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Student trust in teachers and its relationship to student identification with school, student perceptions of academic press, and achievement

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STUDENT TRUST IN TEACHERS AND ITS RELATIONSHIP TO STUDENT
IDENTIFICATION WITH SCHOOL, STUDENT PERCEPTIONS OF ACADEMIC PRESS,
AND ACHIEVEMENT

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary

In Partial Fulfillment
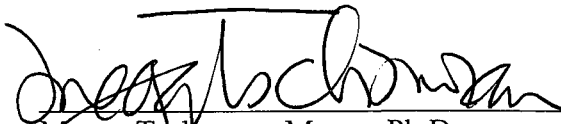Of The Requirements for the Degree
Doctor of Philosophy in Education

by
Regina A. Bankole
December 2010

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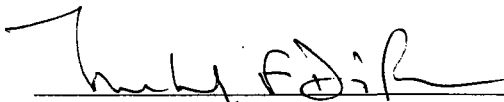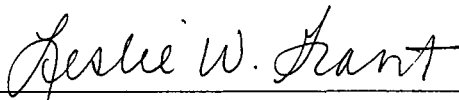
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DEDICATION

To my family and friends, thank you all for taking this journey with me and for your unending support and encouragement along the way.

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STUDENT TRUST IN TEACHERS AND ITS RELATIONSHIP TO STUDENT IDENTIFICATION WITH SCHOOL, STUDENT PERCEPTIONS OF ACADEMIC PRESS, AND ACHIEVEMENT

ABSTRACT

Research has documented a plethora of evidence that children's perceptions of their relationships with caregivers, specifically teachers, impacts learning outcomes, including academic engagement and achievement (Furrer & Skinner, 2003; Owens & Johnson, in press; Stipek, 2002; Wentzel, 1997), identification with school (Anderman, 2003; Bonich, 2007; Goodenow, 1993; McGannon, 2003; Meloro, 2006; Mitchell, 2004;) and academic press (Bonich, 2007; Lee & Smith, 1999; Middleton & Midgley, 2002). Yet the research base from the student perspective on the pertinent elements that influence meaningful relationships between students and teachers, namely trust, is largely missing.

The purpose of this study was to examine the construct of student trust in teachers and its relationship to student identification with school, student perceptions of academic press, and achievement in math and reading in an urban elementary school district. An additional aim of this reserach was to add to the research base on trust in schools from the student perspective.

In this study of 4,700 ethnically and economically diverse students in 35 urban elementary schools, a number of significant relationships were found between student trust in teachers, identification with school, student perceptions of academic press, and achievement. Although all independent variables indicated a moderate and significant

correlation with achievement in both reading and math, the strongest relationship was

between student trust in teachers and achievement.

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EDUCATION POLICY, PLANNING AND LEADERSHIP PROGRAM

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Student Trust in Teachers and its Relationship to Student Identification with School, Student
Perceptions of Academic Press, and Achievement

CHAPTER 1: The Problem

Introduction

Children's attitudes about school in the elementary grades predict long-term

growth in achievement (Ladd & Dinella, 2009). However, little is known about what

impacts student perceptions about school, why some students have different perceptions

than others, and how these perceptions impact achievement. As children enter school

they face a period of adjustment as they transition from home-life to school, where they

must cope with new demands and expectations of being a student. Yet some children,

particularly those from disadvantaged backgrounds, African American, and Hispanic

students, as well as those in urban settings, tend to be less successful than their peers, as

evidenced by persistent discrepancies in achievement (National Center for Education

Statistics, 2009).

One explanation for the relationship between student perceptions about school

and achievement has to do with trust formation. Just as infants form attachments toward

their caregiver, (e.g. Bowlby, 1969; Ainsworth, 1967) when children enter school, they

form attachments with their teachers. Students who enter school with a pattern of secure

attachments are better able to form trusting relationships with peers and adults (Watson,

2003), whereas children with less secure attachments will be faced with more challenges.

The security of these trusting relationships with adults, such as teachers, could

influence students' overall attitudes about school in a similar way that children's

attachment to their caregiver impacts their cognitive development. In the school

environment, some of the attitudes that these trusting student-teacher relationships might

influence include whether or not students feel that school is an important place where

they want to be and that they feel a part of, and how willing they are to seek and accept the help and support that they need in order to be successful in an academically-oriented environment where expectations are high.

Conceptual Framework

The hypothesis that guides this study is that student trust in teachers, student identification with school, and student perceptions of academic press are each related to student achievement, independently and also as a set of variables. In addition, there is a relationship between student identification with school and student perceptions of academic press (Figure 1).

Figure 1.

Conceptual Framework

Construct Convergence
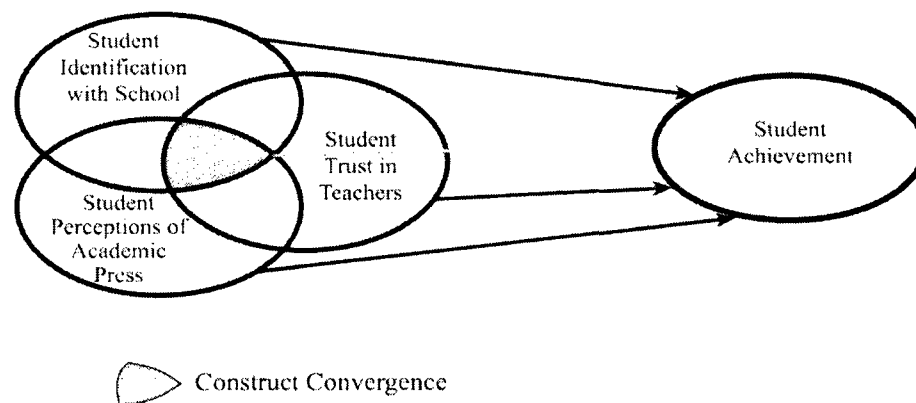
Empirical evidence has shown a link between teacher trust in students and parents and the impact on achievement (Bryk & Schneider, 2002; Forsyth, Barnes, & Adams, 2005; Goddard, Salloum, & Berebitzky, 2009; Goddard, Tschannen-Moran, & Hoy, 2000). Furthermore, there is evidence that students' feelings about relationships with teachers impact academic performance (Furrer & Skinner, 2003; Stipek, 2002), but

the specific role that student trust in teachers plays in the student-teacher relationship and the impact on achievement is relatively untested.

Research results suggest a relationship between identification with school and achievement (Finn, 1989; Mitchell, 2004; Wehlage, 1989), and that student-teacher relationships can enhance identification with school (Finn, 1989; Goodenow, 1993; Voelkl, 1997). However, little is known about which are the most salient aspects of the student-teacher relationship that impact identification with school and ultimately contribute to the influence on achievement. Empirical evidence has also confirmed a link between teachers' perceptions of academic press and achievement (Goddard et al., 2000; Hoy, Hannum, & Tschannen-Moran, 1998; Hoy & Sabo, 1998; Hoy et al., 1991). However, little research has been done that explores student perceptions of academic press. While there is some evidence that student-teacher relationships impact students' commitment to the high expectations and norms of school (Lee & Smith, 1999; Shouse, 1993), the role that student trust in teachers plays in student's perceptions of academic press has not yet fully been explored.

In addition to the suggested relationship with achievement, student identification with school and perceptions of academic press may also be related. Preliminary evidence suggests that students are more likely identify with school if the environment is characterized by academic press (Ma, 2003).

Statement of the Problem

Although the link between faculty trust and student achievement has been established, less is known about student perceptions of trust in teachers as it impacts school outcomes. If trust processes between faculty and students were more fully

explicated, schools could realize more positive outcomes in educating children. The overall purpose of this study is to build upon the research base in the area of trust and achievement, specifically from the student perspective, and to examine the linkages between student trust in teachers, student identification with school, student perceptions of academic press, and student achievement in math and reading in the context of urban elementary schools. The unit of analysis is the school, thus the interrelationships of the above variables will be collectively examined and aggregated to the school level.

<div align="center">Hypotheses and Research Questions</div>

Hypotheses

H.1. Student trust in teachers is positively and significantly correlated to identification with school.

H.2. Student trust in teachers is positively and significantly correlated to student perceptions of academic press.

H.3. Student trust in teachers is positively and significantly correlated to student achievement.

H.4. Student identification with school is positively and significantly correlated to student perceptions of academic press.

H.5. Student trust, student identification with school, and student perceptions of academic press will independently and together explain a significant proportion of the variance in achievement in reading and math in urban elementary schools.

Research Questions

1. To what extent is student trust in teachers related to student identification with school?

2. To what extent is student trust in teachers related to student perceptions of academic press?

3. To what extent is student trust in teachers related to student achievement in math and reading in grades three, four and five?

4. To what extent is student identification with school related to student perceptions of academic press?

5. What is the independent and combined influence of student trust in teachers, student identification with school, and student perceptions of academic press in explaining variance in student achievement?

Definition of Terms

Trust. The willingness to be vulnerable based on an assessment of benevolence, honesty, openness, reliability, and competence (Hoy & Tschannen-Moran, 1999).

Relational trust. The crucial interdependence of relationships in schools combined with the expectation of fulfilling role responsibilities (Bryk & Schneider, 2002).

Identification with school. Students who identify with school feel that they belong within the school community, school plays an important role in their lives, and they value school and school related goals (Finn, 1989).

Academic press. An academically-oriented environment where expectations and goals are high, teachers have confidence in students' abilities, and students respect the academic norms of the school (Hoy & Feldman, 1987). This construct has also been referred to as Academic Emphasis.

CHAPTER 2: Literature Review

Introduction

The purpose of this chapter is to examine student trust in teachers and the

relationship to identification with school, student perceptions of academic press, and the

influence of each of these constructs on academic achievement. The construct of student

trust in teachers will be examined through a discussion of the meaning of trust, children's

socio-cognitive development, and organizational outcomes. In order to explicate the

broad-based construct and correlates of identification with school, the discussion of this

variable will be inclusive of a number of interrelated key constructs that embody similar

theoretical underpinnings, including school membership, commitment to school, sense of

belonging, and engagement with school. Academic press will be examined through a

discussion of the factors that impact this construct, as well as the linkage to student trust

and achievement. Finally, the interrelationships between these variables, as well as their

relationship to achievement, will be discussed.

Trust

Theorists from a variety of disciplines widely agree that trust plays a vital role in

all aspects of human affairs. Trust is the underpinning of cooperation in everyday

interactions (Baier, 1986; Zucker, 1986) and without it societies will collapse (Bok,

1978). It is a necessary component in economic exchange (Coleman, 1984; Fukuyama,

1995; Hirsch, 1969); social relationships (Coleman, 1990; Lewis & Weigert, 1985); and

organizational effectiveness (Tyler & Kramer, 1996). Over the past two decades, trust

has been increasingly studied by organizational theorists and most recently, in relation to

schools. Schools are similar to other types of organizations, in that they too are social structures which depend upon members' mutually interdependent relationships in order to function successfully (Bryk & Schneider, 2002). Thus, the construct of trust also provides a lens within which to examine relationships among members of school communities and organizational outcomes.

Defining Trust

Although many agree that trust is important, there has been less agreement on the definition of trust. Trust has been described as a calculated social exchange whereby one makes a choice about engaging in an action where risk is involved (Bryk & Schneider 2002); one's dependence upon another's ability and desire to take care of that which is important and entrusted to their care (Baier, 1986); the expectation that another can be relied upon (Rotter, 1967); and in terms of a cost-benefit analysis where the respect of one's vulnerability is at stake (Zand, 1972). The five-facet model of trust, that has been conceptualized by Hoy and Tschannen-Moran (1999), describes trust as a willingness to be vulnerable based on an assessment of benevolence, honesty, openness, reliability, and competence.

Social Trust

There are three forms of social trust that exist in society- organic, contractual, and relational (Gambetta, 1988). Although this study is concerned with relational trust, in order to understand the underlying assumptions of this form of trust, it is necessary to provide a brief discussion of the other two.

Organic trust. Organic trust is that which is found in connection with many religious organizations (Bryk & Schneider 2002). Trust is assumed unquestioningly and

has a moral basis. Organic trust can be explained within the framework of moral development theory, which suggests that individuals reach a level of autonomy in their thoughts and behavior toward others and act with a sense of moral obligation and an "orientation toward conscience as a directing agent and toward mutual respect and trust" (Kohlberg, 1967 p. 171). Thus, regardless of the costs or benefits associated with trust, individuals will trust one another because of a sense of moral obligation, feeling it is the right thing to do.

In their study on Catholic urban high schools, Bryk, Lee, and Holland (1993) found that trust levels were high in these schools due to the moral obligation and trust that teachers felt toward students and parents, and that parents reciprocated by trusting in teachers' competence and expertise in educating their children.

Contractual trust. Another form of trust in organizations is based upon a contract, which specifically delineates each party's expectations and responsibilities. This form of trust is typical in the course of economic transactions and exchange and can be considered a specialized form of interpersonal behavior (Hosmer, 1995). Opportunism in the form of self-interest seeking behaviors such as deception, cheating, misleading and confusing (Hill, 1990; Williamson, 1985) can be seen as endemic in economic exchange (Hosmer, 1995). But trust can reduce this opportunistic behavior if individuals strive to follow through on commitments, are honest in negotiations, and behave with fairness regardless of the opportunity that presents itself (Bromily & Cummings, 1992). Conversely, organizations with low levels of trust must enforce this trusting behavior, referred to as trust substitutes (Fukuyama, 1995; Hosmer, 1996) in the form of policies

and contracts meant to control behavior which take away valuable resources from the organization:

> ...people who do not trust one another will end up cooperating only under a system of formal rules...which have to be negotiated...litigated and enforced...this legal apparatus, serving as a substitute for trust, entails what economists call "transaction costs" (Fukuyama, 1995 p. 27).

