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Investigating the mediation effects of student-teacher relationships between extracurricular activities and students' academic achievement in high school

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Investigating the Mediation Effects of Student-Teacher Relationships between Extracurricular Activities and Students' Academic Achievement in High School

by

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DISSERTATION CERTIFICATE OF APPROVAL

This dissertation by Rachael Schofield, entitled, *Investigating the Mediation Effects of Student-Teacher Relationships between Extracurricular Activities and Students' Academic Achievement in High School,* is approved.

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Shannon Russell, Committee Member 3

DEDICATION

This dissertation is dedicated to all my friends and family who have been there for moral and emotional support throughout this life changing journey. Thank you for listening to me, supporting me, and giving me the time and space needed to focus on writing and all the other aspects of this study.

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Abstract

While there is evidence to support the notion that extracurricular activities have a positive impact on student success and development, the reasons *why* students participate in these activities, *why* they continue to participate in these activities, and *why* these activities lead to better educational outcomes are unclear. This study was conducted at three high schools in a county in northeast Florida with a total n of 131 students. This study used three theories as lenses to examine how student-teacher relationships impacted student engagement in extracurricular activities and in turn student achievement: Self-Systems Processing (Connell & Wellborn, 1991), Attachment Theory (Bowlby, 1969), and School Belonging (Goodenow & Grady, 1993) to analyze the data collected from the surveys. This data collection for this study included both quantitative survey questions and open-ended qualitative survey questions that produced three main findings. First, overall, students involved in extracurricular activities had slightly higher mean-level perceptions about their student-teacher relationships (i.e., caring, trust, and help) than those not involved in extracurricular activities, but this difference was not statistically significant. Second, for students involved in extracurricular activities their perceptions of the student-teacher relationship were slightly higher for their extracurricular teachers than their general teachers, but again, not significantly so. Finally, there were no effects of extracurricular activity on academic achievement within this sample.

Chapter 1: Introduction

Problem Statement/Rationale

Extracurricular activities can be an integral part of a students' high school experiences. According to McNeal (1999), student participation is directly related to many positive educational, social, and developmental outcomes for a student. McNeal (1998) linked student participation in extracurricular activities to higher educational aspirations for students, higher levels of academic achievement, higher levels of educational attainment, higher self-esteem, and lower rates of student dropout. Likewise, a study by Reed (2014) looked for the correlations between student participation in extracurricular activities and GPA and ACT scores and found that students who participated in extracurricular activities had higher GPA and ACT scores than their peers who did not. Students may decide to participate in these extracurricular activities offered on their campus for many reasons. While there is evidence to support the notion that these activities have a positive impact on student success and development, the reasons *why* students participate in these activities, *why* they continue to participate in these activities, and *why* these activities lead to better educational outcomes are unclear.

One area that potentially explains the *why* is the nature of student-teacher relationships in extracurricular activities. Student-teacher relationships have been shown to be a strong indicator of students' academic success and school life more generally (Hattie, 2009). These relationships are important at all levels of a student's education; however, the relationships change qualitatively as students develop. This change in relationship could be due to the fact that an elementary school student and teacher spend most of the day together, while a high-school student and teacher only typically spend one hour together during the day. Indeed, the strength of

the student-teacher relationship may fluctuate between stronger and weaker as students progress through these developmental time periods (Prewett et al., 2019). Further, these relationships are important when studying student engagement in school. A study on secondary student-teacher relationships by Martin and Collie (2019) found that more positive relationships between students and teachers leads to more positive school engagement.

According to Furrer et al. (2014), relationships that students have with teachers can also provide students with increased motivation for them to engage in school activities – both during and after the school day. When teachers show an interest in their students, the students feel that they belong (Furrer et al., 2014). When teachers attend students' extracurricular activities and sporting events it can have an impact on the relationship between a student and their teacher because teachers have shown an interest in their students' lives. For example, the students will see the time that their teacher has invested in the students by working with students in an extracurricular activity. Even the act of showing up at an event where the teacher was invited by the student can provide further examples of teachers being invested in the lives of students. This evidence supports the notion that these relationships may affect student participation in extracurricular activities as well as their educational outcomes. The question that remains is to what degree does the club sponsor affect the student's participation in the extracurricular activities in which they decide to participate and does this translate to those better educational outcomes?

Purpose Statement

The purpose of this study was to learn more about where student-teacher relationships and extracurricular activities interrelate, how they interrelate, and what changes those

interrelations have on students' academic achievement. Evidence suggests that it is important for students to have adults at school with whom they have positive relationships (Martin & Collie, 2019). Martin and Collie (2019) explained that these relationships can be from interpersonal connections (from teacher warmth), substantive connections (from content and task assignments) and pedagogical connections (from communication of content). There was also evidence that suggested just how important it is for students to participate in extracurricular activities (McNeal, 1998). For example,

> "Student involvement in extracurricular activities is associated with increased levels of human capital (e.g., skills, years of schooling completed, and levels of achievement), cultural capital (e.g., specific attitudes and values, and access to art and literature), social capital (e.g., extended sets of social relationships and networks, and access to adult-supervised activities), political involvement, and personal development" (McNeal, 1999, pp. 292).

However, there was a need to learn more about where student-teacher relationships and extracurricular activities interrelate, how they interrelate, and what changes those interrelations have on students' academic achievement. In this study I examined and compared the differences and similarities in student data from students who participated in extracurricular activities and students who did not participate in extracurricular activities with regard to their teacher relationships, school engagement, and academic outcomes.

Research Questions

Three questions guided this study:

1. What differences emerge in students' perceptions of their student-teacher relationships between those students who participate and students who do not participate in extracurricular activities?
2. Does the quality of the student-teacher relationship mediate the relation between engagement in extracurricular activities and academic achievement?
3. What is the nature of the student-teacher relationships for teachers who interact with students as part of their extracurricular activities versus those who do not?

Overview of Theoretical Framework

Three different theories were used as a lens to guide the collection of data in this study. The three theories are Self-Systems Processing (Connell & Wellborn, 1991), Attachment Theory (Bowlby, 1969) and School Belonging (Goodenow & Grady, 1993). Firstly, Self-Systems Processing is a model that is used when discussing engagement or disaffection in relationships that occur in the educational setting. This framework includes three fundamental psychological needs: competence, autonomy, and relatedness (Connell & Wellborn, 1991).

Secondly, Attachment Theory (Bowlby, 1969) typically looks at attachment between children and parents but has also been used to look at the relationships that are formed between students and their teachers. Last but not least, school belonging will be used to as it is a factor that researchers have long deemed as an essential influence in student learning. School belonging

is the "need to form and maintain at least a minimum number of interpersonal relationships' based on trust, acceptance, love, and support" (Baumeister & Leary, 1995; Maslow, 1943, as cited in OECD, 2019). Belonging has also been described as "the extent to which they [students] feel personally accepted, respected, included, and supported by others – especially teachers and other adults in the school social environment" (Goodenow & Grady, 1993, pp. 60-61). Belonging is the feeling that students perceive to be included and have a place at their school, a feeling that can be amplified through participation in extracurricular activities.

Self-System Processes was the theory used as the primary lens through which this study was conducted due to the fundamental psychological needs that the framework addresses. By using these three theories as lenses, I was able to analyze relationships that students have with their teachers in different ways and see what the impact of those relationships looked like when it came to addressing student engagement in extracurricular activities and the strength of student academic achievement from those three vantage points. More detail on these frameworks is found in Chapter 2.

Definitions of Key Terms

- Extracurricular Activities: Bartkus et al., (2012) gave a working definition based on past literature of extracurricular activities, "Extracurricular activities are defined as academic or non-academic activities that are conducted under the auspices of the school but occur outside of normal classroom time and are not part of the curriculum. Additionally, extracurricular activities do not involve a grade or academic credit and participation is optional on the part of the student." (p.

698) For the purpose of this study, these activities are operationalized as activities that happen on a campus after school and may be athletic, academic, social, or other in nature. Athletic activities would include sports (e.g., football, track and field, swimming, etc.), academic activities would include clubs (e.g., debate, robotics, future business leaders of America, honor societies), and social activities could include clubs such as gamers gathering, gender and sexuality alliance, girl up. Other clubs that do not necessarily fit these categories but are still included are drama clubs, the interact club (a community service club), great decisions (a club that hosts discussions on a variety of worldly topics) and Be the Change (an anti-bullying club).

- Student-Teacher Relationships: This is the relationship created between a student and their teacher. According to Furrer et al., (2014) these close relationships are based on interpersonal liking and trust. “When teachers are dependable sources of emotional and instrumental support in difficult times, students feel connected to their teachers” (Furrer et al., 2014, p. 105). For the purpose of this study, a teacher was defined as any faculty member of a school that engages with students. This allows for those who work at a school who are not solely classroom teachers; for example, an instructional assistant, speech teacher, etc., to be included in this study.
- Academic Achievement: According to the American Psychological Association, academic achievement is defined as “any identifiable success in the areas of scholarship or disciplined study” or “in educational psychology, a level of

proficiency in scholastic work in general or in a specific skill" (APA Dictionary, 2020).

- Grade Point Average (GPA): According to the Florida Department of Education, GPA is the numeric value (with an implied decimal point) of the student's cumulative grade point average calculated on an unweighted 4.0 scale (FDOE, 2014).
- Engagement: According to Skinner and Belmont (1993), "engagement includes both behavioral and emotional components. Children who are engaged show sustained behavioral involvement in learning activities accompanied by positive emotional tones" (p. 572).
- Belonging: Goodenow and Grady (1993) defined sense of belonging as "the extent to which they [students] feel personally accepted, respected, included, and supported by others – especially teachers and other adults in the school social environment" (pp. 60-61).

Overview of Methodology

For the purpose of this research, a descriptive quantitative study was conducted with additional qualitative support from open-ended survey questions. Both quantitative and qualitative survey data were collected. The quantitative and qualitative data brought different strengths to the study. The qualitative data collected provided varying perspectives of each participant. The quantitative analysis ran were a within-subjects ANOVA and a between-subjects

ANOVA. The open-ended qualitative questions were analyzed by using content analysis, three coding units were identified from the participant responses: positive, neutral, and negative.

Participants were the general population of three high schools of a northeast Florida school district. There were two groups of participants; students who participated in extracurricular activities, and those who did not. Students who participated in extracurricular activities provided information on their perceptions of both their general teachers as well as those teachers with whom they [students] interacted during after school activities.

Having both groups of students participate in this study addressed the first question of the study: the difference between students that participated in and students that did not participate in extracurricular activities. The second question of the study was addressed through the data collected from students who participated in extracurricular activities, further understanding was gained from the qualitative questions. The third question of the study was addressed through the qualitative questions.

Significance of the Research

The findings of this study informed educators on the perspectives of students pertaining to student-teacher relationships in the Context of extracurricular activities and the influence these relationships may have had on academic achievement. The intent of this study was to close a gap in the literature with regard to the intersection of two essential parts of students' lives – their participation in extracurricular activities and their relationships with their teachers. This study not only looked at the differences in students' perceptions of student teacher relationships with general teachers from students who do and do not participate in extracurricular activities but also

the differences in students' perceptions of their general teachers compared to their extracurricular teachers for those students who do participate in extracurricular activities. This leads us to believe that not only could student-teacher relationships be a mediator on student academic achievement but there is also a bidirectional relationship between student-teacher relationships and student engagement in extracurricular activities.

Organization of the Study

Before beginning the study, I sought approval from the superintendent of schools for the school district and the three principals of the schools where the study was conducted. Additionally, approval was granted by the UNF IRB. IRB letter of approval and the recruitment email can be found in Appendices A and B. Once approval was granted, the school contacts received an email containing the informative letter with the opt out instructions.

Two weeks after the last opt out letter was posted, the persons of contact at each school were sent the link to the survey. The persons of contact were asked to distribute the survey to the students on their campus via student email and Google Classroom. These contacts were also asked to encourage teachers to share the survey with their students and promote participation. The survey was set to be open initially for two weeks. However, due to low participation, the survey was distributed again and remained open for another week. There were three reminders sent out and 3-5 reminder notifications were posted in Google Classroom. Once sufficient participants completed the survey, I closed the survey. A total of 131 students participated, 96 of those participants were students who participated in extracurricular activities and 35 of those participants were students who did not participate in extracurricular activities.

Chapter Summary

This study used three theories as lenses to examine how student-teacher relationships impacted student engagement in extracurricular activities and in turn student achievement. This study was conducted at three high schools in a county in northeast Florida with a total n of 131 students. I used Self-Systems Processing (Connell & Wellborn, 1991), Attachment Theory (Bowlby, 1969), and School Belonging (Goodenow & Grady, 1993) to analyze the data collected from the surveys. This data collection for this study included both quantitative survey questions and open-ended qualitative survey questions.

Chapter 2: Review of Literature

Introduction

After school, a visitor can see the high school campus come to life as students are heading to their coaches'/sponsors' class, the field, the gym, or to their favorite extracurricular activity. Extracurricular activities are an important aspect of the high school experience for students as there are many benefits that students will gain from their participation in these activities. One of these benefits that students may gain from the extracurricular activities is the strengthening of relationships with their teachers. Teachers can be present to support their students' extracurricular activities in different ways. They can show up to watch a show or a game or they can be involved in all aspects of this activity by being the sponsor or coach.

This literature review addresses student-teacher relationships and how they benefit students in terms of academic achievement. Next, it covers the same benefits for students under the umbrella of extracurricular activities. Finally, this literature review examines the interconnectedness between student-teacher relationships, extracurricular activities together and academic achievement.

Student-Teacher Relationships

Student-teacher relationships are the bonds that are formed between students and their teachers. Conner et al. (2014) stated that, "positive student-teacher relationships are those in which students feel respected, valued and supported" (p. 23). These relationships change as students progress from elementary school to middle school to high school. When students begin creating strong student-teacher relationships in kindergarten, they may reveal higher levels of

academic achievement throughout their time in elementary school (Prewett et al., 2019). In middle school, it was reported that students felt that their relationships with their teachers were less strong compared to elementary school, potentially due to having more teachers and less time in one given classroom. This reduced amount of time in each class allowed for less time for students to create a strong relationship with their teachers (Prewett et al., 2019). The same trend may continue in high school.

Though there was information available about student-teacher relationships in lower levels, less was known about the relationships between students and teachers in the high school setting (Prewett et al., 2019). For example, "there is less known about the effects of students' feelings of closeness with their teachers" (as cited by Roorda et al., 2011, in Prewett et al., 2019, p.40). Despite knowing less about these relationships in the high school setting, the relationships remained important as they continued to have an impact on academic achievement (Prewett et al., 2019). This was particularly important as students grew through adolescence and into young adulthood, a phase where there is not only academic development taking place, but a whole host of social and emotional changes as well (Prewett et al., 2019). Next, I turned to a discussion of how student-teacher relationships have engagement and motivational benefits and academic achievement benefits for students.

Engagement and Motivational Benefits for Students

Student-teacher relationships at school are important for many reasons. A study conducted by Valkov and Lavrentsova (2019) on high school student concluded that "supportive and caring student-teacher relationships and conflict free peer relationships are related to increased school engagement, motivation for learning, and academic performance" (p. 328).

While this study focused on student dropout rates, it is important to note that having a supportive and caring relationship with their teacher was a major influencer on why some students continued to go to school. This was found to be another reason student-teacher relationships were important for the success of each student. There was discussion in a study by Klem and Connell (2004) about how students needed to feel supported by their teachers and needed to know that there is a shared sense of participation. The study presented evidence, with both elementary and secondary students, showing that when students had teachers who cared about them, there was a positive difference in student academic outcomes (Klem & Connell, 2004).

