

**The Effect of Teacher-Student Relationships  
on the Academic Engagement of Students**

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## ABSTRACT

This research explores relationships in schools, specifically interactions between teachers and students. Initially, the research examined an overview of teacher-student relationships and factors that contribute to these interactions. This overview included both teacher and student perceptions and personal characteristics and then examined the effects of teacher-student relationships on education and how teacher and student behaviors affect educational outcomes. The overview of the research literature concluded with how to develop positive relationships. Teacher expectations, attitude, familiarity, and communication all play a role in cultivating relationships in the classroom environment.

The purpose of the research was to determine if improving relationships between teachers and students would decrease off-task behaviors during class. The intervention involved four weeks of initiatives focused on developing improved teacher-student relationships. The mean number of off-task behaviors per student during the weighted baseline period (Mean = 44.33, SD = 14.89) was significantly higher than the mean number of off-task behaviors during the intervention period (Mean = 31.08, SD = 9.68) [ $t(11) = 5.90, p \leq .001$ ]. As the data was significant, the null hypothesis was rejected.

# CHAPTER I

## INTRODUCTION

### Overview

Receiving a quality education is an important cornerstone in the lives of every individual. It is imperative that students have the tools they need to be successful—tools that include motivation and engagement. For some students, however, motivation is not always intrinsic. It therefore falls to others to guide students along the path to their own education. As teachers spend an incredible amount of time with their students over the course of the year, it is a teacher's responsibility to foster an inclination for learning. Research has indicated that the relationship between teachers and students is an important predictor of academic engagement and achievement. In fact, the most powerful weapon teachers have, when trying to foster a favorable learning climate, is positive relationships with their students. Students who perceive their teachers as more supportive have better achievement outcomes (Boynton & Boynton, 2005; Spilt, Koomen, & Thijs, 2011; Skinner & Green, 2008; Rimm-Kaufman & Sandilos, 2012; Gehlbach, Brinkworth, & Harris, 2012). Additionally, the learning environment plays a significant role in maintaining student interest and engagement. When students feel a sense of control and security in the classroom, they are more engaged because they approach learning with enthusiasm and vigor. Students become active participants in their own education (Skinner & Green, 2008; Maulana, Opdenakker, Stroet, & Bosker, 2013). Therefore, the first step to helping a student become more motivated and engaged, and thus academically successful, is building and maintaining positive teacher-student relationships.

The lack of academic achievement among secondary students is ubiquitous. There are numerous reasons why students may lose interest in school, and engagement is a key factor.

Considering that students spend about twenty-five percent of their waking hours in a classroom, it is essential that students are engaged or they will not be willing to learn. This creates a problem for both the teacher and the student. Throughout an average school day, teachers frequently overhear students complaining about an assignment, a class, or even a teacher. If students have positive relationships with their teachers, they will be more engaged and thus more motivated throughout each of their classes.

The researcher's interest in this topic has grown from years of personal experiences, observations of others, and both teacher and student testimonials. It was her experiences that indicated students who have positive and meaningful relationships with their teachers are more motivated to succeed in school, specifically in the classes in which they have a positive relationship with the teacher. The researcher has also taught classes over the years where the relationships have been strained, and she experienced difficulty connecting with the students. These classes often had a higher number of students who were not intrinsically motivated, which resulted in an excessive number of poor grades and failures. Because the researcher wondered if the relationship, or lack thereof, contributed to each student's lack of motivation, engagement, and academic achievement, her interest in a possible correlation proliferated.

### **Statement of Problem**

The purpose of this study was to determine if building positive relationships between teachers and students impacts students' academic engagement in the classroom.

### **Hypothesis**

The null hypothesis is that there will be no significant statistical differences between the number of off-task behaviors at momentary time sampling ten-minute intervals among underachieving

high school English students during a weighted two-week baseline period and a four-week Teacher-Student Relationship Building Intervention period.

### **Operational Definitions**

Below are the definitions for all relevant variables and concepts used in this study:

- ***Relationships***: The way in which two or more people are connected through their interactions; relationships can be defined as either positive or negative.
  - ***Positive Relationships***: These relationships include teachers who think about their practice and search for ways to improve it. These teachers give students power and choice in the classroom. These teachers make their students feel a sense of belonging.
  - ***Negative Relationship***: These relationships include teachers who do not foster a welcoming environment. They hold all the power and students do not feel a sense of belonging or control.
- ***Off-task behaviors***: Off-task behaviors occur while the teacher is reading, providing instruction, or leading and facilitating class discussion. Off-task behaviors also include behaviors that occur when the student is expected to be working independently or collaborating with classmates. These behaviors include sleeping, head down, excessive discussion on unrelated subjects, cell phone use not related to the task, wandering purposelessly around the classroom, or completing work not related to the current subject area. Furthermore, if the student leaves the room to visit the bathroom or the nurse and is not present during the momentary time-sampling interval, this will be included as an off-task behavior if it occurs more than two times during the baseline or four times during the intervention period.



