UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

A STUDY OF STUDENT TRUST IN TEACHERS IN A SUBURBAN SCHOOL DISTRICT

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

EDUCATIONAL ADMINISTRATION: CURRICULUM SUPERVISION

DOCTOR of EDUCATION

By

BRENDA S. SHAW
Norman, Oklahoma
2022

A STUDY OF STUDENT TRUST IN TEACHERS IN A SUBURBAN SCHOOL DISTRICT

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY THE COMMITTEE CONSISTING OF

Dr. Curt Adams, Chair

Dr. Timothy Ford

Dr. Beverly Edwards

Dr. Chad Johnson

© Copyright by BRENDA S. SHAW 2022
All Rights Reserved

Dedication and Acknowledgements

Dedication

For my amazing husband, Doc. Your inspiration and constant encouragement kept me going.

Acknowledgements

I would like to first offer my sincere gratitude and appreciation to my dissertation committee, Dr. Curt Adams, Dr. Timothy Ford, Dr. Chad Johnson, and Dr. Beverly Edwards. I would like to extend that gratitude to Dr. Patrick Forsyth, Professor Emeritus, as well. The opportunity to learn from each of you is something I will always treasure. Each of you have encouraged me, challenged me, and given me the determination I needed to finish this process rather than giving up! And you hung in there with me so I could eventually earn the most expensive EdD in OU history!! I am truly eternally grateful to each of you.

I would like to offer my thankfulness and appreciation to my family and friends who have continually offered me support, encouragement, and understanding throughout this process. I truly love you all!! To my husband, Doc, I would not have started, nor would I have finished without you! You continually inspired me, and you fussed at me and pushed me when all I wanted to do was quit. You refused to allow me to give up, and I am grateful beyond measure. To Dr. Kelsey, you too inspired me more than you could possibly know. I watched you work so hard, I saw your frustration, but most of all I saw your determination, and it was the motivation I needed. Derek and Ryan, you both continually cheered me on, and perhaps made fun of me, and that too inspired me to keep going!! Ryan – I'm going to need a new t-shirt! Last but not least, Lester, Retsel, ShaTina, and Harmoni thank you so much for continually encouraging me along

the way. To our grandbabies, I hope we can be an inspiration to you that anything is possible – regardless!

Finally, I want to thank my BPS family. Mr. Rob Miller, Superintendent, thank you for believing in this research, and for allowing me to look inside our district to see what we already knew, that our team is simply the best! Lydia Wilson, your encouragement, faith in me, and mentorship has meant more than you could ever know. To the other BPS Administrators, YOU inspire me to be better every day! You are truly an incredible lot, and I am so happy to be on this journey with you. Finally, the teachers and staff on my team, I love you all and I am in constant amazement of what you do every day for our kids, and for your love and tolerance for me!! Thank you for inspiring me, teaching me, and understanding me every day. You are truly the BEST!!

Contents

Introduction……………………………………………………………………………....1

Statement of the Problem……………………………………………………………..5

Statement of the Purpose……………………………………………………………...7

Definition of Terms……………………………………………………………………..8

Organization of Dissertation………..……………………………………………10

Review of Literature……………………………………………………………………11

Definition of Trust…………………………………………………………………...11

Conditions of Trust……………………………………………………………………12

Facets of Trust…………………………………………………………………………15

Relational Trust………………………………………………………………………..18

Three Levels of Relational Trust……………………………………………………19

Trust Comparison……………………………………………………………………...21

Collective Trust………………………………………………………………………...22

Organic Trust…………………………………………………………………………23

Contractual Trust……………………………………………………………………...24

Trust Effects…………………………………………………………………………..25

Trust as a Facilitator of Social Exchanges………………………………..………25

Trust as an Activator of Motivation……………………………………..……….26

Literature Review Summary..……….………………………………………..…….28

Theoretical Framework………………...…………………………………………30

Introduction to the Theoretical Framework………………………………………30

Collective Trust Theory….…………………………………………………………30

Self Determination Theory…………………………………………………………33

Instructional Styles of Teachers and Student Trust………………………………34

Student Trust in Teachers and Engagement.………………………………………..35

Research Methods……………………………………………………………………38

District Context……………………………………………………………………….39

Data Source……………………………………………………………………………40

Measures Included in the Survey………………………..…………………………41

Trust Measures………………………………………………………………………41

Autonomy Support……………………..……………………………………………………41
Competence Support………..……………………………………………………….…42
Student Engagement…………….…..…………………………………………………42comp
Analytical Technique………………………………………………………………...42
Limitations of the Research Design…………………………………………………44
Results……………………………………………………………………………………...47
Student Perceptions of Teacher Trustworthiness…..………………………….........47
Student Trust in Teachers by School and by Grade Level……………………..........55
Student Trust and Instructional Styles of Teachers…………………………………60
Student Trust and Engagement..……………………………………………………..61
Research Results Summary…….…………………………………………………..…62
Discussion…………..……………………………………………………………………...64
Introduction to Discussion………………………………………………………...64
Student Endorsement of Trust Facets..…………………………………………….…65
Task Context and Student Trust……………………………………………………66
Competency and Autonomy Supportive Instruction and Student Trust…………...…68
Student Engagement and Student Trust….……………………………….….……71
Relevance for 21st Century Education………………………………….........…72
Limitations and Implications for Future Research……..………………………….....73
References…….…………..…..……………………………………………………….…76
Appendix…………..……………..………………………………………………………...85

List of Tables

Table 1. Descriptive Statistics by Facets of Trust……….……………………………….….…48

Table 2. Descriptive Statistics by School/Grade Level and Student Trust in Teachers..………..55

Table 3. Descriptive Statistics by Grade Level and Student Trust in Teachers..………………..56

Table 4. Analysis of Variance (ANOVA)…….…………………………………………………57

Table 5. Post Hoc Test for Multiple Comparisons……...……………………………………….58

Table 6. Regression for Student Trust in Teachers and Instructional Styles of Teachers..……...61

Table 7. Regression Examining Relationship between STT & Student Engagement…..……..…62

List of Figures

Figure 1. Benevolence with an Emphasis on Helpfulness..…………………….……...……..49

Figure 2. Openness……………………………………………………………………..50

Figure 3. Benevolence with an Emphasis on Caring…………………….………………..51

Figure 4. Reliability,……………………………………………………………..……..52

Figure 5. Honesty……………………….……...……………………………………….53

Figure 6. Competence…………………………………………………………………..54

Figure 7. Estimated Means of Student Trust in Teachers…...……………………….……....59

Abstract

The formations, differences, and effects of student trust were examined in a midsized suburban school district where a sample of 1086 fourth, fifth, and sixth grade students were surveyed. Four research questions guided the study: Which facets of trust received the highest endorsements from students in relation to student trust in teachers? Are there differences in student trust in teachers by school? By grade level? What is the relationship between student trust and instructional styles of teachers? What is the relationship between student trust and engagement in school? Descriptive and summary analyses were performed on data to examine the relationship between the facets of trust, instructional styles of teachers, and student engagement. Evidence yielded the following claims: Students perceived teachers as being more benevolent, reliable, and competent than open and honest; Instructional styles experienced as supportive of student autonomy and competence were related to student trust in teachers; and student trust in teachers had a strong relationship with student engagement.

Chapter 1: Introduction

From the progressive reforms of John Dewey in the 1820's, to the monumental Supreme Court case, *Brown v. The Board of Education* in 1954, and to No Child Left Behind and Common Core, educational reforms have sought to raise student achievement with grand and expensive interventions (NCES, 2020). Policies and interventions have largely attempted to address achievement problems by controlling at the federal and state levels what schools and teachers do in classrooms to stimulate learning (NCES, 2020). In order to bridge the gap between reform visions and what actually happens in classrooms, teachers need an accentuated voice in policy making and implementation. Most policy makers do not recognize the value of teacher input (NCES, 2020). As such, some reform results have been positive, like integration of schools, but more often than not educational problems targeted by policies remain unchanged (Haug & Mork, 2021). For instance, achievement gaps, especially in minority children, persist and teachers continue to leave the profession leading to major turnovers every five years or less, and arguments surrounding the effectiveness of school assessments continue to cloud efforts (Haug & Mork, 2021). Reforms have simply failed to achieve their objectives (Romero et al., 2020).

Many students, especially those who come from impoverished backgrounds, continue to show signs of not being college/career ready. In fact, more than one-third of America's students require remediation when they enter college (Clough & Montgomery, 2015). Although there has been a decline in the dropout rate of students, the rate of dropouts that come from families living below the poverty level is still 4.5 times higher than those from moderate to high income families in spite of the increase in federal program funds (NCES, 2020). Student achievement for the past twenty years has remained flat, even though federal funding of primary and secondary education has increased (Bentsen, 2016). Pundits like Bentsen (2016) have concluded that federal education reforms have failed to achieve the goals of raising and equalizing achievement.

Whether the failure to achieve policy objectives is due to lack of funding or poor execution, the fact remains that the same excuses related to failed education reforms are made on both the federal and state level. In spite of the repeated policy changes by the federal government, those such as Race to the Top and No Child Left Behind tend to leave too many students behind (Bentsen, 2016). The answer to systematic change may not come from specific policy reforms but may instead be found within the research on trust.

Baier (1994) said, “Trust is the assurance that one can count on the good will of another to act in one’s best interest.” In our society, we send children to school with the expectation they will be safe as well as be taught in accordance with our shared values and ideals (Tschannen-Moran, 2004). In order to meet those expectations, it is necessary for schools to have cohesive and cooperative relationships, and trust is essential to fostering those relationships (Tschannen-Moran, 2004). However, the very necessity of trust can be thwarted by the organizational dynamics that tend to complicate things through the hierarchical relationships (Tschannen-Moran, 2004). For example, federal and state mandates or directives that may come from district, state or federal entities.

A consequence of federal and state reforms is that schools have become dependent on tangible resources to strengthen instructional programs. Increased capital investment, however, is not likely to translate into desired outcomes unless structures and processes become more responsive to student needs (Adams, 2014; Noguera, 2008). Funding and resources are required for effective educational programs, but school reform efforts have a long history of throwing money at performance problems without any large-scale, sustained improvement (Adams, 2014;

Fullan 2010; Grubb, 2009; Grubb & Allen, 2011; Hess, 1999). Tangible resources are inconsequential if the internal capacity within students is not developed (Deci & Ryan, 2000, 2008). The foundation for greater student capacity comes from a social environment that students experience as supportive, engaging, and motivating (Adams et al., 2016), and policy reforms have not resulted in such conditions at scale (Bentsen, 2016).

Results from national student surveys point to a student capacity problem within many US schools struggling to inspire the innate capacity within students. In 2019, Gallup reported a study of 128 schools and more than 11,000 students with questions related to student engagement and hope. Student engagement and hope were significantly positively related to student academic growth in math and reading, as well as in all subjects combined. With a focus on student engagement and hope, along with a strong Social-Emotional Learning curriculum, many school leaders believe the tide of educational reforms may be turning towards more success (Reckmeyer, 2019). Gallup's founder Don Clifton argues that "Our greatest contribution is to be sure there is a teacher in every classroom who cares that every student, every day, learns and grows and feels like a real human being" (Reckmeyer, 2019). The Gallup survey shows that there is work to do. Approximately 50% of the students surveyed were considered to be engaged, with 50 percent of respondents also stating that they were bored in school (2019). When questioned about hope, approximately 50% of students felt hopeful about their future. These findings suggest that nearly half of the students do not feel engaged, are bored in school, and have diminished hope, troubling findings for an educational system that has invested heavily in finding programs or policies that work.

Alongside the Gallup survey, Desautels (2015) surveyed a variety of educators and students from three large school districts. Students responded to two questions: (1) *What does* *your teacher say to you that feels encouraging or motivating? (2) What do you want to hear from your teacher about your performance or disposition in school?* Desautels (2015) found that overwhelmingly, the students' responses indicated the desire for teachers who believe in them, can help them find their purpose, who challenge them, and show interest in students' ideas and knowledge. From this informal study, students exhibited the desire for dedicated teachers who challenge them in learning activities and who support their overall learning and growth (Desautel, 2015).

Results of the Gallup survey and Desautel's (2015) findings illustrate the importance of hope and engagement for student academic success. The evidence of the erosion of those things emphasizes why student trust in teachers matters. Students want teachers who care (benevolent), who are competent and can show them their purpose while also challenging them. Students also desire teachers who show an interest in them, their ideas, and knowledge. These characteristics build trust. Student trust is a catalyst for hope and engagement (Desautels, 2015).

Hoy and Tschannen-Moran (1997) argued that trust is the critical element in all of human learning. Trust leads to the engagement, hopefulness, and motivation that seems to be missing from the educational experience of so many students (Forsyth et al., 2011). Research has also established that student trust in teachers has positive motivational and behavioral consequences (Hoy & Tschannen-Moran, 1997; Forsyth & Adams, 2014). Ryan, Stiller, and Lynch (1994) found that when teachers were perceived as caring and honest, students experienced greater motivation (Adams et al., 2015). Trust enables students to put forth quality effort in school and become autonomous learners, students must have trust in teachers so the necessary type of risk taking is prevalent (Hoy & Tschannen-Moran, 1997). Student trust establishes the relational infrastructure to transmit autonomy and competence-building experiences (Adams, et al, 2015;

Reeve, 2006). Stated simply, trust is an essential resource for healthy communities, schools, teachers, and students (Bryk & Schneider, 2002; Forsyth, Adams, & Hoy, 2011; Tschannen-Moran, 2014).

Wu, Hughes, and Kwok completed a study in 2010 in an elementary school looking at the teacher-student relationship and the effect on student engagement. When teachers rated the teacher/student relationship quality as average to good, students had more engagement and higher achievement over the next three years than those who rated the teacher/student relationship quality as low. What the researchers did not predict was that teachers who rated the teacher/student relationship quality as average also experienced more student engagement and higher achievement over the next three years as well. According to the researchers, even when the relationship is seen as “good enough,” a positive difference is made on engagement and achievement. Trust is the foundation for generative teacher-student relationships (Wu et al., 2010).

Statement of the Problem

Research on student trust in teachers is closely associated with an array of important school outcomes (Bryk and Schneider 2002). Currently, however, research about individual student trust, and whether or not it matters, is still emerging (Romero, 2015; Adams, Forsyth & Mitchell, 2009). Adams (2014) states that, “With knowledge expanding on the role of trust in effective schooling, it is surprising that relatively little effort has been made to study student trust (p. 136). In 2010, Adams presented an empirical study related to the formation of student trust in teachers, and from that research, further studies have emerged. Adams’ initial research focused on collective trust involving multiple stakeholders. In more recent years, however, the research has included the consideration that student trust in teachers, along with faculty trust and student perceived academic emphasis, combine to form a self-regulatory climate that is beneficial to students and their academic success (Adams et al., 2016).

Given the importance of student trust in student learning it is vital that educators understand how to create an environment that is conducive to a trusting relationship with their students (Adams, 2010). High levels of learning are not likely to occur without a nurturing environment that includes trust because schools are social systems (Bryk & Schneider, 2002). However, one reason why questions related to the importance of student trust in teachers remain unaddressed is that there seems to be a relentless focus on physical artifacts of schooling, such as organization, curriculum, testing and accountability. There is an ensuant lack of attention to the non-cognitive attributes of an effective student-teacher relationship (Romero, 2015).

We know that trust between teachers, principals and parents impacts student achievement and is a necessary ingredient for successful school reform because the importance of that trust has been well established (Romero, 2015). In an environment of student trust, students are more likely to risk being vulnerable by asking clarifying questions and engaging in help-seeking behavior, both of which are important to student growth and achievement (Romero, 2015). When students trust their teacher, they are more likely to adopt the goals of the teacher and to be compliant with teacher requests. The students are also less likely to exhibit defiant behaviors and there is a diminished need by the teacher to use strategies that demand compliance. (Mitchell & Spady, 1983; Gregory & Ripski, 2008). When students have a high level of trust in their teacher, they are more likely to align with the goals and values of the school as well (Gregory & Ripski, 2008). More research to solidify the importance of student trust in teachers holds important implications for school and district improvement efforts (Romero, 2015)

Statement of the Purpose

This study sought to address knowledge gaps by studying student trust in teachers in a suburban school district. The purpose was to gather and examine descriptive evidence to determine how trust facets may differ in student discernments of teachers. Additionally, the study was designed to test for differences in student trust in teachers across school and grade levels; to examine the relationship between teacher's instructional styles and student trust; and to examine the relationship between student trust in teachers and indicators of student engagement. The following research questions guided the study:

1. Which facets of trust received the highest endorsements from students in relation to student trust in teachers?
2. Are there differences in student trust in teachers by school? By grade level?
3. What is the relationship between student trust and instructional styles of teachers?
4. What is the relationship between student trust and engagement in school?

Definition of Terms

Trust –The condition of vulnerability and risk-taking by individuals or groups who have confidence that others will act in positive ways such as benevolence, reliability, competence, honesty, and openness (Forsyth, Adams, & Hoy, 2011).

Interdependence – Relationship building through the process of relying upon one another (Adams, & Hoy, 2011).

Vulnerability – An interpersonal relationship that is based on the vulnerability of one person to the actions and decisions of another person (Forsyth, Adams, & Hoy, 2011).

Risk – The perception of the likelihood of loss (Forsyth, Adams, & Hoy, 2011).