In this way, it can be understood that organizations that already have low levels of trust create an artificial system of trust which is based upon the enforcement of rules and regulations. This forced system of trust could therefore exacerbate the low levels of trust due to forced behaviors and feelings of resentment at unfair treatment.

Relational trust. Relational trust, which is situated between the moral aspects of organic trust and the fulfillment of expectations characteristic of contractual trust, is associated with trust in schools and is described by Bryk & Schneider (2002) as:

> ...the social exchanges of schooling as organized around a distinct set of role relationships: teachers with students, teachers with other teachers, teachers with parents, and with their school principal. Each party in a role relationship maintains an understanding of his or her role obligations and holds some expectations about the role obligations of the other (p. 20).

Bryk and Schneider (2002) further contend that relational trust in schools manifests itself on three levels: *intrapersonal,* whereby individuals engage in a cognitive process of discerning another's intentions; *interpersonal,* as members of role groups interact with each other and social exchange takes place; and at the *organizational* level which is where the consequences of trust become apparent. In framing student trust within the

context of the three levels of relational trust, one could put forward that at the intrapersonal level, students make judgments about whether or not teachers are trustworthy by observed behaviors that are based upon a set of descriptors that define trust. Based upon these collective judgments, interpersonal student-teacher relationships develop. As a result of these relationships, organizational outcomes are impacted.

The Five Facet Model

Although there have been a wide variety of definitions of trust, the five facet model (Hoy & Tschannen-Moran, 1999) takes into account key elements of trust gleaned from the literature on trust, particularly in relation to schools. In order for trust to be present there must be a willingness to be vulnerable (Hoy & Tschannen-Moran, 1999) whereas one party is reliant upon another's expected behavior within the context of an interdependent relationship (Golembiewski & McConkie, 1975; Rotter, 1967; Zand, 1972).

Vulnerability. When one trusts, they are dependent upon the good will of another toward something that is valued, and thus place themselves in a position of vulnerability (Baier, 1986). The willingness to be vulnerable has particular significance in schools, which depend upon community members' mutually interdependent relationships for the successful functioning of the organization (Bryk & Schneider, 2002). These interdependent relationships give rise to dependency and vulnerability which develops due to the power imbalance inherent in the relations between various role groups, including administrators, teachers, parents, and students (Bryk & Schneider, 2002). Bryk and Schneider point specifically to the significance of "this vulnerability...in the context of asymmetrical power relationships" (p.20). With respect to student-teacher

relationships, there is a power imbalance whereby students are vulnerable due to their dependence upon teachers who wield a great deal of power over their academic success (Adams, in press).

Benevolence. Of the various definitions and facets of trust discussed in the literature, the most common element is benevolence (Goddard, Shalloum & Berebitsky, 2009; Hoy & Tschannen-Moran, 1999); meaning "…the confidence that one's well-being or something one cares about will be protected by the trusted person or group" (Hoy & Tschannen-Moran, 1999, p. 187). When one trusts, there is an expectation based upon good will of one toward another (Baier, 1986). Oftentimes, when parents send their children to school they trust that their children will be cared for and that their well-being will be well looked after during the time that their children are in the care of school personnel. Additionally, students trust that teachers are acting in their best interest while educating and supervising them.

Reliability. Reliability is a facet of trust concerned with one's expectation that another will behave in a consistently altruistic manner, and can be seen as the merger between reliability and a sense of benevolence (Hoy & Tschannen-Moran, 1999). In schools, teachers must earn the trust of their students through a consistent display of trust and care (Tschannen-Moran, 2004). In their study on adolescent trust formation, Owens and Johnson (2009) found that students engaged in a "take and give" cycle of testing the teachers' sense of reliability until they felt they could return their trust. Once students returned their teachers' trust, they were more likely to be committed to the expectations and norms of their academic programming.

Competence. Competence or one's ability to perform the duties required of their job (Hoy & Tschannen-Moran, 1999) points to trust in one's "expectation of one's technically competent role performances from those involved with the individual" (Barber, 1983, p. 9-10). In order for schools to educate children, there is a sense of trust that teachers will have the skills and the ability to be able to teach the children that they serve. As such, students depend upon this competence as they trust that teachers have the ability to impart to them the necessary subject matter knowledge that will allow them to succeed.

Honesty. One's character attributes determine the degree to which they are (or are not) honest. This facet of trust refers to the truthfulness of one's accounts of occurrences, owning one's behavior and following through on statements of future action (Tschannen-Moran & Hoy, 2000). As students build trust with teachers, they have the expectation that teachers will have integrity of word and deed, be authentic, and keep promises. Students expect that teachers will offer them honest feedback with the goal of helping them to be successful learners.

Openness. Openness refers to the willingness to share information, indicating reciprocal trust whereby one feels assured that they will not be taken advantage of by the vulnerable position that they find themselves in by trusting another. The interdependence of school community members makes this facet of trust crucial in that they depend upon one another to have transparency in decision-making, openly communicate, and exchange information that will affect all aspects of the organization and ultimately student outcomes. Students trust that teachers will convey information about content, strategies,

and resources that will positively impact their achievement and teachers trust that students and parents will share information that will support their efforts.

Student-Teacher Relationships

A more recent dimension of examining trust in schools focuses on student perceptions of relationships with teachers and the impact that this has on learning outcomes. Research has documented evidence that student perceptions of their relationships with teachers impact achievement (e.g. Connell & Wellborn, 1991; Furrer & Skinner, 2003; Stipek, 2002; Wentzel, 1997). An examination of elementary student's self-reported sense of relatedness to social actors including parents, teachers, and peers found that student's relationships with teachers was the strongest predictor of academic performance (Furrer & Skinner, 2003). Furthermore, this study presented evidence that the student-teacher relationship could compensate for detrimental relationships with peers and parents in predicting achievement. Although it is widely agreed that student-teacher relationships impact learning outcomes, the nature of this relationship must be further explicated in order to understand the specific relational elements that impact performance.

Cognitive development and social relationships. Many relational studies on children are situated in Bowlby's (1969) attachment theory. Bowlby postulated that infants form attachments through proximity seeking behavior toward a preferred individual who is accessible and responsive to their needs, and that attachment behavior is crucial in the "development of affectional bonds or attachments, initially between child and parent...[and] are present and active throughout the life cycle" (p. 39). Bowlby postulated that attachment impacts infants' early bonding experiences and cognitive

processes with caregivers, including the development of thoughts, beliefs and expectations about the self and others. Bowlby termed this system the internal working model of social relationships, which develops continuously over time. He contended that:

> ...human beings of all ages are found to be at their happiest and to be able to deploy their talents to best advantage when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise. The person trusted provides a secure base from which his (or her) companion can operate (1973, p.359).

In this sense it can be understood that the infant's perception of trust in the relationship with their caregiver impacts their internal working model which provides a foundation for their development and encourages exploration and risk-taking with the self-assurance that the caregiver will protect them from harm.

Ainsworth is credited with expanding upon Bowlby's theory through empirical research and innovative methods which included field studies (Bretherton, 1991). Ainsworth's observational research on infant-parent dyads (1967) resulted in the development of three attachment patterns that children form with caregivers:

> 1) Secure- the caregiver is consistently and appropriately responsive to the child's needs, and the child sees the caregiver as a secure base from which to explore.
>
> 2) Avoidant- the caregiver does not respond to the child's needs and the child does not interact with the caregiver.
>
> 3) Ambivalent/Resistant- the caregiver displays inconsistent behavior and the child does not recognize the caregiver as an attachment figure.

Each of the attachment patterns, which are impacted by the caregiver's behavior toward the child, influences the child's behavior; for example, the manifestations of a secure attachment pattern in children are high levels of self-esteem, self-efficacy, and social skills (Stroufe, Egeland, Carlson, & Collins, 2005). Conversely, insecure or ambivalent attachment patterns can lead to feelings of distrust of the caregiver and a low sense of self-worth (Berlin, Cassidy, & Appleyard, 2008).

When children first enter school, their previous attachment patterns impact their learning. Sroufe (1983) examined attachment patterns from infancy through preschool, and found that children's attachment histories impacted their beliefs about themselves and whether or not their own efforts would be effective in meeting their needs and goals. Children's beliefs about themselves can impact their performance and success in school. Watson (2003) suggests that children who arrive in school with insecure attachments will have deficits to overcome, including "…little ability to regulate behavior; difficulty trusting teachers and using them as a secure base from which to explore; …fewer skills and less knowledge to build upon" (p. 279). Clearly, the role that teachers can play is crucial in helping students to have successful school experiences.

Caring. Theorists have suggested that one of the characteristics of student-teacher relationships which has an impact on academic performance is students' perception of whether or not teachers care about them (Goldstein, 1999; Noddings, 1984; Wentzel, 1997). Noddings' (1984) *ethic of care* model explicates the importance of caring in school social relations. Briefly, Noddings posits that caring is a relation that is entered into as a moral obligation; the one caring feels as one with the cared-for, putting aside their own feelings and needs.

Further development of Noddings' ethic of care model resulted in a conceptualization termed *pedagogical caring* (Wentzel, 1997). In an effort to identify the characteristics of caring, Wentzel examined ways that students perceived teacher care. She found that students characterized caring most commonly to mean that teachers were concerned about them as a person outside of school, acted as a friend, and were able to communicate openly. These factors are similar to those of benevolence and openness in the five-facet model of trust discussed above. The crucial role of caring in the student-teacher relationship has been empirically studied which resulted in evidence suggesting a relationship between caring, motivation, and achievement (Furrer & Skinner, 2003; Stipek, 2002; Wentzel, 1997). This linkage could indicate that students' perception of their relationships with teachers and whether or not teachers care about them has an indirect effect on achievement.

Self-system processes. The importance of social relations among students and the adults in their school can also be explained through self-system processes. In schools, student's sense of relatedness has to do with their perception of themselves in relation to school social actors; these views are impacted by feelings of trust in others (Furrer & Skinner, 2003). This concept has been conceptualized as *self-system processes*, referring to interpersonal processes which impact individuals' beliefs about themselves in various environments, including school. The construct of self-system processes in relation to school is rooted in the notion that students have a psychological need for competence, autonomy, and relatedness (Connell & Wellborn, 1991). A number of studies have established a link between self-system processes and achievement (e.g. Connell & Wellborn, 1991; Goodenow, 1993; Murdock, 1999), whereby student's sense of

relatedness with teachers predicts engagement which impacts achievement. One of the reasons that self-system processes, such as relatedness, play a role in belonging and achievement has to do with the impact on motivation. Self-system processes act as a catalyst in impacting engagement, which is a key factor in many models on motivation (Connell & Wellborn, 1991), and motivation impacts achievement by influencing the level of effort put forth in learning.

Organizational Outcomes

Relational trust also impacts the organization. Two of the consequences of trust in organizations include increased cooperation and internal control of normative values (Bryk & Schneider, 1996). Trust is based upon cooperation as well as communication (Baier, 1986; Gambetta, 1988) and trust paves the way for cooperation to occur (Tschannen-Moran, 2001). Gambetta (1988) further notes that high levels of trust result in higher levels of cooperation. Thus, there is a reciprocal relationship between trust and cooperation which both impact relationships.

Trust also impacts the internal control of normative values (Bryk & Schneider, 1996). Two of the normative values that schools impart are a commitment to school including school-related goals, and school's academically-oriented environment. The control of these values and norms affect students in an indirect way. Adams and Forsyth (in press) contend that "identifying with the purpose of schooling is easier if students perceive the relational environment as supportive and caring, not impersonal, contentious, and unfair" (p. 15). In an academically-oriented environment, which relies upon an internal level of academic excellence placed on the school community (McDill, Natriello, & Pallas, 1986; Shouse, 1995) student perceptions are shaped by supportive

student-teacher relationships (Lee & Smith, 1999; Shouse, 1995; Wehlage, 1989) as well as by student trust in teachers, whereby students who trust teachers may be more apt to be committed to the norms and high expectations of the school (Gregory & Ripski, 2008). Thus, one could argue that trust allows for the internal control of normative values in that student perceptions and commitment to these values are based upon student-teacher relationships and specifically, trust.

Summary

In this study, student-teacher trust is characterized by the five facet model of trust (Hoy & Tschannen-Moran, 1999) which describes trust as a willingness to be vulnerable based on an assessment of benevolence, honesty, openness, reliability, and competence. The importance and implications of student-teacher relationships is rooted in attachment theory and the notion that a link exists between children's social relations and cognitive development. Although empirical evidence has established a link between student-teacher relations and achievement outcomes (Anderman, 1999; Connell & Wellborn, 1991; Furrer & Skinner, 2003; Noddings, 1984; Wentzel, 1997) the research base is lacking on the role that trust plays in this particular social relation. At the organizational level, trust impacts such outcomes as cooperation and control of normative values. At this level, student trust in teachers is significant in that students might feel a sense of support and care in the overall environment (Lee & Smith, 1999; Shouse, 1995; Wehlage, 1989) which could contribute to their identification with school (Adams & Forsyth, in press) and assist them in meeting the high expectations of an academically-oriented environment (Gregory & Ripski, 2008).