- ***Achievement:*** Achievement is defined as the level of academic skills demonstrated through both oral and written contributions.
- ***Low Achievement:*** Low achievement is defined as a student not meeting grade level expectations in the curriculum and is based on both oral and written contributions.
- ***Underachieving High School Students:*** These are students, based on teacher perception, who have low achievement levels and are often off-task and unengaged. They appear to be underachieving academically relative to their abilities due to lack of engagement.
- ***Academic Engagement:*** To occupy a student's attention and interest in academic tasks; not demonstrating off-task behaviors; participating in learning activities through independently working on class assignments, contributing to class discussions or working on learning tasks with peers; a student's willingness and desire to participate in the learning process.
- ***Teacher-Student Relationship Building Intervention:*** The teacher will modify the conditions of the classroom by greeting students at the door at the start of class and saying goodbye at the end of class. Additionally, the teacher will amplify interactions with participants by engaging them in supplemental, individual conversation before the class period begins.
- ***Momentary Time Sampling:*** At ten-minute interval points, the teacher observed whether participants were engaging in off-task behaviors

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

#### **Overview of Teacher-Student Relationships**

On average, students spend six and a half hours at school each day for 180 days throughout the year. Therefore, it comes as no surprise that teachers have an enormous amount of influence on their students. This influence, or power, can significantly impact the learning environment, which, in turn, affects a student's achievement in school. The most powerful weapon teachers have, when trying to foster a favorable learning climate, is a positive relationship with their students (Boynton & Boynton, 2005). There are many factors that impact the relationships between teachers and students, yet one point is clear. Multidimensional relationships in school play a significant role in developing the learning environment.

According to self-determination theory of motivation (SDT), there are three universal, innate psychological needs: autonomy (ownership, responsibilities, and self-actualization), belongingness (close relationships, interpersonal regard, and support), and competence (feeling capable to bring out desired outcomes and effectively cope with challenge). This theory has been widely applied to the study of motivation and well-being, and fulfillment of these basic needs for students contributes to intrinsic motivation and academic motivation and achievement (Spilt et al., 2011). Teachers can fulfill these needs by building and maintaining relationships with their students. Students need to experience an emotional involvement from their teachers—to know their teachers care and can provide structure and support.

The review of the literature is organized in the following manner. First, there is an overview discussing both the teacher's and the student's perception of relationships, factors that contribute to building relationships, and the impact of a student's perceived control in the

classroom. The review then delves into how teacher-student relationships affect both parties, which includes student behaviors and educational outcomes. Finally, the review describes how teachers can develop and maintain positive teacher-student relationships. This section includes promoting control, expectations and attitude, feedback, familiarity, and communication.

### **Perception of Relationships**

Student perception plays an important role in incentive. In fact, research suggests that the most powerful predictor of a child's motivation is the child's perception of control. Perceived control is the belief that one can determine one's behavior, influence one's environment, and bring about desired outcomes. Because students already have a history of experiences with whether adults are attuned to their needs, teachers build on these experiences (Skinner & Greene, 2008). Therefore, a student's perception of the teacher's behavior impacts the relationship. Students who feel their teacher is not supportive towards them have less interest in learning and are less engaged in the classroom (Rimm-Kaufman & Sandilos, 2012).

Moreover, students and teachers influence each other. When a student perceives that he is welcomed and wanted in the classroom, he is more likely to be engaged and motivated. Thus, the role the teacher plays in the classroom affects the perception the student has on the relationship and the classroom environment, which ultimately contributes to achievement. Students who perceive that their teachers are more supportive have better achievement outcomes on standardized math tests and English grades (Gehlbach et al., 2012).

In the early years of school, students' perceptions of their relationships with teachers and teachers' perceptions of those same relationships are very similar. Yet as students develop and age, the gap between students' perceptions of teachers and teachers' perceptions of students grows and widens (Rimm-Kaufman & Sandilos, 2012). Therefore, it is essential for teachers to

reflect on their relationships as well as their practice. Teacher perception is just as powerful as student perception when constructing relationships. In order for teachers to build and improve upon their practice, teachers need to reflect and think about their teaching. Teacher thinking results in teacher learning (Kennedy, 2008). Reflection is imperative for the classroom environment—each lesson should be tailored to the needs of the students who are currently present in the classroom. When the classroom environment is structured to meet the students' needs, teachers are also able to fulfill the three universal, innate psychological needs of the students—autonomy, belongingness, and competence.

Because teachers play important roles in children's lives, teacher well-being, at least indirectly, has significant effects on children's socio-emotional adjustment and academic performance (Spilt et al., 2011). Yet, teacher well-being is affected when teachers feel unprepared to handle a diverse group of students, especially when there are discipline concerns. These concerns, as well as a lack of classroom management skills, can hinder teachers from helping their students succeed academically (Price, 2008). When teachers experience negative relationships or negative interactions with their students, teachers feel stress and internalize these feelings. Teachers also feel negative effects when their relationships are characterized as disrespectful or distant (Spilt et al., 2011). An internalization of negative interactions can then lead to a negative teacher perception; thus, the relationships do not improve and the classroom environment is not fulfilling for either the teacher or the students.

### **Contributing Factors**

Personal characteristics of both teachers and students contribute to the interactions and relationships between the two groups. As stated above, teacher well-being plays a role—teachers who have a higher sense of self-efficacy and believe that classrooms should center on student

interests and needs tend to create a classroom environment that fosters better relationships (Jerome & Pianta, 2008). The nature of the interaction that takes place between a teacher and student affects the relationship. Because the way teachers communicate plays a critical role, teachers who are friendly and positive develop better relationships with their students. Teachers who respond in different ways depending on the student are less likely to maintain positive relationships and will have more negative interactions. Thus, teachers have a responsibility to welcome all students and create an air of respect between them so that more positive relationships can be formed.