Facets of Trust – Characteristics of behavior that could lead a person to trust another person or group (Hoy & Tschannen-Moran, 1999).

Benevolence – Confidence that a trusted person or group intends to protect another's well-being or something they care about (Hoy & Tschannen-Moran, 1999).

Reliability – The ability of one person to count on another (Hoy & Tschannen-Moran, 1999),

Competence – The ability of one to have the skills necessary to complete the required task at hand (Hoy & Tschannen-Moran, 1999).

Honesty – The combination of character, integrity, and authenticity held by a person (Hoy & Tschannen-Moran, 1999).

Openness – The willingness of a person to share information that could result in vulnerability (Hoy & Tschannen-Moran, 1999).

Relational Trust – Defined role sets where the social exchanges of schooling occur (Bryk & Schneider, 2003).

Collective Trust – Shared perceptions of the trustworthiness of a group or individual that emerges over time out of numerous social exchanges between them (Adams, 2014; Forsyth, et al., 2011).

Organic Trust – When individuals believe in the rightness of a social system or the moral character of the leadership of that system and unconditional trust is given (Bryk & Schneider, 2002).

Contractual Trust – Trust that is based on a particular outcome or product (Bryk & Schneider, 2002).

Self-Determination Theory – A theory that defines the intrinsic and varied extrinsic sources of motivation as well as the description of the roles of motivation in cognitive and social development and in individual differences (Deci & Ryan, 2000).

Basic Psychological Need – Essential psychological nutrients for one's adjustment, integrity, and growth (Ryan, 1995).

Autonomy – When one is given the freedom to experience volition and willingness (Vansteenkiste & Ryan, 2013).

Relatedness – Connecting to and feeling significant to others while experiencing warmth, bonding and care (Vansteenkiste & Ryan, 2013).

Competence – Exhibited mastery and effectiveness (Vansteenkiste & Ryan, 2013).

Organization of Dissertation

Chapter 1 introduces the study of student trust in teachers. It does so by describing the larger context, identifying the problem the study addresses and specifying the purpose. Chapter 2 synthesizes aspects of trust. The synthesis establishes a working definition of trust, describes components and conditions of trust, explains the benefits of trust, and highlights the consequences of distrust. Chapter 3 describes the theoretical framework that is used to guide the empirical study. The framework includes evidence from collective trust theory and self-determination theory. Chapter 4 describes the methods used for the empirical study. This includes the research design, data source, measures, and analytical techniques. Chapter 5 presents results of the research questions. The dissertation concludes with chapter 6, the discussion. In this chapter, knowledge claims are written based on the results and the theoretical framework. Chapter 6 concludes with implications for further research.

Chapter 2: Literature Review

This review of literature provides the foundation for exploring the formations, differences, and effects of student trust in a suburban school district. The review begins by examining the evolution of trust, a concept that has been empirically studied for more than fifty years. Next, conditions and facets of trust are described, and the properties of relational trust are differentiated from collective, organic, and contractual trust. The literature review concludes with evidence on trust effects and costs of distrust.

Definition of Trust

Although trust appears to be a simple concept to understand, it is actually a complex psychological and sociological phenomenon that consists of different elements that are dependent on one another, such as interdependence, vulnerability, and risk (Hoy & Tschannen-Moran, 1999). Early researchers offered varying definitions of trust that included elements of cooperation, confidence, and predictability (Tschannen-Moran & Hoy, 2000). Deutsch (1958) claimed that an “individual must have confidence that the other individual has the ability and intention to produce [trust]” (p. 556). Similarly, Gambetta (1988) argued that to trust someone means “the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him” (p. 213 – 237). Gambetta, et al. (1988) suggested that trust is partly wrapped up in one’s confidence toward another party.

Gambetta (1988) went on to expand the meaning of trust by introducing the idea of vulnerability. He argued that trust reflects “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p. 712). Mayer et al., (1995) asserted that trust could often lead to cooperative behavior, and like Gambetta, they considered vulnerability as an important element of trust. Luhmann (1988) argued that both trust and confidence refer to expectations that may lead to disappointment, but trust differs from confidence because it requires a previous engagement on a person's part and recognition and acceptance of a potential risk.

As definitions of trust evolved throughout the years, researchers accounted for the complexity of trust by identifying elements such as confidence, cooperation, and predictability. Considering the evolution of the definition of trust detailed above, the definition given by Forsyth et al., (2011), is appropriate for this research as it seems to consider the elements of Deutsch (1958), Gambetta (1988), and Luhman (1988), in addition to Mayer et al.(1995). Forsyth et al., (2011) defined trust as, "a state in which individuals and groups are willing to make themselves vulnerable to others and take risks with confidence that others will respond to their actions in positive ways, that is, with benevolence, reliability, competence, honesty, and openness" (p. 19-20). By describing conditions required for trust and facets of trustworthy behavior, a layered definition broadens this view on trust.

Conditions of Trust

Three basic conditions are necessary for trust: vulnerability, risk, and interdependence (Forsyth et al., 2011). According to Forsyth et al., (2011), these conditions provide the common elements that build the basis for trust in social relationships. Trust in social relationships, such as students and teachers, requires interdependence, it involves vulnerability, and it emerges through risk.

Interdependence refers to the process of relationship building through reliance upon one another (Forsyth et al., 2011). The more interdependence there is, the greater the need for trust. Rousseau et al., (1998) claim that interdependence occurs only when the interests of one party cannot be achieved without relying on another party. Success in the classroom may be determined by a student's interactions with the teacher, and often through collaboration with fellow students (Forsyth et al., 2011). Students and teachers naturally depend on one another. Teachers depend on students to achieve academic goals and students depend on teachers to provide opportunities for learning. Critical thinking skills develop through learning from one another. Interdependence, a foundation for a student-teacher trust relationship, grows as the student relies on the teacher for opportunities for learning as well as providing a safe environment conducive for learning (Forsyth et al., 2011). Interdependence is a recurrent condition for a student-teacher trust relationship.

Vulnerability, another condition for trust, is based on an interpersonal relationship where one person is vulnerable to the decisions and actions of another (Forsyth et al., 2011). All students naturally feel vulnerable to teachers because of the implication of the teacher's power over the students in the classroom. Students' vulnerability exists not only because of the power dynamic but also because of their age and the expectation of the teacher's authority (Tschannen-Moran & Hoy, 2000). In the academic context, students express their vulnerability when they willingly give an answer aloud in the classroom or when they turn a paper in to the teacher. Without vulnerability there is no need for trust as there is none involved in the relationship.

Risk-taking behavior completes the three primary conditions for trust (Forsyth et al., 2011). Forsyth et al., (2011) define risk as "perceived probable loss" (p. 17). Risk is created by the uncertainty of knowing the intentions of one party to act in the best interests of another party.

(Lewis & Weigart, 1985). In certain situations, trust is considered a choice. Trust strengthens when the expected positive behavior occurs. When faced with uncertainty of intentions, one is expected to act with positive behavior, and trust opportunities develop because one must take the risk in trusting the other person (Forsyth et al., 2011). Within the context of the classroom, a student, depending on experience, may or may not expect the teacher to behave in a manner that is trustworthy, thereby not warranting the student to engage in risk-taking behavior. Such behavior could be something as small as the student not raising his hand to offer an answer. If the student is unwilling to take risks in the classroom, the positive student-teacher trust relationship struggles to be present.

In summary, the combination of interdependence, vulnerability, and risk determine the degree of the trust relationship (Rosseau et al., 1998). These conditions of trust are all present in the teacher-student relationship. Students rely on teachers for more than academics as they provide guidance for social norms and expectations to students as well. Students allow themselves to be vulnerable when they trust teachers to be helpful rather than detrimental to learning. Risk, like vulnerability, is present when students engage in learning activities that maximize their learning potential because they trust teachers to again be helpful rather than detrimental. These conditions form a context in which trust is part of social relationships, but they do not form trust beliefs. Trust beliefs are formed by the facets of trust.

Without these conditions, trust would not be needed. Having established these three basic conditions of trust, it is now important to examine the facets of trust, which align well with the conditions discussed here. Having a descriptive picture of what individual trust looks like in the classroom allows for researchers and practitioners to fully understand the nature of trust.

Facets of Trust

Goddard et al., (2001), determined trust to be a complex concept with a variety of facets and a number of common conditions that characterized most definitions. The facets of trust have been shown to be important elements for establishing trusting relationships between two interdependent parties. Facets are behavioral characteristics that would lead one person to trust another person or group (Hoy & Tschannen-Moran, 1999). Hoy & Tschannen-Moran (1999) determined that benevolence, reliability, competence, honesty, and openness together form the facets of a trust belief. Hoy and Tschannen-Moran (2000) also determined there to be empirical evidence that all of these facets are important aspects of trust relations in schools.

Hoy and Tschannen-Moran (1999) define what is considered to be the most common facet of trust, benevolence, as "the confidence that one's well-being or something one cares about will be protected by the trusted person or group. One can count on the good will of the other to act in one's best interest" (p. 187). Recognizing the vulnerability of another, yet not acting in a manner that will be perceived or hurtful or malicious is an example of benevolence. Benevolence is most often characterized as care (Tschannen-Moran, 2004). Benevolence in the classroom can appear as caring interactions between the student and the teacher. A benevolent teacher would be seen as one who behaves in a manner that is kind and caring toward their students.

Reliability combines a sense of predictability with benevolence, and it represents the extent to which one can count on another (Hoy & Tschannen-Moran, 1999). Reliability is not based solely on predictability given that a person may be predictably malevolent, yet it is based on both predictability and benevolence so that the extent of the trust reflects the person's beliefs that the outcomes will be positive (Hoy & Tschannen-Moran, 1999). Tschannen-Moran (2004) states that showing respect and benevolence consistently leads to reliability. Teachers exhibit reliability through consistency in the classroom in terms of discipline, grading practices, and relationships with students.

In describing competence, Hoy and Tschannen-Moran (1999) use the analogy of a young doctor who may have the best intentions of healing his patients, yet if he/she lacks the skill to fulfill that expectation then he/she may not be trusted. Individuals who do not have the skills to perform the task at hand are not considered to be competent. Competence is critical for trust relations (Goddard et al., 2001). Within her research, Tschannen-Moran (2004) found that students perceive the teacher’s competence when the teacher exhibits consistency, organization, and is thought to be competent by other students.

Honesty is a facet of trust that captures the integrity of the trustee (Tschannen-Moran, 2004). Tschannen-Moran (2004) also states that “honesty speaks to character, integrity, and authenticity” (p. 23). Honesty also provides another foundational cornerstone for creating trust. How well a person’s words and actions align characterizes that person’s level of integrity, and a person’s willingness to accept responsibility for actions and avoid distortion of the truth characterizes the level of authenticity (Tschannen-Moran, 2004). When combined, character, integrity, and authenticity represent the level of a person’s honesty (Tschannen-Moran, 2004). In schools and classrooms, honesty helps determine trust relationships between teachers and students. In the classroom, a teacher who is not consistent in discipline and academic areas can be seen by students to lack honesty. Teachers who are willing to admit mistakes and take responsibility may be determined to have a higher level of integrity and honesty by students (Tschannen-Moran, 2004).

Finally, openness operates within two dimensions: sharing information in a transparent way, which could result in vulnerability; and being open and willing to listen to the ideas and needs of others (Hoy & Tschannen-Moran, 1995). Reciprocity within the construct of openness occurs when information is shared between individuals with assurance it will not be exploited. Both parties should feel the same level of confidence in terms of the safety of sharing information. Equivalent communication between parties feeds openness. In the classroom, if the teacher wants students to be open and share information, then the teacher can foster that relationship by being willing to share information as well (Tschannen-Moran, 2004). In order to model openness in the classroom, teachers may share their experiences in school, or perhaps share about their own family or children in order to encourage students to do the same. This kind of openness helps to foster a trust between the student and teacher. Teachers may also exhibit openness by listening to students' suggestions and ideas in the classroom and by listening to their specific needs. When a teacher fosters an open classroom environment, students are likely to respond positively to the vulnerability present through sharing (Tschannen-Moran, 2004).

The facets of trust are common within all forms of trust and provide a clear understanding of how trust looks in the classroom. The facets, however, do not account for different forms of trust. That is, the facets are elements of trust and do not represent forms of trust that may hold specific attributes. Relational trust is one form of trust (Bryk & Schneider, 2002). In order to better understand relational trust, it helps to distinguish it from other forms of trust. Relational trust will be examined and compared to other forms of trust in the following section.

Relational Trust

There are many different types of trust found in the literature. Organic trust (Louis & Miles, 1990), contractual trust (Yamagishi & Yamagishi, 1994), and relational trust (Bryk & Schneider, 2002) are a few forms that organizational scholars have studied. This study focuses on relational trust, the trust that individual students hold for teachers (Bryk & Schneider, 2002). Relational trust has intrapersonal and interpersonal properties and organizational level effects. It is considered a psycho-social condition of an individual. Bryk and Schneider (2003) theorize that relational trust characterizes the unique social exchanges of schooling that occur within defined role sets (e.g., teachers with students, teachers with other teachers, teachers with parents, and all groups with the school principal). Each party within the relationship maintains an understanding of role obligations and holds expectations about the role obligations of other parties. Relational trust is considered the “connective tissue that binds individuals together to advance the education and welfare of students” (Bryk & Schneider, 2002, p. 45).

According to Bryk and Schneider (2002), for a school community to work well, it must achieve agreement in each role relationship in terms of the understandings held about these personal obligations and expectations of others. Regardless of how much formal power is held by any given role, all participants in the school community remain dependent on others to achieve desired outcomes and feel empowered (Bryk & Schneider, 2002). For example, the principal depends on faculty support to maintain a cohesive professional community and to productively engage parents and students. Teachers’ work depends on decisions that the principal makes regarding resource allocations to classrooms and instructional programming. Parents depend on both principals and teachers to create a safe environment that is conducive to learning. A sense of mutual vulnerability exists when all individuals involved create such dependencies (Bryk & Schneider, 2003). Trust builds throughout the community when deliberate action is taken by any party to reduce the sense of vulnerability in others so that they are made to feel safe and secure (Bryk & Schneider, 2002).

Three Levels of Relational Trust

Bryk and Schneider (2002) determined that relational trust is composed of three levels: intrapersonal, interpersonal, and organizational. The intrapersonal is the cognitive process and is the actual judgment of trustworthiness. The interpersonal is the social interaction that transmits trust generating information. A trustor discerns whether or not they perceive the trustee to have their best interests at heart based on the interactions they have had with the trustor (Adams, 2014; Bryk & Schneider, 2002). Organizational conditions are fostered by trust, and those conditions make the environment more conducive for activities to be initiated and sustained. Those activities in turn affect productivity improvements (Bryk & Schneider, 2002).

The intrapersonal level is described by Bryk and Schneider (2002) as a complex cognitive activity of discerning the intentions of others. Bryk and Schneider argue that relational trust is fundamentally an intrapersonal phenomenon that emerges through interactions that occur within defined role relationships. Intrapersonal is the cognitive discernment. The student takes in the information that has come to them and processes it to determine if they can judge the teacher to be trustworthy. Whether or not the teacher is judged to be trustworthy is based on a pattern of behavior that exhibits the facets of trust. If the student discerns that the teacher's behavior is consistent with those facets, then the student forms the psychological belief that the teacher is, in fact, trustworthy. (Adams, 2014; Bryk & Schneider, 2002).

The interpersonal level of relational trust is considered the social process. It is the interaction or repeated interactions that transmit the trust-forming information. Students must discern the intentions of their teachers, and Bryk and Schneider (2002) argue that “these discernments occur within a set of role relations (interpersonal) that are formed by both the institutional structure of schooling and by the particularities of an individual school community, with its own culture and history” (p. 22). In the case of student trust in teachers, student discernments emerge from their experiences with teachers. Repeated interactions between the teacher and the student allow the student to determine whether or not the teacher is trustworthy. That is, interactions in which students experience teachers as competent, benevolent, honest, open and reliable position teachers as trustworthy. The intrapersonal and the interpersonal levels work together.

The organizational level of relational trust reduces the vulnerability experienced by educators when they are asked to take on new and uncertain tasks related to school reform. This level of relational trust empowers teachers to innovate in their classrooms and to feel confident in reaching out to parents in an effort to deepen the support around students’ learning, both of which are critical to improving academic achievement (Bryk & Schneider, 2002).

Further, relational trust at the organizational level facilitates problem-solving within an organization. Problem-solving is important to some of the critical aspects of school improvement as they require working together collectively. Curriculum alignment as well as internal accountability among professionals to ensure that students are learning both require relational trust at the organizational level to be effective in the efforts toward school improvement (Bryk & Schneider, 2002).

When professional standards and organizational norms are clearly understood and widely shared by the professionals in a school, those norms determine the day to day work while teachers still experience autonomy and mutual support (Bryk & Schneider, 2002). This type of relational trust allows teachers to feel compelled to engage in more innovative and ambitious classroom instruction (Bryk & Schneider, 2002).

Finally, relational trust at the organizational level establishes the moral resource for improvement. School improvement takes sustained effort by the adults within the organization, and an organization with relational trust will influence the development of strong personal attachment to the organizational beliefs and mission. When individuals hold those attachments, they are more likely to go the extra mile even when the work is difficult (Bryk & Schneider, 2002).

