

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

CONCEPTUALIZING AND VALIDATING A MEASURE
OF PRINCIPAL TRUST IN CENTRAL ADMINISTRATION

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF EDUCATION

By

Debra A. Burchfield
Norman, Oklahoma
2013

CONCEPTUALIZING AND VALIDATING A MEASURE
OF PRINCIPAL TRUST IN CENTRAL ADMINISTRATION

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

BY

Dr. Curt Adams, Chair

Dr. Patrick Forsyth

Dr. Chan Hellman

Dr. Beverly Edwards

Dr. Gregg Garn

© Copyright by DEBRA A. BURCHFIELD 2013
All Rights Reserved.

DEDICATION

To my mother, Julia, who was my greatest supporter in every possible way.

When others questioned the pursuit of a doctoral degree and said, "Why?" Mimi said, "Why not?" I miss you every day.

ACKNOWLEDGEMENTS

I must express my sincere gratitude to the individuals who provided me with support, assistance, and encouragement throughout this dissertation process.

First, I would like to acknowledge the faculty and staff members within the Department of Education Leadership and Policy Studies at the University of Oklahoma for sharing their knowledge, thoughtful suggestions and expertise throughout the program. In particular, I would like to thank my dissertation committee members Dr. Patrick Forsyth, Dr. Beverly Edwards, Dr. Chan Hellman, and Dr. Greg Garn, for their time, guidance, and critical support. A special thank you goes to my advisor and committee chairman, Dr. Curt Adams. His demand for excellence and his penchant for pushing me farther than I thought I could go are, in hindsight, greatly appreciated!

Special thanks also go to my colleagues in the Jenks Public School District. Many of you provided technology assistance as well as plain old moral support—and there were those times when that was what I needed most!

Finally, I cannot thank enough my entire family for their love and encouragement throughout this process. My daughters, Becky and Elizabeth, are true treasures. Many thanks to my niece, Jolee, for technology support. And to my husband, Gary, goes my unending gratitude for his love, support, and encouragement through some especially dark times. I love you all.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
ABSTRACT	x
CHAPTER 1: INTRODUCTION	1
BACKGROUND.....	1
<i>Educational Reform in the United States</i>	2
<i>Challenges in the Implementation of No Child Left Behind</i>	5
STATEMENT OF THE PROBLEM.....	9
<i>Problem of Practice</i>	9
<i>Problem of Research</i>	11
PURPOSE OF THE STUDY	12
CHAPTER 2: REVIEW OF LITERATURE	14
DEFINITION OF TRUST.....	15
CONDITIONS REQUIRED FOR TRUST.....	17
FACETS OF TRUST.....	19
<i>Benevolence</i>	20
<i>Reliability</i>	20
<i>Competence</i>	21
<i>Honesty</i>	21
<i>Openness</i>	22

CONCEPTUAL FORMS OF TRUST	23
COGNITIVE DIMENSION	25
AFFECTIVE DIMENSION	26
SOCIAL DIMENSION	29
REVIEW OF EMPIRICAL EVIDENCE ON SCHOOL TRUST FORMATION ...	31
TEACHER-PRINCIPAL TRUST	31
PARENT-SCHOOL TRUST	33
CHAPTER 3: ITEM DEVELOPMENT	34
THE DISTRICT ROLE IN CONTINUOUS IMPROVEMENT	35
CENTRAL ADMINISTRATION PROCESSES	40
CENTRAL ADMINISTRATION PRACTICES AND FACETS OF TRUST	45
CHAPTER 4: METHODS	51
DATA SOURCE	52
MEASURES FOR CONCOMITANT VALIDITY	53
<i>Enabling District Structure</i>	54
<i>District Commitment</i>	55
<i>Principal Efficacy</i>	55
ANALYSIS	56
CHAPTER 5: RESULTS	59
RESULTS FOR THE URBAN SAMPLE	59
RESULTS FOR THE STATEWIDE SAMPLE	64

DIFFERENCES IN PRINCIPAL TRUST.....	68
SUMMARY.....	72
CHAPTER 6: DISCUSSION.....	74
TRUST IN CENTRAL ADMINISTRATORS: AN INTERCONNECTED CONSTRUCT	74
PRINCIPAL TRUST IN CENTRAL ADMINISTRATION: FORMATION AND EFFECTS.....	76
IMPLICATIONS FOR DISTRICT LEADERSHIP	80
CONCLUSION	83
REFERENCES.....	85
<i>APPENDIX A</i>	100
<i>APPENDIX B</i>	101
<i>APPENDIX C</i>	102
<i>APPENDIX D</i>	103
<i>APPENDIX E</i>.....	104

LIST OF TABLES

Table 5.1: Exploratory Factor Analysis for Results for the Sample of Urban School Administrators	62
Table 5.2: Bivariate Correlations between Trust in Central Administration, Efficacy for Instructional Leadership, Efficacy for Management, and Total Principal Efficacy	64
Table 5.3: Exploratory Factor Analysis Results for Random Sample of School Administrators in Oklahoma	66
Table 5.4: Bivariate Correlations between Central Administration Trust, Enabling District Structures, and District Commitment.....	68
Table 5.5: Descriptive Statistics Results for Random Sample of Principals in Oklahoma Summary Table.....	71

LIST OF FIGURES

Figure 5.1: Exploratory Factor Analysis Results for Urban Principal Sample ..	63
Figure 5.2: Exploratory Factor Analysis Results for Random Sample of CCOSA School Administrators	67

ABSTRACT

Trust is a core social resource for schools. Lack of trust, however, is a serious impediment to the implementation of improvements in schools today. The absence of a valid and reliable scale to measure principals' trust in district administrators has created a void in which little is known about its nature and function. This study consisted of a field test of the Principal Trust in Central Administration Scale. Effective district administrative practices were linked to facets of trust, providing a foundation for construction of an instrument to measure principal trust in central administration. The purpose of the study was to assess the psychometric properties of the survey by conducting tests of construct validity. Responses from two test samples of principals from across Oklahoma were analyzed. An exploratory factor analysis revealed most items relating to one construct, trust. A Cronbach's Alpha Test revealed strong inter-item reliability. Concomitant validity was established by confirming that the items correlated with other established measures, including enabling school structures, principal efficacy, and principal commitment. Results provide evidence that this survey accurately captures perceptions of principal trust in central administration. In addition, descriptive data were used to examine patterns of district trustworthiness across different school and district contexts. The data support the idea that relational behaviors and interactions are more indicative of the presence of trust than are contextual conditions.

CONCEPTUALIZING AND VALIDATING A MEASURE OF PRINCIPAL TRUST IN CENTRAL ADMINISTRATION

CHAPTER 1: INTRODUCTION

Background

The last three decades, as the twentieth century transitioned into the twenty-first, produced amazing advances in the quality of life for residents of the United States and other countries around the world. Contact with others internationally occurs in seconds, and the average life span has increased due to breakthroughs in medical practices and advancements in scientific knowledge. Thanks to changing political philosophies emphasizing cooperation, new knowledge on a variety of issues is shared among many nations. Technology has revolutionized most people's way of life; unfortunately, improvements in the US educational system have occurred at a much slower pace than advancements in other fields.

Forces in public education today are creating huge stressors for educators and students; schools struggle to meet growing expectations as they are vested with an increasing vision of equality via the No Child Left Behind Act (NCLB). Goodlad (1984) observed that for most of American history, society was content with schools that functioned to segment students into various social strata and job designations. Beginning in the 1960s with the first Elementary and Secondary Education Act (ESEA), however, the goal of providing equality of opportunity for all students, especially those from lower

economic circumstances or with disabilities became the main policy objective. Yet, schools continue to struggle to close achievement gaps and to realize equality aspirations. Growing distrust of schools is evidenced in the exploding population of people who are unwilling to send their children to public schools. Movement toward charter schools and voucher systems has occurred in most states, and the home-schooled population continues to increase (Ray, 1997; United States Department of Education (USDE), 2008). Trust in schools is pivotal for educational improvement, yet trust seems ever more difficult to achieve and maintain (Tschannen-Moran & Hoy, 2000). How did society's trust in the educational system get to the point of diminishing trust, and what mechanisms are necessary to reverse negative trends in school performance? A brief look at past educational reform may give rise to future approaches.

Educational Reform in the United States. An early major effort of school reform was a response to the 1957 launch of Sputnik by Russia. Feeling its position as a world technological leader threatened, the United States federal government immediately increased its involvement in educational delivery, especially in science and math. The federal response occurred in the form of the National Defense Education Act, which provided funding to schools for improving science, math, and foreign language instruction (Spring, 1991).

Each succeeding post-Sputnik decade strengthened the call for reform. The Elementary and Secondary Education Act of 1965 provided categorical aid to poor children, connected national policy objectives to education, and resulted in dramatic changes in local school systems (Spring, 1991). This initial act

spread federal dollars around with few stipulations and virtually no accountability for student achievement (DeBray-Pelot & McGuinn, 2009), leading to the 1970s being characterized as the *back to basics* movement (Finn, 1989). Almost simultaneously, the Individuals with Disabilities Education Act (IDEA) established in 1975 mandated equitable education for handicapped children and established accountability standards for educators involved with disabled students (Parrish & Wolman, 2004).

More focused, expansive studies of educational outcomes began in the 1980s in response to the calls for reform. The study garnering the most attention was *A Nation at Risk* (NCE, 1983) which captured the apparent performance problems of schools as perceived by the American public, most notably those of business leaders and policymakers (Cunningham & Gresso, 1993). Released by the National Commission on Education, *A Nation at Risk* found that schools in the United States were performing poorly in comparison to international counterparts. The proposed policy remedy was to hold schools accountable for the implementation of standards and assessments geared toward school improvement (U.S. Dept. of Education, 2008). Alarmed by this report, former president George H. Bush held an historical educational summit attended by the nation's governors in 1989 that resulted in *America 2000: An Education Strategy* (Alexander, 1991). *America 2000* set the first performance targets for the national education system. The 1990s also gave rise to increased governmental interest and debate regarding the implementation of school vouchers and charter schools.

Contemporary times mark an even greater effort at educational reform. The reauthorization of the Elementary and Secondary Education Act, better known as the No Child Left Behind Act of 2001 (NCLB) (USDE, 2001), uses accountability systems as a policy instrument to improve public schools. NCLB requires the implementation of statewide accountability systems based on challenging standards in reading and math, annual testing for all students in grades 3 through 8 and at selected points throughout grades 9 through 12. Adequate yearly progress (AYP) objectives require all students categorized within various subgroups to reach proficiency within a 12-year period ending in 2014. The need for reform was voiced by then Secretary of Education Rod Paige when he testified before the Senate Committee on Health, Education, Labor, and Pensions on February 15, 2001, in support of NCLB.

It is uncomfortably clear that our system of elementary and secondary education is failing to do its job for far too many of our children . . . a failure that threatens the future of our nation, and a failure that the American people will no longer tolerate. . . . (C-Spanvideo [Producer], 2001).

