | 27.| 0 | 1 | 2 | 3 | 4 | 28.| 0 | 1 | 2 | 3 | 4 | 29.| 0 | 1 | 2 | 3 | 4 | 30.| 0 | 1 | 2 | 3 | 4 | 31.| 0 | 1 | 2 | 3 | 4 | 32.| 0 | 1 | 2 | 3 | 4 | 33.| 0 | 1 | 2 | 3 | 4 | 34.| 0 | 1 | 2 | 3 | 4 | 35.| 0 | 1 | 2 | 3 | 4 | 36.| 0 | 1 | 2 | 3 | 4 | 37.| 0 | 1 | 2 | 3 | 4 | 38.| 0 | 1 | 2 | 3 | 4 | 39.| 0 | 1 | 2 | 3 | 4 | 40.| 0 | 1 | 2 | 3 | 4 | 41.| 0 | 1 | 2 | 3 | 4 | 42.| 0 | 1 | 2 | 3 | 4 | 43.| 0 | 1 | 2 | 3 | 4 | 44.| 0 | 1 | 2 | 3 | 4 | 45.| 0 | 1 | 2 | 3 | 4 | 46.| 0 | 1 | 2 | 3 | 4 | 47.| 0 | 1 | 2 | 3 | 4 | 48.| 0 | 1 | 2 | 3 | 4 |
Questionnaire on Teacher Interaction

Teacher Self Questionnaire

This questionnaire has 48 sentences about your behavior in a particular class.

For each sentence, circle the number corresponding to your response. For example:

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>I express myself clearly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>If you think you always express yourself clearly, circle the 4. If you think you never express yourself clearly, circle the 0. You also can choose the numbers 1, 2 and 3 which are in-between. If you want to change your answer, cross it out and circle a new number.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thank you for your cooperation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I talk enthusiastically about my subject.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I trust the students,</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I seem uncertain.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I get angry unexpectedly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I explain things clearly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. If students don't agree with me, they can talk about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I am hesitant.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I get angry quickly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I hold the students’ attention.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I am willing to explain things again.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I act as if I do not know what to do.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I am too quick to correct students when they break a rule.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I know everything that goes on in the classroom.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. If students have something to say, I will listen.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I let the students take charge.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I am impatient.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I am a good leader.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. I realize when students don't understand.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. I am not sure what to do when students fool around.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. It is easy for students to have an argument with me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. I act confidently.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. I am patient.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. It's easy to make me appear unsure.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
24. I make mocking remarks. 0 1 2 3 4
25. I help us with their work. 0 1 2 3 4
26. Students can decide some things in my class. 0 1 2 3 4
27. I think that students cheat. 0 1 2 3 4
28. I am strict. 0 1 2 3 4
29. I am friendly. 0 1 2 3 4
30. Students can influence me. 0 1 2 3 4
31. I think that students don't know anything. 0 1 2 3 4
32. Students have to be silent in my class. 0 1 2 3 4
33. I am someone students can depend on. 0 1 2 3 4
34. I let students decide when they will do the work in class. 0 1 2 3 4
35. I put students down. 0 1 2 3 4
36. My tests are hard. 0 1 2 3 4
37. I have a sense of humor. 0 1 2 3 4
38. I let students get away with a lot in class. 0 1 2 3 4
39. I think that students can't do things well. 0 1 2 3 4
40. My standards are very high. 0 1 2 3 4
41. I can take a joke. 0 1 2 3 4
42. I give students a lot of free time in class. 0 1 2 3 4
43. I seem dissatisfied. 0 1 2 3 4
44. I am severe when marking papers. 0 1 2 3 4
45. My class is pleasant. 0 1 2 3 4
46. I am lenient. 0 1 2 3 4
47. I am suspicious. 0 1 2 3 4
48. Students are afraid of me. 0 1 2 3 4

Please provide demographic data. Circle the most appropriate answer.