To summarize, relational trust so conceived is an individual property. In this case, it is an individual belief of a student. It forms as interactions occur between students and teachers. Relational trust is discerned by students and students arrive at a judgment that their teacher is trustworthy. This belief has consequences for their behavior, action, and performance in the classroom (Bryk & Schneider, 2002). Relational trust also has a strong effect on the adults within the organization, as it creates an environment where strong norms and expectations provide the impetus for improvement (Bryk & Schneider, 2002).

Trust Comparison

A comparison between relational, collective, organic, and contractual trust is offered as a way to clarify the meaning and nature of relational trust. These trust forms are similar in that they all reflect a perception of another party in an interdependent relationship, but they differ by their formation process and their level of existence. These similarities and differences are explained.

Collective Trust

Collective student trust is defined as “a stable group property rooted in the shared perceptions and affect about the trustworthiness of another group or individual that emerges over time out of multiple social exchanges within the group” (Forsyth, et al., 2011, p.22). Collective trust is a group property that is constructed from the interactions and shared experiences of students (Adams, 2014). Comparing relational trust and collective trust, the two forms of trust do offer similarities. In fact, they both form through repeated interactions between individuals and groups as well as through a discernment of trustworthiness criteria. The attitudes and behaviors of an individual may influence the level of trust held within the group or by an individual. Within relational trust, the individuals hold an expectation for one another within respective roles, but with collective trust the expectations are based on collective group norms (Forsyth et al., 2011).

According to Forsyth, Adams, and Hoy (2011), collective trust prevails as an essential element to increasing student achievement and developing an effective learning environment. Research measuring relational trust from Bryk and Schneider (2003) reaches similar findings, namely that trust acts as an integral factor in student achievement and an effective learning environment. The primary similarity of this comparison is that the research clearly disclosed a relationship between collective and relational trust and student achievement. Collective trust is based on a broader group and relational trust is based on more of the individual’s role, however, the relative expectations of how one party treats another remains the same and both have consequences for student achievement (Bryk & Schneider, 2003; Forsyth et al., 2011).

Organic Trust

Organic trust is present in social systems where individuals give their trust unconditionally because they believe in the rightness of the system and the moral character of its leadership (Bryk & Schneider, 2002). The presence of organic trust in those social systems creates strong social bonds among members who share the ethical responsibility for consequences of their behaviors to themselves and to others within that system (Bryk & Schneider, 2002). An example of such social systems would be fundamentalist religious schools where organic trust operates. Those schools typically align with larger religious communities that encompass a moral vision that guides the actions of the professionals who hold positions in those schools. Because the truth of the vision is beyond doubt, obedience is demanded (Bryk & Schneider, 2002).

Typically, organic trust is based on the belief systems put in place in organizations such as religious entities and the trust comes from the shared belief systems of the individuals (Bryk & Schneider, 2002). Whereas relational trust is based on the interpersonal relationships of those who hold particular roles, organic trust is based on the vision of the total institution. The applicability of organic trust to modern institutions, such as public schools, is not appropriate because institutional membership in schools is usually more open and less likely to maintain lifelong affiliations (Bryk & Schneider, 2002). Further, a public school may hold a vast amount of varying belief systems; therefore, it is impossible for organic trust to be in place (Bryk & Schneider, 2002). Because of this, the theory of relational trust is considered a more relevant form of trust for this proposed study.

Contractual Trust

Contractual trust is predicated by outcome specificity, which means it is based on a particular outcome or product (Tschannen-Moran & Hoy, 2000). A contract defines basic actions to be taken by the individuals involved in a mutual transaction, and although friendships may develop over time through repeated interactions, the moral-ethical dimension of contractual trust is weak, and the social-psychological motivations remain modest (Bryk & Schneider, 2002). Because contractual trust is transactional, once the outcome is reached by the parties, the relationship could dwindle based on limited future interactions.

In the realm of schooling, contractual trust does not fit well for multiple reasons. First, the objective of schooling is multiple and interrelated. Educational outcomes are not a single product. Complex intellectual, personal, and interpersonal dispositions present in education are difficult, if not impossible, to measure accurately. As a result, evidence of the desired outcomes which might form the basis of the contract cannot be easily attained (Bryk & Schneider, 2002). Although there is substantial research on effective schools and instruction, there is still no explicit knowledge base on educational best practices (Bryk & Schneider, 2002). Because of this, no universally accepted standards for good professional practice exist that can be reduced to standardized steps and outcomes. Without clear, universal standards, it would not be easy to make judgments regarding the proper execution of school practice, of which contractual trust is based (Bryk & Schneider, 2002).

Even if universal standards and outcomes were established, it would be a logistical nightmare to monitor and evaluate the implementation of these standards daily (Bryk & Schneider, 2002). So much of this activity occurs within the privacy of the classroom and constant external oversight is not the norm. Bryk and Schneider (2002) argue that it is simply not fiscally or logistically possible to police classrooms to the extent this would require.

Neither organic nor contractual trust provide a reasonable framework in which to determine the effect of an individual student's trust in their teacher. Relational trust, on the other hand, emerges through the dynamic and emotionally charged relationship between students and teachers. Repeated interactions with teachers in the context of learning determines the degree of trustworthiness students perceive in teachers. An additional element of relational trust is its effects on behavior and performance, a topic examined next.

Trust Effects

The purpose of this section on trust effects is to extrapolate the varying ways trust can create the environment of safety and engagement that may be necessary for students to succeed. This section also examines the consequences of distrust and the costs associated with distrust.

It is likely that trust operates similarly no matter if the trustor is a teacher, student, parent, or group of school actors. Generally defined, trust acts as a facilitator of social exchanges and an activator of self-determined behavior (Deci & Ryan, 2002). Distrust, on the other hand, has costs that undermine productive actions (Tschannen-Moran, 2004).

Trust as a Facilitator of Social Exchanges

Trust works as a facilitator of social interactions by eliciting the psychological safety needed to be open with others and to be cooperative (Fukuyama, 1995; Kramer, 1999; Romero, 2010; Vangen & Huxham, 2003). Trust efficiently acts as a lubricant, facilitating transactions, communication, and collaboration (Fukuyama, 1995; Kramer, 1999; Romero, 2010; Vangen & Huxham, 2003). Tschannen-Moran states that students who do not feel a sense of psychological safety will invest their energy into self-preservation rather than learning because the trust is not there to facilitate. Psychological safety comes at the expense of behaviors associated with better engagement and achievement, and the result is disengagement (2004). If students do not trust their teachers to keep them safe and tell them the truth, then students will be less likely to engage authentically and holistically in learning (Tschannen-Moran, 2004). If the students' psychological needs are met, students can exhibit the openness and cooperation necessary for a positive learning environment and enhanced performance (Gambetta, 1988; Luhmann, 1979; Van Maele et al., 2014).

When relationships are characterized by trust, valuable information is more likely to be shared and students are likely to be more confident in the positive intentions of teachers (Gambetta, 1988; Luhmann, 1979; Van Maele et al., 2014). Trust enables people to be more willing to risk vulnerability toward other members of the organization. Trusting relationships foster an environment conducive for cooperation (Gambetta, 1988; Luhmann, 1979; Van Maele et al., 2014). Student trust creates the psychological safety to be open with teachers, to engage in important conversations, and to share their understandings (Gambetta, 1988; Luhmann, 1979; Van Maele et al., 2014). Trust is a facilitator of social interactions (Fukuyama, 1995; ; Kramer, 1999; Romero, 2010; Vangen & Huxham, 2003),

Trust as an Activator of Motivation

Trust can create higher motivation, performance, and increased adaptability, and it acts as a form of social control and promotes citizenship behaviors (Fukuyama, 2003; Putnam, 1993; Romero, 2010; Tschannen-Moran & Hoy, 2000;). In an environment of trust, students are more likely to risk vulnerability by asking questions, as well as engage in seeking help which is key to achievement. Trusting students are also more likely to adopt the goals set by the teacher as well as the institution, both in terms of behavior and achievement (Gregory & Ripski, 2008). Most importantly, trust for students is essential to learning (Bryk and Schneider, 2002; Goddard, 2003; Goddard, Tschannen-Moran and Hoy, 2001; Romero, 2010). In terms of achievement, student trust is associated through research with student identification with school, engagement, and achievement motivation (Romero, 2015; Tschannen-Moran et al., 2013).

Existing research shows that trust is related to behaviors like organizational citizenship behavior, better performance, cooperation, and risk taking. Evidence suggests that these relationships are mediated by motivational processes. These processes allow the individual to discern the intentions of others in an effort to form trust or distrust based on a mix of considerations. Achieving valued outcomes is one such discernment of trust, as well as advancing one's self-esteem and self-efficacy. Ethical and moral considerations are also included in the theory that individual trust leads to individual motivation (Bryk & Schneider, 2002).

When students perceive a teacher to be caring and honest, they have been shown to experience more intrinsic motivation (Ryan et al., 1994). In a study by Van Houtte (2021), the results determined that student trust was the strongest determinant of autonomous motivation. Further, the student-teacher trust relationship must be fostered in order to enhance that motivation (p. 214). As it has been shown in this section, in order to exhibit motivation, students must have a robust positive relationship with their teacher (Ryan et al., 1994).

Just as trust can act as a motivator, according to Tschannen-Moran and Hoy (2000), distrust has costs that can upset motivation. It is associated with lower productivity, rule proliferation, organizational rigidity, resistance and energy diverted to self-protection, disruption, and even revenge (Romero, 2010; Tschannen-Moran, 2004). Based on this notion, whereas trust would promote citizenship behaviors, distrust would facilitate inappropriate behaviors and lack of student engagement and learning. Once the relationship between teacher and student is established, if trust fails or is broken, the student does not have an option of just contracting with another teacher; they are forced to just live with the failures of that trust (Romero, 2010; Bidwell, 1970). However, when student trust exists, and when the perception by students is that their teacher leaders act with benevolence, competence, and integrity, then they are transformed and motivated to learn (Romero, 2010; Mayer et al, 1995).

Literature Review Summary

This review of literature attempted to provide insight into the conceptualization of trust. Trust is difficult to define because it is a multifaceted construct that may vary depending on the context of the trust relationship (Tschannen-Moran, 2004). Along with a conceptualized definition of trust, three conditions of trust are instrumental in forming a trust relationship. Those conditions are vulnerability, risk, and interdependence, and the variance of each can affect the levels of trust throughout the course of a relationship (Forsyth, Adams, & Hoy, 2011). Along with conditions of trust, there are also facets of trust as detailed by Hoy and Tschannen-Moran (1999), that are all important, but have varying effects on trust depending on the trust relationship.

Various forms of trust allow for better understanding of the social construct that is trust. Relational trust is one form of trust explained in this study. Relational trust is considered a psycho-social condition of an individual, and relational trust is explained as unique social exchanges in schooling that occur within defined role sets (Bryk & Schneider, 2002). A trust comparison between relational, collective, organic and contractual trust in this literature review clarifies the meaning and nature of relational trust used in this study as well.

Finally, trust acts as a facilitator of social exchanges, and an activator of motivation (Deci & Ryan, 2002). Trust has effects, as does distrust, which has costs that undermine productive actions (Tschannen-Moran, 2004). In the classroom, students who do not feel safe will invest energy into self-preservation rather than learning (Tschannen-Moran, 2004), thereby emphasizing the importance of a trusting student-teacher relationship.

Chapter 3: Theoretical Framework

Introduction to Theoretical Framework

The theoretical framework situates the research questions within existing knowledge on trust formation and its effects. Collective trust theory provides an explanation on trust formation that has value for the first two research questions. The first research question seeks to determine which facets of teacher trustworthiness have higher student endorsement and the second research question addresses differences in student trust in teachers by school and by grade levels. Self-determination theory is used for research questions three and four. Research question three seeks to determine the relationship between student trust and the instructional styles of teachers, and research question four examines the relationship between student trust and engagement in school.

Building upon the theoretical framework that serves as the basis for this study, four specific research questions were advanced for examination:

1. Which facets of trust received the highest endorsements from students in relation to student trust in teachers?
2. Are there differences between student trust in teachers by school? By grade level?
3. What is the relationship between student trust and instructional styles of teachers?
4. What is the relationship between student trust and engagement in school?

Collective Trust Theory

Collective Trust Theory, advanced by Forsyth and colleagues (2011), explains trust formation as a function of three contextual elements: external context, internal context, and task context. External context includes all the environmental influences and experiences that shape the values and expectations of individuals within a group (e.g., faculty, students, parents). Internal context focuses on the influences and conditions within an organization that affect the values and expectations of its groups and the individuals within them. Task context refers to the set of constraints inherent in the group's particular task or specialty that establish the levels of necessary trust in order for the groups and organization to be effective (Forsyth et al., 2011).

Looking at the data through the lens of collective trust theory allows researchers to have a more complete picture of all the elements involved in the complex social structure that is the classroom. Examination of the external contexts when analyzing data allows for a better understanding of the differences in student trust. Knowing the level of student demographic data, such as socioeconomic levels, will allow researchers to determine if a specific variable must be factored in during data analysis. Further, external contexts can inhibit the capacity and disposition to trust because of diverse values and background experiences, as those experiences can negatively condition the emergence of trust (Forsyth et al., 2011).

Forsyth et al. (2011), describes internal context as the organizational conditions that immediately surround the groups. These internal contexts can affect the level of trust within the group. For example, the more homogeneous a group is, the higher level of trust they hold. As social exchanges increase within the group, trust increases as well (p.29). Adversely, when the organization becomes too large and complex, trust decreases. Likewise, as social change and volatility increases within the organization, trust decreases (p. 29).

Finally, task context affects trust formation as well (Forsyth et al., 2011). In an organization like school, where the learning process for each student may be different based on their background knowledge, motivation, and so on, the complexity of the task is monumental. There are many variables set forth by individual students, and the outcome is variable as well.

Because of the complexity of the tasks of teaching and learning, trust formation has definite consequences (Forsyth et al., 2011)

Collective trust theory aligns well with the first two research questions for this study. Question one asks what facets of trust contribute most to student trust in teachers. Determining which facets of trust contribute most to student trust would seem to be an interpersonal trust based on the fact that each student may value a different facet more than another. The outcomes for this study, however, were examined collectively rather than individually. Because the number of participants for this study was large, reviewing the data through the lens of collective trust makes sense as it describes the trust from an organizational and sociological perspective rather than a psychological one according to Forsyth et al. (2011).

Question two seeks to determine the differences in student trust in teachers by school and by grade level. External context is a consideration that must be included into the analysis of the differences determined by this study. Individual students view school through cognitive schemata (Schneider & Reichers, 1983), which means the values and beliefs held by those individuals shape how they perceive the world. Shared understandings of expectations and obligations must be present for collective trust to be present, otherwise individual perceptions through that cognitive schemata determine trustworthiness (Forsyth et al., 2011). Schools typically hold expectations and obligations, though they may not be the same at each school, so it makes sense that there would be differences in student trust levels because external contexts as well as internal contexts may vary from building to building. The same could be said for grade level differences in trust as well, since younger students may hold fewer experiences and perceptions than older students. In consideration of either external or internal contexts, to build student-teacher trust individually and collectively, positive interactions between those groups must occur for trust to emerge (Adams et al., 2009).

Self-Determination Theory

Self-determination theory is an approach to human motivation and personality that highlights the importance of inner resources to developing self-regulatory behavior (Ryan & Deci, 2000). Using the natural internal capacity of students as a resource to trigger self-regulated and self-determined behavior, self-determination theory proposes that social environments supportive of autonomy, relatedness, and competence advance quality learning and development (Adams et al., 2015; Deci & Ryan, 1985, 2008; Ryan & Deci, 2000). That is, people develop and flourish in environments that meet their psychological needs of autonomy, competency, and relatedness (Ryan & Deci, 2000). Psychological needs facilitate the natural propensities for growth, as well as constructive self-motivation, social development, and personal well-being (Ryan & Deci, 2000). When the basic psychological needs for competence, relatedness, and autonomy are supported, then motivation, performance, and development will be maximized (Deci, et al., 1991).

Ryan and Deci’s work on self-determination theory lays the theoretical foundation for research questions three and four by explaining how needs support is the element that must be present in order for competence and autonomy to flourish and for a trusting relationship to be present between the teacher and the student. When a teacher commits to a needs-supportive classroom, students are more willing to trust. Without that trust, a struggling learner may be more reluctant to seek help in a dependent manner because it can expose their limitations (Zimmerman & Schunk, 2008), and exposing limitations makes them vulnerable. Where there is no vulnerability, there is no need for trust (Hoy & Tschannen-Moran, 1999). A needs-supportive environment facilitates increased learning because the students can identify with the teacher and her purpose for teaching (Zimmerman & Schunk, 2008). Where support is put in place by the teacher, the bond established between the teacher and student over time will inspire the student to do what is asked and do it well in an effort to please the teacher and receive affirmation. Thus, students become willing to risk vulnerability when their psychological needs are met (Hoy & Tschannen-Moran, 1999).