Ironically, these words seem to echo those expressed in *A Nation at Risk* almost 3 decades ago, demonstrating that concerns regarding school effectiveness have not lessened over time. Still, many pathways to school failure exist in NCLB. In spite of a call for another reauthorization of ESEA, one that according to the Obama blueprint lessens punitive sanctions and rewards

progress (U.S. Dept. of Education, 2010), schools will continue to face challenges presented by NCLB.

Challenges in the Implementation of No Child Left Behind. The intent of NCLB is to ensure that all children perform at satisfactory levels in reading and mathematics, regardless of their race, economic circumstances, or disability. The intent is noble; however, the achievement of this objective becomes more elusive as target goals reflecting satisfactory progress are raised at designated intervals. The assumption is that schools can achieve unprecedented levels of equitable achievement among all subgroups of students in a short period of time and that current methods of reform will accomplish this task (Daly & Finnigan, 2010).

While a few schools and districts have improved under NCLB (Center on Education Policy, 2006), emerging data indicate the gap between intention and implementation is wide. It is clear that NCLB has not achieved its stated goals. Each year brings larger numbers of schools falling into *Needs Improvement* status. Researchers project that a majority of schools will be labeled for *program improvement* by 2014 after failure to make adequate yearly progress (AYP) (Daly, 2009). During the 2004-2005 school year, more than 9,000 Title I schools were identified as *Program Improvement* schools, representing nearly a 50% increase from the previous year (Stullich, Eisner, McCrary, & Roney, 2006). The Center on Education Policy (2007) found that between 2005-2006 and 2006-2007, only 10 of California's 401 Title I schools on *Program Improvement* status improved enough to exit this designation.

Fullan (2010) asserted that since 1989, the United States has steadily lost ground to other countries in student performance on the Program for International Student Assessment (PISA) at a time when education expenditures quadrupled. Rather than test on a narrow base of knowledge, as many state curricular assessments do, PISA measures how well students can extrapolate from what they have learned and apply their knowledge and skills in novel settings. The fact that U.S. students are losing ground to students in other countries has led scholars to conclude that NCLB has failed to engender the desired improvement that school systems need (Fullan, 2010).

Improvement mandates within NCLB are numerous. Requirements for highly qualified teachers, as well as additional requirements for dual certifications in teaching credentials, especially in those hard-to-fill teaching areas (e.g., special education), contribute to teacher shortages (Berry, Hoke & Hirsch, 2004; Reese, 2004). School administrators report an increase in the pressure related to demands of operating schools and districts in the current educational climate (Farkas, Johnson, & Duffett, 2003), making it increasingly difficult to recruit and retain school administrators (Winter & Morgenthal, 2002). NCLB requests cooperation for unfunded mandates, specifically assessment requirements for all students in reading and math, then applies sanctions for noncompliance and underperformance (Daly, 2009). Not only does the demand for testing create stress for school staff, excessive testing reduces available instructional time, introducing an additional stressor for teachers and students who are trying to implement and learn a full curriculum (Hansen & Sullivan,

2003). Collectively, as Daly argues (2009), NCLB pressures create an environment that focuses on artificial outcomes and sanctions, rather than on the processes leading to school improvement.

A constant threat environment surrounding NCLB sanctions disrupts the internal processes necessary for a school to function effectively (Daly, 2009). Sanctions for failure to achieve annual yearly progress (AYP) result in a well-publicized status as a failing school because of its *need for improvement* label. Repeated failures to meet AYP results in mandated school closings, employee terminations, and student transfers (USDE, 2001), creating a greater focus on outcomes and consequences than on internal processes that influence outcomes. Research does not support the effectiveness of authority and pressure tools when tasks are complex and work processes are not standard (Mintrop & Trujillo, 2007). In fact, evidence outside of education suggests that threats for compliance reduces voluntary cooperation and builds resistance to change (Fehr & Schmidt, 1999), which is visible in many schools and districts.

NCLB is regulatory and not supportive, relying more on mandates and sanctions than on capacity building and reward (Lee & Wong, 2004). Research does not support justification for these high pressure approaches. Daly (2009) argues that external stressors created by NCLB with its threat-and-sanction-driven methods increases stress levels for teachers and administrators who are struggling with school improvement and creates rigid responses in schools that need more support for capacity building. Rigid responses become more highly regulated as schools move further into the improvement cycle (Sunderman,

Kim, & Orfield, 2005), negatively affecting the professional environment by limiting collaboration and professional interaction (Daly, 2009; Mintrop, 2003). Organizational research suggests that a lack of collaboration and communication between site and central office personnel can be devastating. A focused, systemic approach to student instruction based on collaborative efforts between central office administrators and principals is crucial to school effectiveness (Daly and Chrispeels, 2008; Daly & Finigan, in press; Honig, 2003).

Daly (2009) also maintains that when factors such as trust, empowerment, and involvement are present, teachers and administrators perceive a less rigid response in schools under NCLB sanctions. His findings suggest that the role of trust as a resource for schools and districts *in need of improvement* is valuable. The notion is supported by Bryk and Schneider (2002) who found that schools with high trust levels are more likely to seek new ideas, reach out to the community, and commit to organizational goals that result in school improvement. Forsyth, Adams, and Hoy (2011) argue that collective trust is the lynchpin of reform. Collaboration and teamwork require trust between site and central office administrators. Louis (2007) pointed out, "Trust has been a subject of philosophical and academic discussion for centuries," (p. 2) but only in the past 30 years has scholarly research been undertaken to understand how it operates as a variable in the school reform process.

Statement of the Problem

This study addresses a problem of practice and a problem of research. First is the practice problem relating to the disconnect between principals and central office personnel (Fullan, Bertani & Quinn, 2004; Daly & Chrispeels, 2008), a disconnect characterized by a lack of communication and trust. The second is a research problem that stems from a lack of evidence about principal trust in central administration (Chhuon et al., 2008; Daly, 2009). These equally important problems are described in detail.

Problem of Practice. Principals and teachers often comment about tenuous connections between school sites and district offices (Chhuon et al., 2008). Central office administrators express frustration when faced with unintended perceptions on the part of principals or teachers. Questions arise that ultimately, when examined closely, have to do with expectations that school sites have of central administration. If expectations are not met, people are unlikely to take the risk that is necessary to move school systems forward. The identification of practices by central office administration that engender trust in principals is extremely important if continuous school improvement is to take place.

Trust has been called the foundation of school effectiveness (Cunningham & Gresso, 1993) due to its relationship with attributes by which schools are judged to be effective. Just as the most successful, productive relationships in life are based on trust, these relationships are also the common thread interwoven through the fabric of effective schools and school districts

(Tschannen-Moran & Hoy, 1998). Although empirical studies of trust in schools do not constitute a large portion of the research in education, findings have indicated its relevance to school reform and effectiveness (Daly, 2009; Forsyth, Adams & Hoy, 2011; Tarter, Sabo, & Hoy, 1995). It has been firmly established that there is a need for positive social relationships among teachers, administrators, students, and parents for schools to be effective (Adams, Forsyth, & Mitchell, 2009; Bryk & Schneider, 1996, 2002; Goddard, Tschannen-Moran, & Hoy, 2001; Hoffman, Sabo, Bliss, & Hoy, 1994; Hoy & Kupersmith, 1985; Hoy, Tarter, & Witkiskie, 1992; Hoy & Tschannen-Moran, 1999; Smith, Hoy & Sweetland, 2001; Uline et al., 1998). Such needs are evident in federal and state educational policies that mandate relationships between families and schools (USDE, 2001).

As plans for school reform increasingly call for parents, teachers, and administrators to work collaboratively, trust allows all parties to act in an open and honest manner (Adams & Forsyth, 2007a; Tschannen-Moran, 2001). Trust has also been positively related to teacher efficacy and the belief in teachers' abilities to engage in activities that lead to school success (Hoy & Tschannen-Moran, 1999), as well as to improvements in classroom instructional strategies (Bryk & Schneider, 2002). Research also points to trust relationships as positive predictors of student achievement (Bryk & Schneider, 2002; Goddard, Tschannen-Moran & Hoy, 2001; Goddard, Salloum & Berebitsky, 2006; Hoy, 2002). The cumulative evidence leads one to believe that studying and

developing trust in school organizations is well worth the time and resources required.

Evidence on whole system reform demonstrates that it is possible for effective school reform to take place if central administration and school sites maintain supportive and harmonic relationships (Corcoran, Fuhrman, & Belcher, 2001; Fullan, 2010; Honig, 2008; Louis, 2007; Massell, 2000). For practitioners, therefore, the challenge is to recognize that trust is essential for developing strong site-central administration connections and to discover behaviors and practices of district leaders that will aid in the development of positive trust relationships with principals.

Problem of Research. The research problem speaks to the need to extend the study of trust to interactions between central administration and principals. A number of studies suggest that trust is an important ingredient for school effectiveness (Bryk & Schneider, 2002, 2003; Daly & Chrispeels, 2005a; Hoy & Miskel, 2001; Forsyth, Barnes & Adams, 2006). There is also evidence that trust is a predictor of student achievement (Goddard et al., 2001; Hoy, 2002). The development of trust appears to be an essential part of educational systems as well as a resource for school improvement (Bryk & Schneider, 2002; Daly & Chrispeels, 2005a; Louis, 2006). Fullan, Bertani, and Quinn (2004) suggest that organizations struggling with low-trust cultures are likely to become defensive in the face of challenges and lack the capacity to accomplish difficult goals. McLaughlin and Talbert (2003) argue that taking the district system as the *unit of change* is essential to advancing equitable and

sustainable reform. Daly and Chrispeels (2008) speak to the role of trust in developing effective district leadership. Forsyth, Adams, and Hoy (2011) argue that schools cannot improve without trust. Yet, few studies have examined the role of trust as an explicit variable in the district change process or have examined trust using the district as the unit of analysis. Without trust and facilitative, cooperative interactions among site and district leaders, system-wide improvement is not likely.

The structural differences between central offices and schools suggest that there are fewer opportunities for central and site leaders to develop trust through ongoing daily social exchanges than are present at the site level for principals and teachers (Chhuon et al., 2008). The focus of this study, therefore, was on the exploration and identification of behaviors and practices of central office administrators that engender trust beliefs in principals. These behaviors were linked to various facets of trust that enhance the collaborative and collegial effort to develop effective schools.