<div align="center">Student Identification with School</div>

Students who identify with school are often described in terms of their sense of affiliation, attachment, involvement, commitment, and bonding; conversely, less successful students who do not identify with school are portrayed as being alienated and withdrawn (Finn, 1989). Because identification with school is a multidimensional construct, it is oftentimes referred to in the literature by various names, including school membership (Goodenow, 1993; Smerdon, 2002; Wehlage, 1989) commitment to school (Firestone & Rosenblum, 1988; Polk & Halferty, 1972) sense of belonging (Bonich, 2007; McGannon, 2003), and school engagement (Finn, 1989; Fredericks, Blumenfeld, & Paris, 2004). Finn (1989) contends that "...the task of identifying common themes in the various literatures related to identification with school is impeded by this plethora of labels for the same or similar behaviors..." (p. 126). Thus, a number of constructs in the literature are similar in meaning to, and are associated with identification with school.

Characteristics of Identification with School

Finn (1989) posits two complementary ideas that describe students who identify with school: a) they feel that they belong within the school community in that school plays an important role in their lives; and b) they value school and school-related goals. Finn contends that his conceptualization is rooted in the notion that student identification with school is based upon commitment to learning, which is the idea of valuing school, and commitment to a place, meaning belonging. In their study on developing a conceptual framework for understanding student and teacher commitment to school, Firestone and Rosenblum (1988) identified two separate elements to commitment:

The first is commitment to learning...some students indicate that they take seriously the school's primary activity. Some students become committed to the

"place". It appears that school is important because it is a place where students can come to be with their friends or where they find activities other than educational ones to keep them occupied. These include extracurricular activities but also "hanging around" with others (p. 288).

Along these same lines, Polk and Halferty (1972) conducted a factor analysis of a number of elements associated with home environment, participation in school, achievement, and extracurricular activities. They found that items associated with commitment to school included school-related goals, activities and values.

Feelings of Belonging, Commitment, and Membership

Feelings of acceptance and belonging are crucial in all stages of life (Maslow, 1962), but have particular significance when applied to schools and student learning. School membership theory focuses on the reciprocal behavior of adults and students in schools, and posits that when adults show care and concern for students as individuals and learners, students will respond to adults' commitment to them with positive behavior toward others and a commitment to and engagement with academics (Wehlage et al., 1989). In his study of successful schools for at-risk youth, Wehlage attributed the success of these schools, in part, to various aspects of school membership, such as attachment, commitment, bonding, and involvement with adults in the school and the norms of schooling.

Further research was conducted along these lines which resulted in the development of the Psychological Sense of School Membership Scale- PSSM (Goodenow, 1993). This 18 point scale measured student's self-reported sense of belonging in school and characteristics of relationships with teachers and peers. In this

same study, correlates of school membership were examined, and Goodenow found that school membership was related to levels of achievement through the influence on engagement, motivation, effort, and participation. This finding was consistent with hypotheses suggesting a link between belonging and motivation (Finn, 1989; Weiner, 1990).

Alienation

The opposite of identification with school is alienation. The multidimensionality of the construct of identification with school is rooted in the work of Seeman (1975) on alienation. The vast majority of studies on alienation have been framed within the discipline of social psychology, and focus on the measurement of attitudes, values, sentiments, or expectancies (Seeman, 1975). Those variables are evidently reflected in Seeman's descriptions of the six categories of alienation he puts forth: powerlessness, meaninglessness, normlessness, cultural estrangement, self-estrangement, and social isolation. Powerlessness is the low expectation that one's behavior will not impact their rewards and that one has little control over personal and social outcomes in their life. In terms of commitment to school, students who feel powerless will not believe that their efforts will result in academic success, and thus will have low levels of motivation.

Meaninglessness has to do with an inability to comprehend personal and social affairs. Specifically, those who feel a sense of meaninglessness will be uncertain of situation-specific behaviors, values, norms, and role expectations (Allardt, 1972). Students who feel a sense of meaningless will not comprehend the expected values of their student role group; they may not feel that school is important.

Normlessness is rooted in the notion of anomie and concerns a lack of commitment toward established group behavioral norms. This discord between personal beliefs and expected norms oftentimes results in deviant behavior. Because the construct of commitment to school is, in part, based upon a commitment to the norms of schooling (Wehlage, 1989), students who feel a sense of normlessness will have difficulty identifying with school as an institution and will be alienated by their deviant behavior.

Cultural estrangement has to do with the rejection of commonly held values in society. Similar to normlessness, feelings of cultural estrangement result in a misalignment between one's personal values and those of the larger society. Students who feel a sense of cultural estrangement will unlikely value school as an institution.

Self-estrangement is the engagement in activities that are not intrinsically rewarding. Seeman (1975) contends that in the workplace, unless workers feel that their tasks are self-fulfilling and that they have some measure of control over the work that they do, they will feel a sense of self-estrangement. Thus, if students do not find school work interesting they may feel a sense of self-estrangement and a lack of commitment to academics and learning.

Social isolation is the feeling of aloneness. Seeman (1975) discusses this construct as being imbedded in three of his other categories: normlessness (deviance), self-estrangement (detachment), and cultural estrangement (loss of common values). Students who feel socially isolated may find it difficult to feel a sense of belonging and identification with group norms and values in school.

Seeman's (1975) work gave rise to an understanding of the necessary feelings and behaviors that students must internalize and exhibit in order to be committed to school.

The feelings of isolation, normlessness, and self-estrangement embodied in Seeman's categories have been negatively correlated with achievement levels (Reid, 1981).

Engagement with School

School engagement is a characteristic of identification with school (Finn, 1989) and has been examined more closely as a solution to declining student motivation, achievement, and graduation rates (Finn, 1989; Fredericks et al., 2004). The key premise of school engagement is that in order for learning to take place, students must actively engage with, or participate in the classroom and the school environment itself. Engagement has been operationalized to include three dimensions: *behavioral*, or participation in school; *emotional*, referring to students' feelings about school social relations and schoolwork, and *cognitive*, meaning effort and motivation (Fredericks et al., 2004; Ladd & Dinella, 2009).

Behavioral engagement. Within the research literature, behavioral engagement has been defined as adhering to school norms and following school rules, academic involvement, participation in extracurricular activities (Fredericks et al., 2004); and operationalized with respect to constructive and cooperative participation in the classroom (Ladd & Dinella, 2009). Finn (1989) classified participation into four categories:

1) Attending school and being prepared to learn;

2) Initiating engagement in the classroom and putting forth additional effort than is required;

3) Involvement in extracurricular activities which may be in addition to or in place of academic involvement;

4) Participation in school governance, such as academic decision-making and
setting goals.

Finn presented the above categories in order of increased commitment to school; participation in school governance, such as the student council, would represent the highest level of commitment to school. Characteristics of behavioral engagement have been correlated with students' perceptions of teachers. Students who feel that teachers are supportive and care about them have high levels of participatory and on-task behavior (Battistich, Solomon, Watson, & Schaps, 1997) and are more likely to attend school (Croninger & Lee, 2001).

Emotional engagement. Emotional engagement has been characterized as the way that students feel about members of the school community and school work, as well as their affective reactions in the classroom (Ladd & Dinella, 2009; Connell & Wellborn, 1991). Other scholars have defined emotional engagement in terms of identification with school (Finn, 1989; Voelkl, 1997). Fredericks et al. (2004) contend that these conceptualizations of emotional engagement are based upon an earlier body of work that examined attitudes toward school (e.g. Epstein & McPartland, 1976; Yamamoto, Thomas, & Karns, 1969) such as interest and value.

Students' behavioral engagement, or participation, is linked to their emotional engagement or identification with school. In his participation-identification model, Finn (1989) puts forward that participation, or engagement with school is based upon external behaviors, whereas identification with school is based upon an internal emotional feeling. Participation is a manifestation of identification with school, and has been empirically correlated with achievement outcomes (Finn, 1989). Expanding on Finn's work, Voelkl

(1997) concluded that participation and identification are not only linked, but that identification is a prerequisite in order for participation to take place, and that participation can strengthen students' level of identification with school. In her study of prior participation and achievement as correlates of identification with school, Voelkl (1997) found that the strongest link to identification is participatory behavior, particularly in the primary grades. This finding suggests that identification with school influences participation which impacts achievement.

The link between participation in the primary grades as a predictor of future achievement has been strengthened by a study that focused on the impact of early engagement on achievement. In their eight longitudinal studies on change and continuity in classroom participation and the impact on achievement, Ladd and Dinella (2009) found that classroom behavioral (participation) and emotional (social relations) engagement predicted students' long-term achievement. These results indicate the importance of classroom participatory behavior and positive social relations to sustained growth in educational outcomes.

Cognitive engagement. The construct of cognitive engagement generally refers to students' intellectual effort put forth in learning (Ladd & Dinella, 2009). In the research literature, cognitive engagement has been conceptualized by research on engagement and motivation, as well as learning and instruction (Fredericks et al., 2004). The engagement literature is focused on students' psychological investment in learning and centers around concepts focusing on students' desire for challenging and engaging work that extends beyond minimum expectations (Connell & Wellborne, 1991; Newman et al., 1989; Wehlage et al., 1989). Similarly, motivation research puts forth the notion that students

who are intrinsically motivated to learn are "…focused on mastering the task, understanding, and trying to accomplish something that is challenging…adopt learning rather than performance goals…prefer challenge and are persistent when faced with difficulty" (Fredericks et al., 2004). Conversely, the literature on learning focuses on cognitive engagement in terms of self-regulation (Fredericks et al., 2004) which includes the use of metacognitive (Pintrich & Degroot, 1990), learning (Corno & Madinach, 1983), and effort control strategies in order to engage with academics.

Although each dimension of engagement has been studied separately in relation to school and classroom environments (Eccles & Midgely, 1989) classroom instruction (Newman et al. 1989) as well as dropping out (Wehlage et al., 1989), Fredericks et al., (2004) argue that:

> …these factors are dynamically interrelated within the individual; they are not
> isolated processes…considering engagement as a multidimensional construct
> argues for examining antecedents and consequences of behavior, emotion, and
> cognition simultaneously and dynamically, to test for additive or interactive
> effects (p. 61).

Thus, the examination of engagement, in addition to its precursors and outcomes, such as trust and academic press, can aid in gaining a fuller understanding of this multidimensional construct.

Student-Teacher Relationships and Identification with School

Student-teacher relationships influence identification with school (Fredericks et al., 2004; National Research Council Institute of Medicine, 2004; Wehlage, 1989). The sense of relatedness that students feel toward teachers is particularly salient given the

number of prominent roles that teachers play in students' lives "...as potential attachment figure, as instructor, and as arbiter of student performance" (Furrer & Skinner, 2003, p.150). As such, empirical evidence has established a link between student-teacher relationships and students' sense of identification with school. For example, students who reported feeling cared about by teachers also felt a greater sense of belonging in school, valued academic work (National Research Council Institute of Medicine, 2004), and had higher levels of behavioral engagement (Fredericks et al., 2004).

Furthermore, Wehlage (1989) contends that student-adult school relationships are crucial in that students must feel a sense of trust in the school and its' governance (administration) in order to be able to experience bonding with school. Additionally, he asserts that the school's governance is seen as legitimate only when positive reciprocal relationships have been established between students and faculty.

Bryk and Schneider (2001) contend that school social relations, including student-teacher relationships, are based upon trust. Given the empirical evidence linking student-teacher relationships and identification with school, it could be suggested that trust is one aspect of the student-teacher relationship that impacts the degree to which students identify with school.

Summary

A number of constructs and theories have contributed to the meaning and development of identification with school, including school membership and belonging, commitment to school, and engagement with school. The explication of these constructs, which are overlapping in meaning, has revealed that they are all impacted by student-

teacher relationships (Battistich et al., 1997; Croninger & Lee, 2001; Finn, 1989; Goodenow, 1993; Voelkl, 1997; Wehlage, 1989).

<div align="center">Academic Press</div>

The purpose of this section is to discuss the theoretical underpinnings of the construct of academic press, how this construct impacts achievement, and the relationship between student perceptions of academic press, student-teacher relationships, and achievement.

Definition

Academic press, which is also referred to as academic emphasis, is concerned with the focused emphasis on learning and academics and is rooted in the notion that children are more likely to succeed in environments that offer challenging and interesting work (Bandura, 1986; Eccles et al., 1989; Hoy, Tarter, & Kottkamp, 1991). Academic press has been defined in a number of ways, including: policies, practices, expectations and norms that push students to achieve (Murphy, Weil, Hallinger & Whitman, 1982); an academically-oriented environment where expectations and goals are high, achievement is recognized and honored, teachers have confidence in students' abilities, students respect the academic norms of the school (Hoy & Feldman, 1987) including homework completion and studying; and "the degree to which the push for academic success contributes to the behavioral and environmental press of the school" (Goddard, Sweetland, & Hoy, 2000, p. 684).

Emergence of the Construct

The focus on variables within the school environment that impact achievement, particularly academic press, is an outgrowth of the school effectiveness research. In the

1970's, as a reaction to the Coleman report (1968) on inequality which found that academic achievement is dependent upon family-level variables which the school has no control over, researchers began to examine ways that schools could impact student achievement. This new line of inquiry, termed *school effectiveness research*, focused on factors that make schools effective and impact student achievement. One of the overarching findings from these studies was that an emphasis on academics within the school environment impacts student achievement (Brophy & Good, 1986; Edmonds, 1979; Purkey & Smith, 1983; Weber, 1971). Edmonds' (1979) research on effective schools was the first study to offer evidence that specific school properties were linked to achievement. According to Edmond's findings, five factors contribute to schools' effectiveness: strong school leadership, high expectations for student achievement, purposeful school atmosphere, focus on developing basic skills, and evaluating student improvement.