Instructional Styles of Teachers and Student Trust

Needs support provides the theoretical argument for the relationship between teacher instructional styles and student trust in teachers. Two such teacher instructional styles that provide a needs-supportive environment are competence support and autonomy support. A competence supportive teaching style is one where students are encouraged and supported towards being efficacious in performing the requisite actions (Deci et al., 1991). Ryan and Deci (2000) posit that competence facilitates internalization, which leads to higher motivation. Competence supportive instructional style is considered as one where students can set challenging goals, where they can experience personal and vicarious mastery, and receive positive and constructive feedback (Ryan and Deci, 2000). When competence-support is present, students experience rewards for personal improvement and learning instead of just achieving a valued test score (Adams & Khojasteh, 2017).

An autonomous supportive teaching style is demonstrated as one where self-initiating or self-regulating one's actions is an opportunity as well as an expectation (Deci, et al., 1991). Teachers can be considered as autonomy-supportive by emphasizing relevance in learning, using informational language that is non-controlling and engaging to students, allowing students a choice in the selection of tasks and projects, and encouraging independent thinking (Adams & Khojesteh, 2017).

Research question three seeks to examine the relationship between student trust and the instructional styles of teachers. Self determination theory is the lens for this question because the theory describes the needs that are required to be present in a trustworthy learning environment. When psychological needs are met within the context of teaching, students will value the behaviors of the teacher and the instruction because they recognize them as important for achieving their self-selected goals and well-being (Gabne & Deci, 2005).

Student Trust in Teachers and Engagement

Engagement is a multi-dimensional construct reflecting an underlying motivation to learn and the key premise of school engagement is that for learning to take place, students must actively engage with, or participate in the classroom and the school environment itself. (Fredricks, Blumenfeld, & Paris, 2004; Skinner, Furrer, Marchand, & Kindermann, 2008; Olivier, Galand, Hospel, & Dellisse, 2020). Engagement has been deemed crucial for the amelioration of student's educational paths (Appleton et al., 2008); it operates as a protective factor for problem behavior, alienation from school, and motivational problems (Wang & Fredricks, 2014). For students to be engaged, a needs-supportive environment is necessary.

Skinner and colleagues (2008) found that engagement was shaped over time by the fulfillment of basic psychological needs as well as students' perceptions of their teacher's support. Teachers that are caring, trusting and respectful towards their students provide them with the socioemotional support necessary for them to approach, engage in, and persist with academic learning tasks (Hattie, 2009). Studies have also shown that the quality of the teacher-student relationship and engagement are reciprocal over time. This means that the higher quality teacher-student relationships have a positive effect on student’s basic need satisfaction and autonomous engagement, which in turn garners further teacher support (Opdenakker, 2021).

Trust is a psychological state likely to promote autonomous engagement. Time and again, the positive teacher-student trust relationship has been shown to be one of the major factors in student engagement. Duffy and Elwood (2013) stated “that a positive relationship with a trusted adult can make a significant difference in terms of maintaining young people’s engagement” (p. 119). Students will often refuse to work for those teachers who they perceive to be belittling or disrespectful, but they will work for teachers who they trust and respect and feel that trust and respect them (Benson, 2020). When students believe there is a positive trust relationship with teachers they are more behaviorally and emotionally engaged which further contributes to their academic achievement (Hughes et al., 2007; Lee, 2012). Likewise, when students perceive a warm, caring, respectful and positive relationship with their teacher, they tend to be more willing to engage in learning (Duffy & Elwood, 2013). This is just further confirmation that when teachers build trusting, positive relationships with students, those students respond through engagement in the classroom.

In summary, trust is a social bond that connects students to teachers (Adams, 2014; Tschannen-Moran, 2004). Without trust, students are more likely to adopt a self-protective orientation towards teachers and learning (Adams, 2014). A strong culture of student trust in teachers signals a learning environment where patterns of behavior and interactions facilitate the internalization of school, support students in becoming responsible and self-regulated learners, and maximize the academic potential of students (Adams, 2014). Relatedness support through trust is the binding agent that connects students to teachers. Without this bond, it is hard to envision that students will place themselves in positions where they can learn and grow and it is equally as hard to envision that other psychological needs would be activated (Deci & Ryan, 2002).

Chapter 4: Research Methods

The empirical study used a descriptive and correlation research design with quantitative survey data to address four research questions: Which facets of teacher trustworthiness have higher student endorsements? Are there differences in student trust by school and by grade level? Is there a difference between student trust and the various instructional styles of teachers? Is there a relationship between student trust and student engagement in school? The answers to these questions will be presented in this study.

The descriptive research design was used to explore the formation of student trust in teachers, differences in student trust across school and grade levels, and the relationship between student trust and characteristics of students' instructional experiences. Use of descriptive methods requires clearly developed procedures as well as the involvement of data collection personnel who can follow the procedures without influencing the data (Anderson, 1998). The primary unit of analysis for this study was students from three different school sites in a suburban school district.

With descriptive research, data collection is paramount to the quality of the research undertaken (Muijs, 2007). This study used a survey as the means for measuring and describing trust and differences in student trust. How survey questionnaires are designed and the wording of the questions will affect the answers given by respondents (Muijs, 2007). There are different types of questions that can be asked in survey research and each has its own limitations. A closed-ended survey was used for this study. Students were asked questions with responses arranged on a 6-point Likert response set ranging from 1 Strongly Disagree to 6 Strongly Agree.

Survey research has a number of advantages. Survey research is very flexible and can be used to study a wide range of research questions. Findings can easily be generalized to real-world settings as well because artificial situations are not used like in experimental methods (Muijs, 2007). Descriptive methods, such as survey research, are important because we often do not know the state of the thing being described, and descriptive methods can provide an end in themselves, or they could be necessary to formulate more detailed questions or to structure more precise data collection instruments (Anderson, 1998). In the case of this study, survey data provide the means to determine the answers to specific research questions.

For the correlation research, the relationship between student trust in teachers and teacher's instructional styles was examined. These relationships were intended to establish a connection between teaching practices and student trust in teachers. The relationship between student trust in teachers and engagement was also tested. This relationship describes the potential effects of trust on student engagement in schools.

District Context

The school district in this study is a steadily growing district in a suburban area of a midwestern city. Yearly, the district growth rate is approximately three percent. People are drawn to this district largely because of the high-performing schools, strong athletics programs, and affordable housing options. Demographically, the school district student population is comprised of 69.8% Caucasian, 1.8% African American, 0.5% Asian, 9.2% Hispanic, 7.1% Native American, and 10.8% Two or More Races. The district holds a 22.8% free/reduced lunch rate. Schools within the suburban school district consist of three elementary schools Pre-K to third grade; three intermediate schools housing 4th to 6th grade; a middle school that includes

7th and 8th grade; a ninth-grade center; and a high school with grades 10 through 12. There is also one alternative education center that sits on the high school campus grounds.

State test scores in the district are among the highest in the region. Each school in the district regularly scores above state averages. The district holds a 98.8% high school graduation rate as of 2019, which was the last reporting date from the State Department of Education. The average grade point average of high school seniors in that same year was 3.3, and the average ACT score from those same students was 21.2, both above the state average of 3.1 GPA and 18.9 ACT score respectively.

The three sites participating in the study represent the areas of the growing suburban town. Combined demographics give an idea of the population of students who were surveyed. The district population of 4th, 5th, and 6th graders is comprised of 68.1% Caucasian students, 1.67% African American students, 1.58% Asian students, 9.7% Hispanic students, 7% Native American, and 11.9% Two or More Race students. Of the students surveyed, 25.6% of them qualify for the free and reduced lunch program.

Data Source

Administrative data were used for this study. The school district collected data from the three intermediate school sites serving fourth, fifth, and sixth grade students. Surveys were administered electronically during the school day by school leaders at each individual school site. All students received the same survey. Survey information was sent to parents in advance of the survey. Completion of the survey was voluntary. Parents could opt their child out of participation in the survey and students themselves could choose to participate or not participate. A total of 1,086 usable surveys were received from a population of 1,681 fourth, fifth, and sixth grade students, for a response rate of 65%. According to district profile data, of the students surveyed, 25.6% qualified for the federal free and reduced lunch program.

Measures Included in the Survey

Trust Measure. Student trust was measured with the Student Trust in Teachers Scale (Forsythe et al., 2011). The student trust scale, as with other trust measures, operationalizes teaching trustworthiness through the facets of openness, benevolence, competence, honesty, and reliability. Eight items on the survey were used. The scale used a 6-point Likert response set ranging from *strongly disagree (score 1)* to *strongly agree (score 6)*. Sample items include: “Teachers are eager to help at this school.” “Teachers at this school are easy to talk to.” and “Teachers at this school are good at teaching.”

Autonomy Support. Student perceived autonomy support from teachers was operationalized using the Autonomy-Enhancement Scale (Assor, Kaplan, & Roth, 2002). Items on the scale measure instructional practices that foster relevance, provide choice, establish rationale for instructional activities, and encourage independent thinking (Adams & Khojasteh, 2018). Six items on a 6-point Likert response set ranging from *strongly disagree (score 1)* to *strongly agree (score 6)* were presented on the student survey. Sample items from the survey include: “Teachers listen to the opinions and ideas of students.” “Teachers encourage students to work in their own way.” “Teachers show students how to solve problems themselves.” Using this same survey, Adams and Khojasteh, (2017) found through an exploratory factor analysis that the items loaded strongly on one factor that explained over 50 percent of the variance, with factor loadings ranging from .60 - .71 and inter-item consistency was sufficient with a Cronbach alpha of .82.

Competence Support. Student perceived competence support was operationalized using items from an academic press scale used by the Consortium of Chicago School Research to measure the instructional practices of teachers. Six items on a 6-point Likert response set ranging from *strongly disagree (score 1)* to *strongly agree (score 6)* were presented on the student survey. Sample items from the survey include: “Teachers in this school really make students think.” “Teachers in this school expect students to work hard.” “Teachers in this school challenge students to achieve academic goals.” Using this same survey, Adams and Khojasteh, (2018) found through an exploratory factor analysis that the items loaded strongly on one factor that explained over 50 percent of the variance. The scale has strong reliability with a Cronbach’s α of 0.88. Scale items maintain strong conceptual alignment with competence-supportive practices directed toward establishing optimally challenging goals and supporting students in mastery experiences (Adams and Khojasteh, 2018; Ryan and Deci, 2000).

Student Engagement. Student engagement was measured with the Student Identification with School Scale (Voelkl, 1996). Seven items on a 6-point Likert response set ranging from *strongly disagree (score 1)* to *strongly agree (score 6)* were presented on the student survey. Sample items from the survey include: “The things we learn in class are meaningful.” “I feel proud of being a part of my school.” “School is worth the time I put into it.” These items have been used in other studies and show strong structural validity and good item consistency (Adams & Khojasteh, 2017).

Analytical Technique

Three different analytical techniques were used for this study to address the research questions. For the first research question, responses to student trust in teachers items were examined to describe student perceptions of teacher trustworthiness. In order to determine which of the five facets of trustworthiness have a higher student endorsement, item level means, standard deviations, and ranges were calculated. Means allow for a comparison of average student responses to each question and the standard deviation and ranges estimate variability around the group average. Histograms for each survey item were also reported. Histograms describe the number of student responses for each response category. These graphs show variability in student responses to each survey item. A criterion value of 5 was added to the histograms to denote a strong endorsement of the item. The value 5 is the average response that falls in the agree category. This criterion is represented as a black line in the histograms.

The second research question sought to determine differences between student trust in teachers by school and by grade level. Descriptive statistics and Analysis of Variance (ANOVA) were used. Means and standard deviations were estimated for each school and for different grade levels. ANOVA was used to determine if mean differences in student trust were more likely due to chance or a systematic difference across school sites and grade levels. ANOVA estimates the variance within groups, in this case school and grade level, and compares it to variance between groups (Cardinal & Aitken, 2006). Because school site and grade level had three levels, a Turkey post-hoc was performed to identify statistically significant differences between the three levels.

The third and fourth research questions examined the relationship between instructional styles of teachers and student trust and between trust and engagement. Bi-variate correlations were estimated to determine the relationship between trust, competence support, autonomy support, and student identification with school. A multiple regression analysis was estimated to test the relationship between student trust and student identification with school after controlling for school site, grade level, competence support, and autonomy support.

Limitations of the Research Design

One of the limitations of using descriptive, survey research from the data collected from one school district is that results suffer from an inability to determine a true causal relationship. However, use of these research methods remains the predominant mode of empirical research analysis (Bowen & Wiersema, 1999). This study examined empirical evidence that allowed for strong conclusions about the most prominent facets of trust, the effects of trust, the differences in trust, and the relationship between trust and engagement in classrooms, as well as the value and importance of a needs-supportive environment where autonomy, competence, and relatedness are prevalent.

The research study involved the use of only one suburban public school district with an enrollment of slightly fewer than 7000 students. Despite possible criticism related to the size and scope of the use of sampling from one school district, which included only three of the schools, and three grade levels from those schools, the data acquired in this study replicates results from similar studies, and the relationships explored hold strong external validity as those similar studies reflect similar results. However, sampling from only one district does hold the risk of poor sampling, which would inhibit the ability to generalize the results. Sampling from only one district could create a limitation because of the sample's representation, or lack thereof, to the general population (Coughlan, 2009).

Limitations on demographics, such as free and reduced lunch status, were not imposed on the methods of this study. Analysis of trust relationships within an urban district showed that poverty, more than ethnicity or race, seemed to hinder the trust that would lead to student achievement (Tschannen-Moran, 2004). The demographics of the suburban district represented in the study report a 33% free and reduced lunch rate among all students in the district, which is far below the national average of 77%, as reported by the USDA Annual Report. Aggregating the data of those students qualifying for free and reduced lunch may have changed the results, or, given the relatively small number of students qualifying for free and reduced lunch involved in the study, the results may not have significantly changed. Either way, the data related to students from poverty repeatedly exhibits the high need for student trust in teachers. Without trust, the students are denied an important form of social support, as well as access to the opportunities schools present (Tschannen-Moran, 2004).

To further the body of research specifically related to the aspects of student trust in teachers, studies such as this could be replicated, expanding the scope and size of the data sample to include differing school demographics, such as socioeconomic status, race, grade level, and so on. Future studies could expand to varying urban, suburban, and rural public school districts in order to reflect more representation of the many different school systems and more diverse demographics.

This empirical study focused only on fourth, fifth and sixth grade students. Subsequent research could expand to students at the middle school and high school levels in order to increase sample size and provide more generalizability of overall results. It is strongly recommended that further research studies, such as a longitudinal design, expand the study to include all levels of K – 12 education in order to gather valuable information related to the facets of trust, the relationships between instructional styles of teachers and student trust, and student identification and student trust at all academic levels. Furthering this study could potentially allow for a more concrete methodology for trust development in relationships between teachers and students.

This study and the subsequent results have already brought about systemic changes, starting with rebuilding school and district culture and trust. The need for relationship building and trust relationships has led to the adaptation of school discipline and training for teachers across the district at every grade level. The primary focus of the district’s new strategic plan and training is a foundation of trust. It was developed with representatives from every stakeholder group: parents, students, teachers, administrators, and community members with collaboration, openness. honesty, and constructive conversations.

Chapter 5: Results

Results derived from the data are reported in alignment with the research questions. Each research question determined how the data would be extrapolated and analyzed. Descriptive data are reported for the first research question to describe student perceptions of teacher trustworthy behaviors about trust facets. Analysis of group differences in student trust by grade level and school are reported for the second research question. Regression results are used for questions three and four on the relationship between teacher instructional styles and student trust and student trust and engagement.

Student Perceptions of Teacher Trustworthiness

Descriptive statistics were used to examine the means of each facet of trustworthiness using the entire sample (n = 1082). Table 1 reports the means and standard deviation for each item on the student trust in teacher scale. As seen in the table, item responses ranged from a mean of 5.23 for the benevolence item to 4.33 for the openness item. Three of the items reached the 5.0 threshold. These include "Teachers at this school care about students," which represents benevolence with an emphasis on caring, with a mean of 5.23; "Teachers at this school are good at teaching," which represents competence, with a mean of 5.19; and "Teachers at this school do what they are supposed to," which represents reliability, with a mean of 5.13.

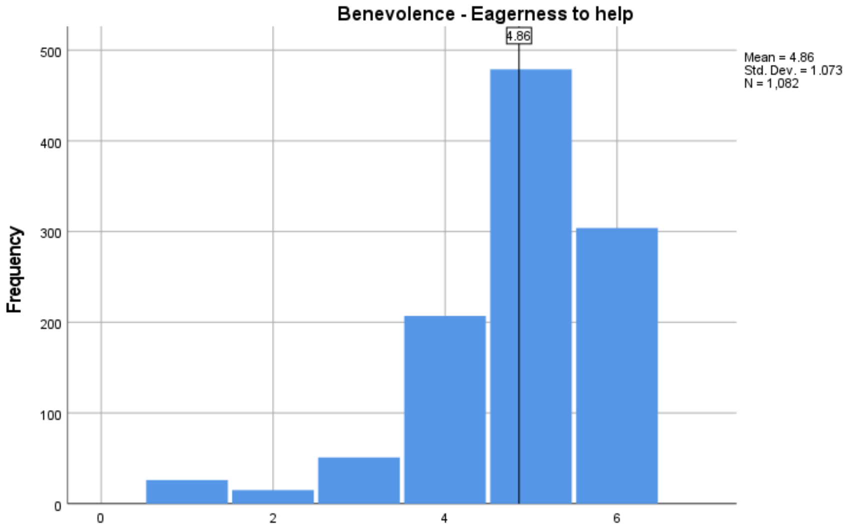
Three of the items were below the 5.0 threshold. Those include "Teachers are eager to help at this school," which represents benevolence with an emphasis on helpfulness, with a mean of 4.86; "Teachers at this school are honest with me," which represents honesty, with a mean of 4.81; and "Teachers at this school are very easy to talk to," which represents openness, with a mean of 4.33, which is the lowest mean of all the items.