Purpose of the Study

Many business and industry organizations attribute their success to a culture of trust (Dyer & Chu, 2003; Freiberg & Freiberg, 1996). Building on this foundation, educational researchers have begun to study trust relationships among teachers, students, parents, principals, and to a much lesser extent, central office administrators (Adams & Forsyth, 2007a; 2007b; Bryk Bertan & Schneider, 2002,2003; Chhuon et al., 2008; Daly & Chrispeels, 2008; Geist & Hoy, 2004; Hoy, Smith and Sweetland, 2002; Louis, 2007; Tschannen & Hoy,

2000). The antecedents and conditions required for the building of trust among various school stakeholders (e.g., teachers, principals, and parents) have been well documented (Adams, 2008). However, little is known about central administrative practices that elicit trust in site administrators (Chhuon, Gilkey, Gonzales, Daly & Chrispeels, 2008; Louis, 2007).

The purpose of this study was to develop a measure of principal trust in central administration that is theoretically consistent with trust elements and that captures supportive practices of central administration. A secondary task was to examine the variation in trust in central administration across different school and district contexts, including district type (urban, suburban, rural); school configuration (elementary, middle/junior high, high school), principal gender, and the socioeconomic type of the school (Title I).

Specific research questions are: Is the principal trust in the central administration scale valid and reliable? Are there differences in principal trust in central offices across urban, suburban, and rural districts? Are there differences in principal trust in central administrative offices across elementary, middle level, and high schools? Are there differences in principal trust in central administrative offices when schools are designated Title I or non-Title I? Does principal gender make a difference in central administration trust? Answers to these research questions may help central office administrators determine strategies to use in establishing trust with school principals.

CHAPTER 2: REVIEW OF LITERATURE

Some argue that lack of trust is a serious impediment to many reforms taking shape in American schools and that the presence of trust is vital if schools are to improve (Daly & Chrispeels, 2005b; Fullan, 2001; Tschannen-Moran & Hoy, 2000). It is becoming increasingly clear that strong connections and collaboration between central administrators and school sites are paramount to school improvement (Fullan, 2010). Trust is the bond that brings site and central office administrators together (Daly & Chrispeels, 2008), which in turn, promotes school improvement through a systems framework. The effects of trust are evident in the research on school effectiveness (Hoy, Tarter & Witkoskie, 1992; Tarter, Sabo & Hoy, 1995), and trust is also a predictor of academic achievement (Forsyth, Barnes, & Adams, 2006; Goddard, Tschannen-Moran & Hoy, 2001). As Forsyth, Adams, and Hoy (2011) claim, schools cannot improve without trust. Simply put, improvement of school systems is best implemented when accompanied by trust.

Congruent actions and interactions are much easier to sustain when the various stakeholders within the system are willing to take risks based on the belief that others in the system are working toward a common vision and common goals (Firestone, 2009). According to Daly and Finnigan (2010), trust relationships are critical to the implementation of coordinated change strategies that affect knowledge transfer from one organizational level to another. Effective system performance depends on establishing operational congruence

among interdependent parts (Nadler & Tushman, 1980). Establishing system congruence among disparate parts of the system requires the presence of trust.

Definition of Trust

Trust is essential to interpersonal relations, and it is fundamental to effective functioning of complex social systems (Tschannen-Moran & Hoy, 2000). The importance of trust has been examined in psychology, philosophy, economics, and sociology (Al-Mutairi, Hipel, & Kamel, 2007) and recognized in the literature for at least four decades (Likert, 1967; Golembiewski & McConkie, 1975). While there appears to be widespread agreement on the importance of trust in human behavior, there also have been different trust definitions (Hosmer, 1995). In a very early study, Deutsch (1958) described characteristics of trust based on expected outcomes. Specifically, he noted,

An individual may be said to have trust in the occurrence of an event if he expects its occurrence and the expectations lead to behavior which he perceives to have greater negative motivational consequence if the expectation is not confirmed than positive motivational consequence if it is confirmed. (p. 266)

Trust has been defined from a philosophical perspective (Baier, 1986; Hosmer, 1995) and in economic terms as a rational calculation of costs and benefits (Coleman, 1990; Williamson, 1993). It has been defined in individual terms as the extent to which people are willing to rely upon others and to make themselves vulnerable to others (Frost, Stimpson, & Maughan, 1978; Rotter, 1967). Adding to that line of thought, Zand (1971) asserted that trust consists

of actions that increase one's vulnerability to another whose behavior is not under one's control in a situation in which the penalty one suffers is greater than the benefit.

By the 1980s research on trust had turned its focus from individual traits to the role of interpersonal relationships in trust production (Johnson-George & Swap, 1982; Larzelere & Huston, 1980). This interpersonal nature is reflected in Baier's (1986) definition that accounts for reliance on others' competence and willingness to look after, rather than harm, things one cares about. Baier asserted, "Trust is accepted vulnerability to another's possible but not expected ill will toward one" (pp. 259). From the interpersonal conception, trust definitions evolved to an organizational perspective in which trust is often perceived as a collective property that affects transactions among individuals within organizations (Cummings & Bromily, 1996).

Early trust definitions in the school literature paralleled those generated within other disciplines (Rousseau, Sitkin, Burt, & Camerer, 1998). An early definition of trust in schools by Hoy and Kupersmith (1985) was based upon the work of Likert (1967) and Golembiewski and McConkie (1975). Hoy and Kupersmith noted: "Trust is a generalized expectancy held by the work group that the word, promise, and written or oral statement of another individual, group, or organization can be relied upon" (p. 2).

As seen in the Hoy and Kupersmith definition, trust was thought to be based on expectancy on the part of one individual or a group toward another. Through continued research, scholars recognized that trust was more complex

than just a perspective based on expected outcomes. Missing from these definitions were considerations of conditions required for trust, behaviors exhibited by individuals involved in trust relationships, and the facets or characteristics of trust. The multi-dimensional nature of trust first emerged from Mishra (1996) when she argued that trust is a complex construct involving vulnerability (Barber, 1983; Bigley & Pearce, 1998; Deutsch, 1973) and expectations of others (Barber, 1983; Luhmann, 1979). Mishra (1996) defined trust as: Trust is one party's willingness to be vulnerable to another party based on the belief that the latter party is (a) competent, (b) open, (c) concerned, and (d) reliable. (p. 265)

Hoy and Tschannen-Moran (1999) added to Mishra's work by including honesty as a trustworthy behavior and changed *concerned* to *benevolent*. Tschannen-Moran and Hoy's (1999) definition focuses on five specific facets, or "faces" (p. 185), of trust, providing a basis for much of the research on trust in schools. It is also the basis of the definition chosen for this study. Site administrator trust in central administration is defined as principals' willingness to be vulnerable to central administration based on confidence that the central administration acts benevolently, reliably, competently, honestly, and openly.

Conditions Required for Trust

Conditions necessary for trust include interdependence, risk, and vulnerability. The degree of interdependence may alter the form trust takes. When there is no interdependence, there is no need for trust (Rousseau et al., 1998). For example, principals depend upon teachers to be competent in their instruction

and committed to their students. In turn, teachers depend on principals to be benevolent and honest (Spuck & MacNeil, 1999). Teachers and principals depend on each other to accomplish common goals. A similar interdependence exists between principals and central administrators. Principals expect central office administrators to be supportive and to act with integrity, while central office administrators expect competence and commitment to district goals and expectations from site principals. Interdependence is a natural condition for schools and school systems.

Vulnerability must also exist for trust. Baier (1986) asserts that trust requires "vulnerability to another's possible but not expected ill will" (p.236).As Mayer, Davis, and Schoorman (1995) state:

Trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (p. 712).

Examples of vulnerability in school role relationships abound: teachers to principals, principals to teachers, central office administrators to site administrators, site administrators to central office. To illustrate, principals who involve teachers in decision making not only risk losing control of the decision but also remain responsible for the outcome and *vulnerable* to potential negative consequences (Hoy & Tarter, 1995).Or, one may consider the teacher who engages in cooperative learning strategies with his students in a tightly structured, highly traditional high school. The teacher is vulnerable to the

principal. If a decrease in assessment scores occurs in the short term, the teacher has to rely on the good will and patience of the principal as refinements are made to the instructional strategy. A similar vulnerability exists between principals and central administration. Principals may find themselves vulnerable to central administrators who expect schools to implement district strategies and expect schools to meet annual yearly progress, or AYP, as designated by the No Child Left Behind legislation (USDE, 2001).

Closely aligned with vulnerability is a willingness to risk. In fact, risk taking embodies trust beliefs. Without risk there cannot be trust (Granovetter, 1985; Lewis & Weigert, 1985). Risk is the perceived probability of loss as interpreted by a decision maker (Coleman, 1990; Williamson, 1993). Hoy and Tschannen-Moran (1999) in their study of teacher-principal trust note that the willingness to risk is the degree of confidence one has in a vulnerable situation (Hoy & Tschannen-Moran, 1999). This axiom is supported in the literature in the case of teacher-principal trust. Although not supported by empirical evidence currently, it stands to reason that it would also hold true for principal trust in central administration.

Facets of Trust

Hoy and Tschannen-Moran (1999) argue that facets of trust, (i.e. risk, vulnerability, and interdependence) covary to influence future behavior. It is difficult to describe one facet without referring to the others. The facets as defined by Hoy and Tschannen-Moran (1999) include benevolence, reliability, competence, honesty, and openness.

Benevolence. Benevolence is the confidence that one's well-being or something one cares about will be protected by the trusted person or group (Baier, 1996; Butler & Cantrell, 1984; Cummings & Bromily, 1996; Gambetta, 1988; Hosmer, 1995; Hoy & Kuper-Smith, 1985; Hoy and Tschannen-Moran, 1999; Mishra, 1996; Zand, 1971). Trust is the assurance that the other party will not take advantage of one's vulnerability even when the opportunity arises (Cummings & Bromily, 1996; Deutsch, 1960). For example, teachers must often rely on the good will of the principal as they experiment with new teaching strategies and make inevitable mistakes (Hoy & Sabo, 1998). Principals rely on the same good will of the superintendent as they implement new school-wide initiatives to improve performance.

Reliability. Reliability is the extent to which one can count on another to deliver what is needed. It combines a sense of predictability with benevolence, in that, when something is required from another person or group, that trustee can be counted on to supply it (Butler & Cantrell, 1984; Hosmer, 1995). Reliability in the practices of the central administration is important to site principals. Principals need central office administrators to provide resources and support for district strategies. Reliability is even more important when site principals develop plans of improvement for inadequate teachers or collect documentation for teacher dismissal. It will be extremely important to a site principal to know that he can count on the central office to be supportive in his efforts.

Competence. Competence is also a condition of trust. A person who does not possess the skill or ability to complete a task effectively, no matter how well intentioned he is, is not likely to engender trust (Baier, 1986; Butler & Cantrell, 1984; Mishra, 1996). For example, the student of a new teacher may feel that the teacher wishes very much to help him learn, but if the teacher is not skillful the student may not feel a great deal of trust. Principals may have difficulty trusting teachers who cannot demonstrate content knowledge or pedagogical skill. It is just as likely that principals will not trust central office administrators who cannot set a clear performance vision and lead a district toward the vision. Leadership from the central office is especially important in supporting school reform and capacity building (Fullan, Bertani & Quinn, 2004). Reform and improved capacity are unlikely if principals cannot trust the central administration to lead improvement initiatives.