Subsequent research on school climate built upon the school effectiveness studies and through factor analysis in three studies (e.g. Hoy & Sabo, 1998; Hoy & Tarter, 1997; Hoy, Tarter, & Kottkamp, 1991) labeled a single factor which reflected similar characteristics from the school effectiveness research as academic emphasis (Goddard et al., 2000). Hoy and his colleagues found that:

> Academic emphasis is the extent to which school is driven by a quest for academic excellence...in such schools, teachers set high but achievable goals, they believe in the capability of their students to achieve, the school environment is orderly and serious, and students, as well as teachers and principals, pursue and respect academic success (Goddard, Sweetland, & Hoy, 2000 p. 686).

The research base has established environmental factors that characterize effective schools and the behavior of group members within these schools. In order to understand how these environments are sustained and ultimately shape perceptions and behavior, the interplay between environment, group norms and behavior must be explicated.

Environment, Group Norms, and Behavior

The academic press of schools influences the norms and behaviors of members (Goddard et al., 2000). For example, if achievement is the established norm in high press schools, ideally teachers will have high expectations that students participate in class, complete homework, and study for exams; and teachers would behave in ways that support this high press environment, such as offering students timely feedback, developing challenging and interesting course work, supporting students to meet high expectations, and rewarding success. Bandura's (1986) social cognitive theory postulates that learning "can occur vicariously by observing other people's behavior and its consequences for them...observation enables people to acquire rules for generating and regulating behavioral patterns" (p. 19). Thus, school community members learn to behave according to the manner in which the overall group behaves. Furthermore, Bandura contends that group members will evaluate themselves and other members of the group according to the established norms of the environment. In this way, norms can impact the behavior of group members in schools including students, faculty and administrators as members adjust their behavior according to the prevailing expectations. Norms can also serve as a way to control behavior whereby group members may sanction those whose behavior is incompatible with the established group norms (Coleman, 1985). If teacher or student behavior in high press schools is not congruent with the expected

normative behaviors, then it would follow that some form of action would be taken to alter their behavior to conform to the established group norms.

Academic Press and Achievement

A rich body of empirical research has established a link between academic press and student achievement (Goddard et al., 2000; Hoy, Hannum, & Tschannen-Moran, 1998; Hoy & Sabo, 1998; Hoy et al., 1991; Lee & Smith, 1999). The increased levels of achievement in high press schools can be explained by Bandura's (1986) social cognitive theory. Bandura (1986) viewed human functioning as an interaction between personal, behavioral, and environmental factors, which he termed triadic reciprocal causation. He contended that:

> Persons are neither autonomous agents nor simply mechanical conveyers of animating environmental influences. Rather, they make causal contributions to their own motivation and action within a system of triadic reciprocal causation…action, cognitive, affective and other personal factors, and environmental events all operate as interacting determinants (Bandura, 1989, p. 1175).

At the root of Bandura's social cognitive perspective is the notion that humans have certain capabilities, which include symbolizing- extracting meaning from their environment; forethought- which includes planning, anticipating, goal setting, and creating challenges; vicarious learning through observational processes; and self-reflection, which he contends is the most human of these capabilities. Self-reflection and the ability to evaluate one's actions is the most prominent capability that impacts human behavior, which determines motivation, effort, and perseverance (Bandura, 1989).

Thus, a high press environment impacts the normative behavior of group members. As students are pressed to meet the high expectations of their environment and begin to experience repeated successes, referred to as mastery experiences (Bandura, 1986), their self confidence in their own abilities increases, which influences continued effort, motivation, and achievement.

Student-Teacher Relations and Perceptions of Academic Press

As discussed above, the normative environment created by academic press impacts the behavior of all members of the school community. Teachers beliefs about their own capabilities not only influences their teaching abilities but also the way that they relate to students in that they persist in their support of them and believe in their capabilities, thus accepting a sense of responsibility for them (Goddard et al., 2000). One of the ways that students can meet the high expectations of schools with an emphasis on academic press is through this personal sense of responsibility that teachers assume for students (e.g. Lee & Smith, 1999; Shouse, 1995).

Lee and Smith (1999) examined the relationship between achievement, academic press and social support. They characterized social support as the social relations that students maintain with those who have an impact on their academic success, including teachers, amongst other school community members. Their findings revealed that benchmark test scores in reading and math were highest in schools with high levels of academic press *and* social support for students, and concluded that "...to succeed in schools that press them to learn, students need support from the people with whom they interact" (p. 935).

In his study of schools serving economically disadvantaged students, Shouse (1995) examined the impact of academic press and schools' sense of communality. Communality has been characterized by Bryk and Driscoll (1988) as containing three components; 1) shared understandings; 2) common expectations; and 3) unique social relations amongst faculty as well as between students and teachers, which reflects an ethic of caring. Shouse found that "the combination of academic press and communal organization constitutes the strongest package of achievement effects" (p.16).

Summary

Academic press, meaning an intense focus on academics, is an outgrowth of school effectiveness research, which purports that two factors which greatly influence academic press are the school environment, including culture and climate, as well as school actors, including teachers (Brophy & Good, 1986; Goddard et al., 2000; Phillips, 1997; Purkey & Smith, 1983; Weber, 1971). Social cognitive theory explains the interaction between an academic press environment, behavior, and achievement, positing that the academically-oriented normative environment in high press schools presses students to achieve through the impact on their human capabilities (Bandura, 1986). Research suggests that students may better be able to meet the high expectations of school and respond positively to academic press if teachers assume a personal sense of responsibility for them.

Student-Teacher Trust, Identification with School, Student Perceptions of

Academic Press, and Achievement

Student-teacher relationships, which are comprised of elements of trust (Bryk & Schneider 2001; Furrer & Skinner, 2003) impact achievement through the influence from

self-system processes and the level of effort and motivation in learning put forth by students (Connell & Wellborn, 1991).

Student-teacher relationships also influence identification with school which impacts achievement. Student identification with school has to do with emotional feelings about members of the school community (Finn, 1989; Ladd & Dinella, 2009). It has been suggested that students' positive emotional feelings about members of the school community develop as a precursor to participation in school (Voelkl, 1997), which is the external manifestation of identification (Finn, 1989). Identification with school impacts achievement through the influence on participation, effort, and motivation (Fredericks et al., 2004; Ladd & Dinella, 2009).

Additionally, student-teacher relationships may have an influence on student perceptions of academic press and achievement. The normative environment of schools with high levels of academic press can influence teachers' level of self-confidence in their capabilities. Teachers' self-confidence impacts the way that they interact with students, including being more persistent in their support of students' efforts (Goddard et al., 2000). The normative environment of high press schools presses students to achieve through the influence on effort and motivation (Bandura, 1986), thus, the support that these relationships can offer is of particular importance in order for students to meet the high expectations inherent in high press environments.

Research not only suggests that student teacher relationships may influence both student identification with school and perceptions of academic press, but preliminary evidence indicates that these two constructs could also be complementary and that together they can have an even greater impact on achievement (Anderman, 2003; Ma,

2003). One of the predictors of students' sense of belonging is prior academic success. Anderman (2003) studied students' changes in sense of belonging over three years. She concluded that factors of academic press in educational environments were linked with students' sense of belonging. Specifically, her findings revealed that students feel a greater sense of belonging in educational settings that emphasize "personal effort, improvement, and mastery... [and] academic tasks [that are] interesting, important, and useful" (p. 18).

In Ma's (2003) study of middle school students and predictors of sense of belonging, for sixth graders he found that an environment of academic press was the strongest predictor of a sense of belonging. Students reported that caring teachers and an emphasis on school work and academic success were the most important factors that contributed to their sense of belonging. Ma suggests that self-confidence in one's academic abilities influences whether or not one feels valued or is willing to participate in an environment where these academic capabilities are emphasized. The results of these studies linking academic press and identification with school support the notion that repeated successes, or mastery experiences, influence self-esteem (Bandura, 1986), and that students' self-system processes, particularly their psychological need for competence (Connell & Wellborn, 1991) is linked to identification with school (Finn, 1989).

Conclusion

This study posits that student trust in teachers, student identification with school, and student perceptions of academic press are related to achievement, and that there is a relationship between student identification with school and perceptions of academic press. The importance of student-teacher relationships is rooted in attachment theory and

has been linked to cognitive development and achievement outcomes. Student trust in teachers impacts identification with school and achievement through self-system processes and the influence on engagement, effort, motivation, and achievement. Student-teacher relationships may have an impact on student perceptions of academic press and achievement as a result of the normative environment and the influence on teachers' beliefs about students' capabilities, student's response to those beliefs, and levels of effort and motivation put forth in learning. Academic press and identification with school may also be complementary constructs, as mastery experiences influence one's self confidence and feelings of belonging in a high press environment. Gaining a fuller understanding of the interrelatedness between student trust in teachers, student identification with school, student perceptions of academic press, and the impact of these variables on achievement could add to the research base, as well as lead to positive school outcomes for students.

CHAPTER 3: Methodology

Introduction

Although the link between faculty trust in students and achievement has been established (Bryk & Schneider, 2002; Goddard et al., 2009; Goddard, Tschannen-Moran, & Hoy, 2001) less is known about student perceptions of trust in teachers as it impacts achievement outcomes. Student-teacher relations have been linked to achievement, student identification with school (Mitchell, 2004; Mitchell et al., 2008; Wehlage, 1989) as well as student perceptions of academic press (Gregory & Ripski, 2008; Lee & Smith, 1999; Shouse, 1995; Wehlage, 1989). If more were known about the role of trust in these interactions, schools and students alike could realize more positive educational outcomes while also adding to the research base. The purpose of this study was to examine linkages between student trust in teachers, student identification with school, student perceptions of academic press, and achievement in reading and math on standardized state assessments in the context of urban elementary schools. The unit of analysis was the school, thus the interrelationships of the variables were aggregated to the school level.

Hypotheses

H.1. Student trust in teachers is positively and significantly correlated to identification with school.

H.2. Student trust in teachers is positively and significantly correlated to student perceptions of academic press.

H.3. Student trust in teachers is positively and significantly correlated to student achievement in reading and math in urban elementary schools.

H.4. Student identification with school is positively and significantly correlated to student perceptions of academic press.

H.5. Student trust, identification with school, and student perceptions of academic press will independently and together explain a significant proportion of the variance in achievement in reading and math in urban elementary schools.

Research Questions

1. To what extent is student trust in teachers related to student identification with school?

2. To what extent is student trust in teachers related to student perceptions of academic press?

3. To what extent is student trust in teachers related to student achievement in math and reading in grades three, four and five?

4. To what extent is student identification with school related to student perceptions of academic press?

5. What is the independent and combined influence of student trust in teachers, student identification with school, and student perceptions of academic press in explaining variance in student achievement?

Setting

The school district under study was an urban district in the mid-Atlantic region. The district was made up of 35 elementary schools, nine middle schools, and five high schools, with a total population of over 34,000 students. The student population was diverse: 23% White, 63% African American, 4% Hispanic, and 2% Asian. Fifty-nine percent of all students qualified for free or reduced lunch. Each year, the school district

develops and administers stakeholder surveys in order to gain feedback from teachers, students, and parents about their perceptions of various aspects of the district. In the fall of 2008, the district's Research and Testing department requested assistance from Dr. Tschannen-Moran, College of William and Mary, in the development of the scales that would comprise the survey. The district's primary concern was to develop a research-based tool that would measure school social relations among parents, teachers, and students.

Participants

The participants for this study consisted of approximately 4,700 elementary students in grades three, four, and five from 35 elementary schools. During the school year 2008-2009, 84% of third graders passed the state test for math, and 82% passed the reading test. For fourth graders, 82% passed the math test and 86% passed the reading test. For fifth graders, 89% passed math and 91% passed reading.

Table 3.1

Percentage of Students Passing State Achievement Tests in 2008-2009

Grade	Math	Reading
Third	84	82
Fourth	82	86
Fifth	89	91

Instrumentation

This study was part of a larger study comprised of teachers, parents, and students in grades three through twelve. The Student Climate Survey arrived in schools in April,

2009, and was administered to students by randomly selected homeroom teachers from grades three, four, and five. The Student Climate Survey measured three constructs, including student trust in teachers, student identification with school, and student perceptions of academic press, with a Likert-type scale response set of choices ranging from strongly agree to strongly disagree.

Student Trust in Teachers

The Student Trust Scale (Adams & Forsyth, 2009), which measures student trust in teachers, is based upon the five-facet model of trust conceptualized by Hoy and Tschannen-Moran (1999). Adams and Forsyth described their measure as "…written to capture student perceptions and recollections of teacher behavior, which allow for judgments to be made about their relative openness, benevolence, reliability, competence, and honesty" (p. 264). The thirteen item Likert-type Student Trust Scale is comprised of five original survey items, three survey items adapted from the Trust Scales (Hoy & Tschannen-Moran, 1999) and five survey items adapted from the Parent Trust Scale (Forsyth, Adams, & Barnes, 2002). All of the thirteen items from the Student Trust Scale were included on the Student Climate Survey, with two items that were slightly modified, as shown in Table 3.2.

Table 3.2

Sample Comparison of SCS and Student Trust Scale Survey Items

Student Climate Survey	Student Trust Scale (Adams & Forsyth, 2009)
Teachers are easy to talk to at this school.	Teachers at this school are easy to talk to.
Teachers always do what they are supposed to do.	Teachers at this school always do what they are supposed to do.