Table 1 – Descriptive Statistics

	Mean	*Standard Deviation*
Teachers are eager to help at this school. (Benevolence)	4.86	1.073
Teachers at this school are very easy to talk to. (Openness)	4.33	1.237
Teachers at this school care about students. (Benevolence w/emphasis on caring)	5.23	1.083
Teachers at this school do what they are supposed to. (Reliability)	5.13	1.046
Teachers at this school are honest with me. (Honesty)	4.81	1.260
Teachers at this school are good at teaching. (Competence)	5.19	1.049

The following figures show each survey question with the actual numbers of responses related to the facets of trust. The mean and standard deviation are reported in each figure. Figure 1 represents the responses related to Benevolence with an emphasis on the teacher's eagerness to help. Recall the survey question was "Teachers are eager to help at this school." The mean of 4.86 falls below the 5.0 criterion; however, more than 72% of the respondents chose *agree* or *strongly agree* on the survey.

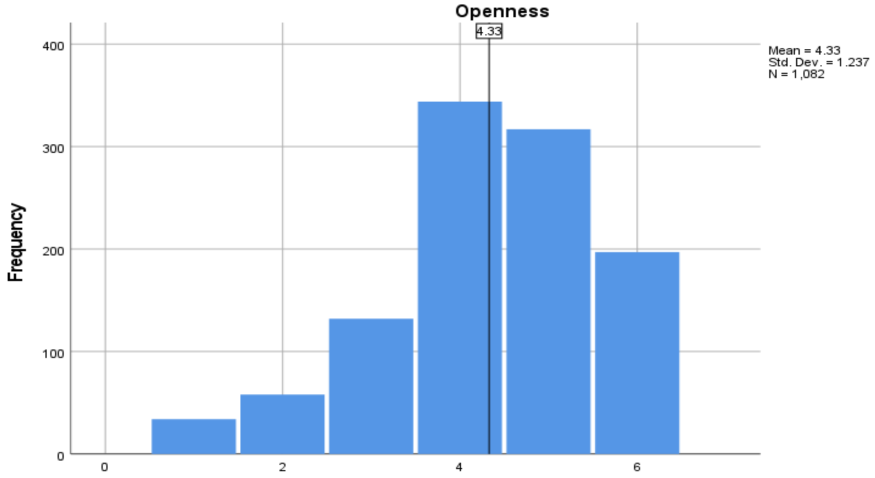
Figure 1 – Benevolence with Emphasis on Eagerness to Help



Criterion is set at 5 being the highest, which is where the average response is indicated. Five and six represent agree or strongly agree responses respectively.

Figure 2 data represents the facet of openness. The survey question stated, "The teachers at this school are easy to talk to," and the mean of the responses is 4.33, which is within the range of a higher level of trust. More than 47% of the respondents chose *agree* or *strongly agree* for their responses on this question, however, slightly more responses were below the threshold of 5.0, and therefore more ambivalence was exhibited. Approximately 32% of respondents indicated they were neutral on the survey. In the case of openness, the responses exhibit the perception of students is that teachers are less open than they might be, for example, benevolent and willing to help.

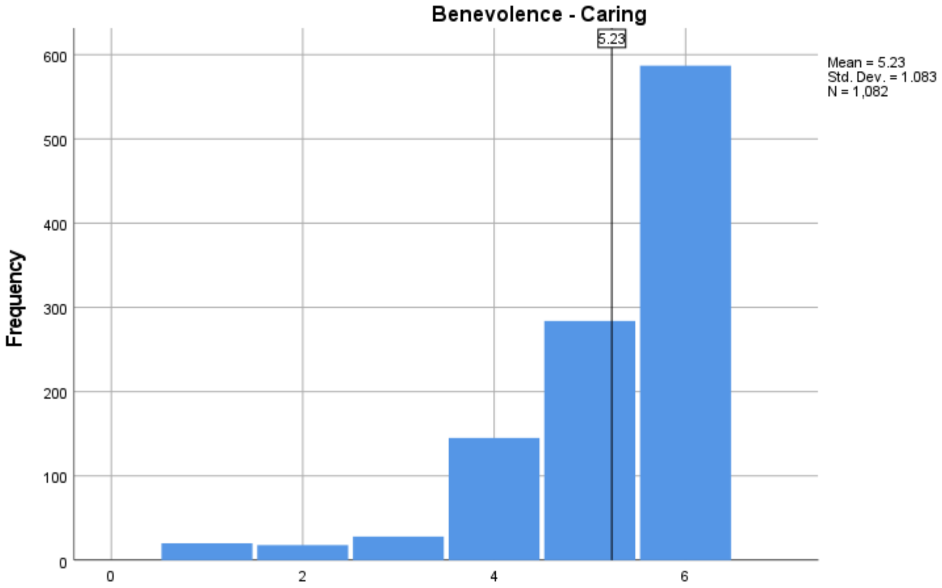
Figure 2 – Openness



Criterion is set at 5 being the highest, which is where the average response is indicated. Five and six represent agree or strongly agree responses respectively.

Figure 3 data represents the responses for the facet of benevolence with an emphasis on a caring teacher. The survey question was “Teachers at this school care about students,” and the mean of the responses is above the criterion set at five, with 5.23. In fact, more than 80% of responses were in the *agree* and *strongly agree* categories for this facet. This indicates a very high level of trust and indicates that a caring teacher is a very important factor in student trust. When looking at the spread of responses, it is skewed heavily to the higher responses, specifically number six which represents strongly agree. These responses are as expected based on theory, as a teacher perceived to be caring contributes to a trusting classroom environment.

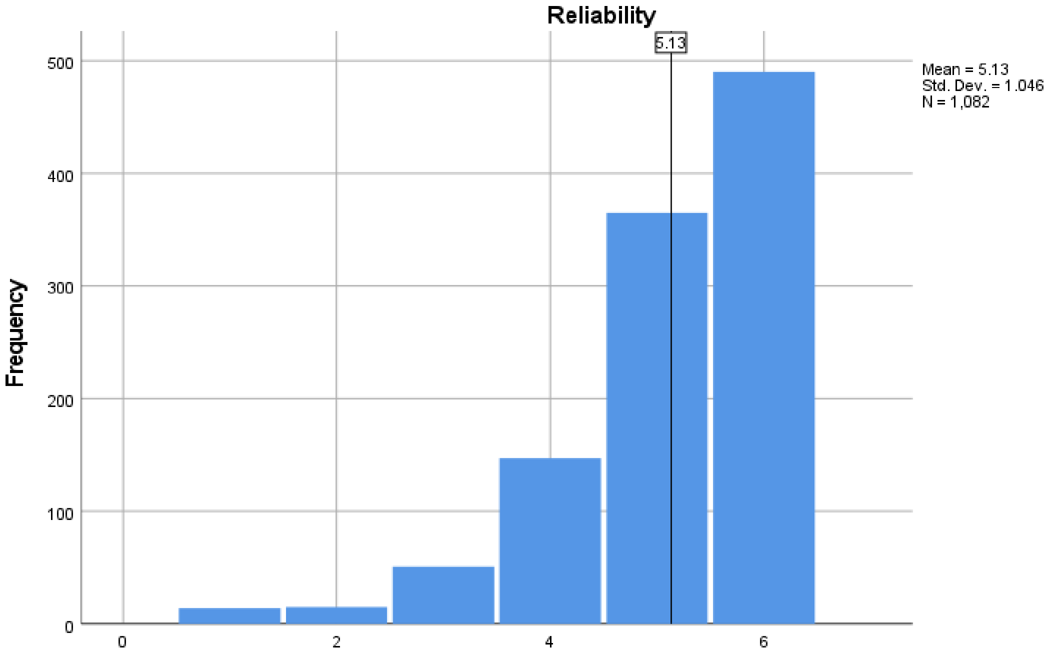
Figure 3 – Benevolence with an Emphasis on Caring



Criterion is set at 5 being the highest, which is where the average response is indicated. Five and six represent agree or strongly agree responses respectively.

Figure 4 reflects the responses for the facet reliability. The survey question stated, “Teachers at this school do what they are supposed to.” This mean of 5.13 is again above the criterion set at 5 for this graph. *Agree* and *strongly agree* were chosen as more than 78% of the responses in the survey. In fact, the average responses for the survey question related to reliability were more strongly agree than any other option, which indicates a high level of trust related to the students’ perception that the teacher is reliable.

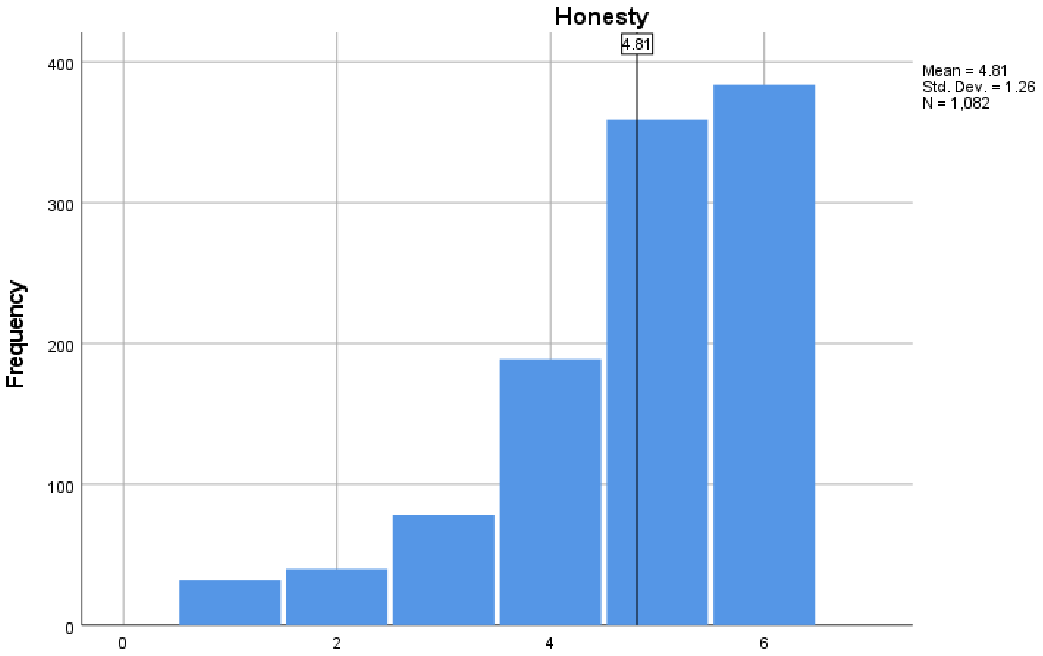
Figure 4 – Reliability



Criterion is set at 5 being the highest, which is where the average response is indicated. Five and six represent agree or strongly agree responses respectively.

Figure 5 reflects the responses to the survey question related to honesty and students' perceptions of the honesty of their teachers. The survey question stated, "Teachers at this school are honest with me." The mean for honesty is 4.81, so below the criterion of five set for the histogram. Approximately 48% of responses were either *agree* or *strongly agree* on the survey. The spread of responses still indicates a higher level of trust, but there are more responses below five, indicating some ambivalence or lower levels of trust.

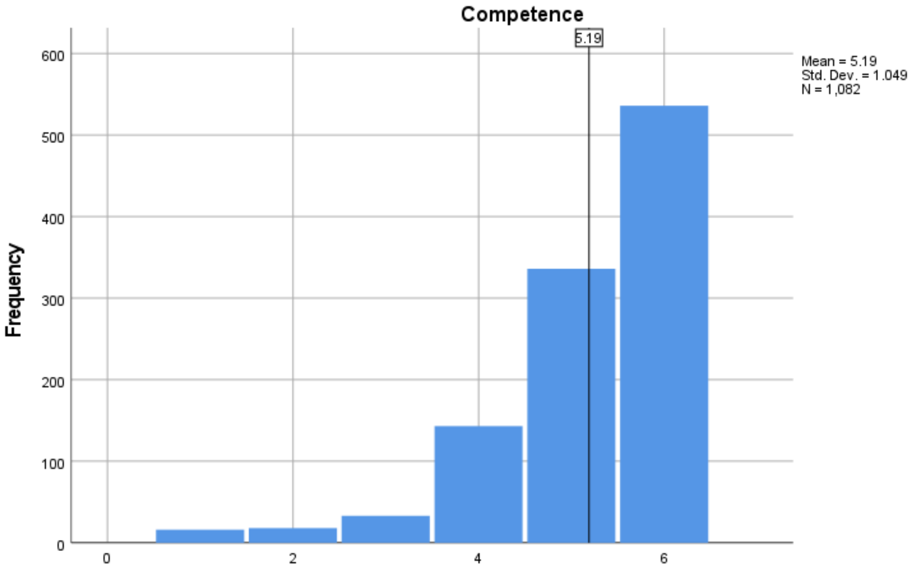
Figure 5 - Honesty



Criterion is set at 5 being the highest, which is where the average response is indicated. Five and six represent agree or strongly agree responses respectively.

The final figure representing the importance of the facets of trust is for competence. The survey question stated, “Teachers at this school are good at teaching.” The mean score from this data for competence is 5.19, which is above the criterion of five on the graph. More than 68% of the responses were either *agree* or *strongly agree*. This again indicates a high level of trust when a student perceives a teacher to be competent. In this study, competence is considered by students to be one of the most important facets when determining a teacher to be trustworthy by students.

Figure 6 – Competence



Criterion is set at 5 being the highest, which is where the average response is indicated. Five and six represent agree or strongly agree responses respectively.

In Summary, data related to Research Question 1 reflect some differences in how students judge the benevolence (with caring and with eagerness to help), competence, honesty, openness, and reliability of teachers. Three items exceeded the criterion of five. These were benevolence (with an emphasis on caring), reliability, and competence. Three items fell below the threshold. These were benevolence (with an eagerness to help), openness, and honesty.

Each facet of trust is represented in this section with a histogram to act as a visual figure to show results. The horizontal axis of each histogram represents the responses of the Likert-like scale provided, with one being “strongly disagree” to six being “strongly agree.” The vertical axis of each histogram represents the minimum possible mean score of zero to the maximum mean of five. Recall that the desired threshold for each response was a five, which would represent the averages of the two highest response options of agree and strongly agree for each question. Figure 3 represents Benevolence with an Emphasis on Caring; Figure 4 represents

Reliability; and Figure 6 represents Competence, each of which exceeded the desired threshold on the histograms.

Student Trust in Teachers by School and Grade Level

The second research question asked if there are differences in student trust in teachers by school and by grade level. In order to answer this question, descriptive statistics were aggregated by school and by grade level, followed by an ANOVA to compare within group and between group variance in trust. Table 2 presents the mean scores for student trust in teachers at each school site and is also broken down by grade level means from all three sites combined.

Table 2 shows that SCH130 had the highest mean score of 5.0265, SCH140 had a mean score of 4.9939, and SCH160 had the lowest mean of 4.7279. For grade level, the highest mean was with fourth graders at 4.9806. The fifth grader mean was 4.9646, and the sixth grade mean was 4.7926. Each of the means presented for the grade levels are not far below the criterion of five set to indicate a high level of perceived teacher trustworthiness.

Table 2 – Descriptive Statistics

School Code/Grade	*Mean*	*Standard Deviation*
SCH130	5.0265	.78502
SCH140	4.9939	.77748
SCH160	4.7279	.92415
4th Grade	4.9806	.87137
5th Grade	4.9646	.77173
6th Grade	4.7926	.87583

Dependent variable is student trust in teachers. The three school sites in this data are coded as SCH130, SCH140 and SCH160. SCH130 is the intermediate site with the lowest free and reduced lunch qualifying rate, while SCH160 has the highest free and reduced lunch qualifying rate among students.

Table 3 shows the means for each of the grade levels at each of the three individual school sites. Fourth grade students at SCH130 appear to have the highest mean of 5.2116, followed by fourth graders at SCH140 with a mean of 5.0428, then fifth graders at SCH140 with a mean of 5.0136. Each of these exceed the 5.0 criterion. Fifth graders at SCH130 have a mean of 4.9790, and sixth graders at BIX140 with 4.9220, both having means close to the 5.0 threshold. Fifth graders at SCH160 have a mean of 4.8687; sixth graders at SCH130 with 4.8357, and SCH160 fourth graders with 4.7097, and lastly, the sixth graders at SCH160 with 4.5655.

Table 3 – Descriptive Statistics

	Mean	*Standard Deviation*
SCH130		
4th Grade	5.2116	.72222
5th Grade	4.9790	.79029
6th Grade	4.8357	.81920
SCH140		
4th Grade	5.0428	.82128
5th Grade	5.0136	.74915
6th Grade	4.9220	.77635
SCH160		
4th Grade	4.7097	.97040
5th Grade	4.8687	.77615
6th Grade	4.5655	1.01495

Dependent variable is student trust in teachers. The three school sites in this data are coded as SCH130, SCH140 and SCH160.