Students who have had past negative experiences have a more difficult time forming positive relationships with teachers. These experiences can include interactions with prior teachers or other adults, and these relationships are sometimes affected by the student's socio-economic status. Children who come from less economically and socially advantaged families are at risk of having poorer relationships with teachers and parents. Unfortunately, students who have poor relationships with their primary attachment figure, such as a parent, are likely to have poor relationships with their teachers (Jerome & Pianta, 2008). In addition, students who have behavioral problems are more likely to have conflict with their teachers. It is more difficult for teachers to form positive and supportive relationships with students who misbehave and elicit negative attention.

On the other hand, when a student has positive relationships with teachers each year, it improves the likelihood of forming good relationships with future teachers. These students feel a sense of control and security. Additionally, students who achieve at higher academic levels have more positive relationships with teachers. Because these relationships are formed in the school setting where the main objective is to be academically successful, it is possible that teachers

invest more time in relationships with students who are more likely to succeed (Jerome & Pianta, 2008).

### **Perceived Control**

As stated in the overview of teacher-student relationships, perceived control plays a significant role in forming relationships. Students need to develop a sense of control by having a structured classroom environment and by experiencing a caring and trusting relationship with teachers (Skinner & Greene, 2008). The effects of perceived control directly contribute to forming relationships with teachers and the student's education. When students do not feel a sense of control or when they feel their teachers do not care about them, there are many negative consequences. Students will avoid challenges and will not seek help from their teachers. In fact, these students will only complete the minimum and do enough to get by but will never truly engage in their own education. Feeling distracted, anxious, distressed, and unmotivated are also consequences when the student feels he has no control. Unfortunately, these students will procrastinate, make excuses, and quit as soon as possible, resulting in low academic achievement.

On the other hand, when a student does perceive he has control, there are a multitude of positive academic consequences. This includes, but is not limited to, engagement in academic activities, setting high and concrete goals, increased focus on tasks, and more preemptive action like study and practice. These students actually learn more because they approach learning with enthusiasm and vigor, enjoy challenges, and seek help when needed (Skinner & Greene, 2008). These positive consequences of perceived control are skills that will help students throughout their academic careers and further strengthen relationships between teachers and students.

Therefore, teachers should seek to build a sense of student control; the positive consequences of control can have numerous and lasting effects on students.

### **Effects of Teacher-Student Relationships**

Good teacher-student relationships can positively impact student behaviors in the classroom. The learning environment plays a significant role in developing a student's motivation to learn, and positive relationships can help maintain student interest and active engagement in learning (Maulana et al., 2013). On the other hand, if the foundation for a good relationship is lacking, it will negatively impact student behaviors. Students will resist rules and procedures, and they will neither trust teachers nor listen to what they have to say if they sense teachers do not value or respect them (Boynton & Boynton, 2005). To reiterate self-determination theory, students need to experience an emotional involvement from their teachers. Furthermore, students who have positive relationships with teachers are less likely to avoid school (Rimm-Kaufman & Sandilos, 2012). Experiencing a sense of belonging greatly contributes to developing positive relationships and positive behaviors.

The nature of teacher and student interactions shape the quality of the relationships; teachers tend to have more negative interactions with students who are peer rejected or less academically and behaviorally competent. Unfortunately, this interaction not only impacts the relationship that the teacher has with the student, but it also affects the way the student's peers view him; this negative interaction can influence other classroom relationships (Jerome & Pianta, 2008). In order to correct this, teachers need to be more cognizant of their interactions and the influence they have on students. Teachers should be aware that positive relationships predict school adjustment and may serve as a defensive factor for children at high risk of poor school and development outcomes (Lander, 2009). Taking time to build positive relationships with

students can have profound effects on that child's school experiences—both within and outside of the classroom.

### **Educational Outcomes**

Intrinsic motivation tends to deteriorate over time. Because learning environments play such a significant role in determining motivation, students must feel a sense of belonging, which is a predictor of motivational outcomes and engagement. When a teacher creates a welcoming environment and considers the needs of the students, learning outcomes will be ideal—students will effectively perform tasks they find personally important or interesting (Maulana et al., 2013). Creating a climate of warmth and caring as well as supporting autonomy and self-determination will help students feel a sense of control (Skinner & Greene, 2008). All students should have a respectful, caring, and positive learning environment that enhances the joy of learning. The nature of the classroom environment has a powerful influence on how well students achieve educational outcomes (Asiyai, 2014). When teachers have positive relationships with their students, they improve the classroom and environment, which results in more motivation.

Research suggests that good teacher-student relationships are important for maintaining adolescents' interests and academic engagement in learning (Maulana et al., 2013). As previously stated, students who have more positive relationships with their teachers have better achievement outcomes on standardized math tests and English grades. The inverse is also true—negative teacher-student relationships correspond to worse student outcomes. One study found that teacher-student conflict was consistently related to lower grades in math and English (Gehlbach et al., 2012). Therefore, it is essential that teachers consider the nature of the work itself. When academic activities are interesting, challenging, fun, and relevant to the lives of



students, students will want to put forth more effort and engage in these activities. Student choice also allows students to tailor activities to their own interests—project-based learning is significantly more effective in increasing intrinsic motivation than drills and worksheets (Skinner & Greene, 2008).