The way a teacher presents themselves to the students has an impact on the students as a whole. Skinner and Belmont (1993) stated that teacher behavior influenced student engagement:

> Children's engagement in learning activities is influenced both by their perceptions of teachers and directly by teachers' actual behaviors. Children's behavioral engagement (student report) is primarily a function of student perceptions of teacher structure. In other words, children who experience their teachers as providing clear expectations, contingent responses, and strategic help are more likely to be more effortful and persistent. Emotional engagement (student report) is predicted by teacher involvement; when children experience teachers as warm and affectionate, children feel happier and more enthusiastic in class. (p. 578)

Teacher behavior, structure, and expectations of their students influenced how the children felt and performed in the classroom. This made teacher self-presentation and behavior imperative to

building relationships with students (Skinner & Belmont, 1993). This study specifically studied students in grades 3-5.

A study that focused on students in 5th and 6th grades by Wentzel et al. (2012) found that students perceived emotional care from peers and teachers acted as a partial mediator between the perceptions of expectations and pursuit of goals. More specifically, their research found that "…perceived caring from teachers partly mediated relations between academic expectations from peers and social expectations from teachers and learning goal pursuit" (Wentzel et al., 2012, p.624). Further, this study supports that the relationships that students build with their teachers (as well as their peers) can have an impact on the students that not only supports students' pursuit of performance goals, prosocial goals, social responsibility goals, but also academic and social expectations. Students who perceive that their teachers and peers care about them can have an influence on students' motivation in goal driven situations. This perceived sense of caring can impact a student in many ways on their educational journey.

Academic Achievement

High student engagement and academic achievement in school is imperative. Academic achievement can be measured through grades and grade point averages (GPA). Kuncel et al. (2005) state that grade point averages are "summaries of student learning" (p. 63) and they are also predictors of student success in continued education and other areas of life. In order to be successful academically, it is important that students show up to school healthy, both physically and mentally. Engaged students pay more attention in school compared to those students who are not engaged. In turn, the engaged students had higher achievement levels. Klem and Connell (2004) argued that based on their data collected that teachers had gained a higher level of

engagement from students who perceived their teachers to be caring and had high and clear expectations.

Student-teacher relationships are an important aspect of school life. These relationships were present at all levels of a student's education but change throughout the years and can be stronger (or weaker) when students are older. A study on secondary student-teacher relationships by Martin and Collie (2019) found that the more positive relationships students have with their teachers the more positive their school engagement tends to be. This study specifically looked at academic engagement. Hattie (2009) stated, "In classes with person-centered teachers, there is more engagement, more respect of self and others, there are fewer resistant behaviors, there is greater non-directivity (student-initiative and student-regulated activities), and there are higher achievement outcomes" (p.119). Hattie (2009) later continues to state that one of the six signposts towards excellence in education is that teachers are one of the "most powerful influencers in learning" (p.238).

Extracurricular Activities

Extracurricular activities are any activities that students participate in outside of normal school hours. These activities can be either athletic or non-athletic. Non-athletic extracurricular activities can include academic activities and ones that pertain to students' specific interests. All extracurricular activities were an important part to student success and development (McNeal, 1999). Given these parameters, I will now describe the motivational engagement and academic benefits that extracurricular activities can have on students.

Motivational Engagement of Students

There are many benefits for students who participate in extracurricular activities. McNeal (1998) linked student participation in extracurricular activities to many benefits for students, including: higher educational aspirations, higher levels of academic achievement, higher levels of educational attainment, higher self-esteem, and lowered dropout rates. Students who participated in extracurricular activities may have higher academic achievement, which in turn may lead to them to seek continuing education at the collegiate level. This could also promote students to continue with their extracurricular activity pathway into college. Also, if student dropout rates are lowered from student participation in extracurricular activities, we can assume that these students are graduating and adding to the graduation rates of the schools (Mahoney & Cairns, 1997). Lastly, participation in extracurricular activities promoted a higher level of self-esteem in students which is a strong benefit for every student.

A study by Kim (2022) showed that students who participated in extracurricular activities in high school were more likely to continue that trend and participate in extracurricular activities in college as well. This study also provided support that students who participate in extracurricular activities tend to have a stronger sense of leadership development (Kim, 2022). Kim's study (2022) not only showed that student participation at the collegiate level positively correlates to leadership development but also students who participated in extracurricular activities in high school had these same strong leadership values.

Academic Achievement

Extracurricular activities, as mentioned above, were an important part of student success and development. In a study conducted by McDonald (2013), teachers who either coached sports or sponsored clubs were asked if they believed that extracurricular activities had academic benefits for the students. Roughly nine out of ten teacher participants either agreed or strongly agreed that extracurricular activities had academic benefits for students. The aforementioned evidence presented a strong indication that these activities can benefit a student in more ways than just student motivation and engagement but also in their academic performance as well. In a study by Reed (2014) four high schools in Mississippi were surveyed to look for the correlations between student participation in extracurricular activities and GPA and ACT scores. This study found that students who participated in extracurricular activities had a higher GPA, not only that but they also had higher ACT scores (Reed, 2014). Reed (2014) also found that the teachers and administrators that participated in the study believed that extracurricular activities positively influenced student academic achievement.

Links between Student-Teacher Relationships, Extracurricular Activities, and Academic Achievement

While previous evidence has informed the literature on some aspects of how student-teacher relationships encourage students in the classroom and through their extracurricular activities, the literature has not yet shown much in regard to a correlation between the student-teacher relationships and student participation in extracurricular activities. Further, what are the

differences that emerge in the relationships a student has with their general teachers compared to their extracurricular activity teachers.

Relationships that students have with teachers may provide students with more motivation for them to engage with their school. When teachers show an interest in their students, the students feel that they belong (Furrer et al., 2014). When teachers attend students' extracurricular activities and sporting events this can have an impact on the relationship between a student and their teacher because teachers are showing an interest in their students' lives. This supports that there would be a bidirectional relationship between student-teacher relationships and the student engagement in extracurricular activities, as that is one way in which teachers could show an interest in the lives of their students. In a large meta-analysis, there was little effect of after-school activities on student achievement (Hattie, 2009). However, the effect may be strengthened when the student-teacher relationships are added into the equation. This information appears to show that these relationships would affect student participation in extracurricular activities and, in turn, student academic achievement.

It is known student-teacher relationships have a significant influence on students and their academic achievement, however the mediation between these student-teacher relationships and student engagement in extracurricular activities has not been studied enough. The mediation model would suggest that student-teacher relationships would further impact academic achievement from student participation in extracurricular activities. Through the process of this literature review, I found little research that addressed this topic. While the overarching goal of this study was to address the problem of practice with regard to student-teacher relationships, and extracurricular activities, this study may also help close the gap in the literature about how

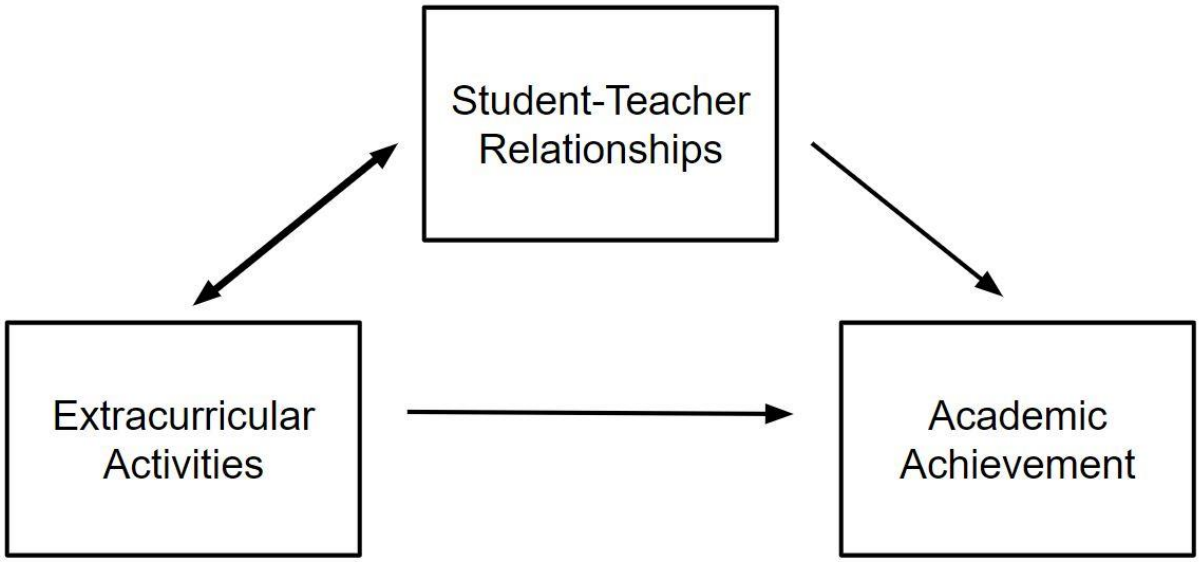
and where student-teacher relationships and extracurricular activities cross paths on the way to high student academic achievement.

Links to Academic Achievement

Student participation in extracurricular activities and positive student-teacher relationships may have a positive impact on students in general but also when looking specifically at student academic achievement. Through this study, I hoped to find a connection between student-teacher relationships and extracurricular activities to see if they had an impact on student academic achievement.

Figure 1

Mediation Model of Relationship Between Student-Teacher Relationships, Extracurricular Activities, and Student Academic Achievement (EA-R-A Conceptual Model)



Note. This figure was created by Rachael Schofield for the purpose of this study.

The mediation model I created, above, (EA-R-A Conceptual Model) represents student-teacher relationships as a mediation between extracurricular activities and student academic achievement. In this model, the independent variable, x, represents student participation in extracurricular activities, and the dependent variable, y, represents student academic achievement. An additional variable, the mediator, is added in the model and is represented by student-teacher relationships. In this case, the mediator would affect the relationship between student participation in extracurricular activities and student academic achievement. This model suggests that there is a direct effect on the outcomes (stronger student academic achievement) due to the mediator (student-teacher relationships). This mediation model is important when addressing question two of this study.

There is also a bidirectional aspect in this model between student-teacher relationships and student participation in extracurricular activities. This bidirectional aspect indicates that there is correlation between student-teacher relationships and student participation in extracurricular activities. The bidirectional relationship is important when addressing questions one and three of this study.

Theoretical Framework

The three theoretical frameworks in this study were used to both justify the relations between constructs in Figure 1 as well as to aid in interpreting the data collected from the study in Chapter 5. The three frameworks are Self-Systems Processing (Connell & Wellborn, 1991), Sense of Belonging (Goodenow & Grady, 1993), and Attachment Theory (Bowlby, 1969). These

three frameworks complement each other when looking at student-teacher relationships and the conceptual model presented in Figure 1 as a whole.

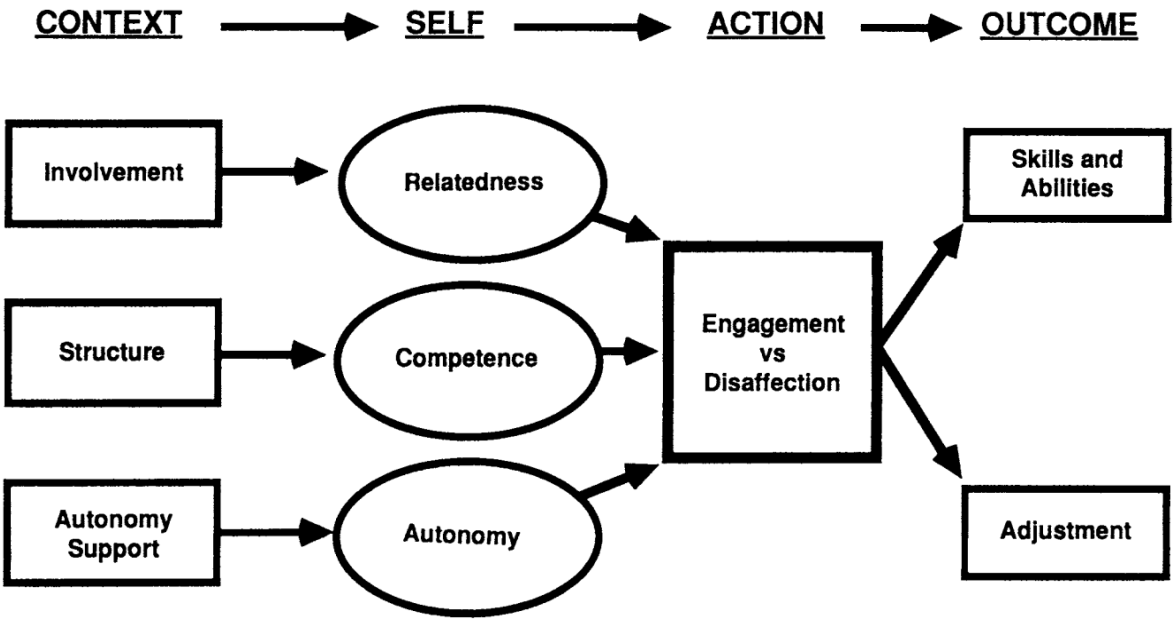
Self-Systems Processes

The theoretical framework that is being used as the primary lens for this research is the model of self-system processes.

The model of Self-System Processes by Connell and Wellborn (1991) was used in educational settings with both children and adolescents. The model includes three fundamental psychological needs: Competence, Autonomy, and Relatedness. Competence includes strategies and capacities, Autonomy includes self-regulation, and Relatedness refers to how one relates to themselves as well as to others including teachers, parents, and peers. Figure 2 shows the process of how, in this case, a student goes from Context to Self to Action and further an Outcome is provided. The Action that is produced from the relatedness, competence, and autonomy will be either favorable or unfavorable for the Outcome of the student. The Action can be either engagement or disaffection and depending on the Action, the Outcome can lead to a student creating skills and abilities or making an adjustment in their lives.

Figure 2

Self-System Processes



Note. By J. Connell and J. Wellborn, 1991

Self-System Processes was used as the primary lens through which the data from this study was analyzed due to the fundamental psychological needs that the framework addresses. Through this lens I was able to analyze the data collected and connect how the Context and Self lead to an Action of either the engagement with or disaffection in student participation in extracurricular activities. I was also able to use this same lens to explore the student-teacher relationships. Three questions were posed to students in an open-ended manner in this study. Those questions were on feelings of trust, care, and help from their teachers, both general and extracurricular. Through the application of this model to the data collected in the open-ended questions of this study, I was able to not only connect aspects of involvement but also those of structure and autonomy support. Involvement is applied through student participation in extracurricular activities. Structure can also be found within the students' participation in

extracurricular activities, but it can also be seen in student responses to how their teachers help them. Lastly, autonomy support, this aspect correlates to the questions of trust and how students feel that they are trusted by their teachers.

Relation to the EA-R-A Conceptual Model and Research Questions

The Self-Systems Processing Model, Figure 2, (Connell & Wellborn, 1991) relates to the EA-R-A Conceptual Model, Figure 1 due to the set constructs of each model. One can identify where the areas of the Self-Systems Processing would correspond with the EA-R-A Conceptual Model. In Figure 2, involvement under the area of Context parallels the EA-R-A Conceptual Model area of student participation in extracurricular activities. From the Context of extracurricular activities, students not only have the involvement, but they should also have structure and autonomy support. Student participation in these activities can lead to relatedness, competence, and autonomy in oneself when the Context (of student participation in extracurricular activities) provides the involvement, structure and autonomy support the students need. Once a student has the relatedness, competence, and autonomy within themselves provided by the extracurricular activity, this could then lead to deeper engagement in extracurricular activities and stronger student relationships with their teachers. The engagement in these activities could then lead to the Outcome of skills and abilities. This Outcome of skills and abilities parallels the EA-R-A Conceptual Model with high levels of academic achievement. However, if there is disaffection that would lead to the Outcome of adjustment, or in my proposed EA-R-A Conceptual Model, lower levels of academic achievement.