Table 4 reports ANOVA results by school and by grade. As seen, results show a statistically significant difference in student trust in teachers by school (F=13.09, df=2, p<0.1). Approximately 2% of the variance in student trust was explained by school. This is a small amount of variance (Larson, 2008), yet still statistically significant. A statistically significant difference was also found by grade level (F=5, df=2, p<0.1). One percent of the variance in student trust in teachers was explained by grade level.

Table 4 – Analysis of Variance (ANOVA)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	30.373[a]	8	3.797	5.628	.000	.040
Intercept	24207.540	1	24207.540	35882.209	.000	.971
SchCode	17.660	2	8.830	13.089	.000	.024
Grade	7.692	2	3.846	5.701	.003	.011
SchCode	5.637	4	1.409	2.089	.080	.008
Error	723.888	1073	.675			
Total	27005.250	1082				
Corrected Total	754.261	1081				

a. R Squared = .040 (Adjusted R Squared = .033)

Table 5 reports post-hoc results. Two percent of the variance between school sites was indicated by the partial eta squared of 0.24. The explained variance could be because we had a large sample size when comparing the combined school sites. 1% of the variance between grade level results could be explained by the sample size. However, the differences between grade level results were considered statistically significant as well. The main differences of these groups can be found by comparing SCH130 and SCH160. SCH160 has the lowest levels of student trust across all three grades.

Table 5 – Post Hoc Test

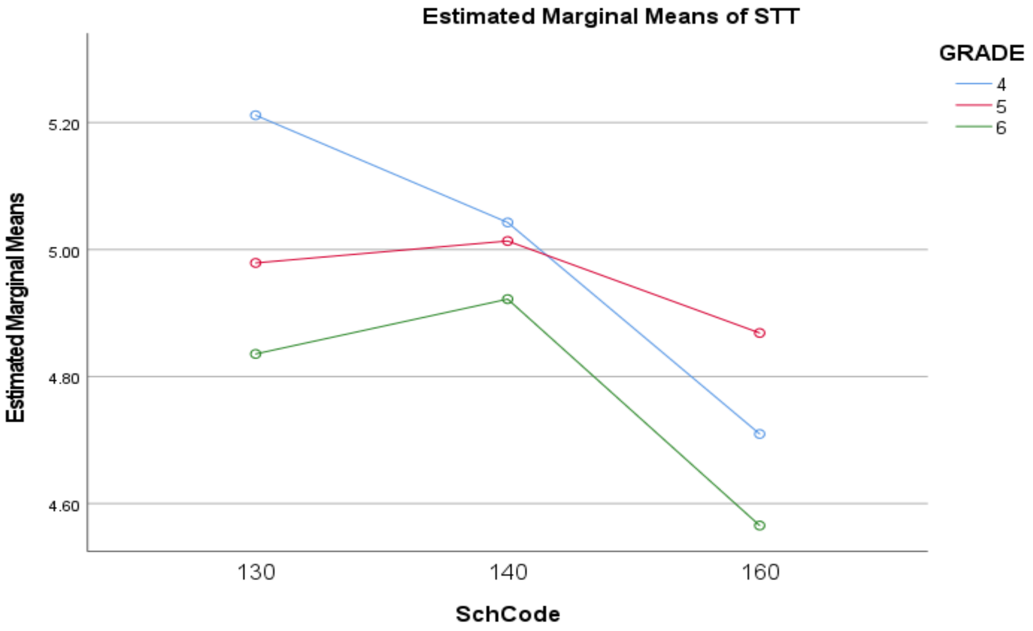
Multiple Comparisons
Dependent Variable: STT
Tukey HSD

(I) SchCode	(J) SchCode	Diff	Std. Error	Sig.	95% Confidence Interval Lwr	 Upr
130	140	.0326	.05972	.848	-.1075	.1728
	160	$.2986^{*}$	.06339	<.001	.1498	.4474
140	130	-.0326	.05972	.848	-.1728	.1075
	160	$.2660^{*}$	.06125	<.001	.1222	.4097
160	130	$-.2986^{*}$	.06339	<.001	-.4474	-.1498
	140	$-.2660^{*}$	.06125	<.001	-.4097	-.1222

*Based on observed means. The error term is Mean Square (Error) = .675. *. The mean difference is significant at the .05 level.*

Figure 7 gives a clearer picture of the differences in means between the three school sites. There is a precipitous drop in student trust in teachers (STT) at each grade level between the three school sites. Note a major difference between the fourth-grade students at SCH130 compared to the students at SCH160. Fifth grade appears to have the least amount of variance between sites, but sixth graders also had a significant drop between sites as well. Table 11 clearly exhibits the differences between levels of trust in each grade level at each school site.

Figure 7 – Estimated Means of Student Trust in Teachers



In summary, examining the descriptive and ANOVA data for Research Question 2 reflects statistically significant differences in student trust in teachers by school site and grade levels. Mean differences showed SCH130 above the criterion of 5, indicating a high level of trust overall at that site. SCH140 had a mean of 4.9939 and SCH160 had a mean of 4.7279, so both sites were very close to the threshold. By grade level, overall, fourth grade had the highest mean of 4.9806, while fifth grade's mean was 4.9646 and sixth grade's mean was 4.7926, all three of which were close to the threshold of 5. The ANOVA results showed a statistical difference in student trust in teachers by school, with 2% of the variance explained. A statistically significant difference by grade level was discovered, with one percent of the variance explained. Post hoc testing showed statistically significant differences between grade levels as well. The test showed that each school site had significant differences between one another. Each site exceeded the .05 level that determines a significant difference in trust between each school when compared to one another.

Student Trust and Instructional Styles of Teachers

This research question asks about the relationship between student trust and the instructional styles of teachers. Table 6 reflects the regression analysis of instructional styles of teachers that have an effect on student trust in teachers. The analysis also includes school site and grade level as variables to determine if they too have an effect on student trust in teachers, or if the effect of those variables is so insignificant they can be ignored.

Looking at this data, the total explained variance, or R Squared, is 0.523, which indicates 52% of the variance can be explained by the regression model. This means student trust in teachers can be affected by the other considered variables like autonomy-supportive instruction, competency-supportive instruction, grade level and school site. Looking at this data further, the standardized coefficients, or beta, for autonomy-supportive instruction and competency-supportive instruction appear to have the largest effect size on student trust in teachers. Autonomy-supportive instruction has a beta of 0.359, and competency-supportive instruction has a beta of 0.420, both indicating a moderate effect size. The closer to one the beta is, the more of an effect these variables have on student trust in teachers. Adversely, grade level and school site had a negative beta, indicating that those two variables did not affect student trust in teachers positively.

The analysis of Table 6 explains how the instructional styles of teachers positively affect the amount of trust students have in teachers. According to this data, competency-supportive instruction and autonomy-supportive instruction do make a difference in how much trust students have in their teachers. The data also shows that it does not matter the grade level or the school site when it comes to the instructional styles of teachers and the effect on student trust.

Table 6 – Regression for Student Trust in Teachers (STT) and Instructional Styles of Teachers

Coefficients

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	1.535	.119		12.854	<.001
	ASI	.309	.025	.359	12.625	<.001
	CSI	.439	.030	.420	14.546	<.001
	Fifth	-.052	.041	-.031	-1.259	.208
	Sixth	-.117	.047	-.062	-2.509	.012
	SCH160	-.085	.046	-.047	-1.860	.063
	SCH140	.018	.042	.010	.415	.678

Note: R Square = .523, Standard Error = .577, Fourth Grade, SCH130, Relatedness

Student Trust and Engagement

Research question four asks about the relationship between student trust and student engagement. Analysis of the data for question four consists of a regression model. The model, with student identification with school (student engagement) as the dependent variable, controls for competency-supportive and autonomy-supportive instruction, as well as school and grade level variables, as well as student trust in teachers.

The total explained variance, or R Square, for the data in Table 7 is 0.523. This indicates 52% of the variance can be explained by the model. This means that student engagement can be affected by autonomy-supportive instruction as well as competency-supportive instruction. Further, looking at the standardized coefficients, or beta, both autonomy-supportive instruction and competency-supportive instruction have a positive effect size on student engagement with 0.320 and 0.122 respectively. However, student trust in teachers has an even larger effect size on student engagement with a beta of 0.332. This indicates that if a student trusts a teacher, they are likely to be more engaged in learning. Just as with Table 6, school and grade levels had a negative beta therefore indicating that neither has a positive effect on whether a student is engaged in learning.

The data in Table 7 again shows the importance of autonomy-supportive instruction and competency-supportive instruction in classrooms. Not only do these instructional styles promote trust in teachers but they also create an environment of engagement. An environment of student engagement is an environment of student learning and can lead to achievement, which is why this data is so important and could have implications for further research.

Table 7 – Regression Examining Relationship Between Student Trust and Student Engagement (Student Identification with School)

Coefficients^{a}

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	-.421	.186		-2.267	.024
	ASI	.382	.038	.320	10.049	<.001
	CSI	.176	.048	.122	3.692	<.001
	Fifth	-.055	.060	-.023	-.916	.360
	Sixth	-.145	.068	-.055	-2.136	.033
	SCH160	-.094	.066	-.037	-1.420	.156
	SCH140	-.131	.061	-.055	-2.130	.033
	STT	.459	.044	.332	10.373	<.001

Note: R Square = .481, Standard Error = .834; SCH130; Fourth Grade; Relatedness

Research Results Summary

In summary, the analysis of results presented for each data set provides answers to the research questions presented. Results showed that each of the facets of trust had a large to moderate effect on student trust in teachers, however, the benevolence with an emphasis on a caring teacher, reliability and competence were considerably high, which shows how students are judging the trustworthiness of teachers. This evidence, though, cannot provide absolute confirmation that any one facet leads the others when it comes to student trust of teachers.

Differences in student trust could be found by school site and by grade level, with the lowest level of student trust being present in the school with the highest rate of poverty, SCH160. This aligns with other research on collective trust that determined faculty trust to be lower in higher poverty schools as well. The data showed that there were significant differences between schools and across grade levels too.

Instructional styles of teachers had an effect across the results on student trust, and of the two tested, competency-supportive instruction has a greater relationship with student trust than does autonomy-supportive instruction, though they are both statistically significant. The data show that teachers do, in fact, matter when it comes to a trustworthy environment.

Finally, the data show that student identification with school, or engagement, has a strong effect size on student trust in teachers. Those results are significant in that all of this could ultimately affect student achievement. Although that was not tested in this study, it makes sense and could be an implication for further research.

Chapter 6: Discussion

Introduction to Discussion

The purpose of this study was to examine the five facets of trust, established by Hoy and Tschannen-Moran (1999), and determine which might contribute most to student trust in teachers in the classroom. Additionally, the study set to establish differences in student trust in teachers by school and by grade level. The study also sought to ascertain if, when the basic psychological needs of autonomy, relatedness, and competence are present, students exhibit more trust in teachers as posited by Deci and Ryan (2000). The research study utilized descriptive and exploratory analysis to ascertain if one of the five facets of trust had more of a bearing on student trust than the other facets, to discover any difference in student trust in teachers by school and by grade level, and to reveal any relationship between student trust and instructional styles of teachers, as well as a relationship between student trust and engagement in school and by grade level. The information provided exhibits analysis of the following research questions:

1. Which facets of trust received the highest endorsements from students in relation to student trust in teachers?
2. Are there differences in student trust in teachers by school? By grade level?
3. What is the relationship between student trust and instructional styles of teachers?
4. What is the relationship between student trust and engagement in school?

An examination of the research questions, along with thoughts on the relevance of findings as they pertain to the questions are found within the discussion chapter. The discussion chapter concludes with implications and recommendations for future research.

Student Endorsement of Trust Facets

In relation to this research question, student discernment of teacher trustworthiness was largely based on teacher behaviors with teaching tasks. Reliability and competence had a higher level of endorsement by the students surveyed for this study. Teachers who exhibited the facet of benevolence with an emphasis on caring had the highest student endorsement according to the results. All three of those facets were above the threshold of 5.0, which indicates a high level of trustworthiness. Further, openness showed the least amount of endorsement by students, which may be further evidence that teacher trustworthiness is determined not by behaviors, but instead by their abilities to teach.

Incompetence is a corrosive element in terms of trust relationships. Although a teacher's competence can be more challenging to ascertain because teaching occurs in the privacy of their classrooms, judgements about expert practice do play a role in the discernments of trust relations in schools (Bryk & Schneider, 2002). Moreover, teachers with more confidence in their own competence tend to create classrooms that focus more on student learning and effort (Miller et al,, 2017).

Rotter (1967), states that much of what children learn in school requires them to rely on the written or spoken words of others. To be considered reliable, there is an implied sense of confidence that one will meet the needs of another in a positive way (Forsyth et al., 2011). To maximize the benefits of schooling for students, then high levels of consistency and reliability are needed (Lo-Casale et al., 2018). Specifically, consistency and reliability of teacher-student interactions could be a predictor of social and academic outcomes for students (Lo-Casale et al., 2018).

Benevolence is founded in the perceived good intentions and motives of others. When parents leave their child at school, they expect that the well-being of their child will be consistently met by the school staff (Tschannen-Moran, 2014). When children perceive their teachers as caring, they are more likely to believe that the teachers have their wellbeing at the forefront (Tschannen-Moran, 2014). Tschannen-Moran’s study aligns with the results of this study in that caring, or benevolence, is the most common facet of trust and the one most identified with trust (Tschannen-Moran, 2014).

Present in this study are implications that students may judge teachers as relatively trustworthy through technical teaching tasks as well, which helps with the discernment of teacher competence and reliability. Benevolence with caring seems the most apparent and direct avenue to a student-teacher trust relationship; however, based on the evidence within this study which showed the means of each over the threshold of 5, the competence and reliability of a teacher also factor into the student-teacher trust relationship. For a teacher to have a classroom environment founded in trust, the evidence from this study suggests that the teacher must not only exhibit care for her students, but she must teach with competence and prove reliable for her students as well.

Task Context and Student Trust

Consistent with collective trust theory, the task context has implications for student trust in teachers. Students come to school with varying degrees of social and academic skills and knowledge (Forsyth et al., 2011). They enter the classroom with differing levels of external and internal trust as well. Teachers should meet students where they are once they arrive, while also moving them towards a set of social and academic goals (Forsyth et al., 2011).

The influence of the task context is largely working through the social interactions between students and teachers. If the classroom were a simple task context where a product was standardized based on certain criteria, then the need for trust would be minimal (Forsyth et al., 2011). Because there are hundreds of variables inside a classroom, from academic levels to home life situations, to teacher competency, to instructional styles, trust is necessary for student success. That trust is dependent on the interactions between the student and the teacher (Forsyth et al., 2011). LaCasale-Crouch et al. (2018) determined that consistent, positive student interactions with teachers while in elementary school into early adolescence can carry a child through the remainder of their school career. School is a social structure where task context is very complex. As such, a positive relationship between the student and teacher is a key component for trust (Forsyth et al., 2011).

Looking at the measurements of trust across the three school sites from this study, the descriptive statistics in Table 2 show that School 130 had the highest level of perceived trust because their overall mean was higher than the threshold that was set at 5.0. Although the other sites were close to that threshold, the overall mean for School 140 and School 160 indicates some ambivalence to trust.

The data further shows that fourth graders have a higher level of perceived trust than do fifth or sixth graders collectively over the district. These results align with previous studies that have shown that younger students have a higher level of perceived trust, in part because of the transference of the parent/child relationship into the teacher/student relationship (Bryk & Schneider, 2002). As students progress through grades, they become more responsible for their own learning and the role dependency between the student and the teacher changes, thereby changing the trust dynamic between the teacher and the student (Bryk & Schneider, 2002). Data from the first research question exhibited that students' trust in teachers was judged through technical teaching tasks. In terms of collective trust theory, younger students tend to have more interdependence with the teachers and classmates, and as they get older, the amount of independent learning increases and the amount of dependence on the teacher decreases, as does the level of trust (Forsyth et al., 2011).

Looking further at these results, each school exhibits a decline in trust by grade level. Although the differences are slight, the results show an increased level of ambivalence in trust between grade levels. School 130 fourth graders had a mean of 5.2, which represents a high level of trust. Fifth graders fell slightly lower at 4.98, and sixth graders even lower at 4.8. School 140 fourth graders had a mean of 5.04, and fifth graders had a mean of 5.01, both maintaining a high level of trust, while the sixth graders slipped below that threshold with a mean of 4.9. School 160, the school with the lowest socioeconomic levels, had a fourth grade mean of 4.7, already lower than the other intermediates and aligning with the notion that socioeconomic status is reflected in trust level. Fifth graders had a mean of 4.9, which is slightly higher than the fourth graders, and sixth grade had a mean of 4.6 which is significantly lower than the sixth graders at the other sites. Aside from the outlier, which was the fifth graders at School 160, the data on Table 3 in the previous chapter aligns with Bryk and Schneider, and other researchers, who have determined trust wanes with the changes in role dependency between teachers and students.

Competency and Autonomy-Supportive Instruction and Student Trust

The study sought to determine if there is a relationship between student trust and instructional styles of teachers examined through the lens of self-determination theory. Students in this study determined that a teacher's ability to provide competency-supportive instruction is more trustworthy than a teacher who provides autonomy-supportive instruction. However, both autonomy and competency-supportive instructional styles were positively related to students' trust in teachers. Therefore, one can discern from this study that a classroom climate supported by competency and autonomy-supportive instructional styles can nurture student trust in teachers.