Honesty. Honesty speaks to character, integrity, and authenticity. A correspondence between what a person says and what a person actually does demonstrates integrity and authenticity. Honest principal behavior and teacher behavior have been linked to faculty trust in schools (Tschannen-Moran & Hoy, 1998). The same effect applies to good relationships between principals and central administration. An alignment between central administration's statements and deeds is an indicator of integrity. For example, if an associate superintendent states that reductions in force due to budget cuts are absolutely necessary, she should have demonstrated prior to that point with communication via actions, words, and deeds that every alternative but staff

reductions has already been implemented. Developing a reputation for honesty *prior* to tough times should be a central office priority.

Openness. Openness is the extent to which relevant information is not withheld and a person listens to the concerns of others. For example, principals engender distrust by withholding information and spinning the truth in order to make their view of reality the accepted standard (Hoy & Sweetland, 2001). Teachers foster trust by listening to students and being present (Adams & Forsyth, 2009). The same effect is likely to occur for central administration practices. Central administration needs to listen to the ideas, needs, and concerns of site principals. It is important to establish open and transparent communication.

The relative importance of each trust facet depends on the referent of trust (who is being trusted), the nature of the interdependence between the parties, and the circumstance that defines the relationship (Tschannen-Moran & Hoy, 2000). A high level of confidence in all facets may not be necessary for trust to form. For example, it could be argued that if a principal does not develop confidence in a new superintendent's competence to develop a shared district vision, it is unlikely that a productive working relationship will occur between the principal and central administration even if the superintendent is viewed as benevolent. In this case, competence may carry more weight than the superintendent expressing concern or acting openly and reliably.

CONCEPTUAL FORMS OF TRUST

In addition to different definitions, there are different conceptualizations and forms of trust. Deutch's (1958) very early experimental attempt to study trust used a variation of *prisoner's dilemma* to determine the social situations in which various types of trust occur. This laboratory experiment explored the trust gains and losses made by individuals as a function of their choices. The greatest gains were realized when both parties cooperated, with the greater loss occurring when one party exploited the other party. Deutsch's (1958) study resulted in a conceptualization of trust and implications for conditions under which mutual trust is most likely to occur. While no longer the primary means of examining trust today, studies involving *prisoner's dilemma* continue to be mentioned in the literature (Bateson, 2000; Gambetta, 1988; Good, 1988), and these provide a psychological foundation for the conceptualization of trust.

In addition to psychological conceptualizations, some scholars base their conceptualizations on ethical and moralistic tenets. Hosmer (1995) for example, characterized trust as "the expectation . . . of ethically justifiable behavior—that is, morally correct decisions and actions based upon ethical principles of analysis" (p. 399). Others conceptualize the calculative dimensions of trust within organizational and institutional settings. For instance, Burt and Knez (1996) looked at trust as simply "anticipated cooperation" based on an expected outcome (p.70). Other researchers viewed trust as a more general attitude or expectancy about other people or social systems (Garfinkel, 1963; Luhmann, 1988; Barber, 1983). Scholars also argued that trust should be

conceptualized as a more complex, multidimensional psychological state that includes consideration of its affective and motivational components (Cummings & Bromiley, 1996; Lewis & Weigert, 1985; Tyler & Degoey, 1996).

The complexity of trust leads several organizational researchers to argue that it should be conceptualized as individuals' choice behavior when confronting various kinds of trust situations. The rational choice perspective presumes that individuals will be motivated to make rational, efficient choices that maximize expected gains or minimize expected losses from their transactions. This conception reflects calculative trust (Coleman, 1990; Williamson, 1993) in which individuals calculate the cost/benefit of engaging in a relationship. Relational trust systematically incorporates the social and relational underpinnings of trust-related choices (Mayer, Davis, & Schoorman, 1995; Tyler and Kramer, 1996). According to relational trust, trust should be viewed not only as a calculative orientation toward risk, but also as a social orientation toward other people and society as a whole that leads a *trustor* to take a risk (Bryk & Schneider, 2002).

Kramer (2006) also argues that one should avoid reflecting on the conflict between the rational choice perspective or the relational trust model and move in the direction of developing a contextualized account that acknowledges and balances the role of both calculative considerations and social inputs in trust-related judgments and decisions. This approach has led to a modern conceptualization of trust that finds its underpinnings in psychology yet is fueled by social interactions and exchanges (Bryk & Schneider, 2002). The evolution of

the concept of trust has led to a general recognition of three trust dimensions: cognitive, affective, and social. Different forms of trust emerge from these three dimensions.

Cognitive Dimension

The cognitive dimension of trust is based on perceived outcomes of a relationship. There is little attention paid to how one feels about another person, but rather to potential consequences if one engages in a social exchange or contractual agreement. Deterrence-based trust and calculative-based trust are two forms that fall within the cognitive dimension.

Deterrence-based trust is dependent on measures or instruments that prevent undesired actions (Sheppard & Tuchinsky, 1996); that is, individuals will do what they say because they fear the consequences of not doing what they say (Shapiro, Sheppard & Cheraskin, 1992). Trust is sustained to the degree that the deterrent (punishment) is clear, possible, and likely to occur if trust is violated. For some, the threat of punishment is more likely to be a greater motivator than the promise of reward. Legal contracts are an example of this form of trust (Rousseau et al., 1998). Deterrence-based trust is decidedly one dimensional; however, it is sometimes considered a subtype of the next level of trust, which is more calculative in nature (Lewicki & Bunker, 1996).

Calculative-based trust is predicated on the belief that trust is an ongoing, market-oriented, economic calculation whose value is derived by forecasting potential outcomes of a relationship relative to the costs of maintaining or severing the relationship (Gambetta, 1988; Williamson, 1993).

Compliance with calculative-based trust is often ensured both by the rewards of trusting and by the threat that if trust is violated one's reputation can be hurt through the person's network of friends and associates. The vulnerable party must be willing to withdraw benefits from, or actually harm, the person acting distrustfully. Thus, behavior control is central to this form of trust, and control of actions is designed to get the other to do what the first party wants. While calculative-based trust is dependent both on benefit seeking and deterrence elements, Lewicki and Bunker (1996) acknowledge that the latter are the more dominant motivators.

Deterrence and calculative trust are simple forms of trust based on perceived punitive or economic effects. These forms of trust simply do not address sufficiently the complex social conditions within schools that underlie trusting relationships.

Affective Dimension

The affective dimension of trust introduces the emotional factor. Just as trust forms through a cognitive calculation of a potential positive outcome, trust can result from positive feelings toward another person or institution. The affective dimension firmly acknowledges the presence of emotionality in the formation of trust. Although parents may trust their child's teacher based on certification or professional guarantees, trust deepens as relationships between parent, child, and teacher become stronger. *Knowledge-based trust* and *identification-based trust* fall within the affective dimension.

Knowledge-based trust consists of knowing the other party well enough that trustworthy behavior may be anticipated (Lewicki & Bunker, 1996), and feelings toward another party's regular behavior elicit trust beliefs. This form of trust is grounded in predictability, and it depends on information about the trustee's behavior that leads to emotional connections. Knowledge-based trust develops over time, usually because the parties have a history of interaction that allows them to develop feelings leading to a generalized expectancy that the other's behavior is predictable and trustworthy (Sheppard & Tuchinsky, 1996; Rousseau et al., 1998). Shapiro et al. (1992) argue that information contributes to the predictability of the other, which contributes to feelings of trust.

In knowledge-based trust, regular communication and courtship (relationship-building) are key processes to forming trust beliefs. Regular communication puts a party in continual contact with another, exchanging information about needs, preferences, and approaches to problems. Courtship is behavior that is specifically directed at relationship development, and it enables two parties to gain enough information to determine whether they can work well together (Lewicki & Bunker, 1996). The development of knowledge-based trust is different from deterrence or calculus-based trust because it begins a process of relationship building that is held together by feelings of trust (Lindsfold, 1978 & Rotter, 1980). Lewicki and Bunker (1996) likened knowledge-based trust to gardening in that the soil is tilled year after year to learn what will grow in the sandy and moist sections or in the shady and sunlit

sections. Trust at this level is not necessarily broken by inconsistent behavior, as there is a belief that if one can adequately explain or understand someone else's behavior, it is forgivable. This could never happen with deterrence- or calculus-based trust, for which consequences are punitive and there is a what's-in-it-for-me attitude.

Identification-based trust exists because the parties effectively understand and appreciate the other's preferences and desires (Lewicki & Bunker, 1996). The emotional investment is significant in identification-based trust, but so are the rewards in that a partner may act independently, knowing that his or her needs will be met. This type of trust requires no monitoring in an organizational setting, instead giving authority to competent employees, which, in turn, promotes greater efficiency (Lewicki & Bunker, 1996; Sheppard & Tuchinsky, 1996). At this highest level, trust exists because the parties effectively understand and appreciate the other's wants, and this understanding is developed to the point that each can effectively act for the other. A side effect is that as knowledge and identification develops, so does the knowledge of what each party must do to sustain the other's trust. For example, Person A comes to learn what Person B believes to be really important and eventually places the same importance on those behaviors. Kramer, Brewer, & Hanna (1996) also speak to group-based trust that evolves from group identification. This group identification greatly enhances the frequency of cooperation because individuals feel connected to the group.

Four factors have been identified (Lewicki & Bunker, 1996) that strengthen identification-based trust in organizations: the development of a collective identity (i.e., a joint name, title, logo, etc.), co-location in the same building or neighborhood; creating joint products or goals such as a new product line; and committing to commonly shared values. All four are easily relatable to schools where school identities form, classes are located in the same building, and school members establish a common goal for improvement in student achievement.

Social Dimension

Drawing from philosophy, political science, economics, and organizational behavior, Bryk and Schneider (2002) saw a deeper complexity in trust than explained by cognitive and affective conceptualizations. They constructed a grounded theory of relational trust based on interpersonal social exchanges in school communities through a combination of literature analysis and field study. Convinced that the effectiveness of organizations depends on the quality of social ties within a community, Bryk and Schneider (2002) defined relational trust in the context of social interactions among members who comprise a community. Inherent in relational trust is the importance of social relationships among school actors, (i.e., central administrators, teachers, principals, parents, and students).