Gender: male female

Years of teaching experience: 1-3 years 4-10 years 11 and beyond

Grade level you mostly teach: 6th 7th 8th

Content area you mostly teach: Reading/Language Arts Math Science Social Studies Elective
**Questionnaire on Teacher Interaction**

*Student Questionnaire*

This questionnaire asks you to describe the behavior of your teacher.

This is NOT a test. Your opinion is what is wanted.

This questionnaire has 48 sentences about the teacher. For each sentence, circle the number corresponding to your response. For example:

<table>
<thead>
<tr>
<th>This teacher expresses himself/herself clearly.</th>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

If you think that your teacher always expresses himself/herself clearly, circle the 4. If you think your teacher never expresses himself/herself clearly, circle the 0. You also can choose the numbers 1, 2 and 3 which are in-between.

If you want to change your answer, cross it out and circle a new number.

Please answer all questions. Thank you for your cooperation.

<table>
<thead>
<tr>
<th>1. This teacher talks enthusiastically about her/his subject.</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. This teacher trusts us.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. This teacher seems uncertain.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. This teacher gets angry unexpectedly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. This teacher explains things clearly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. If we don't agree with this teacher, we can talk about it.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. This teacher is hesitant.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. This teacher gets angry quickly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. This teacher holds our attention.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. This teacher is willing to explain things again.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. This teacher acts as if she/he does not know what to do.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. This teacher is too quick to correct us when we break a rule.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. This teacher knows everything that goes on in the classroom.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. If we have something to say, this teacher will listen.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. This teacher lets us boss her/him around.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. This teacher is impatient.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. This teacher is a good leader.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>18.</td>
<td>This teacher realizes when we don't understand.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>This teacher is not sure what to do when we fool around.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>It is easy to pick a fight with this teacher.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>This teacher acts confidently.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>22.</td>
<td>This teacher is patient.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23.</td>
<td>It's easy to make this teacher appear unsure.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24.</td>
<td>This teacher makes mocking remarks.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25.</td>
<td>This teacher helps us with our work.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26.</td>
<td>We can decide some things in this teacher's class.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>27.</td>
<td>This teacher thinks that we cheat.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>28.</td>
<td>This teacher is strict.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>29.</td>
<td>This teacher is friendly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>30.</td>
<td>We can influence this teacher.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>31.</td>
<td>This teacher thinks that we don't know anything.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>32.</td>
<td>We have to be silent in this teacher's class.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>33.</td>
<td>This teacher is someone we can depend on.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>34.</td>
<td>This teacher lets decide when we will do the work in class.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>35.</td>
<td>This teacher puts us down.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>36.</td>
<td>This teacher's tests are hard.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>37.</td>
<td>This teacher has a sense of humor.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>38.</td>
<td>This teacher lets us get away with a lot in class.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>39.</td>
<td>This teacher thinks that we can't do things well.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>40.</td>
<td>This teacher's standards are very high.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>41.</td>
<td>This teacher can take a joke.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>42.</td>
<td>This teacher gives us a lot of free time in class.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>43.</td>
<td>This teacher seems dissatisfied.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>44.</td>
<td>This teacher is severe when marking papers.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>45.</td>
<td>This teacher's class is pleasant.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>46.</td>
<td>This teacher is lenient.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>47.</td>
<td>This teacher is suspicious.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>48.</td>
<td>We are afraid of this teacher.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Please provide demographic data. Circle the most appropriate answer.

Gender:  
- male  
- female

Grade level:  
- 6th  
- 7th  
- 8th
Questionnaire on Teacher Interaction

Student Questionnaire of Ideal Teacher

This questionnaire asks you to describe the behavior of your teacher.

This is NOT a test. Your opinion is what is wanted.

This questionnaire has 48 sentences about the teacher. For each sentence, circle the number corresponding to your response. For example:

<table>
<thead>
<tr>
<th>This teacher expresses himself/herself clearly.</th>
<th>Never</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

If you think that your teacher always expresses himself/herself clearly, circle the 4. If you think your teacher never expresses himself/herself clearly, circle the 0. You also can choose the numbers 1, 2 and 3 which are in-between.