The purpose for examining the data exhibiting the relationship between the instructional styles of teachers and student trust was to look at how students see teachers' efforts in respect to autonomy and competence supportive instruction and if there was a relationship between this and trust. Does the teacher create an environment that allows students to take risks and exhibit vulnerability, or does the environment thwart autonomy and competence? When teachers provide competency-supportive instruction and autonomy-supportive instruction, students are then more willing to risk vulnerability (LaGuardia, 2009). Other studies have shown the teachers' competency and autonomy-supportive instructional styles promote students' internalization of school tasks, enhanced student achievement, and higher functioning in school (Grolnick et al., 1991; Soenens & Vansteenkiste, 2005).

To determine the strength of the relationship between the instructional styles of the teacher and student trust for this study, effect size was examined. The *Pearson r* correlation is the method used to determine the effect size of a relationship. The effect size in turn summarizes the strength of the relationship with a number ranging between -1 (a perfect negative relationship) to a +1 (a perfect positive relationship). The findings in this study showed that, with all students and school sites combined, competency support and autonomy support both had a positive significant relationship with student trust in teachers. In fact, both had an effect size of 0.68, which indicated a moderate to large effect size. Looking further within the data for school site specific data as well as grade level specific data, the effect size for competence support and autonomy support within this study were both large. It is safe to determine from this, because of the positive relationship determined by the effect size, that both competence support and autonomy support were considered by the students surveyed for this study to be important instructional styles of teachers. This study adds to a body of evidence that shows the instructional styles of teachers are key contributors to students' self-reported engagement (Olivier et al., 2020).

Needs-supportive environments advance quality learning and development of students. Self-determination theory is grounded in this notion as well as that students, regardless of their starting point, their background, or their ability, have the internal motivational resources to engage constructively and proactively in learning (Casper, 2012; Ryan & Deci, 2000). The researchers state that needs-support creates an environment where positive functioning can flourish. Autonomy and competence are hindered or thwarted in an environment of excessive control and authentic and open relationships between teachers and students are impeded (Casper, 2012; Reeves et al., 2008). The participants of this study have indicated through data that, to trust their teacher, it is important that the teacher exhibit instructional styles that reflect autonomy and competence within the classroom.

This research confirms that for these schools, for teachers to be considered trustworthy, they should create an environment where needs supports are provided. When autonomy and competency-supportive instruction are provided, individuals are enabled to perform at their peak (Adams & Forsyth, 2013). However, when competency and autonomy-supportive instruction is not present and trust is low, social controls utilized by the teacher that are student-centered, engaging and learning-oriented lose their effectiveness (Adams & Forsyth, 2013).

Student Engagement and Student Trust

Within this study, the data in Table 8 shows when student identification with school increases, then student trust increases as well by a large margin. This indicates that increased engagement and increased trustworthiness may go hand in hand. Therefore, from this study the determination could be made that students who are highly engaged in school also have a high level of trust in their teachers.

In high trust schools, students may feel a sense of belonging that contributes to motivation and engagement thus allowing them to perform better (Goodenow & Grady, 1993). That sense of belonging and engagement is often dependent on a student's perception of needs support from their teacher (Farrell, 2000; Finn, 1989). Conversely, students who hold distrust in their teachers may disengage and create barriers to their own learning, making it difficult to identify with school and hold a sense of belonging (Goodenow & Grady, 1993).

Self-determination theory aligns with the findings of this study along with the aforementioned studies in that a supportive environment, according to Ryan and Deci (2002), lends itself to increased learning because students are better able to engage with the teacher and understand the purpose of the teaching. LaGuardia (2009) argued that the fulfillment of needs support in a positive teacher-student relationship may facilitate education outcomes like engagement and achievement. Further, student trust in teachers may translate directly to the thoughts, feelings, and behaviors directly associated with self-determination, and self-determination is a critical source for quality performance (Forsyth et al., 2011).

When there is an environment of trust, students are more likely to ask questions and to engage in help-seeking behavior. Trusting students are more likely to adopt the goals of the teacher and the school in terms of achievement and behavior. Student trust is associated with identification with school, engagement, and the motivation to achieve (Romero, 2014; Gregory & Ripski, 2008; Tschannen-Moran et al., 2013). Within this study, each individual school site and each grade level exhibited a large effect size for student identification (engagement) and student trust in teachers.

In conclusion, the findings in this study are reflective of the value of competency and autonomy-supportive environments that lead to students trust in teachers. The study's findings show a strong, positive relationship between student trust and instructional styles of teachers as well as a positive relationship between student trust and engagement in school. As a result, these findings also provide the answers to Research Questions 3 and 4 of the study. These results, however, neither imply nor prove causality.

Relevance for 21st Century Education

Expectations for education in the 21st century have evolved. Stauffer (2020) determined the 4 C's of 21st Century Skills to be: critical thinking, creativity, collaboration, and communication. The final two require a definite element of teamwork and effective teamwork, like an effective classroom, must be founded in trust. These skills are considered to be universal and imperative for student success in the Information Age and the age of the Internet (Stauffer, 2020). Individuals care more about each other and are more committed to each other's success and well-being when working together cooperatively rather than working independently (Johnson & Johnson, 2014). Forsyth, Adams, and Hoy (2011) state that an important element of human learning is trusting others, because learning is often a cooperative process. The researchers further state that the evidence supports the conclusion that cooperation in the classroom sets the stage for effective learning in schools, which would be indicative of student engagement.

For students to flourish, and for teachers to teach lessons that promote creativity, critical thinking, collaboration, and communication, it makes sense to expect an environment of trust is present before higher level learning skills such as these can be utilized in the classroom. Enough evidence has been presented in this study to show that trust, and a relationship where basic psychological needs are met, is the basis for a classroom where the students are engaged and willing to learn (Hoy & Tschannen-Moran, 2004; Forsyth & VanHoutte, 2014). Programs, initiatives, and one-size-fits all programs are not the solution to the changing expectations and lack of engagement in our schools. The answer lies in a classroom where a caring teacher exhibits competence, autonomy, and relatedness, while fostering an environment of trust (Tschannen-Moran, 2004; Deci et al., 1991).

Satisfaction of the basic psychological needs relates positively to job satisfaction and vigor (Broeck et al., 2010). Gallup (2019) indicated that approximately 50% of students report being disengaged in school or bored with school. Recent reports indicate that between one and three million students, mostly students of color, have been disconnected and disengaged with schooling during the Covid pandemic (Samuels, 2021). More now than ever, the notion of creating a foundation whereby trust is paramount should be on top of every education policymaker’s list of skills developments for 21st century learning. The findings in this study support the value and importance of a trusting classroom environment.

Limitations and Implications for Future Research

One of the limitations of cross-sectional studies is that they suffer from an inability to determine a true causal relationship. However, cross-sectional research methods remain the predominant mode of empirical research analysis (Bowen & Wiersema, 1999). This study examined correlational relationships supported by empirical evidence that allowed for strong conclusions about the most prominent facets of trust, the effects of trust, the differences in trust, and the relationship between trust and engagement in classrooms, as well as the value and importance of a needs-supportive environment where autonomy, competence, and relatedness are prevalent.

The research study involved a cross-sectional analysis of one suburban public school district with an enrollment of slightly fewer than 7000 students. In spite of possible criticism related to the size and scope of the use of one school district, three schools, and three grade levels, the data acquired in this study replicates results from similar studies, and the relationships explored hold strong external validity as those similar studies reflect similar results.

Limitations on demographics, such as free and reduced lunch status, were not imposed on the methods of this study. Analysis of trust relationships within an urban district showed that poverty, more than ethnicity or race, seemed to hinder the trust that would lead to student achievement (Tschannen-Moran, 2004). The demographics of the suburban district represented in the study report a 33% free and reduced lunch rate among all students in the district, which is far below the national average of 77%, as reported by the USDA Annual Report. Aggregating the data of those students qualifying for free and reduced lunch may have changed the results, or, given the relatively small number of students qualifying for free and reduced lunch involved in the study, the results may not have significantly changed. Either way, the data related to students from poverty repeatedly exhibits the high need for student trust in teachers. Without trust, the students are denied an important form of social support, as well as access to the opportunity's schools present (Tschannen-Moran, 2004).

To further the body of research specifically related to the aspects of student trust in teachers, studies such as this could be replicated, expanding the scope and size of the data sample to include differing school demographics, such as socioeconomic status, race, grade level, and so on. Future studies could expand to varying urban, suburban, and rural public school districts in order to reflect more representation of the many different school systems and more diverse demographics.

This empirical study focused only on fourth, fifth and sixth grade students. Subsequent research could expand to students at the middle school and high school levels in order to increase sample size and provide more generalizability of overall results. It is strongly recommended that further research studies, such as a longitudinal design, expand the study to include all levels of K – 12 education in order to gather valuable information related to the facets of trust, the relationships between instructional styles of teachers and student trust, and student identification and student trust at all academic levels. Furthering this study could potentially allow for a more concrete methodology for trust development in relationships between teachers and students.

This study and the subsequent results have already brought about systemic changes, starting with rebuilding school and district culture and trust. The need for relationship building and trust relationships has led to the adaptation of school discipline and training for teachers across the district at every grade level. The primary focus of the district’s new strategic plan and training is a foundation of trust. It was developed with representatives from every stakeholder group: parents, students, teachers, administrators and community members with collaboration, openness, honesty, and constructive conversations.

References

Adams, C. (2014). Collective student trust: A social resource for urban elementary students. *Educational Administration Quarterly, 50*(1), 135-159.

Adams, C. (2012). Collective trust: A social indicator of instructional capacity. *Journal of Educational Administration*, *51*(3), 363-382.

Adams, C., & Adigun, O. B. (2021). Building a climate of faculty trust in students through principal support of student psychological needs. *Journal of Educational Administration*, *59*(5), 598–614. https://doi.org/10.1108/jea-08-2020-0188

Adams, C., Forsyth, P., Dollarhide, E., Miskell, R., & Ware, J. (2015). Self-regulatory climate: A social resource for student regulation and achievement. *Teachers College Record*, 117, 1-28.

Adams, C., & Forsyth, P. (2013). Revisiting the trust effect in urban elementary schools. *The Elementary School Journal*, *114*(1), 1-21.

Adams, C., Forsyth, P., & Mitchell, R. (2009). The Formation of Parent-School Trust: A Multilevel Analysis. *Educational Administration Quarterly*, 4-33.

Adams, C., Khojasteh, J. (2018). Igniting students' inner determination: The role of a need-supportive climate. Journal of Educational Administration, *56*(4), 382–397. https://doi.org/10.1108/jea-04-2017-0036

Assor, A., Kaplan, H., & Roth, G. (2002). Choice is good, but relevance is excellent: Autonomy-enhancing and suppressing teacher behaviours predicting students' engagement in school work. *British Journal of Educational Psychology*, *72*, 261-278.

Baier, A. C. (1986). Trust and antitrust. *Ethics*, *96*(2), 231-260.

Bandura, A., (1997). Self-efficacy: The exercise of control. New York, NY: Freeman.

Benson, B. (2020). *Teacher-Student Relationships and Student Engagement in the Middle School Classroom* (Order No. 28156055). Available from ProQuest Dissertations & Theses Global; Publicly Available Content Database. (2463584369). https://login.ezproxy.lib.ou.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fdissertations-theses%2Fteacher-student-relationships-engagement-middle%2Fdocview%2F2463584369%2Fse-2

Bidwell, C. E., (1970). Student and schools: Some observations on client trust in client serving organizations. In W. R. Rosengren & M. Lefton (Eds.). *Organizations and Clients: Essays in the Sociology of Service* (pp. 37-69). Columbus, Ohio: Charles E. Merrill Publishing Co.

Bowen, H. P., & Wiersema, M. F. (1999). Matching method to paradigm in strategy research: Limitations of cross-sectional analysis and some methodological alternatives. *Strategic Management Journal, 20*(7), 625-636. doi:10.1002/(sici)1097-0266(199907)20:73.0.co;2-v

Broeck, A., Vansteenkiste, M., Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the work-related basic need satisfaction scale. *Journal of Occupational and Organizational Psychology, 83*(4), 981-1002. doi:10.1348/096317909x481382

Bryk, A., & Schneider, B. (2003). Trust in schools: A core resource for school reform. *Educational Leadership, 60*(6), 40 - 45.

Bryk, A. & Schneider, B. (2002). Trust in Schools: A core resource for improvement. Russell Sage Foundation, New York, NY.

Bryk, A., Camburn, E., & Louis, K. (1999). Professional community in Chicago elementary schools: Facilitating factors and organizational consequences. *Educational Administration Quarterly, 35*(5), 751-781. doi:10.1177/00131619921968815

Cardinal, R. N., & Aitken, M. R. F. (2006). *ANOVA for the behavioural sciences researcher*. Mahwah, NJ: Lawrence Erlbaum Associates.

Casper, D. C. (2012). The Relationship between Collective Student Trust and Student Achievement.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J. Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2014). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, *39*(2), 216–236. https://doi.org/10.1007/s11031-014-9450-1

The condition of college and career Readiness 2015 National. (n.d.). Retrieved March 31, 2021, from https://www.act.org/content/dam/act/unsecured/documents/CCCR15-NationalReadinessRpt.pdf

Cohen, R., Moed, A., Shoshani, A., Roth, G., & Kanat-Maymon, Y. (2019). Teachers' conditional regard and students' need satisfaction and agentic engagement: A Multilevel Motivation Mediation Model. *Journal of Youth and Adolescence*, *49*(4), 790–803. https://doi.org/10.1007/s10964-019-01114-y

Connell, J. P., & Wellborn, J. G. (1991), Competence, autonomy, and relatedness: A motivational analysis of self-system processes. In M.R Gunnar & L.A. Sroufe (Eds.). *Self processes and development: The Minnesota symposia on child psychology, 23* (pp. 43-77). Hillsdale, NJ: Lawrence Erlbaum.

Coughlan, M., Cronin, P., & Ryan, F. (2009). Survey research: Process and limitations. *International Journal of Therapy and Rehabilitation*, *16*(1), 9–15. https://doi.org/10.12968/ijtr.2009.16.1.37935

Davis, H. A. (2001). The quality and impact of relationships between elementary school students and teachers. *Contemporary Educational Psychology*. *26*(4), 431-453.

Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*(2), 109-134. doi:10.1016/0092-6566(85)90023-6

Deci, E. L., & Ryan, R. M. (2004). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

Deci, E., & Ryan, R. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, *49*(3), 182-185.

Deci, E. L., & Ryan, R. M. (2011). Levels of analysis, regnant causes of behavior and well-being: The role of psychological needs. *Psychological Inquiry*, *22*(1), 17–22. https://doi.org/10.1080/1047840x.2011.545978

Deci, E., Vallerand, R., Pelletier, L., & Ryan, R. (1991). Motivation and education: The self-determination perspective. *Educational Psychology*, *26*(3 & 4), 325-346.

Desautels, L. (2015, May 18). 3 things students desire to hear from teachers. Retrieved March 31, 2021, from https://www.edutopia.org/blog/students-desire-to-hear-from-teachers-lori-desautels

Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution*, *2*(4), 265-279. Education technology use in schools. (n.d.). Retrieved March 31, 2021, from http://www.newschools.org/wp-content/uploads/2019/09/Gallup-Ed-Tech-Use-in-Schools-2.pdf

Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, *59*(2), 117-142.

Finn, J., & Voelkl, K. (1993). School Characteristics Related to Student Engagement. *The Journal of Negro Education*, *62*(3), 249-268. doi:10.2307/2295464

Forsyth, P., Barnes, L., & Adams, C. (2006). Trust-effectiveness patterns in schools. *Journal of educational administration*, *44*(2), 122 - 141.

Forsyth, P., Adams, C., & Hoy, W. (2011). *Collective trust: Why schools can't improve without it*. New York, NY: Teachers College Press.

Forsyth, P., & Van Houtte, M. (2014), *Trust in school life: the role of trust for learning teaching, leading, and bridging* (pp. 37-56). Dordrecht, the Netherlands: Springer ‘ Science + Business Media.

Fukuyama, F. (1996). *Trust the social virtues and the creation of prosperity*. New York: Free Press Paperbacks.

Fullan, M. (n.d.). *All Systems Go: The Change Imperative for Whole System Reform*. SAGE Publications.

Furrer, C., & Skinner, E., (2003). Sense of relatedness as a factor in children’s academic engagement and performance. *Journal of Educational Psychology*, *95*(1), 148-162.

Gambetta, D. (1988). Can we trust? *Trust: Making and breaking cooperative relations* (pp. 213-238). New York: Basil Blackwell.

Goddard, R.D. (2003). Relational networks, social trust, and norms: A social capital perspective on students’ chances of academic success. *Educational Evaluation and Policy Analysis, 25*(1), 59-74.

Goddard, R., Tschannen-Moran, M., & Hoy, W. (2001). A multilevel examination of the distribution and effects of teacher trust in students and parents in urban elementary schools. *Chicago Journals, 102*(1), 3 – 17.

Grolnick, W. S., & Slowiaczek, M. L., (1994). Parents’ involvement in children’s schooling: A multidimensional conceptualization and motivational model. *Child Development, 65*(1), 237-252.