Students' motivation to learn and receive an education drives their thoughts and actions. This motivation plays an important role in their efforts to learn, perform, and behave. It is no surprise then that students' educational expectations and perceptions of experiences are important influences on their decision to drop out. With more than 16,000 students in their study, Fan and Wolters (2014) found that student perceptions and expectations greatly influenced dropout rates with a strong correlation between perceived ability and actual performance in math and English. Therefore, student beliefs and perceptions of their abilities play a key role in their intrinsic value and decision-making. Positive teacher-student relationships are fundamental. Self-determination theory emphasizes competence—feeling capable to produce desired outcomes and effectively cope with challenges. Thus, teachers should ensure that every child feels capable and can meet expectations set forth in the classroom.

### **Developing Positive Relationships**

#### **Promoting Control**

To reiterate, perceived control plays a significant role in forming relationships. Experiencing control requires students to be actively engaged. Structure is also key in developing control. Information and support that leads toward desired outcomes can help students be successful. Other classroom practices that promote a sense of control include, but is not limited to, the following: teach strategies that focus on the processes of learning, provide clear and concise feedback, monitor individual progress and improvement, encourage revision and repair,

provide opportunities for practice and study, and model enthusiasm, strategizing, hypothesis testing, and resilience (Skinner & Greene, 2008). When teachers initiate the classroom practices listed above, they promote control. Consequently, the values of these practices have long-term effects on student engagement.

### **Expectations and Attitude**

Teachers need to have and communicate high expectations—academic and behavioral—for all students. Communicating these expectations helps students feel a sense of belonging in the classroom. For instance, when teachers call on the same students repetitively, they fail to recognize certain students—usually the low performing ones. This conveys a low level of confidence in their abilities (Boynton & Boynton, 2005). Teachers who make an effort to include all students, especially those who are typically off task or perform at a low level, will see less off task behaviors and higher academic achievement over time. To easily integrate this practice into the classroom, teachers could use a checklist to document which student she calls on and how many times during the lesson. This will allow the teacher to visually ensure all students are included throughout the class period. Including all students will also help develop the feeling of belonging, which will improve the relationships among teachers and students. Teachers have a responsibility to include all students and greet each one with a positive attitude, regardless of the teacher’s perception of the student.

### **Feedback**

Feedback given by teachers is very important to relationships. Students who feel like the teacher is criticizing their person feel negatively toward the teacher and the relationship.

Feedback can be delivered two ways: (1) referring to the person, which attributes outcomes to stable factors like ability levels and (2) referring to the process, which attributes the outcome to

unstable factors like effort. Research suggests that person forms of feedback lead to more negative outcomes following failure than positive ones. In fact, students who receive person praise or criticism were more likely to feel negative about their performance and themselves and were less likely to persevere and improve. Process feedback and emphasizing effort promotes student growth (Skipper & Douglas, 2015). When students believe that future effort could lead to success, they are more likely to put forth effort and work toward accomplishing their goals while maintaining positive and productive relationships with their teachers.

In addition, one of the most critical aspects of control is how students interpret their mistakes. Mistakes should be treated as learning opportunities and targets for future development. The goal is for students to learn (Skinner & Greene, 2008). Positive feedback and praise will not only encourage students to learn from their mistakes, but it is also vital to both building and maintaining strong teacher-student relationships.

### **Familiarity**

Children are more likely to be respectful when important adults in their lives show respect toward them. When teachers show interest in their students' lives, children know they are cared about and are then more likely to care about others. In fact, demonstrating caring is one of the most powerful ways to build positive relationships. When teachers' actions and words sincerely demonstrate that they care for their students, those students are more likely to want to perform well (Boynton & Boynton, 2005). Moreover, these interactions impact students in ways they may not even recognize. One study explored the role of high school students' perceptions in the development of teacher-student relationships. One of the students interviewed stated that she did not believe teachers should be overly familiar with the lives of their students. However, when asked who the best teacher she ever had was, the student described a teacher who always asked

about her life and who is someone she could talk to. Another student believed that her English teacher did not care about her as much as her other teachers because the teacher would get up, teach, and then sit back down, interacting minimally with the students (Cooper & Miness, 2014). Thus, it is clear that familiarity plays a critical role in developing positive teacher-student relationships.

There are many strategies that teachers can incorporate to show that they care. This includes showing an interest in students' personal lives, greeting students as they enter the classroom, touching base with students who display strong emotions, listening with sincerity to students, and empathizing with students. Some teachers even make it a point to regularly attend extracurricular activities, such as sporting events, so that their students know they are cared about both within and outside of the classroom (Boynton & Boynton, 2005).

Many researchers have called attention to the importance of strong personal attachments of teachers to their students. Teachers also feel the basic need of relatedness, especially with students in their classes. When teachers have negative relationships with students, it can lead to stress and feelings of alienation, which affects both their practice and their well-being. The importance of positive teacher-student relationships extends to both parties—teachers place value on the personal relationships they have with students in their classes (Spilt et al., 2011). Therefore, familiarity with students is essential for building and maintaining positive relationships. Teachers and students can motivate each other as they work towards enhancing the classroom environment.