This framework helped me answer my research questions when specifically investigating the mediating effects that the student-teacher relationships had on the student's participation in

extracurricular activities and student academic achievement. I used this framework to help me interpret my data in Chapter 5 by considering the flow demonstrated in the figures above while analyzing how the Contexts specifically led to the outcomes. The theory of Self-Systems Processing played an important role when I was considering the data set as a whole, including both the Likert-type and open-ended questions that I collected.

Sense of Belonging

The feeling that students belong at school is important, especially for a high school student (Renick & Reich, 2021). Sense of belonging is defined as the "need to form and maintain at least a minimum number of interpersonal relationships based on trust, acceptance, love, and support" (Baumeister & Leary, 1995; Maslow, 1943 as cited in OECD, 2019). Goodenow and Grady (1993) also defined sense of belonging as "the extent to which they [students] feel personally accepted, respected, included, and supported by others – especially teachers and other adults in the school social environment" (pp. 60-61). There are many positive academic and social outcomes that have been associated with students feeling that they belong on their campus (OECD, 2019). Many students who participate in extracurricular activities tend to have a higher sense of belonging at their school (Dotterer et al., 2007, as cited in OECD, 2019). A higher sense of belonging can also be associated with higher academic achievement (OECD, 2019).

Relation to the EA-R-A Conceptual Model and Research Questions

This theory relates to my research questions in that belonging is something that a student can feel through a strong student-teacher relationship or participation in extracurricular activities. I used this theory to help me interpret my data in Chapter 5 by considering if students felt they belong or not, while looking at the differences in the data collected from students who participated in

extracurricular activities compared with those who did not. I originally believed that my data would further confirm the existing research base that students who participate in extracurricular activities and have stronger relationships with their teachers will feel more like they belong at school. I assumed that I would notice a difference between the students who did and did not participate in these activities.

Attachment Theory

Attachment Theory is typically used while investigating children's attachment to parents and how the relationship mediated the child's outcomes. However, the theory has been used in classroom settings when analyzing a students' attachment to their teacher (Marrone, 2014). This is typically applied more in elementary school classrooms. Attachment Theory was developed by John Bowlby in the mid-late 1900s based on some Freudian concepts, however, Bowlby believed that these existing theories were not all encompassing (Marrone, 2014). Marrone (2014) quoted Bowlby stating:

> What for convenience I am terming attachment theory is a way of conceptualizing the propensity of human beings to make strong affectional bonds to particular others and of explaining the many forms of emotional distress and personality disturbance, including anxiety, anger, depression, and emotional detachment, to which unwilling separation and loss give rise. (Bowlby, 1977, as cited in Marrone, 2014)

Relation to the EA-R-A Conceptual Model and Research Questions

This Attachment Theory (Bowlby, 1969) relates to my research questions as it is deeply rooted in the area of relationships in general but also those between students and teachers. As the research questions all analyzed some aspect of student teacher relationships, this theory provides

important insights when looking at the student-teacher relationships and how they differ between students who did or did not participate in extracurricular activities. I used this framework to help interpret the data in Chapter 5, as relationships are the basis of this study.

Relating the Frameworks

These three frameworks tie together to create a strong lens to use while interpreting student-teacher relationships and sorting out the differences between those that students form with their extracurricular teachers compared to their classroom teachers. By utilizing the lens of Self-System Processing (Connell & Wellborn, 1991), Sense of Belonging (Goodenow & Grady, 1993), and Attachment Theory (Bowlby, 1969) I was able to see the relationship between students and teachers in different lights and look at the many elements that make a relationship strong.

These theories frame and support the scales that I used in the development of my survey. Two scales were used to compare student-teacher relationships. The first scale is the Inventory of Parent and Peer Attachment created by Armsden and Greenberg (1989). This instrument has been directly used in relation to Bowlby's Attachment Theory (1969), specifically with adolescents. In its seminal study, the instrument was used to study adolescents between the ages of 17-20 and their feelings towards their attachment figures (Armsden & Greenberg, 1989). The second scale that I used was the Teacher as a Social Context by Belmont, Skinner, Wellborn, and Connell (1988).

The two instruments were used together to gather data with regard to the concepts of trust, communication, alienation, affection, attunement, dedication of resources, and dependability. Through the application of the three chosen theories, above, I had wide scope

when analyzing the data collected from high school students about their relationships with their teachers. Having this wide scope allowed me to use each theory as a tool to base the comparison of perspectives from students who participated in extracurricular activities against the perspective of those students who did not participate in extracurricular activities.

Chapter Summary

This literature review synthesized the existing literature on student-teacher relationships and extracurricular activities. I looked at the benefit that each of these areas had on students overall and in the focus of academic achievement. The literature was rich with positive examples of outcomes that occurred when students had strong relationships with their teachers. There were also multiple examples of positive outcomes that came from student participation in extracurricular activities. There was a gap in the literature surrounding this problem of practice where these two variables under study intersected. Little was known about how student-teacher relationships influenced student engagement in extracurricular activities.

Chapter 3: Methodology

This was a quantitative study that included Likert-type and open-ended questions to survey students in grades 10-12. The participants of this study were from a convenience sample of three schools in a county in northeast Florida during the Fall of 2022. The overall sample size was n=131, this is recognized as a limitation in the study. The quantitative data were analyzed using a with-in subjects and a between-subjects ANOVA in R. The open-ended survey data were sorted by student perception being negative, neutral, or positive. Three research questions were addressed through this study. While there was no statistical significance of the data, the open-

ended questions provided some rich perspectives on student perceptions of their student-teacher relationships on both general teachers and extracurricular activity teachers.

Research Questions

The purpose of this study was to gain a deeper understanding of how student-teacher relationships affect student engagement in extracurricular activities and academic achievement. Three questions guide the current study:

1. What differences emerge in students' perceptions of their student-teacher relationships between those students who participate and students who do not participate in extracurricular activities?
2. Does the quality of the student-teacher relationship mediate the relation between engagement in extracurricular activities and academic achievement?
3. What is the nature of the student-teacher relationships for teachers who interact with students as part of their extracurricular activities versus those who do not?

Research Design

For the purpose of this research, a descriptive quantitative study was conducted with additional qualitative support from open-ended survey questions. Both quantitative and qualitative survey data were collected. The quantitative and qualitative data brought different strengths to the study. The qualitative survey data collected were able to provide the varying perspectives of many students.

Participant/Sample

The sample population for this study included students in tenth, eleventh and twelfth grade from three high schools in a county in the Northeast Florida region. At the initiation of the study, the demographics of the students in the high schools were as follows: School A: 1,955 (1,407 in 10th-12th); School B: 765 (586 in 10th-12th); and School C: 1,501 (1,134 in 10th-12th). Demographic information obtained from public data accessed from the Florida Department of Education, EDStats portal (2021) is presented in Tables 1 and 2 below.

Table 1

2021 School Enrollment

School	10th Grade	11th Grade	12th Grade	Total Male	Total Female	School Grade
A	495	443	469	51.1%	48.9%	A
B	203	217	166	52.7%	47.3%	B
C	387	404	343	50.8%	49.2%	B

Table 2

Survey Participants (Percentages of Participants)

School A	School B	School C	10th Grade	11th Grade	12th Grade	Male	Female	Other
97 (74%)	9 (6%)	25 (19%)	54 (41%)	46 (35%)	31 (23%)	45 (34%)	78 (59%)	7 (5%)

The information provided in Table 1 details the breakdown of school enrollment in schools A, B, and C. Total number of students projected to be in each grade (10, 11, and 12) in the 2022-2023 school year was included in the first three columns. Due to the COVID-19 pandemic, the school grade presented in the table was the grade earned by the school for the year

2019-2020 due to the suspension of many measurement tools during closure of schools. Table 2 provides a detailed breakdown of the participants in the study. Table 3 provides the school demographics by student race for schools A, B, and C. Lastly, Table 4 provides the demographics of the student participants in the study.

Table 3

2021 School Demographics

School	White	Hispanic	Black	Asian	Multiracial
A	71.8%	11.2%	7.3%	3.7%	5.9%
B	88.7%	4.7%	3.1%	0%	2.6%
C	57.0%	15.8%	16.7%	3.1%	7.1%

Table 4

Survey Participant Demographics (Percentages of Participants)

White	Hispanic	Black	Asian	Multiracial
89 (68%)	11 (8%)	10 (7%)	11 (8%)	7 (5%)

The goal for the study was to have a minimum of 10% participation of students for the survey data collected in the quantitative phase of the study. Out of a total student population of 3,127 the desired number of participants was 313 (i.e., n=313). This goal was not met by the time the data collection period ended. There was a total of 131 students who participated in the survey portion of the study, meeting the minimum n for the efficacy of the study. This is realized as a limitation in the study because the n is less than 5% of the total student population to which the survey was sent out.

Criteria for Selection

The quantitative survey was completed in the Fall of 2022 by any current student in grades 10-12 that attended one of the three high schools in the selected county in northeast Florida. The qualitative data collected from that survey also gave perspectives of both subsets of students: those who participated in extracurricular activities and those who did not.

Justification for Sample

The schools selected were all from different areas of the county under study in northeast Florida. These schools were selected as a convenience sample. It was a convenience sample, as I had a relationship with the principals of each of the three schools. This being the case, it was a simple process to gain county and school level approval to conduct my study and I was easily able to obtain a point of contact on the campus. Further, I received approval to conduct this study from the UNF IRB protocol before conducting the study.

Recruitment

The Qualtrics survey was sent out in the Fall of 2022 through the county email system directly from the point of contact of each school to all students currently enrolled in grades 10-12. The survey link was also shared with students through Google Classroom. There were 3 reminder emails sent and the link was shared 3-5 times through Google Classrooms throughout the duration of the study. These reminders were shared weekly from the contacts to the students.

Protection of Participants Rights

Protection from Harm

This study had minimal risk for student participants. The students participating in the quantitative survey were asked to report some basic demographic information, i.e., ethnicity, gender, grade level, and school attended. They were also asked to self-report their GPA and whether or not they participated in extracurricular activities. No identifying information was collected from the students.

Confidentiality of Data

All survey data were de-identified. Student names, ID numbers, and email addresses were not collected. Participants were assigned a number that corresponded to their responses. All data were stored on password protected personal devices.

Informed Consent

I sought and received a waiver of parental consent from the university IRB for this portion of my research. Students signed an electronic waiver of assent before entering the survey. The assent was recorded separately from the data so that confidentiality could be maintained. A copy of the electronic waiver of assent can be found in Appendix C.

Data Collection Methods

Description and Justification

Both quantitative and qualitative data were collected during this study in a survey. Having both types of data available and using the qualitative data as a support for the quantitative data provided a deeper level of understanding to support the questions that I investigated through this research. Creswell (2018) states that there are three types of questions that can be used in a study. The use of the open-ended questions to collect qualitative data was

used to support research questions one and three due to the nature of the questions. As these questions focused on student perceptions on their student-teacher relationships and the qualitative research supports "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences (Merriam & Tisdell, 2016, p.6).

Quantitative

The quantitative survey contained both Likert-type questions and open-ended questions. This survey was used to collect data from all students that meet the criteria (enrolled in one of the three schools and in grades 10-12). The data collected from the Likert-type quantitative questions on the survey helped me to address each of my research questions.

Qualitative

The qualitative aspect of this study was the open-ended questions at the end of the survey. Open-ended questions were included so that participants in the study were able to provide their own response that might not have been anticipated from the Likert-type questions. These data provided a deeper understanding to research questions one and three that I strived to answer through this study. Research question two did not require qualitative data to support the findings.

Overall Design

Having both quantitative and qualitative data available was a critical element of this study design because I was able to analyze the results from the surveys and validate the findings

from the stories shared in the open-ended questions to answer each research question to the deepest extent possible.

Instrumentation

This study included a Likert-type survey with both quantitative and open-ended questions.

Survey

The survey consisted of both Likert-type scale items and open-ended items. These items pertained to student demographics, academic achievement, teacher attachment, and teacher as a social context. The demographic items asked students to report their grade, age, gender, ethnicity, and school they attended.

Second, students responded to items that asked if they participated in extracurricular activities as a dichotomously scored item (i.e., yes or no). The survey was designed to be adaptive thereby depending on the answer given, students were taken to different versions of the survey questions. The students that had participated in extracurricular activities were asked to think about each survey item in relation to their general teachers and then their extracurricular activity teachers. On the other hand, the students that reported that they had not participated in extracurricular activities were only asked to answer questions regarding their general teachers.

Next, students were asked to self-report their most current cumulative GPA in order to measure their academic achievement. GPA data were used for research question two to see if the quality of student-teacher relationships mediated student engagement in extracurricular activities and student academic achievement. Due to the fact that the students are self-reporting their GPA,

consideration will be given to potential GPA inflation. A study conducted at Citrus College (2017) showed that students tend to self-report their GPA within 0.5 accuracy. Kuncel (2005) states that the use of self-reported GPA is common and understandable in educational research as it is hard to obtain these records on students. Students were not specifically asked to self-report unweighted or weighted GPA. An unweighted GPA is on a 4.0 scale whereas a weighted GPA is on a scale of 5.0. According to FLDOE (Florida Department of Education) weighted GPA takes the rigor of the coursework into consideration, being higher for Advanced Placement, Dual Enrollment, and other honors classes. It was easy to distinguish what students reported unweighted GPA and what students reported weighted GPA by looking at the GPAs. If there was a GPA that was above a 4.0, it was a weighted GPA (n=28). Some students reported both and indicated which was weighted and which was unweighted (n=9). The remaining GPA were classified as unweighted (n=103).

With regard to teacher attachment, I based my study using all 25 items from Armsden and Greenberg's (1989) *Inventory of Parent and Peer Attachment*. Similar to a study conducted by Barch (2015), I modified these items to focus on teacher attachment, not parent and peer attachment. This tool had items that covered the topics of trust, communication, and alienation (as reversed score items). An example item for trust, is "When we discuss things, my __ cares about my point of view." An example item for communication is "I can count on my __ when I need to get something off my chest". An example of alienation is "Talking over my problems with my __ makes me feel ashamed or foolish." However, items were adapted to refer to teachers, rather than parents and peers. For example, the item, "When we discuss things, my __ cares about my point of view." was adapted to "When we discuss things, my teacher cares about

my point of view". Previous research has demonstrated adequate psychometric properties of this scale with reliability in previous studies ranging from .86 in its seminal study to .95 in a study by Barch (Barch, 2015, pp. 146). Original reliability for each subscale of the study was as follows: trust, .91; communications, .91; and alienation, .86 (Barch, 2015, pp. 146). The reliability from the study conducted by Barch (2015) for each subscale was as follows: trust, .95; communications, .92; and alienation .86 (Barch, 2015, pp. 146). All items adapted from this scale appear in Appendix D.

The second instrument I used was a survey developed by Belmont, Skinner, Wellborn, & Connell (1988), entitled *Teacher as a Social Context* (TASC). This survey had 14 total items. The items covered the topics of affection, attunement, dedication of resources, and dependability. An example of affection is "My teacher really cares about me." An example item for attunement is "My teacher knows me well." An example item of dedication of resources is "My teacher talks with me." An example item of dependability is "I can count on my teacher to be there for me." Previous research has demonstrated adequate psychometric properties of this scale with reliability in previous studies ranging from .54 in its seminal study to .90 in a study by Barch (Barch, 2015, pp.146). Original reliability for each subscale of the study was as follows: affection, .71; attunement, .54; dedication of resources, NA (not addressed in the seminal study); and dependability, .72 (Barch, 2015, pp. 146). The reliability from the study conducted by Barch (2015) for each subscale was as follows: affection, .88; attunement, .86; dedication of resources, .77, and dependability, .90 (Barch, 2015, pp. 146). All items from the TASC appear in Appendix E.