Bryk and Schneider's (2002) interest in the role of relational trust in improving schools coincided with Hoy and other researchers situated with him (Hoy & Kupersmith, 1985; Tarter, Bliss & Hoy, 1989; Tschannen-Moran, 2001;

Hoy & Tarter, 2006) who were focused on the relationship between trust and school effectiveness. Each group drew the same conclusions about the conditions required for trust: interdependence, vulnerability, and risk. The characteristics of trust as reported by Hoy and Tschannen-Moran (benevolence, reliability, competence, honesty, and openness) are remarkably similar to the criteria for discernment described by Bryk and Schneider (2002): respect, competence, personal regard for others, and integrity. Respect is reflected in how communication is structured within a role set and more generally across a school community. Even when people disagree, individuals feel that the value of their opinions has been recognized, which can also be described as one aspect of benevolence. Competence is equally important and speaks to reliability, skill and ability reflected in the actions of the trustee. Behavior such as negligence or gross incompetence in the execution of one's formal responsibilities can be highly corrosive to relational trust. Personal regard represents caring and benevolent actions. Finally, integrity speaks to honesty.

Relational trust views 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 has an understanding of his role obligations and holds some expectation of the other party's obligations as well. Because Bryk and Schneider were examining the effects of a decentralization reform effort in Chicago, they did not extend their relational trust theory beyond the school setting; however, a case can be made for the examination of principal

relationships and the development of trust in central administration through the lens of relational trust theory.

REVIEW OF EMPIRICAL EVIDENCE ON SCHOOL TRUST FORMATION

Evidence from studies dealing with other forms of trust in schools is used to better understand the plausible sources of principal trust in central administration. Teacher-principal and parent-school relationships share a power hierarchy (Baier, 1986; Blake & MacNeil, 1998; Gabarro, 1978) similar to principals and central administration. Thus, evidence from studies on teacher-principal trust and parent-school trust was used to identify behaviors and practices of central administrators that have consequences for their perceived trustworthiness.

Teacher-Principal Trust

Studies conducted by Hoy and his colleagues have contributed greatly to the empirical knowledge of teacher trust in principals (Hoy & Kupersmith, 1985; Hoy, Smith, & Sweetland, 2002; Hoy & Sweetland, 2001; Hoy, Tarter, & Wiskowskie, 1992; Smith, Hoy, & Sweetland, 2001; Tarter, Bliss, & Hoy, 1989; Tschannen-Moran & Hoy, 1998). Several studies examined the relationship between principal authenticity as discerned by teachers and principal trust. The concept of principal authenticity was defined throughout these studies as the extent to which principals were described as accepting responsibility for actions, as being non-manipulating, and as demonstrating a salience of self over role (Henderson & Hoy, 1982; Hoy & Kupersmith, 1984; Hoy & Kupersmith, 1985). These studies found that teacher trust in principal was strongly related to

principal authentic behavior. Additional evidence from studies of teacher-principal trust indicates that principal leadership styles that were person centered and relationship oriented (i.e., supportive or benevolent) were found to be strong predictors of teacher-principal trust (Hoy, Tarter, & Witkoskie, 1992; Tarter, Bliss, & Hoy, 1989; Tarter, Sabo, & Hoy, 1995). Principals who were collegial or transformational in their leadership approaches also engendered high levels of trust (Hoy, Smith, & Sweetland, 2002; Tschannen-Moran & Hoy, 1998; Tschannen-Moran, 2001, 2003).

Kochanek (2005) provides evidence to suggest that building relational trust depends on a principal's ability to encourage teachers to risk vulnerability. The notion is further supported by Bryk and Schneider (2002, 2003) in their studies of reciprocal relational trust in the Chicago school system. Trust forms when actual behavior is consistent with role expectations and obligations (Bryk and Schneider, 2002). Hence, teacher trust increases when administrators conduct their work in a manner consistent with the responsibilities of their position. Teachers expect principals to be attuned to their needs, to be open to teacher feedback and ideas, to set positive examples, and to respect their professional judgment. These behaviors reinforce the idea that school leadership is critical to the establishment of a positive school climate, which, in turn, contributes to trust. From the principal trust evidence, it is reasonable to believe that open and authentic actions of the central administration will affect trust perceptions.

Parent-School Trust

While there are fewer studies on parent trust than on teacher trust, some interesting evidence has emerged. Parent trust appears to be heavily centered on how parents feel and the context in which they find themselves. Factors contributing to parent trust included parent perceived influence on school level decisions (Adams & Forsyth, 2007b; Forsyth, Adams, & Hartzler, 2007) and the perception that rules and regulations enable role groups to come together (Adams & Forsyth, 2007b). Students' sense of belonging to school and value in education (Adams & Forsyth, 2007a) also emerged as a predictor of parent trust in schools.

Bryk and Schneider (2002) studied the phenomenon of parent-school trust as well. In the context of power asymmetry, the burden generally falls to the more powerful party to initiate actions that reduces the sense of vulnerability experienced by others. In the Chicago situation, it was incumbent upon teachers and principals to take the lead in establishing trust relationships with oftentimes poor, undereducated parents.

Just as parent affective states matter for their trust in schools, affective needs of principals are likely a source of trust. That is, principals who feel connected and supported to the central administration are likely to perceive it as trustworthy.

CHAPTER 3: ITEM DEVELOPMENT

Lack of trust is a serious impediment to the implementation of mandated reforms that schools face today (Daly, 2009). Management structures aligned with a systems approach to improvement have come into play with an expectation of shared interests and goals, an increased level of effectiveness, and improved flexibility for responding to changing demands and environmental pressures (Powell, 1990, 1996). New forms of management that focus on shared influence and collective expectations also require a higher level of trust in those who are granted decision-making discretion (Smylie & Hart, 1999).

The literature outside of education recognizes trust relationships as a conduit for change (Deutsch, 1958; Dirks & Ferrin, 2001; Jones & George, 1998; Zaheer, McEvily, & Perrone, 1998). Dirks and Ferrin (2002) stressed the importance of organizational trust created by senior leaders for increased productivity and continuous improvement. This non-school evidence and exploration of the impact of trust in senior leaders is congruent with emerging research which suggests that the same holds true for education (Chuuon et al., 2008; Daly, 2009; Daly & Chrispeels, 2008; Fullan et al., 2004; Louis, 2007). School personnel must work together to buffer the influence of external pressure in order to enhance student learning. Central and site administrators have not received as much attention in studies on trust. Site principals are expected to implement strategies supportive of district goals as well as to communicate information to central administration about the implications of practices linked to district strategies. Trust can enhance cooperative action

between central and site administrators (Louis, 2007; Chhuon et al., 2008; Bryk& Schneider, 2003). Tschannen-Moran and Hoy (2000) argue:

Understanding the facets and dynamics of trust in the linkages between organizational levels in schools is important: between boards and superintendents, between superintendents and principals, between principals and teachers, between teachers and students, and between parents and schools. (p. 585)

Definitions and measures of faculty, principal, parent, and client trust (Adams, 2008), along with evidence on the role of central administration in supporting school improvement, provide a conceptual foundation for the creation of a measure of site administrator trust in central administration. The following section begins with a discussion of evidence supporting the district role in continuous improvement. Next, effective district administrative practices are aligned with the facets of trust. Recall that trust is defined by Hoy and Tschannen-Moran (1999) as “an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open” (p. 189). Linking facets of trust to specific central office behaviors is the foundation for construction of an instrument to measure site administrator trust in central administration.

The District Role in Continuous Improvement

It is important for district leaders to build relationships with principals that enable the design and implementation of effective improvement strategies. Current educational research highlights this assertion. Honig (2008) suggests

that central administrators face unprecedented demands to play key leadership roles in efforts to strengthen teaching and learning district-wide. Traditionally, central administration offices have functioned mainly as fiscal or administrative pass-throughs for federal and state initiatives; and they have managed operational tasks such as school buses, facilities, purchasing, and human resource processing. Districts focused on continuous improvement in learning, however, have realized that student instruction is a complex task requiring more complex leadership support at the district level and stronger connections between site and district leaders than ever before (Corcoran et al., 2001; Hubbard et al., 2006; Marsh et al., 2006).

More evidence is emerging on how central administration affects school improvement (Corcoran et al., 2001; Snipes et al., 2002; Togneri & Anderson, 2003). In addition to Fullan's (2010) work on a model for whole system reform, other evidence (Massell & Goertz, 2002; Spillane, 1996) supports a system-wide approach to improvement. Central office administrators are in the position to support systems whether they are moving toward goals or stuck in dysfunctional patterns (Marsh et al. 2005). Datnow and Castellano (2003) argue that "supportive conditions at the district level are important to successful implementation and sustainability of whole school reform" (p. 203). McLaughlin and Talbert (2003) argue that a strong district role is effective in reform efforts and suggest that taking the district system as the unit of change is essential to advancing equitable and sustainable reform. District culture has a great influence on the degree of cooperation among administrators in the design and

implementation of a shared vision, curriculum, professional development, performance measurement, and open communication.

Firestone (2009) argues there are three distinct types of district culture: loosely coupled districts, accountability districts, and student-learning districts. Firestone demonstrates how each type deals with the processes of data use, curriculum, and professional development (facilitated or not facilitated by district visioning and good relationship development from the district level), and suggests how these processes influence school-level practices that affect student learning. The argument is that reform movements focusing on school improvement have failed to reach their full potential in part because reformers have failed to account for the district's role in school reform (Musella, 1995). Firestone explores how a mix of district culture supporting teaching and learning and effective processes influences what happens in schools. Interestingly, the student-learning culture is the only culture in which trust is introduced as a powerful tool in the achievement of district goals (Firestone, 2009).

The ideal district culture in Firestone's typology is the student-learning culture. Student-learning districts maintain a strong consensus that all children can learn and that education can make a difference. Practices and processes in schools align with the district vision, but the district vision does not prescribe practices that schools must implement. Darling-Hammond (2005) refers to this as an outside-in, inside-out approach because practices in schools are designed locally and used to carry out the overall district vision. In student-learning cultures, schools hold themselves accountable while central office

educators take the initiative and provide leadership in establishing the vision for the district and supporting schools in the development, implementation, and refinement of that vision. This perspective differs from the loosely coupled district, as the loosely coupled district is characterized by the absence of any central vision for teaching and learning. Loosely coupled systems have goals that do not focus on student learning, a separation of teaching and learning from authority structures, and wide variation in practices and programs across schools (Firestone, 2009; Rosenholtz, 1989; Weick, 1976).

Accountability districts do engage in visioning; however, the vision is developed at the top and forced on schools with command and control leadership (Firestone, 2009). The major tool used for promoting improved learning (Moe, 2003) is accountability, and the belief that linking undesired performance to sanctions or rewards can get schools to focus on results.

Several distinctions exist between accountability and student-learning cultures. First, accountability cultures tighten control from the top, whereas student-learning cultures develop a more organic form of integration that provides structures that enable improvement to come from professionals in schools. Second, teaching and learning in a student-learning culture is assumed to be very complex, relying greatly on teacher discretion and their professionalism, which, in turn, requires trust. Finally, data in student-learning cultures are comprehensive and used to understand the relationship between practice and outcomes, while accountability cultures largely use data to hold schools accountable for outcomes.