There are, however, some teachers who may struggle with the concept of allowing students to get to know them on a personal level. Some teachers may even fear that familiarity will create a more undisciplined atmosphere in the classroom. Yet, when students feel welcomed

and comfortable, they are more receptive. When teachers and students become more familiar with each other, it creates a sense of community (Brown, 2010). Taking time to show students that their individuality is welcomed and that they are cared about not only helps students feel that they belong but also helps foster an encouraging learning environment where both relationships and education can flourish.

### **Communication**

When communicating with students, teachers need to communicate in a polite and respectful way. Beginning the first day of school, teachers must send the message that they are in control. Yet, this should not include being overbearing, authoritarian, or inflexible. Teachers need to establish and maintain boundaries, but it is important that teachers are also approachable. Effective communication also includes both verbal and nonverbal cues. Body language, voice inflection, and facial expressions are all key aspects of communication (Brown, 2010). Teachers should consider their behaviors from the perspective of students in order to ensure their words and actions are always forms of positive communication.

In addition, when teachers need to correct and discipline students for inappropriate behaviors, proceeding in a constructive way will allow students the opportunity to reflect on their behaviors and understand the teacher cares and respects them. Student reactions to being disciplined are often a result of the manner in which they were disciplined. The discipline process will be counterproductive if the teacher is bitter or sarcastic (Boynton & Boynton, 2005). When teachers need to correct and discipline students, it is essential for teachers to remember the goal: students learning from their behaviors. Students should be allowed to keep their dignity; a teacher should never communicate in a hostile or belittling manner.

When correcting students, teachers can employ the following steps: review what happened; identify and accept the student's feeling; review alternative actions; explain the school policy and remind the student that all students are treated the same; invoke an immediate and meaningful consequence; and communicate an expectation that the student will do better in the future (Boynton & Boynton, 2005). When students know the teacher cares and is disappointed that she must invoke said consequences, the student is more likely to learn from his actions. This procedure will also maintain the positive relationship between the teacher and student without evoking resentful feelings due to the discipline.

### **Summary**

Because teachers and students spend so much time together, teachers wield a considerable amount of power over their students. Teachers should use this power to better themselves, the classroom environment, and their students. Therefore, improving relationships in schools between teachers and students will have positive implications for all involved. Research suggests that relationships with students are the most important source of enjoyment and motivation for teachers. When teachers are motivated and sincerely care for their students, they are more likely to think about their practice and employ strategies that create a welcoming and enjoyable learning environment. The research also suggests that students who feel a sense of control and belonging achieve higher academically. Therefore, teachers have a responsibility to foster a welcoming and motivating learning environment for their students. The best way to accomplish this is by having constructive interactions with students and building and maintaining relationships. Positive relationships result in better experiences for the child, a more productive learning environment, and higher academic achievement.

## **CHAPTER III**

### **METHODS**

The purpose of this research study was to determine if building positive relationships between teachers and students impacts students' academic engagement in the classroom.

#### **Design**

This study has a pre-experimental design that is similar to a one-group pretest-posttest design, except that data was gathered over a baseline and intervention period. Baseline data was gathered over a two-week period and was followed by the intervention, which lasted for four weeks. The independent variable was whether or not the Teacher-Student Relationship Building Intervention was in place and the dependent variable was the number of off-task behaviors at momentary time sampling ten-minute intervals.

Other factors considered when designing the study included (1) student absences during both the baseline period and the intervention and (2) class scheduling; students have each class every other day for a period of eighty-two minutes.

#### **Participants**

The participants in this study were secondary students who attend a co-educational public high school in Maryland. The school is the employment site of the researcher. This high school embodies students from a range of incomes and is predominately Caucasian. The participants chosen to be part of this study were students from two of the researcher's ninth grade English I classes. These two classes were Cooperative Collaborative classes, which means there was a special educator in the room in addition to the general educator. In addition to the general education students, there were students in these classes who had IEPs or 504 plans for a variety of learning disabilities. The sample population included twelve boys, six from each of the two

classes. Of the twelve participants, six had IEPs for learning disabilities. The demographic breakdown of the sample population was 100% Caucasian.

The type of sampling used for this study was a convenience sampling because each participant is a student in one of the researcher's classes. The participants shared the same approximate age (14-15 years old) and ability level. Because they all shared a similar disposition for off-task behaviors and low achievement levels during class, these twelve students were selected as participants for the study. These students were perceived by the teacher to be underachieving. In addition, the relationship between the teacher and each of these students was strained, which made these students ideal candidates with whom to build a positive relationship.

### **Instrument**

The researcher designed the instrument used in this study, which was a behavioral observations chart. The researcher used momentary time sampling at ten-minute intervals. The behavioral observations chart was used to record the participant's off-task behaviors. At each ten-minute mark, the researcher would observe the behavior of each subject at that moment and would make a tally mark on the chart if there was an off-task behavior. At the end of the class period, the teacher would record the total number of off-task behaviors for each participant during the momentary time sampling observations.