Between the two surveys, there were 39 total items that together focused on trust, communication, alienation, affection, attunement, dedication of resources, and dependability. The combined survey items appear in Appendix F and Appendix G. Appendix F contains the survey for the students who did not participate in extracurricular activities whereas Appendix G has the survey for the students who did participate in extracurricular activities.

Finally, with regard to open-ended questions, the students were asked to answer three questions following the constructs of care, trust, and help in regard to their general teachers. For the students that participated in extracurricular activities, they were asked to answer the questions thinking about their general teachers first and then thinking about their extracurricular teachers. The questions the students were asked are as follows:

1) Describe how your teachers care/ don't care about you and give an example.
2) Describe how your teachers trust/ don't trust you and give an example.
3) Describe how your teachers help/ don't help you and give an example.

These items can be found at the end of each survey in Appendix F and Appendix G.

Rigor

Reliability and Validity of Quantitative

The survey I used was a combination of two pre-existing surveys. Both surveys had been assessed for their reliability and validity. In the studies that these surveys had previously been used, there has been evidence to suggest that these surveys were reliable. The Inventory of Parent and Peer Attachment by Armsden and Greenberg (1989), reliability for each subscale of the study was as follows: trust, .91; communications, .91; and alienation, .86 (Barch, 2015, pp.

146). The reliability from the study that used this scale with a focus on teachers, conducted by Barch (2015) for each subscale was as follows: trust, .95; communications, .92; and alienation .86 (Barch, 2015, pp. 146). Regarding the Teacher as Social Context Scale by Belmont, Skinner, Wellborn, & Connell (1992), original reliability for each subscale of the study was as follows: affection, .71; attunement, .54; dedication of resources, NA (not addressed in the seminal study); and dependability, .72 (Barch, 2015, pp. 146). The reliability from the study conducted by Barch (2015) for each subscale was as follows: affection, .88; attunement, .86; dedication of resources, .77, and dependability, .90 (Barch, 2015, pp. 146). Due to the surveys having acceptable psychometric properties, it was safe to assume that these surveys would be acceptable in the context of this study as well.

Trustworthiness and Credibility of Qualitative

The open-ended questions that I asked at the end of the survey were aligned with the Likert-type questions. Asking these questions in an open-ended way allowed for the participants to expand and share their experiences. The students were asked three questions about their teachers, both general (all students) and extracurricular (if the student was a participant in extracurricular activities). The students were asked to describe how their teachers care/did not care, trust/did not trust, and help/did not help them.

Some of these responses to the open-ended questions were left blank, the responses that were collected were coded as either positive, neutral, or negative. 35 participants had the opportunity to respond to 3 questions as they were students who did not participate in extracurricular activities and were asked only about their general teachers. Of the total 105

possible responses to open-ended questions, 25 did not get a response at all, 80 got a response that was able to be coded as either positive, neutral, or negative. 96 participants had the opportunity to respond to 6 questions as they were the students who participated in extracurricular activities, and they were asked to respond to questions on both their general and extracurricular activity teachers. Of the 576 possible responses to open-ended questions, 180 did not get a response at all, 396 got a response that was able to be coded as either positive, neutral, or negative.

Collection Process

I spoke to the superintendent and principals, explained the goals of my study, shared my surveys with them for review and asked for their support and cooperation to include the schools in my research.

Surveys

I sent out a Qualtrics survey that included both qualitative and quantitative questions to a point of contact at the three schools for them to send out to all students who attend their schools. The point of contact could have been a guidance counselor, data clerk, or teacher leader on the campus. The survey was shared through the school email systems as well as posted to Google Classrooms. The principals were asked to inform the teachers of the study as well so that they might further encourage student participation. The surveys remained open for three weeks. The surveys were sent out via email 3 times and posted 3-5 times in Google Classroom throughout the time they were open. After these weeks had passed, the survey was closed. I then began

analyzing the quantitative data using the software program R and coding the qualitative data following a content analysis approach.

Data Analysis

Analyses for the three research questions proceeded with quantitative analyses followed by a descriptive qualitative analysis. The analysis for this study consisted of both between-subjects and within-subjects analyses that analyzed both differences *between* those who participated in extracurricular activities (with those that had not) and how the student-teacher relationship differs *within* those individuals who had participated in extracurricular activities. Below is the analysis for each methodology given through an overview of the full analysis process followed by a detailed analysis for each research question.

Quantitative Analysis

All quantitative analyses were done with the software program R (R Core Team, 2022). The quantitative analyses began by reducing the scale data (i.e., the student-teacher relationship items) into factors and creating factors scores for both the 39 items related to student perceptions of their general teachers (all participants) and separately for the 39 items related to their extracurricular teachers (only those participants who indicated they participate in extra-curricular activities). The decision was made to separate these items (those about general teachers versus extra-curricular teachers) since the target of those perceptions was different (i.e., type of teacher), even though the items were worded the same. This was accomplished using a principal components analysis within the “Psych” package of R (R Core Team, 2022). For both, initial analyses based on Eigenvalues greater than one and the scree plot (Figure 3 for the general and

extracurricular teachers respectively) indicated either a one (based on the scree plot) or three factors solution (based on Eigenvalues greater than one). Examination of the items suggested that items loading more highly on factors two and three were negatively worded, thus, the decision was made to retain one factor as suggested by the scree plot. Further examination of the factor loadings for the one-factor solution (all loadings were above .20 across both analyses) were sufficient to support this conclusion (see Table 5 for factor loadings related to participants' teachers in general and Table 6 for the factor loading related to participants' extracurricular teachers). For the items related to participants' teachers in general the total variance explained was 44% and for the items related to participants' extracurricular teachers was 45%.

Additionally, each of these two scales was very high. For the data on general teacher's omega (i.e., latent reliability) was .97. For the data on extracurricular teacher's omega was .96.

Figure 3

Scree Plot for Principal Components Analysis

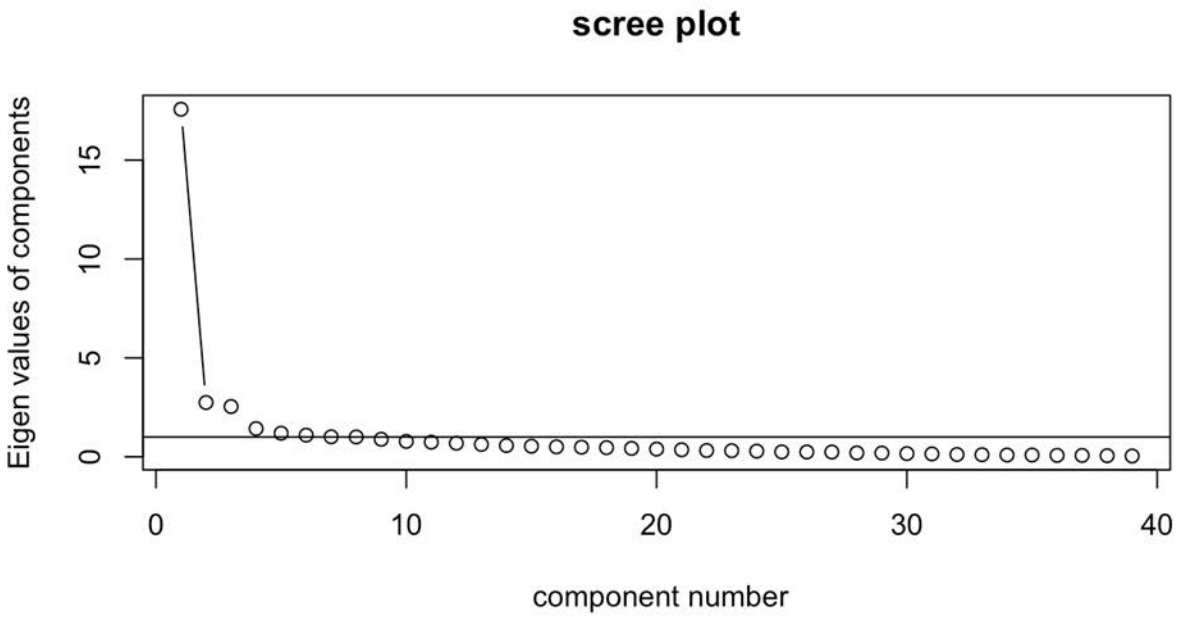


Table 5

Factor Loadings Related to Participants' Teachers in General

Item #	Item	PC1
1	My teachers like me.	0.52
2	My teachers really care about me.	0.74
3	My teachers don't seem to enjoy having me in her class. (reverse score)	0.49
4	My teachers know a lot about me.	0.61
5	My teachers know me well.	0.71

6	My teachers just don't understand me. (reverse score)	0.50
7	My teachers spend time with me.	0.69
8	My teachers talk with me.	0.72
9	My teachers are always there for me.	0.84
10	I can count on my teachers to be there for me.	0.84
11	I can rely on my teachers to be there when I need him/her.	0.80
12	My teachers are never there for me. (reverse score)	0.72
13	I can’t depend on my teachers for important things. (reverse score)	0.61
14	I can’t count on my teachers when I need him/her. (reverse score)	0.69
15	My teachers respect my feelings.	0.79
16	I feel my teachers do a good job.	0.69
17	I wish I had different teachers. (reverse score)	0.58
18	My teachers accept me as I am.	0.72
19	My teachers expect too much of me. (reverse score)	0.55
20	When we discuss things, my teachers care about my point of view.	0.74
21	My teachers trust my judgment.	0.67
22	My teachers understand me.	0.83

23	When I am angry about something, my teachers try to be understanding.	0.79
24	I trust my teachers.	0.78
25	I like to get my teacher's point of view on things I am concerned about.	0.50
26	I feel it is no use letting my feelings show around my teachers. (reverse score)	0.62
27	My teachers can tell when I am upset about something.	0.62
28	My teachers have their own problems, so I don't bother them with mine. (reverse score)	0.52
29	My teachers help me to understand myself better.	0.71
30	I tell my teachers about my problems and troubles.	0.60
31	My teachers help me to talk about my difficulties.	0.75
32	I can count on my teachers when I need to get something off my chest.	0.78
33	If my teachers know something is bothering me, they ask me about it.	0.75
34	Talking over my problems with my teachers makes me feel ashamed or foolish.	0.47
35	I get upset easily around my teachers.	0.28
36	I get upset a lot more than my teachers know about.	0.34
37	I feel angry with my teachers.	0.49

38	I don’t get much attention from my teachers.	0.59
39	My teachers don't understand what I am going through these days.	0.61

Note. These 39 items were answered by all participants on their general teachers (n=131).

Table 6

Factor Loadings Related to Participants’ Extracurricular Activity Teachers

Item #	Item	PC1
1	My extracurricular teachers like me.	0.64
2	My extracurricular teachers really care about me.	0.82
3	My extracurricular teachers don't seem to enjoy having me in her class. (reverse score)	0.62
4	My extracurricular teachers know a lot about me.	0.65
5	My extracurricular teachers know me well.	0.70
6	My extracurricular teachers just don't understand me. (reverse score)	0.59
7	My extracurricular teachers spend time with me.	0.74
8	My extracurricular teachers talk with me.	0.76
9	My extracurricular teachers are always there for me.	0.87
10	I can count on my extracurricular teachers to be there for me.	0.90

11	I can rely on my extracurricular teachers to be there when I need him/her.	0.86
12	My extracurricular teachers are never there for me. (reverse score)	0.77
13	I can't depend on my extracurricular teachers for important things. (reverse score)	0.62
14	I can't count on my extracurricular teachers when I need him/her. (reverse score)	0.75
15	My extracurricular teachers respect my feelings.	0.70
16	I feel my extracurricular teachers do a good job.	0.75
17	I wish I had different extracurricular teachers. (reverse score)	0.70
18	My extracurricular teachers accept me as I am.	0.68
19	My extracurricular teachers expect too much of me. (reverse score)	0.29
20	When we discuss things, my extracurricular teachers care about my point of view.	0.75
21	My extracurricular teachers trust my judgment.	0.71
22	My extracurricular teachers understand me.	0.84
23	When I am angry about something, my extracurricular teachers try to be understanding.	0.74
24	I trust my extracurricular teachers.	0.83
25	I like to get my extracurricular teacher's point of view on things I am concerned about.	0.61

26	I feel it is no use letting my feelings show around my extracurricular teachers. (reverse score)	0.56
27	My extracurricular teachers can tell when I am upset about something.	0.69
28	My extracurricular teachers have their own problems, so I don't bother them with mine. (reverse score)	0.32
29	My extracurricular teachers help me to understand myself better.	0.69
30	I tell my extracurricular teachers about my problems and troubles.	0.53
31	My extracurricular teachers help me to talk about my difficulties.	0.66
32	I can count on my extracurricular teachers when I need to get something off my chest.	0.72
33	If my extracurricular teachers know something is bothering me, they ask me about it.	0.63
34	Talking over my problems with my extracurricular teachers makes me feel ashamed or foolish.	0.37
35	I get upset easily around my extracurricular teachers.	0.25
36	I get upset a lot more than my extracurricular teachers know about.	0.20
37	I feel angry with my extracurricular teachers.	0.58
38	I don't get much attention from my extracurricular teachers.	0.61
39	My extracurricular teachers don't understand what I am going through these days.	0.56

Note. These 39 items were answered only by students who participated in extracurricular activities on those teachers in which they participated in extracurricular activities with (n=96).

Research Question 1. What differences emerge in students' perceptions of their student-teacher relationships between those students who participate and students who do not participate in extracurricular activities?

For research question one, these factor scores were then entered into two ANOVAs – one was a between-subjects ANOVA and the other a within-subjects (i.e., repeated measures) ANOVA. The between-subjects ANOVA was a comparison of participants' (n=131) perceptions of their teachers in general by whether or not they participated in extracurricular activities. The within-subject ANOVA only examined the students (n=96) who indicated they participated in extracurricular activities and compared their perceptions of their general teachers with those that taught extracurricular activities.

Research Question 2. Does the quality of the student-teacher relationship mediate the relation between engagement in extracurricular activities and academic achievement?

Finally, with regard to the quantitative analyses, for research question two I analyzed whether there were differences in the academic achievement between those that participated in extracurricular activities and those that did not. Initially, I intended to examine any mediating effects of perceptions of the student-teacher relationship between participation in extracurricular activities and academic achievement. However, given the null findings between participation in

extracurricular activities and perceptions of the student-teacher relationships, I modified this particular analysis as described in Chapter 4.

Research Question 3. What is the nature of the student-teacher relationships for teachers who interact with students as part of their extracurricular activities versus those who do not?

This question will be addressed more through the qualitative data that was provided from the open-ended questions of the survey.

Qualitative Analysis

The qualitative data were collected from the open-ended questions of the surveys. I used content analysis while analyzing these data, I looked to see how the students answered each question about their teachers caring for them, trusting them, and helping them. I identified if the students had a perception that was positive, neutral, or negative based on those statements. I then calculated the percentages of students who had positive, negative, or neutral statements for each response. An example of a positive comment is "my teachers help me when I don't understand an assignment by clarifying things I don't understand." An example of a neutral comment is "My teachers might trust that I will complete my assignments, but they wouldn't trust me or any student with something personal." An example of a negative response is "I could be crying, and my teacher doesn't even look at me or care."