If you want to change your answer, cross it out and circle a new number.

Please answer all questions. Thank you for your cooperation.

1. The teacher talks enthusiastically about her/his subject. 0 1 2 3 4
2. The teacher trusts us. 0 1 2 3 4
3. The teacher seems uncertain. 0 1 2 3 4
4. The teacher gets angry unexpectedly. 0 1 2 3 4
5. The teacher explains things clearly. 0 1 2 3 4
6. If we don't agree with the teacher, we can talk about it. 0 1 2 3 4
7. The teacher is hesitant. 0 1 2 3 4
8. The teacher gets angry quickly. 0 1 2 3 4
9. The teacher holds our attention. 0 1 2 3 4
10. The teacher is willing to explain things again. 0 1 2 3 4
11. The teacher acts as if she/he does not know what to do. 0 1 2 3 4
12. The teacher is too quick to correct us when we break a rule. 0 1 2 3 4
13. The teacher knows everything that goes on in the classroom. 0 1 2 3 4
14. If we have something to say, the teacher will listen. 0 1 2 3 4
15. The teacher lets us boss her/him around. 0 1 2 3 4
16. The teacher is impatient. 0 1 2 3 4
17. The teacher is a good leader. 0 1 2 3 4
18. The teacher realizes when we don't understand. 0 1 2 3 4
19. The teacher is not sure what to do when we fool around. 0 1 2 3 4
20. It is easy to pick a fight with the teacher. 0 1 2 3 4
21. The teacher acts confidently. 0 1 2 3 4
22. The teacher is patient. 0 1 2 3 4
23. It's easy to make the teacher appear unsure. 0 1 2 3 4
24. The teacher makes mocking remarks. 0 1 2 3 4
25. The teacher helps us with our work. 0 1 2 3 4
26. We can decide some things in the teacher's class. 0 1 2 3 4
27. The teacher thinks that we cheat. 0 1 2 3 4
28. The teacher is strict. 0 1 2 3 4
29. The teacher is friendly. 0 1 2 3 4
30. We can influence the teacher. 0 1 2 3 4
31. The teacher thinks that we don't know anything. 0 1 2 3 4
32. We have to be silent in the teacher's class. 0 1 2 3 4
33. The teacher is someone we can depend on. 0 1 2 3 4
34. The teacher lets decide when we will do the work in class. 0 1 2 3 4
35. The teacher puts us down. 0 1 2 3 4
36. The teacher's tests are hard. 0 1 2 3 4
37. The teacher has a sense of humor. 0 1 2 3 4
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39. The teacher thinks that we can't do things well. 0 1 2 3 4
40. The teacher's standards are very high. 0 1 2 3 4
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42. The teacher gives us a lot of free time in class. 0 1 2 3 4
43. The teacher seems dissatisfied. 0 1 2 3 4
44. The teacher is severe when marking papers. 0 1 2 3 4
45. The teacher's class is pleasant. 0 1 2 3 4
46. The teacher is lenient. 0 1 2 3 4
47. The teacher is suspicious. 0 1 2 3 4
48. We are afraid of the teacher. 0 1 2 3 4

Please provide demographic data. Circle the most appropriate answer.

Gender: male female
Grade level: 6th 7th 8th
Student Interview Protocol

1. Describe a caring teacher.

2. How do you know when a teacher cares about you?

3. Can you talk about a time when a teacher tried to help you?

4. What does a teacher do to show you that he/she cares?

5. Do you have a good teacher-student relationship with a teacher? Can you describe the relationship?

6. Describe the “ideal” (favorite) teacher.

7. How do you know when a teacher does not like you? What behaviors does he/she exhibit?

8. How do you feel about your lunch teacher?

9. If you have a question, problem, or concern, will your lunch teacher help you? Can you give an example?

10. Do you feel like you have a good teacher-student relationship with your lunch teacher? (Does he/she care about you?)

11. Do you feel comfortable around your lunch teacher? Why or why not?

12. How does your lunch teacher handle student behavior?

13. What would you change about your lunch teacher?
Teacher Interview Protocol

1. Describe a caring teacher.

2. How do you let students know that you care? Can you provide an example?

3. What is the importance of having a relationship with your students?

4. How do you develop a relationship with your students?

5. Can you talk about a time when you tried to establish a relationship with one of your students? How did you let the student know you cared about him/her? What was the outcome?