There is no reliability or validity data for the behavioral observations chart because the researcher developed it. However, momentary time sampling has been used in multiple published studies as a measure of academic engagement. The National Center on Intensive Intervention provides data from multiple academic engagement studies using 15-second momentary time sampling intervals that suggest that it is a reliable and valid method of gathering information. The studies included preschool, elementary, middle, and high school students as



well as learning disabled, emotionally/behaviorally disturbed, and general education students (American Institutes for Research). In addition, a study with early childhood students by Wood, Hojnoski, Laracy, and Olson (2016) reported that momentary time sampling measures were highly correlated with continuous duration recording measures and that the momentary time sampling measurements were closer to continuous duration recording measurements than whole-interval and partial-interval recording. Inter-observer agreement (mean = 95.5%) was high. Expert ratings of student engagement, but not teacher ratings, were significantly correlated with momentary time sampling measurements.

### **Procedure**

The study was completed during February and March 2017. The baseline data was collected over a two-week period. The data was collected on an every other day basis because the high school follows an A-day/B-day rotation schedule; the researcher sees each of her classes every other day. In addition to seeing the classes every other day, the researcher would see the classes at different times of the day depending on the rotation schedule. The Teacher-Student Relationship Building Intervention occurred over a four-week period immediately following the collection of baseline data.

All students in the researcher's English I classes were present during the study. During a typical class period, the teacher provides each student with a worksheet on which to complete the assignments for the day. Class begins with a warm-up activity that directly corresponds to the motif in the upcoming reading. The teacher reads a section of text aloud and then asks the students to respond to comprehension questions. After responding individually, students are asked to discuss their answers with their group before discussing as a whole class. This process is repeated again for the second half of the reading. At the conclusion of the story, students are

asked to journal; they find a quotation from the text and analyze its meaning in relation to the literary focus for the day (characterization, irony, tone, etc.). The summative activity for the class period includes a small group activity or a brief constructed response. During the collection of baseline data, the students studied Edgar Allan Poe. The texts read included “The Black Cat,” “The Cask of Amontillado,” and “The Masque of the Red Death.” During the intervention period, the students studied mythology. They read the myth “The Creation of the Titans and the Gods” and several books from *The Odyssey* by Homer. While the units of study were different, both units followed similar routines, as described above. In addition, both units included texts the students found challenging due to the author’s style and archaic diction.

When the baseline data was collected, the teacher made no changes to the routines or behaviors in the classroom. Because the class period was eighty-two minutes, the teacher checked for off-task behaviors every ten minutes, for a total of seven times during the class period. Prior to the start of class, the teacher recorded the exact time when she would check for off-task behaviors on the behavioral observations chart. Because she kept the chart in hand all period, this allowed the teacher to accurately record the behaviors at the proper time and interval.

There were six students selected for the sample in two different classes. The first observation was made ten minutes into the class. At each ten-minute mark of the class period, the teacher would observe the behavior of the six students and record it on the chart if a student was off-task during the momentary observation. The time interval at 80 minutes into the class period was not included on the behavioral observations chart because at this time the students typically do not have task requirements because they are preparing to depart for their next class.

If the student was engaged in any off-task behaviors, the teacher recorded one tally mark in the box for the appropriate interval. Only one tally mark was assigned per observational block,

even if the student were engaging in multiple off-task behaviors (e.g., talking while playing on his phone). Off-task behaviors included behaviors that were not associated with the task and occurred while the teacher was reading, providing instruction, or leading and facilitating class discussion. Off-task behaviors also included any behaviors that occurred when the student was expected to be working independently or collaborating with classmates. These behaviors included sleeping, head down, excessive discussion on unrelated subjects, continuous cell phone use, wandering purposelessly in the classroom, or completing work not related to the current subject area.

After the period dedicated to collecting baseline data, which was five classes over a two-week period, the teacher implemented the intervention. The intervention included greeting each student at the door before class began and saying goodbye to each student during departure from the classroom. While each student in the class received the same salutations, additional attention was paid to the students who were selected as part of the study's sample. The teacher engaged these students individually in extra conversation, which included asking about the child's day, complimenting his attire, inquiring about his weekend plans, etc. Each conversation lasted about one minute and occurred three or four times during each class period. Data was collected over a period of four weeks, for a total of ten class periods. The data for the intervention stage was collected on the same chart that was used to collect the baseline data.

Data from the baseline and intervention periods were prorated to adjust for absences. At the end of the study, the number of off-task observations during the baseline period was doubled, to create a weighted baseline to adjust for the fact that the baseline was half the duration of the intervention. The number of off-task behaviors per student during the momentary time sampling

under the baseline and intervention conditions, were compared using a non-independent samples *t*-test.

## CHAPTER IV

### RESULTS

During the study, the researcher recorded off-task behaviors of twelve boys aged 14-15 in ninth grade English I classrooms. The researcher collected baseline data for two weeks before introducing an intervention. The four-week intervention included greeting each student at the door before the start of class and saying goodbye to each student as they departed. Moreover, additional attention was paid to the selected students; the teacher engaged these students individually in supplemental conversation throughout the class period.

The mean number of off-task behaviors per student during the weighted baseline period (Mean = 44.33, SD = 14.89) was significantly higher than the mean number of off-task behaviors during the intervention period (Mean = 31.08, SD = 9.68) [ $t(11) = 5.90, p \leq .001$ ] (Please see Table 1 on following page). Consequently, the null hypothesis that there will be no significant statistical differences between the number of off-task behaviors at momentary time sampling ten-minute intervals among underachieving high school English students during a weighted two-week baseline period and a four-week Teacher-Student Relationship Building Intervention period was rejected.