I specifically looked at the number of responses collected for each question from students and used that total number to find the percentages for the participant perception, this was different for Research Question 1 and 3. It was different because question 1 included all

participant data (n=131) and question three included only the data collected from students who participated in extracurricular activities (n=96). If there was a response in which the participant had both a negative and a positive comment about their perspective, the response was considered a neutral one. Responses were also considered neutral if the student did not have anything specifically positive or negative to report. Having a space to report neutral comments was important to ensure that comments were not forced into being labeled as positive or negative and to not double count those that may have had both perspectives included in the response. The responses were analyzed for perceptions of care, trust, and helping.

Research Question 1. What differences emerge in students' perceptions of their student-teacher relationships between those students who participate and students who do not participate in extracurricular activities?

The open-ended survey questions were helpful here in that all students answered these questions. I was able to use the data collected through the survey tools and see how the responses differ between the two student populations. I looked at the similarities and differences from each population and compared and contrasted the data to see what differences emerge in the students' perceptions of the student-teacher relationships.

While analyzing these data with content analysis, I looked to see how the students answered each question about their teachers caring for them, trusting them, and helping them. I identified if the students had a perception that was positive, neutral, or negative based on those statements. I then calculated the percentages of students who had positive, negative, or neutral statements for each response. I specifically looked at the number of responses collected for each

question from students and used that total number to find the percentages for the participant perception. Since different groups of students (participants and non-participants of extracurricular activities) responded to different question sets and some students chose not to answer specific questions, I based the number of responses on each specific category. For example, 27 total students who did not participate in extracurricular activities responded to the questions of care and help however only 26 responded to the question of trust. If there was a response in which the participant had both a negative and a positive comment about their perspective, the response was considered a neutral one. Responses were also considered neutral if the student did not have anything specifically positive or negative to report. Having a space to report neutral comments was important to ensure that comments were not forced into being labeled as positive or negative and to not double count those that may have had both perspectives included in the response. The responses were analyzed for perceptions of care, trust, and helping.

Research Question 2. Does the quality of the student-teacher relationship mediate the relation between engagement in extracurricular activities and academic achievement?

This question was only looked at through a quantitative methodology. Due to the null findings in research question 1, this analysis was modified. However, even in this modification, data collected in the qualitative open-ended questions did not further support this question.

Research Question 3. What is the nature of the student-teacher relationships for teachers who interact with students as part of their extracurricular activities versus those who do not?

The open-ended survey questions completed by students who participate in extracurricular activities revealed the students' perceptions on the nature of the student-teacher

relationships. I juxtaposed the responses of the students about the teachers that they participate in extracurricular activities with the teachers that they see only in the classroom setting.

I analyzed the data from students who participated in extracurricular activities the same as outlined above, however, this time I looked at the students' perspective comparing their general teachers to the teachers with whom they participated in extracurricular activities.

I used content analysis while analyzing these data, I looked to see how the students answered each question about their teachers caring for them, trusting them, and helping them. I identified if the students had a perception that was positive, neutral, or negative based on those statements. I then calculated the percentages of students who had positive, negative, or neutral statements for each response. I specifically looked at the number of responses collected for each question from students and used that total number to find the percentages for the participant perception. Since some students chose not to answer specific questions on one teacher or the other, I based the number of responses on each specific category in regard to the type of teacher. For example, 72 students responded about their general teachers whereas 69 responded about their extracurricular teachers to the question of care. Again, if there was a response in which the participant had both a negative and a positive comment about their perspective, the response was considered a neutral one. Responses were also considered neutral if the student did not have anything specifically positive or negative to report. Having a space to report neutral comments was important to ensure that comments were not forced into being labeled as positive or negative and to not double count those that may have had both perspectives included in the response. The responses were analyzed for perceptions of care, trust, and helping.

Chapter Summary

This study was a quantitative study that had a survey that included closed and open-ended questions. The open-ended questions helped to add additional descriptions to the data. The study collected data from three high schools in a county in northeast Florida. The study collected survey data from 131 students at these schools. The students were in grades 10-12, no ninth graders were surveyed. These students could be participants in extracurricular activities or not, all data was valuable to inform the study.

Chapter 4: Results

The data collected from the survey show that the relationships that are formed between students and teachers with or without the interactions in extracurricular activities are unique for both students and teachers. Students were able to express detailed information about the relationship between their teachers with the open-ended survey questions to aid to the quantitative data that was collected from the Likert-type questions in the survey. Each student was different in how they felt about their relationship with their teachers, extracurricular or not. The results of my study show that there is a need for more research to be done in the area of student-teacher relationships, extracurricular activities, and academic achievement.

Descriptive Data

Of the 131 participants included in the analyses, 96 indicated that they were involved in extracurricular activities. Means for the individual survey items about students' perceptions of their teachers (indicating level of agreement with the statements with 0 meaning strongly disagree and 5 meaning strongly agree) ranged from 1.98 to 4.14. The means for these items can be found below in Table 7. Standard deviations for these items ranged from .79 to 1.40.

Table 7

Means by Scale Item for All Students' Perceptions on their General Teachers

Item #	Item	Mean
1	My teachers like me.	4.14

2	My teachers really care about me.	3.66
3	My teachers don't seem to enjoy having me in her class. (reverse score)	4.05
4	My teachers know a lot about me.	2.58
5	My teachers know me well.	2.73
6	My teachers just don't understand me. (reverse score)	3.35
7	My teachers spend time with me.	2.65
8	My teachers talk with me.	3.46
9	My teachers are always there for me.	3.11
10	I can count on my teachers to be there for me.	3.10
11	I can rely on my teachers to be there when I need him/her.	3.13
12	My teachers are never there for me. (reverse score)	3.80
13	I can’t depend on my teachers for important things. (reverse score)	3.29
14	I can’t count on my teachers when I need him/her. (reverse score)	3.61
15	My teachers respect my feelings.	3.42
16	I feel my teachers do a good job.	3.88
17	I wish I had different teachers. (reverse score)	3.41
18	My teachers accept me as I am.	3.81

19	My teachers expect too much of me. (reverse score)	3.02
20	When we discuss things, my teachers care about my point of view.	3.36
21	My teachers trust my judgment.	3.08
22	My teachers understand me.	3.04
23	When I am angry about something, my teachers try to be understanding.	2.88
24	I trust my teachers.	3.20
25	I like to get my teacher's point of view on things I am concerned about.	3.47
26	I feel it is no use letting my feelings show around my teachers. (reverse score)	2.56
27	My teachers can tell when I am upset about something.	2.76
28	My teachers have their own problems, so I don't bother them with mine. (reverse score)	2.14
29	My teachers help me to understand myself better.	2.62
30	I tell my teachers about my problems and troubles.	1.98
31	My teachers help me to talk about my difficulties.	2.35
32	I can count on my teachers when I need to get something off my chest.	2.43
33	If my teachers know something is bothering me, they ask me about it.	2.70

34	Talking over my problems with my teachers makes me feel ashamed or foolish.	2.75
35	I get upset easily around my teachers.	3.81
36	I get upset a lot more than my teachers know about.	2.20
37	I feel angry with my teachers.	3.78
38	I don't get much attention from my teachers.	3.07
39	My teachers don't understand what I am going through these days.	2.35

Note. These 39 items were answered by all participants on their general teachers (n=131).

The skew and kurtosis for these items were all within acceptable ranges for univariate normality (i.e., skew less than two, kurtosis less than seven; Finney & DiStefano, 2006). Further, students had an average GPA of 3.65 with a standard deviation of .55. GPA was also univariate normal according to Finney and DiStefano's criteria.

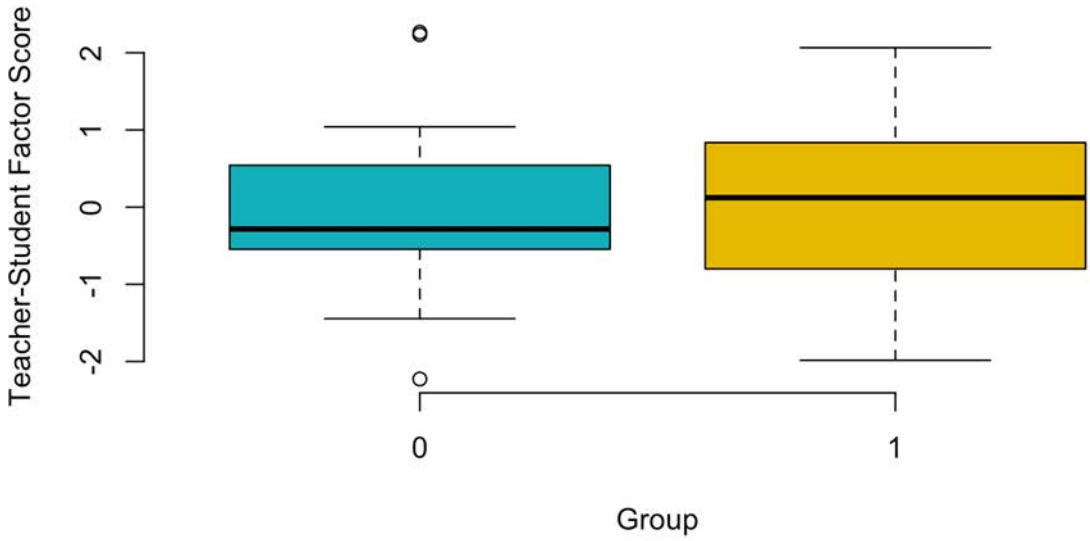
Research Question 1. What differences emerge in students' perceptions of their student-teacher relationships between those students who participated and who do not participate in extracurricular activities?

For the first research question, results of the univariate ANOVA indicated that there was no significant or meaningful difference in the students' perceptions of their student-teacher relationships generally at their school by whether or not they participated in extracurricular activities (F=.65, p=.42). Students who did not participate in extracurricular activities were

identified as group 0 and those who did participate in extracurricular activities were identified as group 1. The mean factor scores for group 0, non-participants, was -.12 and the standard deviation was .96. The mean factor scores for group 1, participants, was .05 and the standard deviation was 1.02. The box plot for this analysis is presented in Figure 4.

Figure 4

Box Plot for Between-subjects ANOVA



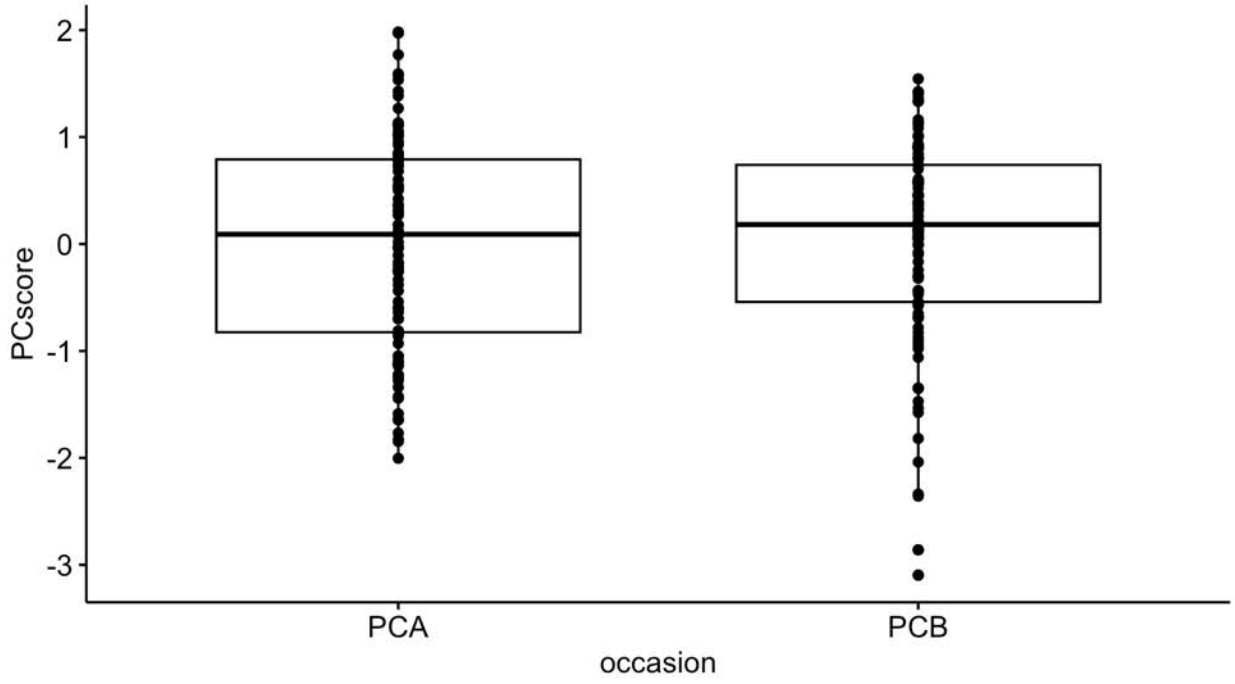
Note. Group 0 is students who did not participate in extracurricular activities. Group 1 is students who did participate in extracurricular activities.

Similarly, there was also no significant or meaningful difference for those students who participated in extracurricular activities with regard to their perceptions of their student-teacher

relationships between their extracurricular teachers and general teachers (F=.026, p=.87). The mean factor scores for their extra-curricular teachers were .01 and the standard deviation was 1.00. The mean factor scores for their general teachers were .02 and the standard deviation was .99. The boxplot is presented in Figure 5.

Figure 5

Box Plot for Within-subjects ANOVA



Note. This figure contains perception data only for those students who reported that they did participate in extracurricular activities. PCA represents student perception data on their relationships with their extracurricular teachers whereas PCB represents student perception data on their relationships with their general teachers.

Research Question 2. Does the quality of the student-teacher relationship mediate the relation between engagement in extracurricular activities and academic achievement?

Given that there were no significant or meaningful differences in their perceptions of student-teacher relationships, I only analyzed any potential relationships between whether or not they participated in extracurricular activities and if there were any significant or meaningful differences in their GPA. If there was a GPA that was above a 4.0, it was a weighted GPA (n=28). Some students reported both and indicated which was weighted and which was unweighted (n=9). The remaining GPA were classified as unweighted (n=103). The ANOVA indicated there was no meaningful or significant difference between those who did participate in extracurricular activities and those that did not participate in extracurricular activities (F=.084, p=.77).

Qualitative Data Discussion

Research Question 1. What differences emerge in students' perceptions of their student-teacher relationships between those students who participate and students who do not participate in extracurricular activities?

Though the data from the quantitative questions of the survey show that there was no significant difference between students' perceptions of their student-teacher relationships between students who participated and students who do not participate in extracurricular activities, the qualitative data collected from the open-ended questions of the survey indicated a complex relation between these constructs. While analyzing these data, I used content analysis to see how the students answered each question about their teachers caring for them, trusting them,

and helping them. I identified if the students had a perception that was positive, neutral, or negative based on those statements. I then calculated the percentages of students who had positive, negative, or neutral statements for each response. I specifically looked at the number of responses collected for each question from students and used that total number to find the percentages for the participant perception. Since different groups of students (participants and non-participants of extracurricular activities) responded to different question sets and some students chose not to answer specific questions, I based the number of responses on each specific category. For example, 27 total students who did not participate in extracurricular activities responded to the questions of care and help however only 26 responded to the question of trust. If there was a response in which the participant had both a negative and a positive comment about their perspective, the response was considered a neutral one. Responses were also considered neutral if the student did not have anything specifically positive or negative to report. Having a space to report neutral comments was important to ensure that comments were not forced into being labeled as positive or negative and to not double count those that may have had both perspectives included in the response. The responses were analyzed for perceptions of care, trust, and helping.