For their pilot test of the Student Trust Scale, Adams and Forsyth collected data from a convenience sample of 450 ethnically-diverse students. One single factor with an eigenvalue greater than one emerged that explained 59% of the variance in student trust. This indicated that the five facets of trust (benevolence, honesty, openness, reliability, and competence) converged around and measured one factor, that of trust. The Student Trust Scale has high internal consistency, with a Cronbach's alpha reliability coefficient of .90. Factor analysis was conducted in order to test the convergence of the items for the sample in this study. Sample survey items from the Student Trust Scale include:

- "Teachers at this school are always honest with me" (*honesty*).

- "Teachers at this school are good at teaching" (*competence*).

Identification with School

Identification with school has been conceptualized as a) sense of belonging and b) valuing school and school related goals (Finn, 1989). The Identification with School Questionnaire (ISQ; Voelkl, 1996) measures the extent to which students both identify with and value school. The ISQ is a sixteen-item Likert-type scale, with nine items that indicate feelings of belongingness in school, and seven items reflecting a sense of valuing school and school-related goals. Ten of the sixteen items from the ISQ appeared on the Student Climate Survey. An eleventh item was also part of the survey but did not originate from the ISQ. The decision to limit the length of this subscale was made by district officials due to the length of the Student Climate Survey.

The ISQ was developed and then pilot-tested on a sample of over 3,500 ethnically-diverse students. Voelkl (1996) hypothesized that identification with school would be best measured by a single factor, as opposed to dual factors of both belonging

and valuing school. Confirmatory factor analysis indicated a .85 correlation between each of the separate belonging and valuing factors; thus, an ISQ score indicates both feelings of belonging and valuing. The ISQ has a Cronbach's alpha reliability coefficient of .84. Because the identification with school subscale was an adaptation of the ISQ- 10 of the sixteen-item ISQ appeared on the subscale, factor analysis was conducted in order to check the dimensionality of the scale, to refine the measure, and to assess the correlation of the subscale items. The results of the factor analysis indicated the relationship between the subscale items and whether or not this scale's separate belonging and valuing factors converged to measure identification with school, or whether they varied separately.

Sample survey items from the School Climate Survey identification with school subscale included:

- "I feel proud of being part of my school."

- "School is more important than most people think."

Student Perceptions of Academic Press

There were eight items on the Student Climate Survey that measured student perceptions of academic press, which has been defined as an academically-oriented environment where expectations and goals are high, teachers have confidence in students' abilities, and students respect the academic norms of the school (Hoy & Feldman, 1997). This subscale was an adaptation of an existing measure that assessed teacher perceptions of academic press. All eight of the survey items were adapted from the School Climate Index (SCI; Tschannen-Moran, Parish, and DiPaola, 2005).

The SCI is a 28 item descriptive questionnaire that consists of four subscales, one of which measures academic press. The SCI is based upon a parsimonious framework developed by Hoy, Hannum, & Tschannen-Moran (1998) that combined a number of subscales from the Organizational Climate Descriptive Questionnaire (OCDQ; Hoy, Tarter, & Kottkamp 1991) and the Organizational Health Inventory (OHI; Hoy & Feldman, 1987). The merger of these measures simplified the interpretation of results. The alpha coefficient of reliability for the academic press subscale in the teacher sample tested was strong at .92.

Unlike the SCI, which is intended to measure faculty perceptions, the items on the Student Climate Survey were intended to measure student perceptions of academic press. With the exception of one item (students respect others who get good grades), the language of the Student Climate Survey items on the academic press subscale was slightly modified for clarity purposes for the targeted student audience. Survey item examples and comparisons are shown in Table 3.3 below.

Table 3.3

Sample Comparison of SCS and SCI Survey Items

Student Climate Survey	School Climate Index (Tschannen-Moran, Parish, and DiPaola, 2005)
This school is serious about learning.	The learning environment is orderly and serious.
Good grades are recognized.	Academic achievement is recognized and acknowledged by the school.

Although the SCI has strong levels of reliability, the Student Climate Survey was an adaptation of an existing measure; therefore, in order to assess the covariance of the items from the academic press subscale, factor analysis was conducted. This shed light

on the relationship between the subscale items and whether or not when used together as one scale the items covaried or whether some items varied separately. Cronbach's alpha coefficient of internal consistency was also calculated.

Student Achievement Data

Student achievement was measured by data from the Virginia Standards of Learning (SOL) assessments in English and mathematics. The measurement consisted of two composite scores for grades 3-5 combined, with one score each for English and mathematics aggregated at the school level. The Commonwealth of Virginia has established academic standards for students in grades K-12, and assessments are administered in English, mathematics, science, and history/social science. Students in grades 3-8 are assessed annually and those in grades 9-12 upon course completion. Moderately strong correlations of construct validity were found between SOL assessments and Stanford 9 tests (Virginia Department of Education, 2009). Validity testing of the English SOL for grades three – five using Spearman Rank Order Correlation Coefficients indicated a .76-.78 correlation with Stanford 9 Reading. For mathematics in grades three through five, validity testing indicated a .72 - .76 correlation with Stanford 9 Mathematics. Additionally, factor analysis indicated strong levels of unidimensionality for SOL English and mathematics test forms, with eigenvalues greater than one.

The SOL assessments in both English and mathematics have strong levels of reliability. For grades three through five in English, the Cronbach's alpha coefficient of reliability ranged from .85-.86. In mathematics, the Cronbach's alpha coefficient of

reliability ranged from .87-.90. Mean scaled scores aggregated by school were used for the analyses.

Data Collection

The data for this study was generated from the Student Climate Survey responses, as well as achievement data from students' SOL raw scores provided by the school district. The Student Climate Survey was administered to students by their homeroom teachers in the spring of 2009. Students were informed that their participation was voluntary and that they could skip any survey items that they did not feel comfortable answering. Teachers instructed students on procedures, answered questions, and collected surveys upon completion.

Data Analysis

Individual student scores were obtained for each variable and then aggregated to the school level; thus, the unit of analysis was the school. The SOL achievement data obtained from the school district consisted of school-level scores and did not need aggregation.

Research Question 1

To what extent is student trust in teachers related to student identification with school? Data were obtained from the student trust and student identification with school subscales on the Student Climate Survey. Factor analysis was performed for both the student trust and the identification with school subscales in order to determine the relationship between each of the subscale items. The relationship between the two variables, student trust in teachers, and student identification with school was examined using descriptive statistics and correlation analysis.

Research Question 2

To what extent is student trust in teachers related to student perceptions of academic press? Data were obtained from the student trust and academic press subscale items on the Student Climate Survey. The results of factor analysis showed the relationship between the academic press subscale items. The relationship between student trust in teachers and student perceptions of academic press was examined using descriptive statistics and correlation analysis.

Research Question 3

To what extent is student trust in teachers related to student achievement in math and reading in grades three, four and five? Data were obtained from SOL math and reading scores, and the student trust subscale on the Student Climate Survey. Descriptive statistics and correlation analysis was used to examine the relationship between student achievement and student trust in teachers.

Research Question 4

To what extent is student identification with school related to student perceptions of academic press? Data were obtained from the student identification with school and academic press subscale items. The relationship between student identification with school and student perceptions of academic press was examined using descriptive statistics and correlation analysis.

Research Question 5

What is the individual as well as combined influence of student trust in teachers, student identification with school, and student perceptions of academic press in explaining variance in student achievement? Data were obtained from student trust in

teachers, student identification with school, and academic press subscale items from the

Student Climate Survey, as well as student SOL scores in math and reading. Multiple

regression was used to analyze these three variables to determine which had the greatest

impact on achievement.

Table 3.4

Data Sources and Analysis of Research Questions

Research Question	Data Source[a]	Data Analysis
1. To what extent is student trust in teachers related to student identification with school?	5-10, 12, 28, 29, 32, 45, 48-60	Factor Analysis Cronbach's alpha coefficient of internal consistency Correlation Analysis
2. To what extent is student trust in teachers related to students' perceptions of academic press?	1-4, 14-16, 26, 48-60	Factor Analysis Cronbach's alpha coefficient of internal consistency Correlation Analysis
3. To what extent is student trust in teachers related to student achievement in math and reading in grades three, four, and five?	48-60 SOL achievement data.	Factor Analysis Cronbach's alpha coefficient of internal consistency Correlation Analysis
4. To what extent is student identification with school related to student perceptions of academic press?	1-4, 14-16, 5-10, 12, 28, 29, 32, 45	Correlation Analysis
5. What is the independent and combined influence of student trust in teachers, identification with school, and perceptions of academic press in explaining variance in student achievement?	Data from all three subscales and SOL achievement data.	Multiple Regression

[a]Numbers represent survey items from the Student Climate Survey

Limitations and Delimitations

This study was limited by a number of issues beyond the researcher's control. The instructions to teachers administering the surveys were minimal and the procedures and conditions for administration were not standardized. It is unclear whether or not students understood the meaning of each of the response choices of the Likert scale, particularly the choice of Neutral, or if students reading comprehension level was such that they were able to understand the statements and descriptions representing each scale item. This possible lack of comprehension could have led to common response bias. Because all three of the variables measuring student perceptions appeared on the same survey, respondents could have been less likely to distinguish their responses between the different constructs, and may have chosen all negative or all positive responses. Survey completion was voluntary, thus, depending upon the response rate, the sample population may or may not accurately represent the student population of the school district. The survey self-report data may have impacted the accuracy of the information collected as participants could have cast themselves in a more positive light than that which reflects their true feelings and circumstances.

The researcher imposed specific limitations on this study. Participants were students in grades three through five from 35 elementary schools in an urban southeast Virginia school district, which limits the generalizability of the findings to a similar school district and population. Additionally, the decision to aggregate data from the individual to the school level could have masked within school variability.

Ethical Safeguards

This study used extant data from a survey that was administered to participants by the school district's Department of Research and Testing. Participants were made aware that survey completion would be voluntary and their anonymity would be protected. Every effort was made by district officials to protect the security and confidentiality of the data collected. Pseudonyms were used throughout the study in order to protect the privacy of participants and schools.

The human-subjects protocol was followed in securing permission to conduct this study. The proposal for this study, as well as all consent forms used, were presented to and approved by the university IRB where the study was conducted. The necessary permission was also obtained from the school district in order to conduct research.

CHAPTER 4: Data Analysis

Introduction

This study examined student trust in teachers and its relationship to student identification with school, student perceptions of academic press, and achievement in reading and math as measured by standardized state assessments. Further analysis was conducted in order to assess the relationship between student identification with school and student perceptions of academic press. The student-teacher relationship and the impact on achievement is relatively untested, therefore, this study sought to add to the research base on student trust.

Participants for this study included 4,700 ethnically and economically diverse students in grades three, four, and five, from 35 elementary schools in an urban school district in the mid-Atlantic region. The Student Climate Survey arrived from the district central office to schools in April, 2009, and was administered to students by randomly selected 3rd, 4th, and 5th grade homeroom teachers. The constructs of student trust in teachers, student identification with school, and student perceptions of academic press were measured using the surveys' three subscales, with a Likert-type five-point scale response set of choices ranging from strongly agree (5) to strongly disagree (1).

Scale Development

The identification with school and academic press scales in this study were adapted from original scales that were found to be unidimensional and to have high levels of reliability. Data were collected from a total of 58 elementary and secondary schools within the district for each of the scales. A decision was made to increase the sample size for the purpose of scale development in order to obtain more accurate data. Each scale in

this study was submitted to principal axis factor analysis with a varimax rotation in order to assess factor loadings and dimensionality, refine the measure, and to assess the correlation of the subscale items. Additionally, a Cronbach's alpha coefficient was calculated to test for reliability and internal consistency.

Student Trust Scale

A factor analysis of the thirteen-item Student Trust Scale (Adams & Forsyth, 2009) confirmed validity of the original scale, indicating unidimensionality and the measurement of student trust in teachers based upon the five facets of trust. One single factor emerged with an eigenvalue of 12.41 and the variance explained was 95.5. Factor loadings were strong, ranging from .93-.99. The alpha coefficient for this sample was .99.

Table 4.1

Analysis of Trust Items (N=58)

Facet	Item	Student Trust Scale (Adams & Forsyth, 2009) Alpha = .99	Factor 1
B/R	48	Teachers are always ready to help.	.99
C	49	Teachers at this school have high expectations for all students.	.95
O	50	Teachers are easy to talk to at this school.	.96
B	51	Students are well cared for at this school.	.97
C	52	Teachers always do what they are supposed to do.	.99
O	53	Teachers at this school really listen to students.	.98
H	54	Teachers at this school are always honest with me.	.99
C	55	Teachers at this school do a terrific job.	.99
H	56	Students can believe what teachers tell them.	.98

B	57(reversed)	Teachers at this school do not care about students.	.93
C	58	Teachers at this school are good at teaching.	.99
C	59	Students learn a lot from teachers in this school.	.99
R	60	Students at this school can depend on teachers for help.	.98
	Eigenvalue		12.41
	Cumulative Variance Explained		95.5

B benevolence R reliability C competence H honesty O openness

Student Identification with School

A factor analysis of the eleven-item scale measuring identification with school indicated that sense of belonging and valuing loaded on one factor and only item number six, "the only time I get attention at school is when I cause trouble" loaded separately on a second factor. This item was removed for conceptual fit and statistical reasons. Factor analysis was conducted after the removal of item six and the results indicated a one factor eigenvalue of 7.85 with 78.5% explained variance. Factor loadings ranged from .70-.97. The alpha coefficient of reliability was .96.