**Table 1**

*Means, Standard Deviations, and t-test Results for Number of Off-Task Behaviors per Student during Weighted Baseline and Intervention Periods*

	<b>Mean</b>	<b>Std. Deviation</b>	<b>t-statistic</b>
<b>Weighted Baseline</b>	44.33	14.89	5.90*
<b>Intervention</b>	31.08	9.68	

N = 12

\*Significant at  $p \leq .001$

When looking at the raw data, some students had high numbers of off-task behaviors while other students had exhibited fewer off-task behaviors. Additionally, in reviewing the pattern of behaviors, there were a few students whose off-task behaviors did not appear to be impacted much by the intervention. However, as can be seen in Table 1, the mean number of off-task behaviors per student during the baseline period was significantly higher than during the intervention period. Therefore, the Teacher-Student Relationship Building Intervention yielded positive results in reducing the total number of off-task behaviors throughout a class period.

## **CHAPTER V**

### **DISCUSSION**

This study examined the impact of teacher-student relationships on students' academic engagement, as the researcher sought an answer to the question of whether building and maintaining positive relationships could impact students' performance and engagement in the classroom. The researcher hypothesized that there would be no significant statistical differences between the number of off-task behaviors at momentary time sampling ten-minute intervals among underachieving high school English students during a weighted two-week baseline period and a four-week Teacher-Student Relationship Building Intervention period. After the study was completed, the null hypothesis was rejected. There were fewer off-task behaviors during the intervention period.

#### **Implications of Results**

The results of this study indicate that building and maintaining positive relationships between teachers and students will improve student engagement and motivation during class. It was observed that students were engaged in fewer off-task behaviors during the four-week intervention period. Although the study did not measure academic growth, it is likely that because students were more engaged in the lessons and activities, they retained more information and grew academically.

Furthermore, the researcher noticed differences in the attitudes and demeanors of the students. The students for whom the intervention was intended were more likely to comply with directions and participate during class. These students also came to class prepared and ready to learn. Students who engaged in off-task behaviors such as sleeping, putting their head down, playing on their cell phones, or working on assignments for other classes, were more involved in

the material at hand. These students were also more open and friendly with the teacher. At the start of the intervention, the teacher took full responsibility for initiating greetings and conversation with the students. As the intervention progressed, students also took responsibility for this task. They greeted the teacher, asked polite questions about her day, and seemed genuinely interested in her response. The teacher may have built positive relationships with her students, but both the teacher and students sought to maintain them.

Positive relationships increased engagement among students, yet it also created a more productive and fulfilling learning environment for all. Teacher well-being is affected by the quality of relationships, and when the teacher perceived that her students were responsive to her greetings and conversations, she grew more motivated to continue this behavior and foster better relationships. Thus, there were positive outcomes for both the teacher and the students, which resulted in a better learning environment.

On a practical level, the intervention is simple to include among daily classroom routines, and all teachers, especially those with off-task and non-engaged students, could implement this intervention. For all intents and purposes, the intervention is effortless and does not require the teacher to spend much time to implement. In fact, greeting students and saying goodbye takes only a moment of the teacher's time and demonstrates to students that the classroom is a welcoming environment. During instruction, teachers already circulate around the room to check on the progress of students, so minor additional conversation can be added to this routine seamlessly. It is possible there will be days when the teacher has to exert more energy when smiling and conversing with students, yet this small additional effort goes a long way when building positive relationships with students. In addition, the intervention had no cost, which makes it valuable to educators in every school and community.



### **Theoretical Consequences**

On a theoretical level, the results of this study prove that students benefit immensely from positive teacher-student relationships. During the intervention period, students participated in fewer off-task behaviors and were more engaged in classroom activities. Because the targeted students were less distracted and distracting to others, it created a better learning environment for the entire class. There was increased participation, productive small group collaboration, and better whole class discussions. As stated previously, academic growth was not measured during this study, but it is likely that there was an increase in academic achievement.

### **Threats to Validity**

There are numerous threats to the internal validity of this study. First, the sample size was small and the researcher used convenience sampling by focusing the intervention on twelve students from two of her classes. Although the classes were both Cooperative Collaborative classes and the students shared the same approximate ability level and disposition for off-task behaviors, each class has its own unique chemistry. The differences in the chemistry among each group of students contributed to the off-task behaviors in which the students participated. Some of the students fed off the behaviors of others.

Another threat to the validity of the study was student attendance. There were not a large number of absences and the number of off-task behaviors was prorated to adjust for absences; however, prorated values are less valid than actual values. In addition, these students met with the teacher every other day; one day absent from class meant the teacher and student did not interact for multiple days, which could have affected the relationship the teacher was attempting to build.

The third threat to the internal validity was curricular differences between the baseline period and the intervention period. During the collection of baseline data, the students studied Edgar Allan Poe and, during the intervention period, the students studied Greek mythology. While the units of study were different, both units followed similar routines and included challenging texts. However, the researcher's observations of the classes indicated that the mythology unit was more enjoyable for the students as they had substantial prior knowledge. Because the students appeared to enjoy their studies more during the intervention period, this could have affected the number of off-task behaviors in which the students engaged.