Similar to the quantitative data, those in extracurricular activities had a more positive perception than those not in extracurricular activities. There was an 8% difference between students who participated and those who did not on positive perceptions of their teachers caring, 15% on teachers trusting, and 31% on their teachers' helping students. Additionally, there was also some variance within these groups in terms of their perception. While those in the extracurricular group were slightly more positive in their perceptions (e.g., for care 45% had

positive perceptions versus 37% for the non-extracurricular activity group), 29% of the respondents in the extracurricular group had negative perceptions. In other words, while there were slight mean differences across the quantitative means and the percentages from their qualitative comments, there was still a great deal of variability within these groups.

Table 8

Percentage of Students' Perceptions on Student-Teacher Relationships of Students who do and do not Participate in Extracurricular Activities.

	Positive Perceptions	Neutral Perceptions	Negative Perceptions
Non- Extracurricular Perspective: Teachers Care	37%	26%	37%
Extracurricular Perspective: Teachers Care	45%	25%	29%
Non- Extracurricular Perspective: Teachers Trust	54%	35%	12%
Extracurricular Perspective: Teachers Trust	69%	16%	16%
Non- Extracurricular Perspective: Teachers Help	55%	30%	15%
Extracurricular Perspective: Teachers Help	86%	8%	6%

For the students who did not participate in extracurricular activities the negative perceptions of their teachers centered on time. Specifically, that their teachers had no time to care, had too many students that they were responsible for, or that their teachers just needed to "get through the curriculum". Students who participated in extracurricular activities tended to have a more positive attitude about their teachers. Student comments on their general teachers were centered around the curriculum and classwork.

In response to the question of care, students who participated in extracurricular activities reported positive perceptions 45% of the time compared to those who did not participate in extracurricular activities reporting positive perceptions 37% of the time. Tyler, a student who did not participate in extracurricular activities, stated "It's not that my teachers don't care about me, I just feel as though they really have no reason to so why would they." Catherine, a participant in extracurricular activities states, "Many of my teachers care, but they never disclose that we can come to them to open up." Both Tyler and Catherine were never specifically told or shown that their teachers care about them, however they have different perspectives on what this means. Catherine feels that she can still talk to her teachers because she knows they care, and Tyler doesn't see that his teachers care. Kathy, another non-participant, stated,

> "All my teachers that I have always make sure I and other students in my classes are okay. They do this when they realize something is off about me or one of the students. Like if one is being unusually quiet or another is being unusually loud. They do not yell at us, rather they pull us to the side and make sure we're okay, and if we say no and maybe start crying, the teachers usually take you outside or farther away from the rest of

> the class to discuss the issue. Sometimes teachers don't know how to help so they might send you to guidance or the nurse's office."

Ash, a participant in extracurricular activities said, "Certain teachers are open to talking to me after hours and don't make me feel bad about doing so, but others may be too busy to spend much time on my concerns and make that evident, intentional or not." Ash is comfortable going to some teachers after school to talk but feels that others are too busy to show that they care. There is a difference in these students' perceptions of their teachers caring for them that is about time and how the teacher shows that they care.

In response to the question of trust, students who participated in extracurricular activities reported positive perceptions 69% of the time compared to those who did not participate in extracurricular activities reporting positive perceptions 54% of the time. Jenn, a non-participant in extracurricular activities shared, "I just don't have much of a presence in the class for them to have the opportunity." On a positive note, Elora, another student who did not participate in extracurricular activities said, "My teachers trust me because I'm responsible and able to be trusted. I finish all my homework on time, and always volunteer to help my teacher when asked. I participate in class and answer/ask all questions I can." Robert, a participant in extracurricular activities stated, "My teachers trust me they know I'm trying my best to get my work done and try to pass." There was a common theme among all students that their general teachers trusted them to get their work done. Layla, a participant in extracurricular activities shared, "Being in a college program, teachers tend to put too much trust in their students, which is fine. Just a bit overwhelming sometimes." Students have a sense of autonomy support in their schoolwork when they feel trusted by their general teachers.

In response to the question of help, students who participated in extracurricular activities reported positive perceptions 86% of the time compared to those who did not participate in extracurricular activities reporting positive perceptions 55% of the time. Rebecca, a student who did not participate in extracurricular activities said,

> "My teachers help me when I have a problem, or even when I just have a question. Even if I were to ask 20 questions in class, my teachers would answer every single one- just to make sure I understand the material. Or, if I'm noticeably upset about something- they try to help best they can. I can tend to get frustrated when things aren't perfect/working the way I want them to- and my teachers have always been there to help me if they see I'm visibly upset. However, if they don't notice, obviously they don't do anything, but you can't blame them for that because they quite literally did not see."

Rebecca shares that her teachers are always willing to help with the curriculum and also if she needs more personal help, she feels her teachers will help her if they notice she is upset. Thomas, a participant in extracurricular activities stated, "Most of my teachers have very good advice that have to deal with both their class and my real-world problems. Sometimes, they think it too inappropriate to give me helpful advice because they are afraid to get in trouble." Thomas expresses the same feelings as Rebecca in that their teachers will help with both class and personal problems.

Due to the differences reported in the perceptions on their general teachers by students who participated in compared to those who did not, (8% difference between students who participated and those who did not on positive perceptions of their teachers caring, 15% on teachers trusting, and 31% on their teachers' helping students) it is evident that students who

participate in extracurricular activities have more positive perceptions on their teachers than those who do not participate in extracurricular activities. Students who are participants in extracurricular activities may have a stronger sense of competence and autonomy support from their participation in the activities and the relationships that they build with their teachers.

Some additional illustrative responses from students related to the notion of care, trust, and helping (pseudonyms used) can be found in table format in Appendix H.

Research Question 3. What is the nature of the student-teacher relationships for teachers who interact with students as part of their extracurricular activities versus those who do not?

The data presented from the open-ended questions of the survey show that within the students who participate in extracurricular activities relationships with their teachers are more positive overall. Relationships that students have with their extracurricular activity teachers are reported to be even more positive than those with their general education teachers. Students who participated in extracurricular activities reported a 32% difference between their extracurricular activity teachers and their general teachers on positive perceptions of their teachers caring, 14% on teachers trusting, and 21% on their teachers' helping students. When looking at the open-ended questions from the survey, looking only at results from the students who participated in extracurricular activities (n=96), the data suggest that students tend to have a more positive perception of their student-teacher relationships overall. The data also show that the relationships students hold with the teachers of their extracurricular activities are more positive than those with their general education teachers.

I analyzed the data from students who participated in extracurricular activities the same as outlined above, however, this time I looked at the students' perspective comparing their

general teachers to the teachers with whom they participated in extracurricular activities. While analyzing these data, I looked to see how the students answered each question about their teachers caring for them, trusting them, and helping them. I identified if the students had a perception that was positive, neutral, or negative based on those statements. I then calculated the percentages of students who had positive, negative, or neutral statements for each response. I specifically looked at the number of responses collected for each question from students and used that total number to find the percentages for the participant perception. Since some students chose not to answer specific questions on one teacher or the other, I based the number of responses on each specific category in regard to the type of teacher. For example, 72 students responded about their general teachers whereas 69 responded about their extracurricular teachers to the question of care. Again, if there was a response in which the participant had both a negative and a positive comment about their perspective, the response was considered a neutral one. Responses were also considered neutral if the student did not have anything specifically positive or negative to report. Having a space to report neutral comments was important to ensure that comments were not forced into being labeled as positive or negative and to not double count those that may have had both perspectives included in the response. The responses were analyzed for perceptions of care, trust, and helping. The data is presented below in Table 9.

Table 9

Percentage of Students' Perceptions on Student-Teacher Relationships between General Teachers and Extracurricular Teachers.

	Positive Perceptions	Neutral Perceptions	Negative Perceptions

General Teachers Care	45%	25%	29%
Extracurricular Teachers Care	77%	14%	8%
General Teachers Trust	69%	16%	16%
Extracurricular Teachers Trust	83%	9%	8%
General Teachers Help	65%	16%	19%
Extracurricular Teachers Help	86%	8%	6%

Overall, the students who participated in extracurricular activities had a much more positive perceptions on their extracurricular activity teachers than their general teachers. Students had positive perceptions of their extracurricular teachers 77% of the time in the area of care, 83% in the area of trust, and 86% in the area of help. Whereas when talking about their perceptions of their general teachers, the positive perceptions were 45% in the area of care, 69% in the area of trust, and 65% in the area of help. While all the perceptions were more positive than neutral or negative for both types of teachers overall, students had more positive perspectives on their extracurricular teachers. Students felt that their extracurricular activity teachers cared more, trusted more, and helped students more than their general education teacher. One student stated, “I’m 1/100 students they aren’t going to get to know me or care” (on their general teacher) and “I’m 1/12 students, they get to know you more personally” (on their extracurricular activity teachers).

In response to the question of care, students reported positive perceptions 77% of the time with their extracurricular activity teachers compared to their general teachers reporting positive perceptions 45% of the time. Victor attributes care to the time his teachers give to him. When it comes to his general teachers Victor shares "They care enough to help me if I'm struggling and are there for any student needs." When it comes to his extracurricular teachers he shares "They care by putting in time from their day for us. Our coach takes off from his job and coaches us." Time given to the students is a common theme throughout. Some students felt that their general teachers had to get through the curriculum and make sure that everyone understands the material compared to their extracurricular activity teachers who could give the students more focused time where they can show an interest in the student as an individual.

In response to the question of trust, students reported positive perceptions 83% of the time with their extracurricular activity teachers compared to their general teachers reporting positive perceptions 69% of the time. Carrie says, "My teachers don't really acknowledge my existence, so I don't know" about her general teachers whereas with her extracurricular teachers she says, "My extracurricular teacher trusts me because she often puts me in leadership positions." Leadership positions are a common theme that arise in the area of students feeling trusted by their extracurricular teachers. When students are put into a leadership role, they are given that autonomy support that is needed to continue with their high levels of engagement. Another student said that their extracurricular activity teachers trust them enough to give them responsibilities and activities to do. Most students attributed their general teachers trusting the students to their completion of schoolwork. For example, Hazel shares, "my teachers trust me to complete work to the best of my ability."

In response to the question of help, students reported positive perceptions 86% of the time with their extracurricular activity teachers compared to their general teachers reporting positive perceptions 65% of the time. Sage continues the theme of time as an important factor with sharing, "Extracurricular teachers, again, have more personalized time so they're able to help more often. It's mostly a consequence of having more time though I think." Whereas in regard to their general teacher, "They'll usually answer any questions but the depth they'll go into why depends on the teacher and lacks sometimes." Sage, along with many other student participants, recognizes the difference between each teacher. High school students in the county in this study have 6 general teachers in their course schedule each year. Each of these teachers is different and would have their own way of teaching. The number of teachers that a secondary student comes into contact with on a daily basis is something that, reflecting back to the literature, makes it more challenging to study the relationships that these students and teachers make with one another, there are so many factors and different personalities that it makes it difficult to generalize.

More examples of student quotes when it comes to their feelings on their general teachers compared to their extracurricular activity teachers can be found in the tables in Appendix I.

Conclusions

Research Question 1 Conclusion. What differences emerge in students' perceptions of their student-teacher relationships between those students who participate and students who do not participate in extracurricular activities?

While the quantitative data collected through the survey showed a slight mean difference between those who participated in extracurricular activities and those that did not, there was not

a significant difference in perceptions between these two groups. The open-ended response data show differences between the groups but illuminated the reasons for these differences. These included the time general education teachers had to spend with students and the pressures to get through the curriculum which made it difficult for those teachers to care for their students in the same way the extracurricular teachers – who did not have these same pressures – could. Students also felt that their extracurricular teachers had more individualized time to get to know their students to form the relationships on a deeper level which in turn created more situations to show care, trust, and help.

Research Question 2 Conclusion. Does the quality of the student-teacher relationship mediate the relation between engagement in extracurricular activities and academic achievement?

Given that there were no significant or meaningful differences in their perceptions of student-teacher relationships, I only analyzed any potential relationships between whether or not they participated in extracurricular activities and if there were any significant or meaningful differences in their GPA. The ANOVA indicated there was no meaningful or significant difference between those who did participate in extracurricular activities and those that did not participate in extracurricular activities.

Research Question 3 Conclusion. What is the nature of the student-teacher relationships for teachers who interact with students as part of their extracurricular activities versus those who do not?

The data presented from the open-ended questions of the survey show that within the students who participate in extracurricular activities relationships with their teachers are more

positive overall as compared to their relationships with other teachers. Further, these students also had a more positive perspective on the relationships that the students had with their extracurricular activity teachers. Students felt that they were more connected to their extracurricular teachers. Data suggests this occurs due to the many hours that these teachers spend with each student and the fact that there is typically a smaller group of students to any one teacher in an extracurricular activity. Students felt that their extracurricular activity teachers were caring, helpful, and trusting in them. Students responded to questions saying that the time with their extracurricular teachers is more personalized due to the smaller setting, so they are better able to build their relationships than with their general teachers. Students also responded about how they felt trusted by their teachers because the students were given leadership roles within their extracurricular activities.

Students who did participate in extracurricular activities also presented more positive perceptions of their general teachers. This data supports an argument that the type of student found to be a participant in extracurricular activities would be more outgoing and personable than one who does not participate in extracurricular activities. Students who are more outgoing in class could build stronger relationships with their teachers overall; general, or extracurricular.

Chapter Summary

Based on the data collected from the survey, the relationships that are formed between students and teachers with or without the interactions in extracurricular activities are unique to each individual. There was no statistical significance shown in the differences in perceptions of student-teacher relationships from students who did participate in extracurricular activities compared to those who did not. Students were able to express more detailed information about

the relationship between their teachers with the open-ended survey questions but even this information was difficult to confirm my original hypothesis. Each student was different in how they felt about their relationship with their teachers across the board. Due to the differences, there is not a blanket statement that can address these questions. Every student expressed different feelings about the teachers they had in class and the teachers they had in extracurricular activities.

Chapter 5: Discussions and Recommendations

Summary of Findings

There were three main findings from the data collected and analyzed in Chapter 4. First, overall, students involved in extracurricular activities had slightly higher mean-level perceptions about their student-teacher relationships (i.e., caring, trust, and help) than those not involved in extracurricular activities, but this difference was not statistically significant. Second, for students involved in extracurricular activities their perceptions of the student-teacher relationship were slightly higher for their extracurricular teachers than their general teachers, but again, not significantly so. Finally, there were no effects of extracurricular activity on academic achievement within this sample.

These non-significant findings were contrary to my expectations based on prior literature and my theoretical framing – namely, self-system processes (i.e., competence, autonomy, and relatedness), sense of belonging, and attachment theory. It was predicted that extracurricular activities would provide more opportunities to develop those self-system processes though increased interactions with teachers outside the regular school day. Additionally, participating in these extracurricular activities alongside the teachers that lead them would increase their sense of belonging. Finally, as has been argued for elementary-aged students (Prewett et al., 2019), more secure attachment to teachers through extracurricular activities should increase the quality of the student-teacher relationship. With the increase in quality of the student-teacher relationship should come a concomitant increase in academic achievement.

Two sets of data in particular can help shed light on this somewhat surprising finding. First, the qualitative data revealed that time was an important factor in how teachers showed

care, trust, and help. Participants made comments that it was easier for teachers to get to know the students when they were "1/12" rather than "1/100." Other participants commented that in the classroom, there were stressors put on the teacher to "get through the curriculum." Thus, there could be certain factors about an extracurricular activity that may impact the time component. For example, a sports team might spend many hours per week together and the coach might be an integral support structure within that team dynamic. By contrast, students in the robotics club may have less direct interaction with their club sponsor or interact with that extracurricular teacher in other ways. This is not to say that the latter type of interaction is bad, only to say that it may impact the types of student-teacher relationships that are built during these different types of activities. If there is an extracurricular activity that meets more frequently, then there would be more opportunity for student involvement and for more interactions with a coach/sponsor. With a coach/sponsor that is more involved in the activities, they would create more structure for the students than a coach that might be less involved. A more involved coach could also promote more autonomy support within each of the students in the extracurricular activity.