Gregory, A., & Ripski, M. B., (2008). Adolescent trust in teachers: implications for behavior in the high school classroom. *School Psychology Review*, *37*(3), 337-353.

Grubb, W. N. (2005). The education gospel: The economic power of schooling. *Science Education, 89*(5), 870-872. doi:10.1002/sce.20105

Grubb, W. N., & Allen, R. (2010). Rethinking school funding, resources, incentives, and outcomes. *Journal of Educational Change, 12*(1), 121-130. doi:10.1007/s10833-010-9146-6

Harter, S. (1996). Teacher and classmate influences on scholastic motivation, self-esteem, and level of voice in adolescents. *Social motivation: Understanding children’s school adjustment* (pp. 11-42). Cambridge: Cambridge University Press.

Haug, B. S., & Mork, S. M. (2021). Taking 21st Century skills from vision to classroom: What teachers highlight as supportive professional development in the light of new demands from educational reforms. *Teaching and Teacher Education, 100*, 103286. https://doi.org/10.1016/j.tate.2021.103286

Hayward, R. B. (2011). *The heart of the matter: Transforming the lives of students through relationships.* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI Number 3455406).

Hoy, W. (2012). School characteristics that make a difference for the achievement of all students. *Journal of Educational Administration, 50*(1), 76-97.

Hoy, W., & Tschannen-Moran, M. (1999). Five faces of trust: an empirical confirmation in urban elementary schools. *Journal of school leadership*, *9*, 184 - 208.

Hussar. (2020, May 19). The condition of education 2020. Retrieved March 31, 2021, from https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2020144

Jederlund, U., & von Rosen, T. (2021). Changes in students' School Trust as a reflection of teachers' collective learning processes: Findings from a longitudinal study. *Scandinavian Journal of Educational Research*, 1–22. https://doi.org/10.1080/00313831.2021.1982764

Jiang, J., Vauras, M., Volet, S., & Salo, A. E. (2019). Teacher beliefs and emotion expression in light of support for student psychological needs: A qualitative study. *Education Sciences*, *9*(2), 68. https://doi.org/10.3390/educsci9020068

Johnson, D. W., & Johnson, R. T. (2014). Cooperative learning in 21st century. *Anales De Psicología / Annals of Psychology*, *30*(3), 841-851. https://doi.org/10.6018/analesps.30.3.201241

Klem, A. M. & Connell, J. P., (2004). Relationships matter: Linking teacher support to school engagement and achievement. *Journal of School Health*, *74*(7), 262-273.

Kramer, R. M., (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of Psychology*, *50*(1), 569-598.

LaGuardia, J. G. (2009). Developing who I am: A self-determination theory approach to the establishment of healthy issues. *Educational Psychologist*, *44*(2), 90-104.

LaGuardia, J. G., & Patrick, H. (2008). Self-determination theory as a fundamental theory of close relationships. *Canadian Psychology*, *49*(3), 201-209.

Larson, M. G. (2008). Analysis of Variance. Circulation, 117, 115-121. doi:10.1161/CIRCULATIONAHA.107.654335. https://www.ahajournals.org/doi/abs/10.1161/CIRCULATIONAHA.107.654335

Luhmann, N. (1988). *Trust and power*. New York: Wiley.

Marylène G., & Deci, E. L. (2005). Self-Determination Theory and Work Motivation. *Journal of Organizational Behavior*, *26*(4), 331–362. http://www.jstor.org/stable/4093832

Miller, A. D., Ramirez, E. M., & Murdock, T. B. (2017). The influence of teachers' self-efficacy on perceptions: Perceived teacher competence and respect and student effort and achievement. *Teaching and Teacher Education*, *64*, 260–269. https://doi.org/10.1016/j.tate.2017.02.008

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom. *Theory and Research in Education*, *7*(2), 133–144. https://doi.org/10.1177/1477878509104318

Newmann, F. (1993). Student engagement and achievement in American secondary schools. *Choice Reviews Online*, *30*(07). doi:10.5860/choice.30-3945

Noguera, P. (2008). Creating Schools Where Race Does Not Predict Achievement: The Role and Significance of Race in the Racial Achievement Gap. *The Journal of Negro Education*, *77*(2), 90-103. Retrieved March 31, 2021, from http://www.jstor.org/stable/25608673

Mayer, R. C., Davis J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, *20*(3), 709-734.

Miles, M., & Louis, K. (1990). Mustering the will and skill for change. *Educational Leadership*, *47*(8), 57-61.

Mitchell, R. M. (2004). *The effects of trust on student identification and academic performance*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses.

Mitchell, R. M., Forsyth, P. B., & Robinson, U. (2008). Parent trust, student trust and identification with school. *Journal of Research in Education*, *18*, 116-124.

National center for Education Statistics (NCES) home Page, part of the U.S. Department of education. (n.d.). Retrieved March 31, 2021, from http://nces.ed.gov/

Niedlich, S., Kallfaß, A., Pohle, S., & Bormann, I. (2020). A comprehensive view of trust in education: Conclusions from a systematic literature review. *Review of Education*, *9*(1), 124–158. https://doi.org/10.1002/rev3.3239

Niemiec, C. P., & Ryan, R. M., (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, *7*(2), 133-144.

Putnam, R. D., (1993). *Making democracy work: Civic traditions in modern Italy*. New Haven: Princeton University Press.

Reckmeyer, M. (2021, March 22). Focus on student engagement for better academic outcomes. Retrieved March 31, 2021, from https://www.gallup.com/education/267521/focus-studnt-engagement-better-academic-outcomes.aspx

Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. *Journal of Educational Psychology, 98*(1), 209-218. doi:10.1037/0022-0663.98.1.209

Reeve, J., Ryan, R., Deci, E. L., & Jang, H. (2008). Understanding and promoting autonomous self-regulation: A self-determination theory perspective. In D. H. Schunk & B. J.

Romero, L. (2010). *Student trust: Impacting high school outcomes*. (Doctoral Dissertation) Retrieved from eScholarship, University of California. Permalink: http://escholarship.org/uc/item/09s3q09w.

Romero, L. (2015). Trust, behavior, and high school outcomes. *Journal of Educational Administration*, *53*(2), 215-236.

Romero, L. S., Scahill, V., & Charles, S. R. (2020). Restorative approaches to discipline and implicit bias: Looking for ways forward. *Contemporary School Psychology*, *24*(3), 309–317. https://doi.org/10.1007/s40688-020-00314-9

Rowley, J. (2002), "Using case studies in research", *Management Research News*, *25*(1), pp. 16-27. https://doi.org/10.1108/01409170210782990

Ruzek, E., Hafen, C., Allen, J., Gregory, A., Mikami , A., Pianta, R. 2016. How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and Instruction*, *42*, 95-103.

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality, 63*(3), 397-427.

Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, *55*(1), 68 - 78.

Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*, 54-67.

Ryan, R. M., Stiller, J. D., & Lynch, J. H. (1994). Representations of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence*, *14*(2), 226-249.

Samuels, C. A. (2021). Inside the effort to find and help disengaged youth. *Edweek.org*.

Stauffer, B. (2020, March 19). What are 21st century skills? Retrieved March 31, 2021, from https://www.aeseducation.com/blog/what-are-21st-century-skills

Sulea, C., van Beek, I., Sarbescu, P., Virga, D., & Schaufeli, W. B. (2015). Engagement, boredom, and burnout among students: Basic need satisfaction matters more than personality traits. *Learning and Individual Differences*, *42*, 132–138. https://doi.org/10.1016/j.lindif.2015.08.018

Tschannen-Moran, M. (2014). The interconnectivity of trust in schools. *Trust and School Life,* 57-81. doi:10.1007/978-94-017-8014-8_3

Tschannen-Moran, M. (2004). *Trust matters: Leadership for successful schools*. San Francisco, CA: Josey-Bass.

Tschannen-Moran, M., Bankole, R., Mitchell, R., & Moore, D. (2013). Student Academic Optimism: A confirmatory factor analysis. *Journal of Educational Administration,* 150-175.

Tschannen-Moran, M., & Hoy, W. (1997). Trust in schools: A conceptual and empirical analysis. *Journal of Educational Administration*, *36*(4), 334-352.

Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, *70*(4), 547-593.

Vangen, S. & Huxham, C. (2003). Nurturing collaborative relations: Building trust in Interorganizational collaboration. *Journal of Applied Behavioral Science*, *39*(1), 5-31.

Van Houtte, M. (2021). Students’ autonomous and controlled motivation in different school contexts: The role of trust. *European Education, 53*(3-4), 203–217. https://doi.org/10.1080/10564934.2022.2039069

Van Maele, D., & Van Houtte, M. (2010). The quality of school life: teacher-student trust relationships and the organizational school context. *Soc Indic Res*.

Van Maele, D, Van Houtte, M., & Forsyth, P. B. (2014). Introduction: trust as a matter of equity and excellence in education. In Dimitri Van Maele, P. B. Forsyth, & M. Van Houtte (Eds.), *Trust and school life: the role of trust for learning, teaching, leading, and bridging* (pp. 1–36). Dordrecht, the Netherlands: Springer Science+Business Media.

Vansteenkiste, M., Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration*, *23*, 263–280

Veronneau, M. H., Koestner, R. F., & Abela, J. R. Z. (2005). Intrinsic need satisfaction and well-being in children and adolescents: An application of the self-determination theory. *Journal of Social and Clinical Psychology*, *24*(2), 280-292.

Voelkl, K. E. (1997). Identification with schools. *American Journal of Education, 105*(3), 294-318.

Vogt, W. P. (2007). *Quantitative research methods for professionals*. Boston, MA: Pearson/Allyn and Bacon.

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques*. Thousand Oaks, CA: SAGE Publications.

Wentzel, K. R. (1997). Student motivation in middle school: The role of perceived pedagogical caring. *Journal of Educational Psychology*, *89*(3), 411-419.

Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, *70*(4), 767-779. Retrieved from http://search.proquest.com.ezproxy.lib.ou.edu/docview/614354761?accountid=12964

Wu, J., Hughes, J., & Kwok, O. (2010). Teacher–student relationship quality type in elementary grades: Effects on trajectories for achievement and engagement. *Journal of School Psychology*, *48*(5), 357-387.

Yamagishi, T., & Yamagishi, M. Trust and commitment in the United States and Japan. *Motiv Emot 18*, 129–166 (1994). https://doi.org/10.1007/BF02249397

Yin, R. K. (2009). *Case study research: Design and methods. Essential guide to qualitative methods in organizational research*. Thousand Oaks, CA: Sage.

Zand, D. E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, *17*(2), 229-239.

Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Educational Psychologist*, *25*(1), 3-17.

Zimmerman, B., & Schunk, D. (2008). *Motivation and self-regulated learning: Theory, research, and applications*. (pp. 1-29). New York, New York: Taylor & Francis Group, LLC.

Appendix
OCEP Survey

2019 Survey Item Key (Bixby)

Student Survey

Student Trust in Teachers (STT)

8 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. Teachers are eager to help at this school.
2. Teachers at this school are easy to talk to.
3. Teachers at this school care about students.
4. Teachers at this school do what they are supposed to.
5. Teachers at this school really listen to students.
6. Teachers at this school are honest with me.
7. Teachers at this school are good at teaching.
8. Teachers at this school treat each student fairly.

Competence Support (CS)

5 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. Teachers in this school really make students think.
2. Teachers in this school expect students to work hard.
3. Teachers in this school help students with difficult assignments.
4. Teachers in this school celebrate the achievement of students.
5. Teachers in this school challenge students to achieve academic goals.

Autonomy Support (AS)

5 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. Teachers listen to the opinions and ideas of students.
2. Teachers encourage students to work in their own way.
3. Teachers explain why it is important to study certain subjects in school.
4. Teachers show students how to solve problems themselves.
5. Teachers talk about the connection between what is studied in school and what happens in real life.

Student Identification with School (SID)

7 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. The things we learn in class are meaningful.
2. School is a very important part of my life.
3. I feel proud of being a part of my school.
4. I look forward to coming to school.
5. I would want to go to school even if I didn't have to.
6. People at school are interested in what I have to say.
7. School is worth all the time I put into it.

Bullying (BUL)

4 items, 1-6 scale, *never* (score 1) to *almost every day* (score 6), student respondent

1. Kids in this school are teased or called names.
2. Kids in this school are left out of things on purpose.
3. Kids in this school have rumors spread about them.
4. Kids in this school are physically threatened or hurt by other students.

Safety (SAFE)

4 items, 1-6 scale, *very unsafe* (score 1) to *very safe* (score 6), student respondent

1. How safe do you feel outside or around the school?
2. How safe do you feel traveling between home and school?
3. How safe do you feel in the hallways and the bathrooms of this school?
4. How safe do you feel in your classes?

Student Trust in Students (STS)

7 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. Students are eager to help each other at this school.
2. Students at this school are easy to talk to.
3. Students care for other students at this school.
4. Students at this school do what they are supposed to. 5. Students at this school really listen to other students.
6. Students at this school are honest.
7. Students at this school work hard on their schoolwork.

Cyber-Bullying (CB)

3 items, 1-6 scale, *not safe* (score 1) to *very safe* (score 6), student respondent

1. During this school year, how often did you receive rude or nasty comments from someone while online?
2. During this school year, how often were you the target of rumors spread online, whether they were true or not?
3. During this school year, how often did you feel worried or threatened because someone was bothering or harassing you online?

Peer Relational Support (ParRS)

3 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

There is a STUDENT at school who…

1. Really cares about me.
2. Listens to me when I have something to say.
3. Believes that I will be a success.

Need Frustration (NF)

9 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. Most of the things I do feel like "I have to."
2. I feel excluded from a group I want to belong to.
3. I have serious doubts about whether I can do things well.
4. I feel forced to do many things I wouldn't choose to do.
5. People who are important to me are cold and distant toward me.
6. I feel disappointed with many of my performances.
7. I feel pressured to do too many things.
8. I think that the people I spend time with dislike me.
9. I feel insecure about my abilities.

Student Disengagement (DIS)

9 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. When I'm in class, I just act like I'm working.
2. When I'm in class, I do just enough to get by.
3. When I'm in class, I think about other things.
4. Class is no fun for me.
5. When I'm in class, I feel worried.
6. When I'm in class, I feel discouraged.
7. When I'm in class, I am silent and unresponsive.
8. When I'm in class, I hide from the teacher what I am thinking about.
9. When I'm in class, I avoid asking any questions.

Autonomy Thwarting (AutoT)

5 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. My teachers punish me if I do not behave how they want me to behave
2. My teachers ignore my ideas about how I want to do my work
3. My teachers insist on only one way to do my class work
4. My teachers use threats to make me do work even when I do not understand it 5. My teachers raise their voice to make me do my work

Competence Thwarting (CompT)

6 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. My teachers expect me to do poorly in my work
2. My teachers do not give me enough opportunity to show what I can do
3. My teachers talk to me in ways that make me feel like I am not smart
4. My teachers make me feel I am not as good as other students
5. My teachers reward/praise me only when I am doing well
6. My teachers do not give me enough time to do my work

Relatedness Thwarting (RelT)

5 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), student respondent

1. My teachers make no effort to get to know me
2. My teachers are hard to talk to about my problems
3. My teachers pick on me
4. My teachers embarrass me in front of other students
5. My teachers do not have time for me

Faculty Survey

Burnout (BURN)

3 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), faculty respondent

1. I feel emotionally drained from teaching.
2. I feel used up at the end of a day of teaching.
3. I feel fatigued when I get up in the morning and have to face another day teaching.

Organizational Commitment (OCQ)

7 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), faculty respondent

1. I am proud to be part of the staff at this school.
2. I often describe myself to others by saying that I work at this school.
3. I am glad I chose to work at this school rather than another school.
4. I am willing to put in a great deal of effort beyond what is normally expected to help this school succeed.
5. I have warm feelings about this school as a place to work.
6. I find that my values and the values of this school are similar.
7. I feel strong loyalty to this school.

Autonomy Satisfaction (AutoSAT)

4 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), faculty respondent

1. I feel my choices in my job express who I really am.
2. (r) I feel pressured to do too many things in my job.
3. At work, I feel a sense of freedom in the things I undertake.
4. (r) My daily activities at work feel like a chain of obligations.

Competence Satisfaction (CompSAT)

4 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), faculty respondent

1. At work, I feel capable at what I do.
2. (r) I feel disappointed with my performance in my job.
3. When I am at work, I feel competent to achieve my goals.
4. (r) I have serious doubts about whether I can do things well in my job.

Faculty Trust in Colleagues (FTCOL)

7 items, 1-6 scale, *strongly disagree* (score 1) to *strongly agree* (score 6), faculty respondent

1. When teachers in this school tell you something, you can believe them.

3. Even in difficult situations, teachers in this school can depend on each other.
4. Teachers in this school do their jobs well.
5. Teachers in this school have faith in the integrity of their colleagues.
6. The teachers in this school are open with each other.
7. Teachers in this school trust each other.

Faculty Trust in Students (FTStu)

5 items, 1-6 scale, s*trongly disagree* (score 1) to *strongly agree* (score 6), faculty respondent

1. Students in this school can be trusted to make good decisions.
2. Students in this school care about each other. 3. Students in this school care about their work.
4. Students in this school treat teachers with respect.
5. Students here tell the truth.