6. How do you maintain a good relationship with your students?

7. Describe the “ideal” student.

8. What characteristics do the students at this school exhibit that make it difficult to form a teacher-student relationship?

9. Describe a time when you felt uncertain in the classroom (academically, dealing with behavior, emotional, etc…).

10. Describe a time when you were angry with a student/class. What behaviors did you exhibit that let the students know how you felt?
January 27, 2014

Kelli Davis
Dept of Curriculum & Instruction
College of Education
Box 870232

Re: IRB#: 14-OR-030 “A Beneficiary Analysis of the Communication Process Relative to the Teacher-Pupil Paradigm of the Pre-Adolescent Student

Dear Ms. Davis:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Your application will expire on January 26, 2015. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Request for Study Closure Form.

Please use reproductions of the IRB approved stamped consent/assent forms to obtain consent from your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,

Carpanuto T. Myles, MSM, CIP, CIP
Director & Research Compliance Officer
Office of Research Compliance
The University of Alabama
University IRB Modification Approval

May 15, 2014

Kellie Davis
Department of Curriculum & Instruction
College of Education
The University of Alabama

Re: IRB # 14-OR-036 (Revision) “A Beneficiary Analysis of the Communication Process Relative to the Teacher-Pupil Paradigm of the Pre-adolescent Student”

Dear Ms. Davis:

The University of Alabama Institutional Review Board has reviewed the revision to your previously approved expedited protocol. The board has approved the change in your protocol.

Please remember that your approval period expires one year from the date of your original approval, January 27, 2014, not the date of this revision approval.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.

Good luck with your research.

Sincerely,

Caroline T. Myles, MSM, CIP
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama
PARTICIPANT ASSENT FORM (under age 19)

Dear Potential Participant:

We are doing a study about teacher and student relationships. We are asking you to help because we do not know very much about how kids your age want your teacher to treat you in the classroom.

If you agree to be in our study, we are going to ask you some questions about teacher's communication behaviors in the classroom. For example, we will ask you to answer if you agree with or disagree with statements like "my teacher explains things clearly."

You can ask questions that you might have about this study at any time. Also, if you decide at any time not to finish, you may stop whenever you want. Remember, these questions are only about what you think. There is no right or wrong answers because this is not a test.

You might be asked to participate in a follow-up interview conducted by the researcher, Kelli A. Fountain (Davis). The interview will be audio recorded for transcription purposes only. The audio recording will be deleted when the study is complete. A possible question you might be asked is "Tell me how your teacher keeps your attention during a lesson? For example, does he/she use hands-on materials? Note taking? Etc…"

If you sign this paper, it means that you have read this and that you want to be in the study. If you do not want to be in the study, do not sign the paper. Remember, being in the study is up to you, and no one will be angry if you do not sign this paper or even if you change your mind later.

Signature of participant ____________________________ Date __________

I will participate in a follow-up interview if I am chosen.

[ ] YES [ ] NO

I give my permission for the interview to be audio recorded. I understand that the interview will be audio recorded for transcription purposes only and the recording will be deleted after the study is finished.

[ ] YES [ ] NO
Informed Consent Statement

Teacher Interview

INFORMED CONSENT STATEMENT (Interview)

Dear Potential Participant:

You are invited to participate in a research study conducted by Kelli Fountain Davis and Dr. Jeremy Zelkowski, from The University of Alabama, College of Education. We hope to learn about teacher communication behaviors exhibited in the classroom as they relate to the teacher-student relationship. You were selected as a possible participant in this study because you teach at Calera Middle School.