The identification with school measure was further refined by removing items that were similar to items on this study's trust scale which measured the five facets of trust: benevolence, reliability, competence, honesty, and openness. The purpose was to create a scale that measured specifically identification with school, which would ensure that the results of the data analysis reflected the construct of identification with school without a confounding variable of student trust as part of the construct. The following items were removed:

9. There are adults at school who are interested in me.
29. My teachers care about me.
45. Teachers respect me.

The seven-item refined identification with school scale was submitted to a factor analysis which resulted in a single factor loading with an eigenvalue of 5.30 with 75.8% variance explained. Factor loadings ranged from .73-.96. The alpha coefficient of reliability was .93.

Table 4.2

Analysis of Identification with School Items (N=58)

Item	Student Identification with School. Alpha = .96	Factor 1	Student Identification with School (trust items removed). Alpha = .93	Factor 1
5	I feel proud of being part of my school	.93	I feel proud of being part of my school	.93
7	School is one of my favorite places to be.	.87	School is one of my favorite places to be.	.86
8	School is more important than most people think.	.77	School is more important than most people think.	.79
9	There are adults at school who are interested in me.	.89	[T]	
10R	Most of the things we learn in school are worthless.	.91	Most of the things we learn in school are worthless.	.92
12R	Going to school is a waste of time.	.86	Going to school is a waste of time.	.89
28	I feel like I am a part of my school.	.97	I feel like I am a part of my school.	.96
29	My teachers care about me.	.94	[T]	
32	I fit in with students at this school.	.70	I fit in with students at this school.	.73
45	Teachers respect me.	.95	[T]	
Eigenvalue		7.85	Eigenvalue	5.30
Cumulative Variance Explained		78.5	Cumulative Variance Explained	75.8

R reverse coded   [T] trust item removed

Student Perceptions of Academic Press

The eight-item scale measuring student perceptions of academic press was submitted to factor analysis, which resulted in a single factor eigenvalue of 6.54 with 81.8% of the variance explained. Factor loadings ranged from .88-.97. Reliability testing indicated an alpha coefficient of .93.

Table 4.3

Analysis of Student Perceptions of Academic Press Items (N=58)

Item	Student Perceptions of Academic Press, Alpha = .96	Factor
		1
1.	Students respect others who get good grades.	.88
2.	Students try hard to improve.	.94
3.	This school is serious about learning.	.94
4.	Students work hard to get good grades.	.97
14.	The content of my courses are challenging.	.73
15.	My teachers believe that I can learn.	.96
16.	Good grades are recognized.	.92
26	I can get extra help at school if needed.	.87
	Eigenvalues	6.54
	Cumulative Variance Explained	81.8

Descriptive Summary

Survey response data was analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were calculated for student trust in teachers, student identification with school, and student perceptions of academic press (see Table 4.4). In addition, achievement in reading and math was measured by Virginia Standards of Learning (SOL) assessments.

Data was aggregated to the school level by calculating a score from each student's completed subscale, and then generating one mean score for each subscale, which comprised the school-level score. A score of 1 indicated that the respondent strongly disagreed with the statement, and a score of 5 indicated that the respondent strongly

agreed with the statement. The mean scores and the range of scores for each of the three independent variables were high, indicating that students had positive feelings about trust in teachers, identification with school, and academic press. The standard deviations indicated that there was not a great deal of variability in school-level mean scores.

Mean scores for reading and math were calculated by averaging students' raw scores on SOLassessments. Minimal competency is indicated by a score of 400 or better, with a maximum possible score of 600. Two composite mean scores were calculated for achievement in grades three, four, and five, with one score for reading and one for math. The mean sores and range of scores indicated that when aggregated to the school level, students met at least minimal competency levels in both reading and math. The standard deviations were an indication of low variability in mean school-level scores.

Table 4.4

Descriptive Data for Trust, Identification with School, Academic Press, and Achievement N=35 Schools

Variables	Mean	S.D.	Range
Student Trust in Teachers	4.13	.19	3.75 - 4.53
Identification with School (10 items)	3.99	.16	3.68 - 4.38
Identification with School (7 items)	3.94	.16	3.65 - 4.28
Student Perceptions of Academic Press	4.16	.14	3.89 - 4.47
Elementary Reading Achievement	469.15	18.49	424.84 – 510.64
Elementary Math Achievement	478.93	22.89	429.12 – 529.64

Results

The relationships between variables in questions one through four were answered using correlation analysis (Table 4.5). Auxiliary findings pertinent to this study also

examined the relationships between variables. Predictors of achievement were examined

to answer question five using regression analysis (Tables 4.6 and 4.7).

Table 4.5

Correlation Analysis of Student Trust in Teachers, Student Identification with School, Student Perceptions of Academic Press, and Achievement

	2.	3.	4.	5.
1. Student Trust in Teachers	.87**	.79**	.60**	.62**
2. Identification with School (7)		.89**	.57**	.59**
3. Student Perceptions of Academic Press			.48**	.44**
4. Elementary Reading Achievement				.90**
5. Elementary Math Achievement				

** $p < .01$

Results for Research Question 1

To what extent is student trust in teachers related to student identification with

school? Correlation analysis was used to examine the relationship between student trust

in teachers and identification with school. The results indicated support for the

hypothesis that student trust in teachers is positively and significantly correlated to

identification with school. A strong and significant relationship between student trust in

teachers and student identification with school ($r = .87$, $p < .01$) was found, as shown in

Table 4.5.

Results for Research Question 2

To what extent is student trust in teachers related to student perceptions of

academic press? The results of correlation analysis of student trust in teachers and

student perceptions of academic press indicated support for the hypothesis that student

trust in teachers is positively and significantly correlated to student perceptions of academic press. Student trust in teachers had a moderately strong but significant correlation to student perceptions of academic press (r = .79, p < .01) as shown in Table 4.5.

Results for Research Question 3

To what extent is student trust in teachers related to student achievement in math and reading in grades three, four and five? The results of correlation analysis of student trust in teachers and reading and math achievement supports the hypothesis that student trust in teachers is positively and significantly correlated to achievement. The results indicated that student trust in teachers was moderately correlated to reading scores (r = .60, p < .01), as well as to math scores (r = .62, p < .01) as shown in Table 4.5.

Results for Research Question 4

To what extent is student identification with school related to student perceptions of academic press? The results of correlation analysis of identification with school and student perceptions of academic press indicated support for the hypothesis that student identification with school is positively and significantly correlated to student perceptions of academic press. A strong relationship (r = .89, p < .01) was found between student identification with school and student perceptions of academic press as shown in Table 4.5.

Auxiliary Findings

Correlation analysis was used to examine the relationship between student identification with school and reading and math achievement. Student identification with school was moderately correlated to both reading (r = .57, p < .01), and math (r = .59, p <

.01) achievement levels. Results of a correlation analysis of student perceptions of academic press and reading achievement ($r = .48$, $p < .01$), and math achievement ($r = .44$, $p < .01$), indicated the most moderate but significant relationship between all of the variables.

Research Question 5

What is the combined, as well as individual influence of student trust in teachers, identification with school, and student perceptions of academic press in explaining variance in student achievement?

Reading. Multiple regression analysis indicated that the combined influence of student trust in teachers, student identification with school, and student perceptions of academic press accounted for 37% of the variance in reading achievement and the analysis was found to be statistically significant ($p < .01$) as shown in Table 4.6. When entered together into the regression model, none of the three independent variables made an independent contribution to the influence on reading achievement, thus, it was shared variance that was explaining reading achievement. This would indicate, as predicted by the results of the correlation analysis (Table 4.5), that there is a strong relationship between all three of the variables. A stepwise regression analysis indicated that student trust in teachers alone accounted for 36% of the variance in reading achievement and had a significant effect ($\beta = .60$, $p < .01$). When added into the regression model, student perceptions of academic press had an insignificant effect on achievement and the variance explained remained constant ($R^2 = 36\%$). Identification with school made a slight contribution to an increase in variance explained to 37%.

Table 4.6

Regression Analysis of Reading Achievement

		Beta	t	Sig.	R^2	Adj. R^2	SE
					.36	.34	15.02
1	Student Trust	.60	4.30	.00			
					.36	.32	15.25
2	Student Trust	.57	2.50	.02			
	Academic Press	.03	.13	.89			
					.37	.31	15.32
3	Student Trust	.42	1.44	.00			
	Academic Press	.14	.45	.66			
	Identification with School	.32	.84	.41			

Math. Multiple regression analysis was used to analyze math achievement data. The results indicated that the combined influence of student trust in teachers, student identification with school, and student perceptions of academic press accounted for 44% of the variance in math achievement. None of the three independent variables made an independent contribution to the influence on variance in math achievement scores. When entered together into the regression model, the three independent variables were highly correlated and worked together to influence achievement scores, as was the case for reading. The results of a stepwise regression analysis indicated that student trust in teachers accounted for 39% of the variance in math achievement and had a significant effect ($\beta = .62$, $p < .01$). The variance increased only slightly to 40% when academic press was added to the regression model. Academic press did not make an independent contribution because it is so highly correlated with student trust. However, the strength of the influence of student trust on math achievement increased with the introduction of academic press into the model ($\beta = .74$, $p < .01$). When the third variable, student identification with school, was introduced into the regression model, the variance

increased to 44% but the independent influence of all three variables became insignificant. This indicates that it is shared variance between those three variables that is accounting for the variability in math achievement.

Table 4.7

Regression Analysis of Math Achievement

		Beta	t	Sig.	R^2	Adj. R^2	SE
					.39	.37	18.13
1	Student Trust	.62	4.60	.00			
					.40	.36	18.29
2	Student Trust	.74	3.31	.00			
	Academic Press	.14	.64	.53			
					.44	.39	17.91
3	Student Trust	.47	1.71	.10			
	Academic Press	.44	1.51	.14			
	Identification with School	.57	1.54	.13			

Summary

The three subscales in this study which separately measured student trust in teachers, student identification with school, and student perceptions of academic press, were subject to factor analysis and found to be unidimensional and to have high levels of reliability. The scale measuring identification with school was found to contain items that also measured student trust in teachers, therefore, this scale was refined.

A descriptive summary of school-level mean scores of the independent variables in this study indicated that students had high levels of trust in teachers and identification with school, as well as positive perceptions of academic press. Mean school-level SOL achievement scores indicated that all students were at least proficient in both reading and math.

A number of strong and significant relationships were found in this study. Student trust showed a strong correlation to identification with school ($r = .87$, $p < .01$) and academic press ($r = .79$, $p < .01$) and had the strongest relationship to achievement in reading ($r = .60$, $p < .01$), as well as in math ($r = .62$, $p < .01$), when compared with the other two independent variables in this study. The results also indicated a strong relationship between student identification with school and student perceptions of academic press ($r = .89$, $p < .01$). Identification with school was moderately correlated with achievement in both reading ($r = .57$, $p < .01$), and math ($r = .59$, $p < .01$). The relationship between academic press and achievement in reading ($r = .48$, $p < .01$), and math ($r = .44$, $p < .01$), was the most moderate of all three variables.

The results of a regression analysis for both reading and math indicated that student trust in teachers was a stable and significant variable in predicting variance in achievement. When academic press was added into the regression model, it did not add to the proportion of achievement explained for reading but did contribute to the one percent increase in math. When identification with school was added to student trust and academic press, the result was a small increase in the proportion of variance explained.

CHAPTER 5: Discussion

Overview of findings

As predicted, the results of this study indicated significant relationships between student trust in teachers, student identification with school, student perceptions of academic press, and achievement. There were strong and significant correlations between three independent variables. Similar strong relationships were found between student trust and student identification with school, and student identification with school and academic press. There was a slightly more moderate relationship between student trust and academic press.

All three independent variables indicated moderate and significant correlations with achievement in both reading and math. Student trust and identification with school indicated similar moderate correlations with achievement in both reading and math achievement. The strength of the relationship between student perceptions of academic press and reading and math achievement was slightly more moderate than the relationships with the other two independent variables and achievement.

Student trust in teachers was the primary variable in this study, so the decision to input student trust as the first variable in the regression model could have influenced the finding that student trust alone accounted for a higher variance in scores. In both reading and math, the slight increase in scores after the addition of identification with school and academic press into the regression model indicated that it was shared variance that accounted for the change. Combined, student trust in teachers, student identification with school, and student perceptions of academic press predicted student achievement in reading, accounting for 37% of the variance in scores. This set of variables was a

somewhat stronger predictor of math achievement, accounting for 44% percent of the variance in scores.

Descriptive statistics indicated that students trusted teachers, identified with school, and had positive perceptions of academic press. The similar ranges of scores for each of the independent variables could be attributed to common response bias. There is the possibility that students were not able to distinguish their responses between the three constructs which were all represented on the same scale, and may have indicated all positive or all negative responses.

<div align="center">Findings in Light of Existing Research Studies</div>

The results of this study, which found correlations between student trust in teachers, student identification with school, and student perceptions of academic press, support this study's conceptual framework which posits that these constructs are interrelated.

Student Trust

Although the research base is lacking in empirical evidence examining student trust in teachers, there are a number of related constructs that have been studied having to do with student perceptions of relationships with teachers and achievement, including self-system processes, sense of relatedness, teacher caring, and social support. This study measured student trust in teachers with the Student Trust Scale (Adams & Forsyth, 2009), which is based upon the five facet model of trust (Hoy & Tschannen-Moran, 1999). Thus, the results of this research contribute to the existing research base on student-teacher relationships, suggesting that student-teacher relationships can be characterized by trust, and that student trust in teachers influences achievement.