Overall, the students who participated in extracurricular activities had a much more positive perceptions on their extracurricular activity teachers than their general teachers. Students had positive perceptions of their extracurricular teachers 77% of the time in the area of care, 83% in the area of trust, and 86% in the area of help. Whereas when talking about their perceptions of their general teachers, the positive perceptions were 45% in the area of care, 69% in the area of trust, and 65% in the area of help. While looking at the difference in perspectives from the group of students that did not participate in extracurricular activities; students had positive perceptions

37% of the time in the area of care, 54% in the area of trust, and 55% in the area of help. Students who participated in extracurricular activities overall had more positive perceptions of their teachers. The students who participated in extracurricular activities reported more positive perceptions on care by 8%, trust by 15%, and help by 10%

Second, a look back at the boxplot in Figure 4 reveals that while the mean level of quality of student-teacher relationships were higher for those in extracurricular activities, the variance in this group was much wider than for those that did not participate in extracurricular activities. Indeed, many of those in extracurricular activities were much *lower* than those who did not participate. This may indicate that simply spending more time together in an extracurricular activity may not always be beneficial to the relationships that are created by the student and the teacher. If a student deems a teacher not trustworthy, simply spending additional time with that teacher is not likely to increase trust if the same teacher's behaviors are perceived as untrustworthy by the student. For instance, if a wrestling coach did not always follow through on their word (e.g., who is in the starting lineup), this could actually *decrease* trust in that teacher. This mistrust could potentially also influence students' perceptions of trust in that teacher in the classroom as well. Thus, the behaviors and dispositions of the teacher matter in building student-teacher relationships. A study by Russell et al. (2016) analyzed the teacher perspective in building student-teacher relationships. In this study they found that there were identified teacher actions such as "demonstrations of caring and establishing safety, consistency and predictability, positive communication styles), provision of supports (e.g., choice, help), characteristics of themselves (e.g. efficacy, use of social roles), building personal connections and instruction" (p.251) that help when building relationships of trust with their students (Russell et al., 2016).

It was not surprising then that there was no significant difference in students' GPA based on the non-significant differences in perceptions of the student-teacher relationship. Since researchers who conducted prior studies indicated that quality student-teacher relationships were important for support of academic achievement (Reed, 2014; McNeal, 1998; Mahoney & Cairns, 1997), the lack of significant findings regarding differences between those that participated in extracurricular activities and those that did not were likely to lead to null findings regarding academic achievement as well. Similar to my interpretations about teachers, there may be a wide variety of types of students that participate in extracurricular activities and what they expect to gain from that activity. For some students, they may aim to create closer relationships with peers and teachers (e.g., relatedness), while others might do it as a way to build skills and practice things for which they are passionate (e.g., competence). These reasons for participating in extracurricular activities may influence academic achievement (GPA in this case) in different ways – not simply by increasing it.

While these findings were far from definitive, they provide many avenues for exploration in this important topic area of student-teacher relationships and extracurricular activities. Next, I will describe implications for both future research and practice.

Recommendations for Future Research

Based on this investigation, I have two major recommendations for future research. The first recommendation is that more qualitative research – such as focus groups or interviews – would help expand on how students perceive their extracurricular and general teachers. While the open-ended questions were helpful, there are potentially much deeper explanations about

student-teacher relationships with extracurricular teachers that could be gleaned through more probing types of methods.

Second, whether a study was qualitative or quantitative, there should be a greater focus on the depth of the activity as well as the teacher. For example, analyses should specify if it is certain extracurricular activities that tend to show higher or lower levels of student-teacher relationship quality. For example, do sports versus theater activities tend to promote better student-teacher relationships? The three questions on feelings of trust, care, and help from their teachers were posed to students in an open-ended manner in this study. Through the application of the Self-Systems Process model by Connell and Wellborn (1991) to the data collected in the open-ended questions of this study, I was able to not only connect aspects of involvement but also those of structure and autonomy support. Involvement and Structure were applied through student participation in extracurricular activities. Structure was also seen in student responses to how their teachers help them. Lastly, autonomy support, this aspect correlated to the questions of trust and how students feel that they are trusted by their teachers.

Additionally, future research should examine the attributes of these extracurricular activity teachers. These attributes might be personality traits of the teachers or their stylistic approaches in their practice, how they conduct and present themselves in the classroom or extracurricular activities. Specifically, it would be helpful to know if these attributes that extracurricular activity teachers have are similar or different from teacher dispositions or behaviors for their general teachers. For instance, are students looking for extracurricular teachers to challenge them as is a hallmark of care at the middle-school level (e.g., Wentzel, 1997), or are they looking for something different?

With either of these approaches, future research should examine a more specific subset of teachers and students. For example, a study that looks solely at students who participate in athletics and the teachers that they have in their core classes. Students in secondary schools interact with so many teachers, it would be beneficial to narrow down the scope of research to particular student-teacher dyads. These dyads could look within or across a student's extracurricular and curricular teachers.

Implications for Practice

Although these findings are far from certain, there are many practices from the extant literature and suggestions that can be garnered, particularly from the open-ended responses in the survey.

Teachers have many things on their plate as they go through their daily schedules with classroom management, teaching a curriculum, differentiating instruction, etc. However, teachers must also be conscious of building relationships with their students. These relationships that are developed will benefit both the students and the teachers. Simply building these relationships in extracurricular activities is not enough, it must be carried through to the classroom as well. Martin and Collie (2019) found that when students have positive relationships with their teachers there are higher levels of academic engagement and participation. If a teacher does not participate in extracurricular activities, then the classroom is the main place where they can work to build these relationships with their students. As the qualitative data of this study show, students long for their teachers to care about them, trust them, and help them; not only academically but also as the young person they are. If teachers are not there for students, students will learn that they cannot count on their teachers (Furrer et al., 2014).

Having relationships with teachers who participate in extracurricular activities is a solid foundation for some students who participate in extracurricular activities. However, not all teachers and not all students participate in extracurricular activities. There is a population of students and teachers that go to school, teach, and learn, and go home, leaving the rest on campus.

Teachers who do not participate in extracurricular activities, and even those that do, must be sure to think about building care, trust, and help in the relationships with their students. Teachers might go about doing this in many ways. For example, teachers (and students) should get to know one another. If a teacher is unable to sponsor an extracurricular activity (because, amongst many other reasons, this is a timely responsibility), they could attend an event that their students participate in. Even more simply the teacher can ask students about the activities they participate in, or hobbies that they have if they do not participate in extracurricular activities. This is not something that has to take up precious class time either, this can be done while greeting students at the door of the classroom between each period, or if a teacher sees a student in the hall.

Another way that teachers can work to build student passions is through embedding those passions in the curriculum. This can be done, for example, by changing a math word problem to be about something students can relate to.

Trusting students is another avenue in which teachers can work to build attachment and autonomy in relationships with their students. As learned from Russell et al. (2016) teachers felt that trust should be reciprocated between the students and the teachers. From the study presented by Kim (2022), we know that students who participate in extracurricular activities tend to have

stronger leadership values. These leadership values would correlate with autonomy and trust from the teacher to the students. Students identified a teacher trusting them with autonomy. For example, many students stated that their teachers would trust them to be alone in the classroom, handle their keys, run an extracurricular meeting, or even deal with money. One student responded by saying they haven't given their teacher a reason not to trust them, indicating that the trust, though not explicitly demonstrated, was felt to be there. Students reported that their general teachers in class would either trust or not trust that they completed their assignments or did as they said. Teachers can demonstrate trust in their students in any of the ways listed above, ways that participants in this study felt trust from their teachers.

Though some of the examples listed above might be specific to extracurricular activities, there are some that can be adapted to fit the confines of the classroom. One example is that teachers can give the students a job, role, or leadership position within the classroom. Students will feel like their teacher is putting trust in them to ensure whatever the task they oversee is completed. These roles can be within learning groups, running an errand for the teacher, or even something as simple as changing the date on the board.

Lastly, another example of how teachers can be intentional in building relationships is engaging the students, no matter what level they are on. Data presented in qualitative responses indicated that, while some teachers are very helpful, some teachers are not always the most helpful to their students. Making sure that students feel comfortable, like they belong in class, can be easily done by ensuring their questions are answered and that they are getting the help that they need. Sometimes the help a student might need can go beyond what their teacher can offer, however, even directing students to the proper channels for help can be beneficial.

Based on the findings from this study, it is clear that there is more research needed on the mediating effects of student-teacher relationships and extracurricular activities. However, we are able to see the vast differences that present from the different combinations of students and teachers. Some students feel that their teachers are caring and trusting while others feel that teachers do not understand their students and the struggles they may face in their life.

To all the teachers that are reading this study, remember that building relationships with students and showing them that you care is something that never goes unnoticed. Results of a study by Wentzel et al. (2010) found that students are likely to have positive motivation, both academically and socially, when they have help and advice from both their teachers and peers (Wentzel et al., 2010). Know that the things we say and do in the classroom can have a lasting impact on the students that we interact with on a daily basis. There is an endless list of ways a teacher can be intentional on building competence, autonomy, and relatedness, sense of belonging, and attachment. The most important thing is that you find what works for you and the needs of the students in your classroom as the students and you grow and develop throughout the years.

Conclusion

Through this research, more clarification has been gained on the vast differences that are present within the realm of student-teacher relationships, specifically those in a high school setting. While the findings of this study are not statistically significant, much was learned from the open-ended responses provided by the participants. The findings from this study can be used to further add to best practices when building relationships with students to help keep students

engaged not only in extracurricular activities but also in their learning. Showing students that teachers care about them as individuals is something that will forever be important to students.

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Appendix A: UNF IRB Approval Letter

UNF
UNIVERSITY of NORTH FLORIDA.

Office of Research and Sponsored Programs
1 UNF Drive
Jacksonville, FL 32224-2665
904-620-2455 FAX 904-620-2457
Equal Opportunity/Equal Access/Affirmative Action Institution

MEMORANDUM

DATE: May 12, 2022

UNF IRB Number: 1774396-3
Approval Date: 05-12-2022
Processed on behalf of UNF's IRB 22-3.

TO: Ms. Rachael Schofield

VIA: Dr. Daniel Dinsmore
Education & Human Services Administration

FROM: Dr. Jennifer Wesely, Chairperson
On behalf of the UNF Institutional Review Board

RE: Review of New Project by the UNF Institutional Review Board
IRB#1774396-3 "Dissertation- Investigating the Mediation Effects of Student-Teacher Relationships between Extracurricular Activities and Students' Academic Achievement in High School"

This is to advise you that your above-refenced study underwent "Expedited" review on behalf of the UNF Institutional Review Board and has been approved under categories 6 and 7.

This approval applies to your study in the form and content as submitted to the IRB for review. Any modifications to the approved procedures or documents must be submitted to the IRB for review prior to implementation, including personnel changes. To submit an amendment to your approved protocol, please complete an **Amendment Request Document** and upload it along with any updated materials affected by the changes via a new package in IRBNet. For additional guidance on submitting an amendment, please contact an IRB administrator.

Please be advised that any subject complaints, unanticipated problems, or adverse events that occur are to be reported to the IRB as soon as practicable, but no later than 3 business days following the occurrence. Please use the **Event Report Form** to submit information about such events.

Upon completion of this study, please submit a **Closure Report Form** within a new package in IRBNet. Please maintain copies of all research-related materials for a minimum of 3 years following study closure. These records include the IRB-approved protocol, approval memo, questionnaires, survey instruments, consent forms, and all IRB correspondence.

Should you have questions regarding this determination, please contact the Research Integrity unit of the Office of Research and Sponsored Programs by emailing IRB@unf.edu or calling (904) 620-2455.

Appendix B: Recruitment Email

You have been invited to participate in a study being conducted by a UNF Doctoral Candidate who is a former Clay County teacher.

This research will examine student-teacher relationships and the difference they can have when looking at those between students who do and do not participate in extracurricular activities and the impact these relationships can have on student academic achievement.

Your district has granted the researcher permission to conduct the study. However, your participation is completely voluntary. There will be no impact on your education or grades with the decision to participate or not. The anticipated risks are minimal.

Your decision to take part in this study is completely voluntary. If you decide to participate, you may complete the survey at school or at home, wherever you have the time and space necessary. The survey should not take you more than 10 minutes to complete. You are free to withdraw from the study at any time if you feel uncomfortable.

Please answer the questions located in the Qualtrics survey as openly and honestly as you feel comfortable.

Thank you again for your participation,

Rachael Schofield

Appendix C: Survey Assent Letter

This is the Assent Form to participate in research that examines student-teacher relationships and the difference they can have when looking at those between students who do and do not participate in extracurricular activities and the impact these relationships can have on student academic achievement.

This is a two-phase research study conducted by Rachael Schofield, an Educational Leadership doctoral candidate for the University of North Florida. You have been invited to participate in the study because the population selected for the study are high school students, grades 10-12, who attend schools in Clay County.

Your district has granted the researcher permission to conduct the study. However, your participation is voluntary. You will be asked to participate in only the first phase of this study. You will be asked to complete a survey which explores student-teacher relationships and the differences between those relationships with general teachers and extracurricular teachers. The survey will take you approximately 10 minutes to complete. You may take the survey at school, home, or any other location that you have the allotted time. The anticipated risks are minimal.

The information collected in the survey and interviews will be anonymous so at no time would anyone have access to your personal information or any identifying information. Email addresses

are not saved for data analysis and cannot be linked to responses. Electronic consent is saved separately from survey and interview responses and will not be linked.

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Human Subjects Institutional Review Board will have access to the data set collected and may inspect the records from this research project. By law, anyone who looks at your records must keep them completely confidential.

The results of this study may be published. All the information you provide will be confidential. The published results will not include your name or any other information that would personally identify you in any way. You will not be given individual results obtained during this study.

The data obtained from the instruments will be stored in the researcher's personal computer, which will be kept in a secure location.

You will not be compensated for taking part in this study. This study will contribute to the studies in the field of education. Educational stakeholders will benefit from the findings of the study in the future.

Your decision to take part in this study is completely voluntary. You are free to withdraw from the study at any time without penalty.

If you have any questions about this study, contact Rachael Schofield at or or the Faculty Advisor of the study Daniel Dinsmore at (904) 620-2610 or daniel.dinsmore@unf.edu. If you have any questions about the rights as a research participant, please contact the chair of the University of North Florida Institutional Review Board by calling (904) 620-2498 or emailing IRB@unf.edu.

Appendix D: Inventory Of Parent And Peer Attachment

Revised Version (Armsden & Greenberg, 1989)

Trust (10 items).

1) My __ respects my feelings.

2) I feel my __ does a good job as my __.

3) I wish I had a different __. (reverse score)

4) My __ accepts me as I am.

5) My __ expects too much of me. (reverse score)

6) When we discuss things, my __ cares about my point of view.

7) My __ trusts my judgment.

8) My __ understands me.

9) When I am angry about something, my __ tries to be understanding.

10) I trust my __.

Communication (9 items).

11) I like to get my __'s point of view on things I am concerned about.

12) I feel it is no use letting my feelings show around my __. (reverse score)

13) My __ can tell when I am upset about something.

14) My __ has her own problems, so I don't bother her with mine. (reverse score)

15) My __ helps me to understand myself better.

16) I tell my __ about my problems and troubles.

17) My __ helps me to talk about my difficulties.

18) I can count on my __ when I need to get something off my chest.

19) If my __ knows something is bothering me, she asks me about it.