Student-learning districts require more shared influence and joint problem solving when compared to loosely coupled or accountability districts. Processes associated with designing and implementing curriculum frameworks, professional development plans, and performance measures require relationship building and the empowerment of all staff members in a collaborative decision-making process (Firestone & Bader, 1992). Collaboration in the design and implementation of strategy is also essential in the formation of trust (Bryk & Schneider, 2002). Student-learning cultures build trust by balancing the need for social order with the need for professional autonomy in how structures and goals are designed and implemented (Firestone, 2009).

Firestone (2009) argues that the student-learning culture is better suited for districts interested in continuous improvement. Clearer visions and strong social networks in student-learning districts facilitate a deeper integration of curriculum, professional development and data use, all of which in turn, requires complex relationships in the various role-sets within a school district. What does Firestone's Typology mean for trust in central administration? It conceptualizes how actions by the central administration can support or impede trust formation. How district leaders approach the design and implementation of a vision and goals, a curricular plan, professional development, performance measurement, and communication will have consequences for the trustworthiness of central administration (Bryk & Schneider, 2002; Forsyth, Adams & Hoy, 2011; Goddard, Salloum & Berebitsky, 2006; Goddard, Tschannen-Moran & Hoy, 2001; Hoy, Tarter & Witkoskie, 1992).

CENTRAL ADMINISTRATION PROCESSES

It is well accepted that districts are largely responsible for development of a vision with a focus on improvement, consistency in curriculum development, aligned professional development, appropriate and consistent use of data, and the development of positive relationships grounded in good communication (Firestone, 2009; Fullan, 2010; Massell, 2000; McLaughlin & Taulbert, 2003; Louis, 2006). Processes and practices associated with the design and implementation of strategies aligned with the referenced responsibilities is just as important as the strategies themselves.

The development of a district vision for continuous improvement affects how school sites translate visions into practice (Corcoran, Fuhrman, & Belcher, 2001; Fullan, Bertani, & Quinn, 2004; Louis, 2006). This also means defining central office roles, balancing between philosophical commitments and political necessities, and establishing a good fit between district level directives and site autonomy (Corcoran, Fuhrman, & Belcher, 2001). Balance between social order and professional autonomy can be achieved with structures that commit individuals to stated goals and authentic behavior (including granting of appropriate autonomy) but allow for social construction at the school level (Bryk & Schneider, 2002; Forsyth, Adams, & Hoy, 2011). Corbett and Wilson (1992) see a focus on improvement when central office administrators send a clear and consistent message that instructional improvement is the primary expectation for all adults in the system, and delineate broad mechanics to achieve the vision.

Structures and processes that contribute to the design of a district vision that is open, inclusive, and transparent are more effective for building trust than those that are closed (Forsyth, Adams, & Hoy, 2011). An open forum also establishes a climate (openness) that is supportive of dissenting opinions. Once the vision is established, districts can support implementation with in-service training about the vision and feedback loops that enable school professionals to learn from practice. For change to occur, individuals expected to implement the vision must make sense of strategy and have an opportunity to co-construct practices (Datnow & Stringfield, 2000). Sense-making and co-constructing are also important for trust (Forsyth, Adams, & Hoy, 2011).

A coherent and aligned curriculum establishes an instructional roadmap for schools and teachers to follow. Again, all trust facets are at work when building a curriculum development process. Implementation of a system-wide curriculum becomes a way to operationalize part of a district's vision, and this is best accomplished within the framework of a student-learning culture in which openness and inclusivity in curriculum development is the norm.

Research suggests that a district curriculum focus on consistency in standards for all children in the district (Corcoran, Fuhrman, & Belcher, 2001; Corbett & Wilson, 1992), tempered with the allowance for autonomy among school sites in determining strategies for implementing district-wide standards and objectives (Massell, 2000), establishes a healthy balance between social order and professional autonomy. Central office behaviors that give professionals influence in the design and implementation of curriculum could

include the establishment of district-wide curriculum committees, a carefully crafted materials and textbook selection process, support with financial resources, and time provided for curriculum work. Creating curriculum consistency and alignment is necessary to create a culture that embraces the study of teaching and learning (McLaughlin & Talbert, 2003). Curriculum development is not a static process (Chhuon et al., 2008; Louis, 2006; Massell, 2000). Once an initial set of standards and objectives for a particular academic subject is created, improvement can be achieved by refining or revising curricula as necessary to meet student needs. A district-wide curriculum should be a living curricular document that is actually used and refined through implementation (Fullan, Bertani, & Quinn, 2004).

Professional development is critical in the implementation of a district vision and goals. A curricular plan without strong professional development consistent with district intentions for student achievement is not likely to see improvement (McLaughlin & Talbert, 2003). Building teacher capacity, knowledge, and skills through professional development is prevalent in the literature (Corbett & Wilson, 1992; Corcoran, Fuhrman, & Belcher, 2001; Daly & Chrispeels, 2005a; Fullan, Bertani, & Quinn, 2004; Honig, 2003, 2008; Louis, 2006; Massell, 2000). Corcoran and colleagues (2001) argue that the determination of the direction of professional development should be the responsibility of the district, while the central office should provide the coordination and resource support of professional development practices. Effective professional development involves embedded support for school

professionals through peer coaching and mentoring opportunities that enable teachers to grow without the fear of failure (Corbett & Wilson, 1992; Massell, 2000). Similar to vision design and curriculum development, open communication and influence by school professionals is effective for designing professional development.

The use of data in districts seeking continuous improvement is non-negotiable (Louis, 2006; Massell, 2000). Assessments of current curricula and continuous evaluation of on-going professional development programs enable districts to move forward in the use of effective practices (Firestone, 2009). Regular student assessment is also a critical part of a performance measurement plan. Central office personnel require the use of data in making decisions and creating shared responsibility and accountability for high standards (Chuuon et al., 2008). For example, achievement data can be used to understand student performance and student need (Black & Wiliam, 1998; Chhuon, et al, 2008; Corbett & Wilson, 1992; Corcoran, Fuhrman, & Belcher, 2001; Daly & Chrispeels, 2005a; Daly & Finigan, 2010; Fullan, Bertani, & Quinn, 2004; Honig, 2003, 2008; Louis, 2006; Massell, 2000). As mentioned previously, student-learning districts use data for more than just reporting test scores to external entities. Decisions related to continuous improvement can be enhanced if based on accurate performance data that measure both processes and outcomes. Without a comprehensive measurement plan, school leaders are left to speculate about underlying causes of outcomes (Forsyth, Adams, & Hoy, 2011).

The perception of good communication and positive relationships among staff members is central to all aspects of a systemic push for continuous improvement. Central office administrators can be more effective in leading school reform when they develop trust relationships with site personnel (Louis, 2006). Open and effective communication can be enhanced when central office administrators develop collaborative relationships, participate in shared decision making, involve themselves in professional development activities, are visible in school buildings, and respond to site concerns in a timely manner (Chuuon et al., 2008; Corbett & Wilson, 1992; Fullan, 2004; Honig, 2003, 2008) These open and collaborative practices are more likely to build trust (Daly & Chrispeels, 2005a; Daly & Finigan, 2010).

In summary, there are commonalities in the development and implementation of processes throughout the five responsibility areas of central administration. Communication and relationship development, one of the five areas, is unique in that it is integrated throughout the development of a vision for continuous improvement, the consistent use of curriculum with aligned professional development, and the use of data in a quality manner. The development of principal trust in central administration is dependent on the quality and consistency of communication that occurs between the two entities. There is an expectation that both parties will fulfill the expectations of their roles with competency and through the engagement of authentic behavior, which includes being present in every situation, open, and willing to listen to others. Consistent adherence to all of the previously discussed conditions allows for

replication and sustainability in reform and is well documented as a step to sustaining progress in school improvement (Chhuon, et al., 2008; Daly & Finigan, 2010; Fullan, Bertani, & Quinn, 2004; Honig, 2008; Louis, 2006).

CENTRAL ADMINISTRATION PRACTICES AND FACETS OF TRUST

The development of processes in a student learning culture reflects authentic behaviors and practices by central administrators that also reflect properties or facets of trust mentioned in an earlier section. The areas of visioning, curriculum development, professional development and data use must evolve with mindfulness towards the needs of teachers and other staff members (benevolence). The design and implementation of practices to support improvement align with trust when processes reflect general knowledge on central administration's part (competency), are consistent in intent and action (reliability), are open and transparent (openness) and are developed with input from representative stakeholders (honesty). How, then, can central office administrators be assured that they are engaging in those behaviors that create trust within principals? One step is to create a measure that will capture individual principal perceptions based on how central administration facilitates the design and implementation of a district vision, curricular plan, professional development strategy, and data use.

Similar to other trust forms, site administrator trust in central administration surfaces through interactions perceived as benevolent, reliable, competent, open, and honest. These facets, as Hoy and Tschannen-Moran (1999) call them, are the conceptual indicators of trust. While trust cannot be

directly measured, it can be indirectly captured by measuring perceived trustworthiness. As with the Omnibus Trust Scale (Hoy & Tschannen-Moran, 1999), the Parent Trust Scale (Forsyth, Barnes, & Adams, 2006), and the District Administrator Trust Scale (Daly & Chrispeels, 2008), the scale to measure principal trust in central administration will capture facets of trust. The connections between trust facets-benevolence, reliability, competence, honesty and openness- and central administration practices linked to school improvement are explored next, along with examples of how these linkages will look as survey items in a measure of perceived principal trust in central administration.

Benevolence is the confidence that one's well-being or something one cares about will be protected by the trusted person or group (Baier, 1986; Cummings & Bromily, 1996). It relates to behavior that is engendered by care and compassion for the other person (Mayer, Davis, & Schoorman, 1995). Central office administrators can demonstrate benevolence by responding to site administrator concerns, needs, and ideas in the design and implementation of a district vision, curriculum plan, professional development, and data use. Items that capture perceived benevolence include *The Central Administration demonstrates an understanding of my needs; The Central Administration shows concern for the needs of my school; The Central Administration values my ideas for school improvement; The Central Administration values my staff and me as professionals; and The Central Administration allows me professional autonomy to do what is best for my school.*

Reliable behavior is another facet of trustworthiness that is characterized by predictable and consistent behaviors. It means that the actions of individuals or groups are consistent with their words and they can be counted on to carry out their obligations (Butler & Cantrell, 1984). Because site principals depend upon the central office for resources and support for improvement efforts, central office administrative behavior that establishes consistency and predictability is likely to be perceived favorably by principals. Conversely, if central administration often abandons strategies and drifts from the vision then central office administrators will be perceived as less reliable. Or, if central administration cycles through programs searching for the holy grail of school improvement rather than a consistent, focused plan, reliability will be viewed negatively. Items that capture perceived reliability include: *The Central Administration follows through on commitments; The Central Administration often says one thing and does another; The Central Administration honors agreements; and The Central Administration is committed to the district's stated goals and strategies.*

Competence captures the ability of the trustee to perform behaviors that are required to produce a desired outcome. If a person who is dependent on another for something that requires a level of skill to accomplish finds that the trustee cannot perform the task, it may be that he cannot be trusted (Baier, 1986; Mishra, 1996). Central administration competence is reflected by how visions, curriculum plans, professional development, and data use that supports capacity building in schools are designed and implemented (Darling-Hammond

et al., 2005). Competent principals will expect implementation of district visioning in the form of a district plan that demonstrates congruence in its curriculum development and instructional materials selection processes. The use of data in decision making is also likely to add to a perception of competence. Items reflecting competence will include The Central Administration demonstrates knowledge of teaching and learning; The Central Administration has established a coherent strategic plan; The Central Administration inspires me to provide leadership for my building; The Central Administration understands district needs; The Central Administration understands student needs; and the Central Administration regularly adopts different improvement interventions.