Student Trust and Identification with School

In schools, self-system processes are characterized by interpersonal processes which impact students' beliefs about themselves. These feelings, referred to as a sense of relatedness, are influenced by trust in others (Furrer & Skinner, 2003). Thus, when students trust teachers, they tend to feel more positive about themselves. These positive feelings, influenced by trust, have been found to impact engagement (Connell & Wellborn) which is a characteristic of identification with school (Finn, 1989; Voelkl, 1997).

Identification with school is influenced by how students feel about members of the school community (Finn, 1989; Voelkl, 1997), including teachers. In his participation- identification model, Finn puts forward that these emotional feelings are the internal manifestation of identification with school, and that they are a prerequisite in order for participation to take place, which is the external result of identification.

Caring can be characterized as feeling a sense of benevolence, which is one of the facets of trust in Hoy and Tschannen-Moran's (1999) five facets of trust model. Students who reported feeling cared about by teachers also felt a greater sense of identification with school, including belonging and valuing school work (Fredericks et al, 2004; National Research Council institute of Medicine, 2004; Wehlage, 1989).

Student Trust and Perceptions of Academic Press

This is one of the first studies to examine the relationship between student trust in teachers and student perceptions of academic press. The results, indicating a relationship between student trust in teachers and student perceptions of academic press, are consistent with research findings suggesting that student perceptions of relationships with

teachers influence their commitment to the high expectations and norms of school (e.g. Lee & Smith, 1999; Shouse, 1993).

The normative environment of schools characterized by academic press impacts all members of the school community, including teachers and students. This normative environment influences teachers' beliefs about their own capabilities as well as those of their students, thus persisting in their support of them and accepting a sense of responsibility (Goddard et al, 2000). Therefore, when students feel supported by teachers they are also likely to have positive perceptions of academic press. This notion of support in schools has been characterized as social support, meaning students social relations with school community members, including teachers, who have an impact on their academic success (Lee & Smith, 1999).

Identification with School and Student Perceptions of Academic Press

The results of this study contribute to the lacking empirical research base examining the relationship between identification with school and student perceptions of academic press. Preliminary research suggests that students feel a greater sense of belonging in schools characterized by academic press (Anderman, 2003; Ma, 2003). One of the reasons for this relationship could have to do with the confidence that comes about for those students who are successful at meeting the academic challenges that they face, and wanting to belong in an environment that values, recognizes, and rewards those successes.

Achievement

A plethora of evidence from children's relational studies confirms a link between student perceptions of their relationships with caregivers, including teachers, and

achievement (e.g. Anderman, 1999; Connell & Wellborn, 1991; Furrer & Skinner, 2003; Noddings, 1984; Stipek 2002; Wentzel, 1997). This line of research has suggested that this relationship has to do with feelings of being cared about, which can have an influence on students' level of motivation and thus achievement. This study's finding that student perceptions of trust in teachers influences achievement not only contributes empirical evidence to the research base on children's relational studies, but also indicates that a more thorough understanding of children's socio-cognitive perspectives in relation to schools and achievement is needed.

Empirical evidence has indicated a link between a number of trust referents and achievement, including teacher trust in students, parents, faculty, and administrators (Bryk & Schneider, 2002; Forsyth, Barnes, & Adams, 2005; Goddard, Salloum, & Berebitzky, 2009; Goddard, Tschannen-Moran, & Hoy, 2000) and student and parent trust in their principal (Mitchell, 2004; Mitchell, Forsyth, & Robinson, 2008). This research has been important in shedding light on school contextual variables that can have an influence on achievement irrespective of students' capabilities and influences outside of school. Unfortunately the research base offers little empirical evidence examining trust from the student perspective and the link to achievement. The findings of this study provide evidence that trust from the student perspective influences achievement. This research has strengthened and expanded the trust research base by suggesting that gaining a fuller understanding of trust will provide increased opportunities to influence positive school outcomes for students.

Consistent with the outcomes of similar studies (e.g. Finn, 1989; Mitchell, 2004; Voelkl, 1997; Wehlage, 1989), the results of this study found that student identification

with school influences achievement. These results add to the research base by suggesting that the construct of identification with school is correlated not only with achievement but also with student-teacher trust and student perceptions of academic press.

Identification with school was also found to be a multidimensional construct. The original identification with school measure, which was based in part on the Identification with School Questionnaire (Voelkl, 1996) consisted of scale items that were similar to items on the Student Trust Scale (Adams & Forsyth, 2009). These items were removed from the measure, which resulted in a more refined 7-item scale for the analysis of identification with school in this study.

A rich body of research evidence has confirmed a relationship between academic press and student achievement (Goddard et al., 2000; Hoy, Hannum, & Tschannen-Moran, 1998, Hoy & Sabo, 1998; Hoy et al., 1991; Lee & Smith, 1999). This research has focused on faculty perceptions of academic press as a school climate construct which influences faculty behavior. This is one of the few studies that measured academic press from the student perspective and in relation to achievement. The results of this study offer preliminary evidence suggesting that students' perceptions about an environment characterized by academic press can influence their academic performance.

The results of this study suggest that student trust in teachers, identification with school, and perceptions of academic press together have the greatest influence on math achievement, and a more moderate influence on reading achievement. Although there is existing evidence that independently, some elements of these variables influence achievement, to date there is no existing research base that has examined these variables and their relationship to achievement collectively. Given the individual influence that

each of these variables have on achievement and the strong interrelatedness and overlap of constructs, it would be expected that these three variables work together to influence achievement to a greater degree. This research has presented the possibility of a new line of research examining the collective strength created by these interrelated variables and how this can have an influence on achievement.

Contributions to Theory

This research contributes to Bryk and Schneider's (1996) theory of relational trust in schools. Relational trust has to do with role relationships in schools, the interactions between role groups, and the obligations and expectations therein. The theory posits that relational trust is manifested on three levels: intrapersonal, interpersonal, and organizational. The results of this research contribute specifically to the significance of the student-teacher role group, and the influence on organizational outcomes, namely student achievement. The examination of student trust in teachers has shed light on the trust processes from the student perspective. This study indicated a discernment of trust based upon the five facet model of trust (Hoy and Tschannen-Moran, 1999) which describes trust as a willingness to be vulnerable based upon an assessment of benevolence, honesty, openness, reliability, and competence. Because the student trust measure was based upon the five facet model, this study also offers stronger support for Hoy and Tschannen-Moran's conceptualization and model of trust.

Student trust in teachers influences the school as an organization in terms of students' affective orientation toward school, including valuing and belonging, and also with respect to their commitment to the expectations of an academically-oriented

environment. These conditions which are influenced by student trust in teachers, impact the most salient school outcome, which is academic success.

The results of this study also contribute to existing theory on caring and attachment. When students trust teachers, they perceive them as being caring, which is a characteristic of benevolence and one of the five facets of trust. The notion of teacher benevolence can be seen in Noddings' ethic of care model (1984), which posits that the one caring puts aside their own needs and feels as one with the one cared-for. Building upon Noddings' work, Wentzel (1997), in her pedagogical caring model, put forth that openness is a characteristic of caring, which is another facet of trust, and that teachers play a crucial role as caregiver in the student-teacher relationship. It is also important that teachers exhibit honesty in their openness with students.

This notion of teachers as caregivers would place them in the critical position of being able to influence students' cognitive development, as put forth in Bowlby's (1969) attachment theory. Of particular relevance is Bowlby's internal working model of social relationships, which puts forth that children's attachments with their caregivers impact their cognitive development, including beliefs and expectations about their own capabilities. Two of the five facets of trust, reliability and consistency, also play a role in the internal working model. Bowlby suggests that when children can rely on the consistent presence of their caregiver, they are more likely to seek out new experiences and take risks.

Thus, this study's finding that there is a relationship between student trust in teachers and student achievement not only confirms existing theory that caring and attachment are a part of student-teacher relationships, but builds upon this theoretical

base by suggesting, through empirical evidence, that the outcome of relationships characterized by caring and attachment include identification with school, perceptions of academic press, and achievement.

Recommendations for Future Research

The results of this research are promising in gaining a fuller understanding of student trust processes, as well as the correlates of student trust. Just as the exploration of race, class, and gender have more fully explicated other trust referents, further examination of student trust in light of student differences would also help to deepen the understanding of this construct.

The focus of this study was on the outcomes of student trust, but further research is needed to examine the process of trust formation. Although seminal work on cultivating trust has begun (e.g. Tschannen-Moran, 2004) and other authors have contributed to this research base (Watson, 2003; Owens & Johnson, 2009), further research on student trust processes is needed. Given the implications of student trust, it would be of great use to practitioners to be able to gain a fuller understanding of student trust formation and to draw upon the most effective research-based strategies that would inform their practice.

A more refined tool needs to be developed with which to measure identification with school. Although the entirety of the original Identification with School Questionnaire (ISQ: Voelkl, 1997) was not used in this study, a number of this study's ISQ items used that were adapted from the original scale overlapped with items from the trust scale. For this study these items were removed and a more refined scale was developed using factor analysis that did not contain any trust items. This research found

that student trust in teachers, student perceptions of academic press, and achievement are related to identification with school, thus, a more refined scale would be essential for future research examining other possible correlates and outcomes of this multifaceted construct.

This study examined data that was aggregated from the individual to the school level, which did not take into account the full spectrum of variance in individual and classroom level scores. Examining within-school differences and gaining a fuller understanding of the variance in scores at the classroom level would be of particular importance for informing classroom practice, teacher and student improvement plans, and also school-wide change efforts.

This research found that student trust in teachers, student identification with school, and student perceptions of academic press had a stronger collective, as opposed to individual, influence on achievement. Future research might focus on the commonalities between these three variables, and that which accounts for and undergirds their collective strength.

Implications for Practice

The results of this study have wide ranging implications for education policymakers who fund, craft, and promote research-based programs and policies; school districts that have the latitude to design and implement programming that will best meet the needs of their student populations; school leaders who articulate the school's vision which influences the culture and climate of the school; teachers who transmit the school's underlying goals and values to students at the classroom level; and teacher preparation programs that can present research, coursework, best practices, and practicum

experiences that will increase students' understanding of a broad array of social conditions in schools and the link to achievement.

Policymakers

Education policymakers at the national and state levels pay close attention to demographic trends when they set their agendas and begin the process of policy formation. Some of the current trends in education include stagnant graduation rates; achievement disparities based upon ethnicity, income, and disability; higher numbers of school-aged children living in poverty; and increasing numbers of non-English speaking students entering schools each year. Policymakers should take into account the empirical data generated from this research, in conjunction with data on curriculum and instruction, in order to inform the development of policies and programs aimed at addressing current education issues and increasing achievement. National and state standards should be written to as to reflect an integration of global concerns, the use of technology, and concepts and themes that are inclusive of a variety of cultures and socio-economic groups.

Policymakers and legislators should create tax incentives that would encourage corporate, university, and community-based school partnerships. Although some such programs exist today, offering tax incentives could spur greater interest in these unique partnerships and also encourage the continuation of those that are already in place. These partnerships can be developed according to schools' needs and organizations' areas of expertise. Some of the existing partnerships place emphasis on sponsoring field learning experiences, collaborating with teachers to deliver engaging classroom lessons and activities that directly support curriculum, offering mentoring to students who are at-risk

of dropping out, and colleges and universities that offer year-long programming for students in the middle grades to generate interest in college. Although the possibilities are varied and endless, the goal is to instill in students the importance of staying in school, being committed to academics, linking academics to real-world experiences, and exposing students to the rewards that could await them as a result of being academically focused. Additionally, mentoring and the cultivation of trusting relationships could be a natural outgrowth of these partnerships.

At the state level, policymakers must take more initiative in exploring and developing differing models of schools that can complement, and not compete with, traditional schools and that would also reflect student's interests and the growing diversity in schools. Schools focusing on particular themes reflecting students interests, referred to in some districts as pilot or magnet schools, currently operate in some states but are not prevalent in most states. Additionally, small school academies within larger schools would more readily allow for the development of trusting student-teacher relationships, classroom engagement, and student involvement in school.

School Districts

School districts should create enabling structures that would give schools the support and flexibility necessary to focus on not only teaching and learning, but also the social conditions in their schools which influence achievement. Principals should be encouraged and given the latitude to develop flexible schedules that would best serve the particular needs of their student population. One example of a non-traditional schedule would be a longer school day, which would not only offer increased learning time, but also opportunities for academic support, more elective course offerings geared toward

student interests, and also increased student-teacher contact and opportunities for relationship building.

Teacher recruitment should be a well-thought-out plan and should include a team of recruiters who have of in-depth knowledge of the needs of the various student populations in their district so that they can target advertising and recruitment to attract teachers who would best serve their needs. Recruitment plans might include advertising in non-traditional places, such as with colleges and universities that serve underrepresented groups of students, and specifically targeted neighborhood newspapers, churches, community-based organizations, fraternal organizations, and professional associations.

Although possessing the required credentials and experience are crucial when considerations for hiring are made, other criteria should also be seriously considered, such as any type of experience (including volunteer) working with children from economically and ethnically diverse backgrounds, as well as children with special needs. Teachers who bring with them an understanding of, or a willingness to learn about, the issues faced by the students they will be working with will be in a better position to influence the conditions that will impact students' academic outcomes. Additionally, teachers who have taken non-traditional routes to teaching, such as "career-switchers" could bring valuable career and personal experiences, as well as connections to community resources that could benefit particularly those students who need additional support.

School Leaders

The vision of the school leader shapes the school environment. The school environment should be safe, welcoming, caring, and a place where students feel like they belong. Expectations about student conduct should be clearly communicated and behavioral consequences should be fair and consistent in order to garner trust.