Additionally, the short time frame of the intervention affected the internal validity of the study. Baseline data was collected over a two-week period (five class periods) and the intervention data was collected over a four-week period (ten class periods). It is impossible to know, therefore, what the results would be if both the baseline data and intervention data were collected over a longer period of time.

There are also threats to external validity that future research on a similar topic should take into account. The participants in this study were all Caucasian ninth grade boys, approximately 14 and 15 years old, that engaged in a multitude of continuous off-task behaviors. In addition, 50% of the participants had an IEP for a specific learning disability. All twelve participants were students in the researcher's classes. It is also important to note that the school where the intervention took place follows an A-day/B-day rotation schedule, which means that the teacher saw her students every other day. Duplicating this intervention in a different setting may not yield the same results. In the case of a setting where classes meet every day, the person implementing the intervention would have to consider not growing overly familiar with the students and neglecting an appropriate balance in the relationship. In addition, the data was

collected using momentary time sampling. The researcher checked for off-task behaviors every ten minutes, for a total of seven times during an 82-minute class period. If the intervention was duplicated during shorter class periods, it may not yield the same results.

Furthermore, the time of year should be considered if the intervention were to be duplicated. The intervention described in this study occurred during February and March, which is the third quarter of the year. At this point during the school year, the teacher and students are already accustomed to classroom procedures and have established relationships. If the intervention were duplicated at the beginning of the school year or closer to the end of the year, the results could vary.

### **Connections to Previous Studies**

A study by Allday and Pakurar (2007) determined how teacher greetings affected off-task behaviors of middle school students. The students used in the study were identified by their teachers as having problem behaviors. Momentary time sampling was used to measure on-task behavior during the first ten minutes of class. The occurrence or non-occurrence of on-task behavior was recorded in 15-second intervals. Data was recorded in each student's classroom as the students participated in the normal class routines. Students were observed two days a week for a total of six weeks. During baseline, teachers maintained their typical daily routines. During the intervention phase, teachers greeted the target students at the door by using the student's name along with a positive statement. The results indicated that teacher greetings were associated with an increase of on-task behavior for all participants.

Similar to the Allday and Pakurar (2007) study, this study focused on off-task behaviors and used momentary time sampling. Both studies used a similar technique to build positive relationships—teachers greeted students as they entered the classroom and engaged students in

meaningful individualized conversation. There are, however, multiple differences between the studies. Allday and Pakurar only tracked behaviors during the first ten minutes of class, whereas this study observed behaviors at ten-minute intervals throughout the entire class period. The population was also different. Allday and Pakurar used three students in three different middle schools, while this study used twelve students in two different classes taught by the same teacher. Both studies prove that positive teacher-student relationships can reduce off-task behaviors during class and provide evidence that the intervention can be effective with students at different grade levels.

### **Implications for Future Research**

This study could be improved by addressing the weaknesses of the study. For example, future research could duplicate the study and add a control group that does not receive an intervention. However, the person who implements the study must be careful that he or she is not doing a disservice to the students in the control group. The current study could also be strengthened by including another teacher who teaches a class of students with similar ability levels and dispositions for participating in off-task behaviors. Being able to compare results from multiple teachers would help validate the results of the study.

Future research could build on this study by duplicating the intervention with different populations. For example, future research could include a larger population comprised of both boys and girls. It would also be beneficial to duplicate the study across multiple grade levels, especially the younger grades when students first form bonds with their teachers and expectations for school. This could serve as a comparative analysis of the benefits of positive relationships throughout multiple years of schooling.

Additionally, future research should consider the length of the study. If the study occurred for more than six weeks, would the off-task behaviors continue to decrease? On the other hand, it is possible that the number of off-task behaviors would plateau or even increase when the novelty of the intervention wears off or if the students grow too comfortable and friendly with the teacher. Future research should also consider whether once a solid relationship has been established between the teacher and students, if the individualized conversations can be reduced. These interactions should not be excessive, and if they were tapered off during the intervention it could affect the number of off-task behaviors either positively or negatively. Furthermore, once the teacher has established positive relationships with the targeted students, the interactions should be phased out so that it does not appear the teacher favors certain students over others. Greeting students as they enter class and saying goodbye as they leave can occur throughout the entire school year, but the implications of extra conversation for selected students needs to be considered when duplicating this intervention.

Since the primary goal of education is to increase academic skill development, it would be valuable to examine the academic growth of students during the intervention. Future studies could implement a similar intervention but collect data that not only tracks the number of off-task behaviors in which the students participate but also any changes in their academic performances.

### **Summary/Conclusion**

In summation, building and maintaining positive teacher-student relationships is essential for success in the classroom. This study examined the effect of simple relationship building strategies on the off-task behaviors of students who were often non-engaged. The number of off-task behaviors was significantly lower during the intervention period. These results suggest that

classroom behavior can be improved through an enhancement in the relationships between teachers and students. The intervention used in this study simply involved greeting students as they entered the classroom and saying goodbye as they departed, which is something that every teacher could include in his or her daily routine, and holding brief interpersonal conversations each class period. By making a few small changes in demeanor and routine, teachers can promote a positive and productive learning environment for all students. Because students spend about 25% of their waking hours in a classroom, it is essential that they feel a sense of belonging in order to be engaged, motivated, and successful.

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