Alienation (6 items). (all reverse scored)

20) Talking over my problems with my __ makes me feel ashamed or foolish.

21) I get upset easily around my __.

22) I get upset a lot more than my __ knows about.

23) I feel angry with my __.

24) I don't get much attention from my __.

25) My __ doesn't understand what I am going through these days.

Appendix E: Teacher As Social Context

(TASC; Belmont, Skinner, Wellborn, & Connell, 1988)

Affection (3 items).

1) My teacher likes me.

2) My teacher really cares about me.

3) My teacher doesn't seem to enjoy having me in her class. (reverse score)

Attunement (3 items).

4) My teacher knows a lot about me.

5) My teacher knows me well.

6) My teacher just doesn't understand me. (reverse score)

Dedication of resources (2 items).

7) My teacher spends time with me.

8) My teacher talks with me.

Dependability (6 items).

9) My teacher is always there for me.

10) I can count on my teacher to be there for me.

11) I can rely on my teacher to be there when I need him/her.

12) My teacher is never there for me. (reverse score)

13) I can't depend on my teacher for important things. (reverse score)

14) I can't count on my teacher when I need him/her. (reverse score)

Appendix F: Survey For All Participants

Grade:
- 10
- 11
- 12

Age: _____

Gender: _____

Ethnicity: _____

GPA: _____

School:
- FIHS
- RHS
- KHHS

Do you participate in extracurricular activities?
- Yes
- No

Please answer the following questions while thinking about your teachers at your school in general:

Item	1	2	3	4	5
1) My teachers like me.	1	2	3	4	5
2) My teachers really care about me.	1	2	3	4	5
3) My teachers don't seem to enjoy having me in her class. (reverse score)	1	2	3	4	5
4) My teachers know a lot about me.	1	2	3	4	5
5) My teachers know me well.	1	2	3	4	5
6) My teachers just don't understand me. (reverse score)	1	2	3	4	5
7) My teachers spend time with me.	1	2	3	4	5

8) My teachers talk with me.	1	2	3	4	5
9) My teachers are always there for me.	1	2	3	4	5
10) I can count on my teachers to be there for me.	1	2	3	4	5
11) I can rely on my teachers to be there when I need him/her.	1	2	3	4	5
12) My teachers are never there for me. (reverse score)	1	2	3	4	5
13) I can't depend on my teachers for important things. (reverse score)	1	2	3	4	5
14) I can't count on my teachers when I need him/her. (reverse score)	1	2	3	4	5
15) My teachers respect my feelings.	1	2	3	4	5
16) I feel my teachers do a good job.	1	2	3	4	5
17) I wish I had different teachers. (reverse score)	1	2	3	4	5
18) My teachers accept me as I am.	1	2	3	4	5
19) My teachers expect too much of me. (reverse score)	1	2	3	4	5
20) When we discuss things, my teachers care about my point of view.	1	2	3	4	5
21) My teachers trust my judgment.	1	2	3	4	5
22) My teachers understand me.	1	2	3	4	5
23) When I am angry about something, my teachers try to be understanding.	1	2	3	4	5
24) I trust my teachers.	1	2	3	4	5
25) I like to get my teacher's point of view on things I am concerned about.	1	2	3	4	5
26) I feel it is no use letting my feelings show around my teachers. (reverse score)	1	2	3	4	5
27) My teachers can tell when I am upset about something.	1	2	3	4	5

28) My teachers have their own problems, so I don't bother them with mine. (reverse score)	1	2	3	4	5
29) My teachers help me to understand myself better.	1	2	3	4	5
30) I tell my teachers about my problems and troubles.	1	2	3	4	5
31) My teachers help me to talk about my difficulties.	1	2	3	4	5
32) I can count on my teachers when I need to get something off my chest.	1	2	3	4	5
33) If my teachers know something is bothering me, they ask me about it.	1	2	3	4	5
34) Talking over my problems with my teachers makes me feel ashamed or foolish.	1	2	3	4	5
35) I get upset easily around my teachers.	1	2	3	4	5
36) I get upset a lot more than my teachers know about.	1	2	3	4	5
37) I feel angry with my teachers.	1	2	3	4	5
38) I don't get much attention from my teachers.	1	2	3	4	5
39) My teachers don't understand what I am going through these days.	1	2	3	4	5

Please answer the following with as much detail as you are comfortable about your general teachers:

1. Describe how your teachers care/ don't care about you and give an example.
2. Describe how your teachers trust/ don't trust you and give an example.
3. Describe how your teachers help/ don't help you and give an example.

Appendix G: Survey For Participants That Participate In Extracurricular Activities

Grade:
- 10
- 11
- 12

Age: _____

Gender: _____

Ethnicity: _____

GPA: _____

School:
- FIHS
- RHS
- KHHS

GPA: _____

Do you participate in extracurricular activities?
- Yes
- No

Please answer the following questions while thinking about your teachers at your school in general (G) and then the teachers in which you participate in extracurricular activities (EC) with:

Item	Teacher G/EC	1	2	3	4	5
1) My teachers like me.	G	1	2	3	4	5
	EC	1	2	3	4	5
2) My teachers really care about me.	G	1	2	3	4	5
	EC	1	2	3	4	5
3) My teachers don't seem to enjoy having me in her class. (reverse score)	G	1	2	3	4	5

	EC	1	2	3	4	5
4) My teachers know a lot about me.	G	1	2	3	4	5
	EC	1	2	3	4	5
5) My teachers know me well.	G	1	2	3	4	5
	EC	1	2	3	4	5
6) My teachers just don't understand me. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
7) My teachers spend time with me.	G	1	2	3	4	5
	EC	1	2	3	4	5
8) My teachers talk with me.	G	1	2	3	4	5
	EC	1	2	3	4	5
9) My teachers are always there for me.	G	1	2	3	4	5
	EC	1	2	3	4	5
10) I can count on my teachers to be there for me.	G	1	2	3	4	5
	EC	1	2	3	4	5
11) I can rely on my teachers to be there when I need him/her.	G	1	2	3	4	5
	EC	1	2	3	4	5
12) My teachers are never there for me. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
13) I can’t depend on my teachers for important things. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
14) I can’t count on my teachers when I need him/her. (reverse score)	G	1	2	3	4	5

	EC	1	2	3	4	5
15) My teachers respect my feelings.	G	1	2	3	4	5
	EC	1	2	3	4	5
16) I feel my teachers do a good job.	G	1	2	3	4	5
	EC	1	2	3	4	5
17) I wish I had different teachers. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
18) My teachers accept me as I am.	G	1	2	3	4	5
	EC	1	2	3	4	5
19) My teachers expect too much of me. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
20) When we discuss things, my teachers care about my point of view.	G	1	2	3	4	5
	EC	1	2	3	4	5
21) My teachers trust my judgment.	G	1	2	3	4	5
	EC	1	2	3	4	5
22) My teachers understand me.	G	1	2	3	4	5
	EC	1	2	3	4	5
23) When I am angry about something, my teachers try to be understanding.	G	1	2	3	4	5
	EC	1	2	3	4	5
24) I trust my teachers.	G	1	2	3	4	5
	EC	1	2	3	4	5
25) I like to get my teacher’s point of view on things I am concerned about.	G	1	2	3	4	5

	EC	1	2	3	4	5
26) I feel it is no use letting my feelings show around my teachers. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
27) My teachers can tell when I am upset about something.	G	1	2	3	4	5
	EC	1	2	3	4	5
28) My teachers have their own problems, so I don't bother them with mine. (reverse score)	G	1	2	3	4	5
	EC	1	2	3	4	5
29) My teachers help me to understand myself better.	G	1	2	3	4	5
	EC	1	2	3	4	5
30) I tell my teachers about my problems and troubles.	G	1	2	3	4	5
	EC	1	2	3	4	5
31) My teachers help me to talk about my difficulties.	G	1	2	3	4	5
	EC	1	2	3	4	5
32) I can count on my teachers when I need to get something off my chest.	G	1	2	3	4	5
	EC	1	2	3	4	5
33) If my teachers know something is bothering me, they ask me about it.	G	1	2	3	4	5
	EC	1	2	3	4	5
34) Talking over my problems with my teachers makes me feel ashamed or foolish.	G	1	2	3	4	5
	EC	1	2	3	4	5
35) I get upset easily around my teachers.	G	1	2	3	4	5
	EC	1	2	3	4	5

36) I get upset a lot more than my teachers know about.	G	1	2	3	4	5
	EC	1	2	3	4	5
37) I feel angry with my teachers.	G	1	2	3	4	5
	EC	1	2	3	4	5
38) I don't get much attention from my teachers.	G	1	2	3	4	5
	EC	1	2	3	4	5
39) My teachers don't understand what I am going through these days.	G	1	2	3	4	5
	EC	1	2	3	4	5

Please answer the following with as much detail as you are comfortable about your teachers:

1) Describe how your teachers care/ don't care about you and give an example.
    a) General teachers
    b) Extracurricular teachers
2) Describe how your teachers trust/ don't trust you and give an example.
    a) General teachers
    b) Extracurricular teachers
3) Describe how your teachers help/ don't help you and give an example.
    a) General teachers
    b) Extracurricular teachers

Appendix H: Tables of Responses from Open-Ended Questions from Students who did not Participate in Extracurricular Activities

Table 10

Quotes in Response to their General Teachers Caring/not Caring about their Students from Students who do not Participate in Extracurricular Activities.

Student	Illustrative Quote
Tyler	It's not that my teachers don't care about me, I just feel as though they really have no reason to so why would they.
Kathy	All my teachers that I have always make sure I and other students in my classes are okay. They do this when they realize something is off about me or one of the students. Like if one is being unusually quiet or another is being unusually loud. They do not yell at us, rather they pull us to the side and make sure we're okay, and if we say no and maybe start crying, the teachers usually take you outside or farther away from the rest of the class to discuss the issue. Sometimes teachers don't know how to help so they might send you to guidance or the nurse's office.
Sarah	When I am struggling my teachers think I'm lazy even and ONLY tolerate missing work if I bring a signed note from parents (ex. Homework not being done when I normally always do it). If I forget or don't do my homework I will say so even if I get in trouble, but if I am going through something or if something out of my control happens and I can't do my work my teachers will roll their eyes and indirectly degrade for "being lazy¨" and not doing my work.

Table 11

Quotes in Response to their General Teachers Trusting/not Trusting their Students from Students who do not Participate in Extracurricular Activities.

Student	Illustrative Quote
Elora	My teachers trust me because I'm responsible and able to be trusted. I finish all my homework on time, and always volunteer to help my teacher when asked. I participate in class and answer/ask all questions I can.

Jenn	I just don't have much of a presence in the class for them to have the opportunity
Matthew	Teachers trust when you say you finished an assignment. Teachers might not trust you when you tell them you finished work when you usually never finish your work.

Table 12

Quotes in Response to their General Teachers Helping/not Helping their Students from Students who do not Participate in Extracurricular Activities.

Student	**Illustrative Quote**
Lillian	I rarely ask for help in class, so I don't have much experience in this category, but whenever I do ask, and even sometimes when I don't, I receive all the help I need.
William	Teachers help when you ask questions, they try their best to answer honestly. Teachers don't help when you might have a bad grade in their class and give you and bad explanation to why.
Rebecca	My teachers help me when I have a problem, or even when I just have a question. Even if I were to ask 20 questions in class, my teachers would answer every single one- just to make sure I understand the material. Or, if I'm noticeably upset about something- they try to help best they can. I can tend to get frustrated when things aren't perfect/working the way I want them to- and my teachers have always been there to help me if they see I'm visibly upset. However, if they don't notice, obviously they don't do anything, but you can't blame them for that because they quite literally did not see.

Table 13

Quotes in Response to their General Teachers Caring/not Caring about their Students from Students who do Participate in Extracurricular Activities.

Student	**Illustrative Quote**

Ryan	My teachers care about me by asking if I am okay if I do something that is not normal. Teachers don't care about me when I have reasonable examples to why I could not complete something for personal reasons, but they don't understand.
Catherine	Many of my teachers care, but they never disclose that we can come to them to open up.
Ash	Certain teachers are open to talking to me after hours and don't make me feel bad about doing so, but others may be too busy to spend much time on my concerns and make that evident, intentional, or not.

Table 14

Quotes in Response to their General Teachers Trusting/not Trusting their Students from Students who do Participate in Extracurricular Activities.

Student	**Illustrative Quote**
Danielle	they trust me to get my work done but we don’t hold a relationship beyond that
Layla	Being in a college program, teachers tend to put too much trust in their students, which is fine. Just a bit overwhelming sometimes.
Robert	My teachers trust me they know I'm trying my best to get my work done and try to pass.

Table 15

Quotes in Response to their General Teachers Helping/not Helping their Students from Students who do Participate in Extracurricular Activities.

Student	**Illustrative Quote**
Zoe	My teachers do help me, I have issues sometimes with work or I will misunderstand an assignment and they will work with me to try and help me figure it out and explain the best that they can.
Tanner	Whenever I have a question about something, they will always help me out. For example, I didn't understand how exactly the volunteering hours work, so I asked my chemistry teacher, and he exampled it all to me.
Thomas	Most of my teachers have very good advice that have to deal with both their class and my real-world problems. Sometimes, they think it too inappropriate to give me helpful advice because they are afraid to get in trouble.

Appendix I: Tables Of Responses From Open-Ended Questions From Students Who Did Participate In Extracurricular Activities

Table 16

Student Perceptions on their Teachers and Extracurricular Teachers Caring/not Caring about them.

Pseudonym	On their General Teacher	On their Extracurricular Teacher
Zach	care make sure I'm on track	care a lot about me to be honest checks on me every day and makes sure I'm on path for greatness
Victor	They care enough to help me if I'm struggling and are there for any student needs.	They care by putting in time from their day for us. Our coach takes off from his job and coaches us.
Colleen	I could be crying, and my teacher doesn't even look at me or care.	Coach W has always been there for me, if I tell her my problem, she helps me work it out and asks about it to see if it goes better. She also knows when I'm upset because she looks to see how I'm doing.

Table 17

Student Perceptions on their Teachers and Extracurricular Teachers Trusting/not Trusting them.

Pseudonym	On their General Teacher	On their Extracurricular Teacher
Hazel	my teachers trust me to complete work to the best of my ability	Gives me keys on occasion, even after I've misplaced them briefly
Carrie	My teachers don't really acknowledge my existence, so I don't know	My extracurricular teacher trusts me because she often puts me in leadership positions
Daniel	My teachers trust me quite a bit. There are many times when my teachers and I have	My cross-country coach trusts me quite a bit as well. Often there are times when he comes to me to see if something is true or

	conversations that take away the teacher student relationship, and we can just talk as people.	not, and I believe he always leaves knowing that I told the truth.

Table 18

Student Perceptions on their Teachers and Extracurricular Teachers Helping/not Helping them.

Pseudonym	On their General Teacher	On their Extracurricular Teacher
John	Most of my teachers are very willing to provide help and answer questions as necessary. For example, my French teacher is more than willing to answer any questions if we stumble upon a word that I do not know	Once again going back to my history teacher/former cross-country coach, he probably knows who I am the best out of all my teachers. Given that history is one of my strong suits, I don't really ever ask any questions, but he is aware of how me and the rest of the class are. Sometimes, he'll postpone deadlines as necessary if the schedule of the class is getting too tight
Michael	They explain things and allow for extended time or create time for me to come back after school.	They're more than willing to help anytime I ask for help with pretty much anything.
Sage	They'll usually answer any questions but the depth they'll go into why depends on the teacher and lacks sometimes.	Extracurricular teachers, again, have more personalized time so they're able to help more often. It's mostly a consequence of having more time though I think.