It is important that the school environment is one of inclusiveness so that all students, no matter their background or challenges, will feel welcome and like they belong. Along with regular celebrations of academic accomplishments, there should also be recognition of the various cultures and backgrounds represented by students of the school. Bulletin boards and display cases in common areas can highlight positive images and successes of a wide range of ordinary people and historical figures from varied backgrounds, including those who have overcome adversity. Additionally, the entire school community can learn about and gain an appreciation for students' cultures and backgrounds through school-wide assemblies, holiday celebrations, and students sharing about themselves, in ways that will not detract from but only enrich classroom curriculum. The learning that will take place will not only be beneficial for students and their sense of belonging, but also for teachers who will gain an increased understanding of who their students are which will help them to build trusting relationships and better support them.

Professional development is one of the tools that principals use to transmit the school's vision to the faculty. During professional development, data, as well as case studies and personal teacher experiences should be shared that illustrate the influence of school social conditions and student outcomes. Teachers should be provided with the

practical tools that they need to be successful in their efforts at supporting the school's vision, including time to collaborate and reflect, administrative support, monitoring, and feedback.

School leaders should be given the flexibility to hire teachers who would best meet the needs of their student population. During the hiring process, school leaders have the opportunity to select candidates based upon not only their experience and pedagogical skills, but also disposition. Overall, administrators should elicit information from candidates about how they can influence the learning process outside of the delivery of curriculum and instruction to students. During the interview, administrators can ask for responses to open-ended questions and hypothetical scenarios having to do with teacher roles in influencing achievement, as well as the importance of student-teacher relationships, student support, and classroom and school-wide environment. Some additional requirements that might be expected of candidates include a commitment to sponsoring extracurricular activities, student mentoring, and after school tutoring.

The sorts of extracurricular activities, opportunities for school involvement, and enrichment programs should reflect the particular interests and needs of students. In order to encourage involvement in after school activities, it is important to offer transportation, as well as scholarships for students who may have limited financial means. School community partnerships can be of particular importance in planning afterschool programs. Community partners can collaborate with schools to support after school programs and extracurricular activities by offering their knowledge, talents, and financial resources in order to meet student needs.

School leaders should create time in the school schedule for remediation and other forms of academic support so that students can meet the high expectations that have been set for them. Students who are at risk of failing should be identified early in the school year before they fail or fall too far behind. Students should receive targeted interventions in each area of difficulty and their progress should be monitored so that the intervention can be modified as necessary. It is also important that academic support sessions be offered during flexible times, preferably during the school day in order to maximize participation rates.

Teachers

This research has broad implications for teachers because they are in direct contact with students each day. More so than other members of the school community, teachers have a greater opportunity to cultivate student trust and build a caring, supportive, and inclusive environment for them.

Building student trust. Teachers should begin to cultivate trust with students on the first day of school and realize that trust-building is an ongoing process that will take continuous effort throughout the school year. It is important that teachers take into account not only their own feelings about their relationships with students' but also students' perceptions of them. Teachers can administer student surveys at various points throughout the school year in order to gain feedback from students, reflect upon their relationships with them, and modify their approach to relationship-building when necessary.

Cultivating student trust requires that teachers first earn the trust of students by demonstrating caring and good will (Tschannen-Moran, 2004). Teacher caring must be

unconditional and not depend on students' ability to reciprocate. Some students will test the limits of trust in order to discern whether or not teachers are sincere in their efforts and will continue to care about them even if they are defiant and disrespectful. Teachers have a great deal of influence over students' academic success, thus, some students will resist trust-building due to the vulnerability and dependency that they feel toward teachers as a result of the power imbalance that is inherent in student-teacher relationships. This resistant behavior is typical of students and can continue throughout all stages of trust formation. In light of students' resistance to building trust, teachers will need to be persistent in their efforts at demonstrating to students that they truly care about them.

Teacher caring involves specific behavior. In her study on student perceptions of caring, Wentzel (1997) found that students characterized caring to mean that teachers were interested in them as a person outside of school, acted as a friend, and were able to communicate openly. Teachers can demonstrate caring by getting to know students, reaching out to their parents not only for support but also to learn about who students are outside of school, showing interest in them by attending their extracurricular events in order to see them in a different light, and being open to sharing about themselves. In addition to demonstrating a sense of benevolence and caring, teachers should demonstrate that they are reliable in their persistent efforts to build trust, competent to impart subject-matter knowledge and skills, honest in their feedback to students, and open in their communication with them.

Extending trust can come more naturally to some teachers than others, which means that teachers must be aware of their own internal working models of children

(Watson, 2003). Working models are rooted in attachment theory, influenced by past and current experiences, and have to do with perceptions of others in relation to the self. Understanding one's own feelings about children and having a positive working model is helpful in learning to understand and accept challenging students. Sometimes the root of challenging students' behavior is due, in part, to insecure attachment patterns (Watson, 2003) which influences their ability to trust. However, as discussed above, teachers are in the position to influence students' attachment patterns in positive ways when they demonstrate that they care. The practice of persistent and unconditional care has been referred to as conscious premeditated caring, which is especially useful in working with students of poverty (Haberman, 1995).

Building trust is particularly crucial when working with economically disadvantaged students. Trust can mediate the effects of poverty on achievement (Goddard, Salloum, & Berebitsky, 2009) and is also a positive predictor of achievement outweighing the effects of poverty (Goddard, Tschannen-Moran, and Hoy, 2001). This link can be explained by the assumptions of social capital theory, which puts forth that learning comes about as a result of the access to social capital. Coleman's (1988) conceptualization has been most commonly applied to schools (Dika & Singh, 2002), particularly his contention that families play an integral role in providing their children with the social capital they need to be successful in school. Yet Bourdieu (1986) suggests that disadvantaged children may not have the familial support and resources that would provide them with social capital, so they look to the social networks (relationships) inherent in schools, particularly with teachers, to provide them with the resources and

access to learning that they need in order to be successful. Thus, teachers can play a critical role in the academic success of disadvantaged students as well

Classroom implications. The classroom environment should mirror the overall school environment, as a place that feels welcoming, caring, orderly, and academically oriented with high expectations. Students should feel safe and comfortable enough to participate, take risks, and be creative without fear of failure or ridicule. Teachers must develop and implement a classroom code of conduct with guidelines about academic and behavioral expectations that is fair and consistent with school policies. This will let students know what is expected of them and allow them to set and meet goals and expectations. In order to foster a sense of community in the classroom, teachers should model the expected behaviors of students- caring, supportive, and respectful.

As teachers build relationships and learn about their students, they will better be able to develop lessons that take into account their interests and backgrounds so that students will feel like they are a part of the class and also be motivated to participate in lessons. Teachers can also influence classroom engagement by using teaching strategies that emphasize small-group interaction, presenting and sharing information, and differentiated instruction in order to appeal to a wide variety of learning styles. Although an interactive student-centered environment is important, there should be time during each lesson for individualized student-teacher interaction in order to monitor progress, offer targeted support, and build relationships.

Teacher Preparation Programs

Teacher preparation programs should offer required courses in socio-cognitive perspectives so that students will gain a deeper understanding of their own role in

influencing social conditions in schools, children's cognitive development, and the link to achievement. An extension of students' required coursework in socio-cognitive perspectives should also include specific practicum experiences, such as mentoring a student, assisting with an extracurricular activity, or tutoring in a remediation or academic enrichment program. A considerable amount of reflection and journaling would allow students to appreciate the multifaceted role that they can play in influencing student achievement.

Final Thoughts

The promising results of this study offer new possibilities for combating low achievement in urban schools, particularly for disadvantaged students. These results are especially pertinent in today's education environment of high stakes testing and accountability, achievement disparities based on class and race, and shrinking education dollars to address these complex issues. The findings of this study suggest that educators need not only focus on curriculum and instruction as avenues to influence education outcomes, but must combine these efforts with an emphasis on developing the social conditions in schools between role groups that have an impact on achievement as well.

Appendix A

Teacher Instructions for Student Survey Administration:

Your homeroom was selected at random to participate in the annual District Stakeholder Survey. Please distribute the surveys to students in your homeroom and return all forms to your representative when completed. Special education students may complete the survey if they are included in your homeroom and are capable of completing the survey.
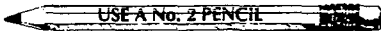
Please have students fill in their grade. If a student has no opinion on a question, they should leave it blank. Please share with the students that the survey is voluntary in nature and the confidentiality of the responses will be protected.

Any questions you may have should be directed to the Department of Strategic Evaluation, Assessment, and Support at 628-3836.

Norfolk Public Schools — Student Climate Survey 2003-04

Grade	School	
African American		
White		
Asian		
Hispanic		
American Indian		
Multi-racial		

Marking Instructions

- Use a No. 2 pencil only.
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the response completely.
- Erase cleanly any marks you wish to change.
- Make no stray marks on this form.

USE A No. 2 PENCIL

CORRECT ●

INCORRECT ✓ ✗ ⬮ •

Please indicate your level of agreement with each item below by assigning a "letter grade" to each item.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Students respect others who get good grades	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
2. Students try hard to improve	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
3. This school is serious about learning	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
4. Students work hard to get good grades	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
5. I feel proud of being part of my school	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
6. The only time I get attention at school is when I cause trouble	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
7. School is one of my favorite places to be	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
8. School is more important than most people think	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
9. There are adults at school who are interested in me	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
10. Most of the things we learn in school are worthless	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
11. I can get a good job even if my grades are bad	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
12. Going to school is a waste of time	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
13. Teachers control classroom behavior	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
14. The content of my courses are challenging	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
15. My teachers believe that I can learn	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
16. Good grades are recognized	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
17. The principal/assistant principal visit classrooms	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
18. I am responsible for what I learn	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
19. My teachers have prepared me for the next grade and the future	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
20. There is at least one adult at school who I can talk about personal matters	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
21. The school staff are friendly and helpful	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
22. Gangs are a problem at my school	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
23. I respect my teacher(s)	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
24. The school guidance counselor helps me if I need it	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
25. If I don't understand something, the teacher will work with me until I get it	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
26. I can get extra help at school, if needed	ⓐ	ⓑ	ⓒ	ⓓ	ⓔ
27. I enjoy coming to school					
28. I feel like I am a part of my school					
29. My teachers care about me					
30. Teachers care about students					
31. Teachers treat me fairly					
32. I fit in with the students at this school					
33. My teachers keep me informed about my progress					

< Over to page 2 >

Norfolk Public Schools   Student Climate Survey 2009-10

Please indicate your level of agreement with each item below by bubbling in the answer that best fits each item.	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
34. I feel safe inside the school					
35. I feel safe outside and around the school					
36. I have been threatened or bullied					
37. I stay home sometimes because I don't feel safe at school					
38. The noise in the school disrupts my learning					
39. I have trouble learning because there are too many students in my classroom					
40. Stealing is a problem in this school					
41. Discipline problems are handled fairly					
42. The rules in this school are clear					
43. My school is clean and well maintained, even if it may be old					
44. Students fight a lot					
45. Teachers respect me					
46. Students are picked on or teased					
47. Students treat each other with respect					
48. Teachers are always ready to help					
49. Teachers at this school have high expectations for all students					
50. Teachers are easy to talk to at this school					
51. Students are well cared for at this school					
52. Teachers always do what they are supposed to do					
53. Teachers at this school really listen to students					
54. Teachers at this school are always honest with me					
55. Teachers at this school do a terrific job					
56. Students can believe what teachers tell them					
57. Teachers at this school do not care about students					
58. Teachers at this school are good at teaching					
59. Students learn a lot from teachers in this school					
60. Students at this school can depend on teachers for help					
61. Students bring drugs or alcohol to school					

DURING THIS SCHOOL YEAR

Have you participated in any of the following activities outside of regular class hours? (check all that apply)

1. Arts or music group (ex. Band, Chorus, Orchestra, Theater or Photography Club)

2. Academic club or competition (ex.; Academic Decathlon; Science, Spanish, Book Club; Math Team; National Honor Society; Debate Team)

3. Club or organization that provides community service (ex., Key Club)

4. School yearbook, newspaper, or literary magazine

5. Student council or student government

6. Naval Junior Reserve Officer Training Corps (NJROTC)

7. Athletics

8. Other club, committee, or organization not included in this list (ex., Chess Club, Computer Club)

Appendix C

Student Trust Scale (Adams & Forsyth, 2009)

48. Teachers are always ready to help.

49. Teachers at this school have high expectations for all students.

50. Teachers are easy to talk to at this school.

51. Students are well cared for at this school.

52. Teachers always do what they are supposed to do.

53. Teachers at this school really listen to students.

54. Teachers at this school are always honest with me.

55. Teachers at this school do a terrific job.

56. Students can believe what teachers tell them.

57. Teachers at this school do not care about students.

58. Teachers at this school are good at listening.

59. Students learn a lot from teachers at this school.

60. Students at this school can depend on teachers for help.

Appendix D

Student Identification with School Subscale

5. I feel proud of being part of my school.

6. The only time I get attention at this school is when I cause trouble.

7. School is one of my favorite places to be.

8. School is more important than most people think.

9. There are adults at school who are interested in me.

10. Most of the things we learn in school are worthless.

12. Going to school is a waste of time.

28. I feel like I am a part of my school.

29. My teachers care about me.

32. I fit in with students at this school.

45. Teachers respect me.

Appendix E

Student Perceptions of Academic Press Subscale

1. Students respect others who get good grades.

2. Students try hard to improve.

3. This school is serious about learning.

4. Students work hard to get good grades.

14. The content of my courses are challenging.

15. My teachers believe that I can learn.

16. Good grades are recognized.

26. I can get extra help at school if needed.

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