Honesty speaks to truthfulness, integrity, and authenticity. Congruence between what a person says and what a person actually does on a repeated basis allows site principals to develop trust in the central administration. Inconsistent behavior, projecting blame onto others, or covering up one's actions certainly diminishes the likelihood that the trustors, in this case, site principals, will risk trusting the central office. When central administrators keep their promises to provide funding or other resources to school sites, there is a perception of honesty. If central administrators hide facts, blame others, or cover up for wrong doing, site administrator trust is likely to lessen. Items that capture perceived honesty include: *The Central Administration takes personal responsibility for its actions and decisions*; and *The Central Administration demonstrates behaviors that are consistent with their beliefs*.

Openness speaks to the climate within a school or district. It involves the willingness of central office administrators to communicate all relevant and important information as well as the ability to be totally present in social exchanges (Hoy and Tarter, 2006). Active listening plays an important role as site principals perceive that they are truly being heard, regardless of the concern. Central office administrators who are consistently visible at school sites, who practice collaboration and shared decision making, who participate in planning, and who encourage dissenting opinions or concerns are likely to be perceived as open. Items that demonstrate perceived openness are: *The Central Administration provides a safe place for difficult conversations; The Central Administration facilitates shared decision-making; The Central Administration maintains a visible presence in my school; and The Central Administration promotes a climate of collaboration.*

The five facets of trust can be operationalized by specific practices used by central administration in the design and implementation of a district vision, curriculum planning, professional development, and use of data. Louis (2008) argues that increasing our knowledge about what principals do and how they have an effect on the instructional behaviors of teachers will lead to a better understanding of how leadership has a direct relationship to improved student achievement. The same holds true for principal/central administration interactions focusing on school improvement. Trust relationships between principals and central administration strengthen the commitment that is critical to the implementation of systemic, coordinated change strategies and the

transfer of knowledge from one organizational level to another (Daly & Finnigan, 2010). It is one thing to delineate responsibilities of central administration and quite another to understand how decisions and actions of central administrators support improvement at the school level. Developing a valid and reliable measure of site administrator trust in central administration will help with the latter.

CHAPTER 4: METHODS

The intent of this study was to develop a measure of principal trust in central administration. Specific responsibilities of the central administration for school improvement were identified and integrated with the trust facets to create survey items. These behaviors were then linked to identified facets of trust, and 20 items for the measure were constructed. The empirical part of the study consisted of two field tests of the Principal Trust in Central Administration Scale. In the first field test, 19 items were used and one additional item was added to the second field test. The purpose of the field tests was to assess the psychometric properties of the measure by testing the construct validity of the scale. Tests of construct validity included face validity, content validity, structural validity, and concomitant validity.

Evaluation of the content, face, structural and concomitant validity provided evidence to judge the construct validity of the Principal Trust in Central Administration Scale. Content validity refers to the alignment between the construct of trust and survey items used to measure the trustworthiness of central administrators (Muijs, 2004). As previously described, survey items were written to reflect central administrative practices consistent with the facets of trust: benevolence, reliability, competence, openness, and honesty. Content validity determines whether the content of the items in a survey measures the latent concepts that characterize the construct under study, in this case, trust (Muijs, 2004). The conceptualization of trust for this study is characterized by five facets—benevolence, reliability, competence, honesty, and openness.

Knowing how these concepts are theoretically defined in the literature helped ensure the content validity of the survey instrument items.

Face validity was tested by submitting survey items to a group of site and central office administrators. These administrators were asked to identify the trust facet measured by the item and the degree to which the practice identified by the item reflected responsibilities of central administration. Face validity was established by asking the respondents whether they judged the questions within the instrument to be viable. Structural validity reports how well the survey items relate to each other and to a common factor. Structural validity of the scale was established through the use of an exploratory factor analysis with principal axis extraction. Concomitant validity is established by confirming how well the composite trust scale correlates with other established measures. Concomitant validity for the Principal Trust in Central Administration Scale was established by examining the relationship between central office administrator trust and measures for enabling district structures, district commitment, and principal efficacy.

Data Source

Two samples were used in this study. The first sample was drawn from a relatively homogeneous group of principals in an urban district in a southwestern state via an anonymous survey distributed as a part of a larger university study. Participation was voluntary. The urban sample consisted of 72 building principals. Of the principals, 29.7% were male, 65.6% were female, the

mean number of years as a principal was 9.7, and the mean number of years in the current school was 5.2.

A second random sample of 300 principals was drawn from the membership of the Cooperative Council of Oklahoma School Administrators (CCOSA). Participation was voluntary, and agreement for participation was secured electronically. Surveys were distributed and returned electronically using Qualitrics.™ The statewide sample resulted in 173 complete and useable surveys. This random sample exceeded the recommended sample size threshold of 100 (Gorsuch, 1983) for exploratory factor analysis (Hair, Anderson, Tatham, & Black, 1995). These principals were from all over Oklahoma: 19 were in urban schools, 52 were in suburban schools, and 97 were in rural schools. Eighty-nine principals were in elementary schools, 35 were from middle/junior high level schools, and 43 reported as high school administrators. The gender mix of this sample was 92 male principals and 77 female principals. One hundred and eighteen principals worked at Title I schools; the remaining 51 principals were in non-Title I schools.

Measures for Concomitant Validity

Validity of a survey is enhanced by evidence that survey responses correlate to other attitudes and beliefs that can theoretically be related to the construct of interest. In this case, trust in central administration was correlated to principals' perception of enabling district structure, district commitment, and principal efficacy. A description of these measures follows.

Enabling District Structure. Organizations of any size, including schools, have bureaucratic structures that may or may not contribute to the success of the organization. Clearly bureaucratic structures can be detrimental to their participants; but research also shows that bureaucracies can also enhance satisfaction, reduce stress, and enable individuals to increase their effectiveness (Adler, 1999; Hoy & Miskel, 2001; Michaels, Cron, Dubinsky, & Joachimsthaler, 1988). There is mounting evidence that schools can be designed with formalized procedures and hierarchical structures that help rather than hinder improvement (Hoy & Sweetland, 2001). This relatively new construct, enabling school structure, is a hierarchy that provides a system of rules and regulations that guide problem solving rather than punishes failure. Principals and faculty who operate with enabling school structures work cooperatively across recognized authority boundaries while retaining their distinctive roles.

Hoy and Sweetland's (2001) Enabling School Structures Scale was adapted to measure administrator perceptions of district formalization and centralization. Sample items include: *Administrative rules in my district enable authentic communication between teachers and administrators;* and *In this district red tape is a problem.* The scale tests consistently high for reliability, and its construct validity has been strongly supported in a number of studies where measures for faculty trust in colleagues and in principals were used for validation. Enabling district structures may be related to principal-central

administration trust as well, as coercive, top-down, bureaucratic procedures are most often observed when trust is not present (Daly, 2009).

District Commitment. District commitment is another construct that is likely to correlate positively with principal trust in central administration. For decades, a great deal of attention has been given to organizational commitment (Mowday, Porter, & Steers, 1982). While the literature outlined several conceptual distinctions, the most prevalent approach to organizational commitment is one in which commitment is considered an affective or emotional attachment to the organization such that the strongly committed individual identifies with and enjoys being involved in the organization (Kanter, 1968; Buchanan, 1974; Porter, Steers, Moday, & Boulian, 1974). Allen and Meyer (1990) identified this affective component and two others, a continuance component and a normative component, as different, but somewhat related, conceptualizations of the same organizational commitment construct. Accordingly, they created measures for all three components. Items from the Affective Commitment Scale were administered to principals in this study for validation purposes. A few of these items include *I would be very happy to spend the rest of my career in my district, I really feel as if problems in my district are my own, and I do not feel emotionally attached to my district.*

Principal Efficacy. A principal's sense of efficacy is a perceived judgment of his or her ability to affect change in one's school, and it may be viewed as a foundational characteristic of an effective school leader. Self-efficacy has a significant impact on goal-setting, level of aspiration, effort,

adaptability, and persistence (Bandura, 1986, 1997). These beliefs influence the development of leadership strategies and the competent execution of those strategies (McCormick, 2001). Leadership self-efficacy has been related to gaining followers' commitment as well as to overcoming obstacles to change (Paglis & Green, 2002), all necessary skills for a principal who desires increased achievement and improvements in his or her school.

Tschannen-Moran and Gareis (2004) developed the Principal Self-efficacy Scale (PSES) with items generated to tap various aspects of principal's work and based largely on the professional standards articulated by the Interstate School Leaders Licensure Consortium. Items center around three distinct areas: efficacy for management, efficacy for instructional leadership, and efficacy for moral leadership. Example of items includes the following: *To what extent as principal can you handle the time demands of the job (management); facilitate student learning in your school (instructional leadership); and promote ethical behavior among school personnel (moral leadership)?* Construct validity for the measure was tested by correlating the PSES to other known constructs to see if positive relationships emerged. Principals' sense of efficacy was significantly positively correlated to both trust in teachers and trust in students and parents; therefore, one may infer a positive correlation with principal trust in central administration.

Analysis

An exploratory factor analysis was used to test the internal structure of the items, and Cronbach's Alpha served to establish reliability of the measure.

Exploratory factor analysis is a data reduction technique that explores the shared variance among survey items for the purposes of reducing multiple items to a common factor or factors (Brown, 2006). Brown (2006) noted that a factor is “an unobservable variable that influences more than one observed measure and that accounts for the correlations among these observed measures” (p. 13). Factor analysis assumes that each indicator is a linear function of one or more common factors and unique variance (error). In this study an exploratory factor analysis was used to reduce items to one factor, trust. Other tests were performed to identify the associations among all the items. Principal axis factoring was the extraction technique used.

Bivariate correlations were also tested to measure the relationship between trust in central administration and enabling district structure, district commitment, and principal efficacy. Pearson correlation coefficients report the direction and strength of the relationships. Descriptive statistics were also gathered in order to begin an examination of potential differences in principal trust in central administration across different school and district contexts. An analysis using descriptive statistics was performed for several research questions including: *Are there differences in site administrator trust in central administration across urban, suburban, and rural districts? Are there differences in principal trust in central administrators across elementary, middle/junior high, and high schools? Does the socioeconomic level of the school, as defined by Title I designation, impact the level of principal trust of*

central administration? Does principal gender make a difference in central administration trust?