If you decide to participate, you will be asked to schedule an interview time with Kelli Fountain Davis. The interview will last approximately twenty to thirty minutes. An example of an interview question could be “In what ways do you show concern for your students?” or “How do you react if a student makes you angry?”

There are no known risks or discomforts associated with your participation in this study. Results from the interview will hopefully guide future professional development opportunities regarding teacher-student relationships in the middle school setting. However, I cannot guarantee that you personally will receive any benefits from this research.

The interview will be audio recorded for transcription purposes only. Once the study is complete, the audio recording will be erased. Subject identities will be kept confidential by not stating your name. Transcriptions will show “Teacher A, Teacher B”, and so forth.

Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with Kelli Fountain Davis, Calera Middle School, or Shelby County Board of Education. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time without penalty.

If you have any questions about the study, you may contact Kelli A. Fountain, 205-365-7756, 240 Nottingham Drive, Calera, AL, 35040 or Dr. Jeremy Zelkowski, at 205-348-9499. If you have any questions about your rights as a research participant, please contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, by calling 205-348-8461, or toll free 877-820-3066.

Completing and returning this form constitutes your consent to participate and certifies that you are 19 years of age or older. A copy of this consent will be given to you at the time of the interview for your records.

Signature of participant

Date

I give my permission for the interview to be audio recorded. I understand that the interview will be audio recorded for transcription purposes only and the recording will be deleted after the study is finished.

☐ YES  ☐ NO

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 11/27/14
EXPIRATION DATE: 12/24/2014
INFORMED CONSENT STATEMENT (parent for under age 19 child)

Dear Parent/Guardian:

It is being requested for your child to participate in a research study conducted by Kelli A. Fountain and Dr. Jeremy Zelkowski, from The University of Alabama, College of Education. We hope to learn about teacher-student relationships in the middle school classroom and how these connections could possibly raise student achievement. Your child was selected as a possible participant in this study because he/she attends Calera Middle School.

Your child's anticipated participation time will be twenty minutes. Your child's participation will involve answering a questionnaire about your child’s perceptions of teacher’s communication behaviors in the classroom. The Questionnaire on Teacher Interaction survey will be administered by the researcher, Kelli A. Fountain. Your child might be selected to participate in a recorded interview based on teacher-student relationships. The researcher, Kelli A. Fountain will conduct the interview. Please indicate below if your child can participate in the follow-up interview.

There are no known risks or discomforts associated with your child's participation in this study. Results from this study will hopefully warrant further research of teacher-student relationships in the middle school grades. However, I cannot guarantee that your child personally will receive any benefits from this research.

All information provided by your child will be confidential. He/she will not sign their name to the survey and an envelope will be used to gather the survey after it is completed. After the completion of the study, the surveys will be shredded.

Your child's participation is completely voluntary. Your child may choose not to answer any questions that make him/her feel uncomfortable. Participation may be discontinued at any time. Refusal to participate will involve no penalty or loss of benefits to which your child is otherwise entitled. Refusal to participate in this research will have no effect on your child’s grades or their relationship with the school.

If you or your child has any questions about the study, you may contact Kelli A. Fountain, 205-365-7756, 240 Nottingham Drive, Calera, AL, 35040 or Dr. Jeremy Zelkowski, at 205-348-9499. If you or your child have any questions about your rights as a research participant, please contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, by calling 205-348-8461, or toll free 877-820-3066.

My child can participate in this study conducted by the researcher, Kelli A. Fountain.

[ ] YES  [ ] NO

My child can participate in the follow-up interview conducted by the researcher, Kelli A. Fountain.

[ ] YES  [ ] NO

UNIVERSITY OF ALABAMA IRB
CONSENT FORM APPROVED: 12/11/14
EXPIRATION DATE: 11/24/2015
Parent/Guardian Signature

Date

Researcher's signature

Date