CHAPTER 5: RESULTS

Psychometric tests were run on two different samples in this study in an effort to measure the validity and reliability of the Principal Trust in District Administration Scale. An exploratory factor analysis for each sample was completed to determine the shared variance among survey items in order to reduce them to a common factor, trust. Validity and reliability were established with evidence from both samples, and positive correlations to other established measures, principal efficacy (sample one) and enabling district structures and principal district commitment (sample two), were also demonstrated. Results are first reported for the sample of urban principals. Next, results are reported for the statewide sample. The chapter concludes with evidence on differences in principal trust in central administration.

Results for the Urban Sample

The urban sample consisted of a group of 72 principals from the same urban district in northeastern Oklahoma. Breakdown by gender revealed 29.7% respondents reported as male and 65.6% reported as female. Ranging in years of experience from 1 to 30 years, the mean for this group was 9.71 years of experience as a principal. The mean for number of years in current school was 5.25.

Prior to the administration of the survey to the urban sample a group of site and central office administrators were surveyed for initial impressions regarding face validity. These administrators were asked to identify the trust facet measured by the item and the degree to which the practice identified by

the item reflected responsibilities of central administration. Face validity was established when respondents perceived the questions within the instrument to reflect facets of trust and central administrator responsibilities.

Two exploratory factor analyses using SPSS[®] software were conducted with this sample. An eigenvalue is a measure of the amount of variance in all the items or variables that is explained by a factor. The commonly accepted standard for an eigenvalue is over 1.0 (Vogt, 2007). In the full run, one factor was extracted from the data with an eigenvalue over 1.0 (13.425), indicating that this one factor explained 71% of the variance in the 19 items. Factor loadings for all items, except item 15, were strong, ranging from .72 to .93. The commonly used standard for an acceptable factor loading for an item is a minimum of .40 (Vogt, 2007). Item 15 had a weak loading of .38. Strong factor loadings indicate that the observed facets of trust cohere around one common factor. Communalities, or each item's correlation to all the other survey items, indicated moderately strong correlations among the items. Again, item 15 had a weaker relationship compared to the other items (see Table 5.1, Figure 5.1). A second exploratory factor analysis was performed with Item 15 removed from the analysis. This item was removed for its low factor loading. Results remained strong for this trimmed run. One factor was extracted with an eigenvalue over 1.0 (13.278) and a 74% variance in the 18 items. Factor loadings for the 18 items continued to be strong, ranging from .72 to .93. Communalities remained consistent with moderately strong correlations among the items (see Table 5.1, Figure 5.1).

A test of reliability was done to determine inter-item consistency. This test measures consistency in item responses. Cronbach Alpha coefficient estimates above .70 are generally judged as acceptable reliability (Muijs, 2004). An alpha coefficient of .97 for the full run and .98 for the trim run denotes excellent reliability of the scale.

Correlations between principal trust in central administration and efficacy beliefs were generated to establish evidence for concomitant validity. A positive relationship was found between principal trust in central administration and principal efficacy in instructional leadership ($r = .50, p < 0.01$), efficacy in management ($r = .52, p < 0.01$), and total principal efficacy ($r = .54, p < 0.01$) (see Table 5.2). Principal efficacy is a construct similar to trust and there is evidence to support its positive relationship to both teacher and student/parent trust (Tschannen-Moran & Gareis, 2004). The finding here indicates that where there was higher principal trust in central administration there was higher principal efficacy. The positive correlation between principal efficacy and principal trust in central administration is logical and provides evidence of concomitant validity.

Table 5.1

Exploratory Factor Analysis for Results for the Sample of Urban School Administrators

TRUST	Factor Loadings		Communalities		Factor 1	Eigenvalue		% of Variance	
	Full	Trim	Full	Trim		Full	Trim	Full	Trim
District Level Administrators:						13.425	13.278	70.656	73.768
1. Show concern for the needs of my school	.906	.905	.820	.820					
2. Value my ideas for school improvement	.861	.863	.741	.744					
3. Value my staff and me as professionals	.833	.837	.694	.700					
4. Follow through on commitments	.923	.924	.853	.853					
5. Say one thing and do another	.781	.781	.609	.610					
6. Honor agreements	.907	.908	.823	.824					
7. Are committed to the district's stated goals and strategies	.833	.832	.693	.692					
8. Demonstrate knowledge of teaching and learning	.847	.848	.717	.719					
9. Have established a coherent strategic plan	.811	.813	.657	.660					
10. Inspire me to provide leadership for my school	.894	.896	.799	.802					
11. Allow me professional autonomy to do what is best for my school	.726	.724	.527	.525					
12. Understand district needs	.808	.806	.652	.650					
13. Take personal responsibility for their actions	.925	.926	.855	.858					
14. Display behavior consistent with their beliefs	.865	.865	.749	.749					
15. Regularly adopt different improvement interventions	.383	--	.146	--					
16. Provide a safe place for difficult conversations	.882	.879	.779	.773					
17. Facilitate shared decision making	.900	.900	.809	.810					
18. Maintain a visible presence in my school	.808	.808	.652	.653					
19. Understand student needs	.920	.916	.847	.839					

Cronbach Alpha =.97 (Full) .98 (Trim)

Extraction Method: Principal Axis Factoring

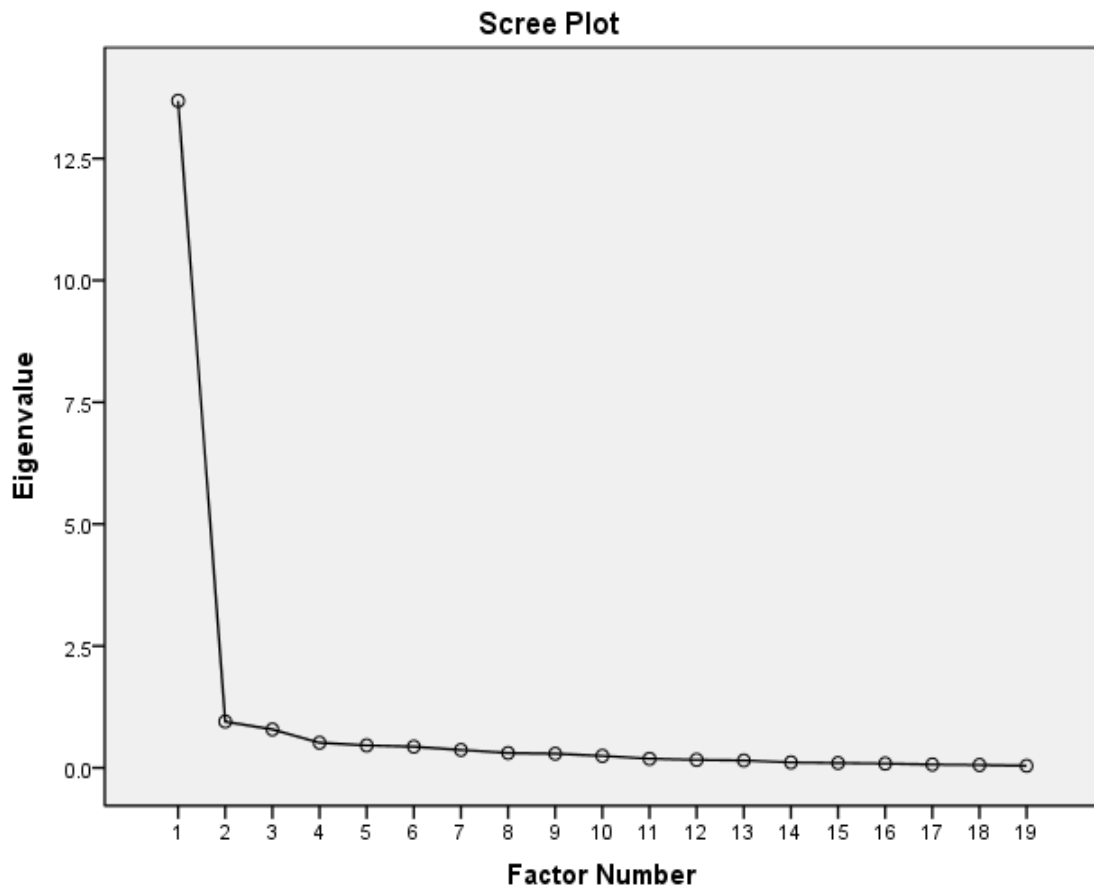


Figure 5.1 Exploratory factor analysis results for urban principal sample

Table 5.2

Bivariate correlations between trust in central administration, efficacy for instructional leadership, efficacy for management, and total principal efficacy

	Trusting Central Admin	Efficacy Instructional Leadership	Efficacy Management	Total Efficacy
Trust in Central Admin	1.0	.50**	.52**	.54**
Efficacy IL		1.0	.76**	.92**
Efficacy Mgt.			1.0	.95**
Total Efficacy				1.0

**p<.01

Results for the Statewide Sample

The second sample consisted of principals from across Oklahoma, representing all school types and configurations. All principals were members of the Cooperative Council of Oklahoma School Administrators (CCOSA).

Again, an exploratory factor analysis was conducted. Results show that one factor was extracted from the data with an eigenvalue over 1.0 (14.132), indicating that this one factor explained 71% of the variance in the 20 items. Factor loadings were strong, ranging from .60 to .91, with the exception of item 15 that had a weaker loading of -.61 (see Table 5.3, Figure 5.2). Strong factor loadings indicate that the observed facets of trust coheres around one common factor. Communalities (Table 5.3) provide evidence for moderately strong correlations among the items. A test of reliability was conducted to determine

inter-item consistency. A Cronbach coefficient of .97 provides evidence for strong reliability.

Correlations between trust in central administration and two additional constructs, enabling district structures and principal district commitment, were investigated. Evidence for validity was again demonstrated with strong relationships between principal trust of central office and enabling district structures ($r = .80, p < 0.01$) and with district commitment ($r = .72, p < 0.01$).

Correlation is significant at the 0.01 level (Table 5.4). The data show that when higher principal trust in central administration is present, principals also perceive that enabling district structures exist and there is a stronger commitment to the district.

Table 5.3

Exploratory factor analysis results for random sample of school administrators in Oklahoma

TRUST	Factor Loadings	Communalities	Factor	Eigenvalue	% of Variance
			1	14.132	70.660
District Level Administrators:					
1. Show concern for the needs of my school	.882	.778			
2. Value my ideas for school improvement	.866	.750			
3. Value my staff and me as professionals	.895	.802			
4. Follow through on commitments	.885	.783			
5. Say one thing and do another	.605	.366			
6. Honor agreements	.899	.808			
7. Are committed to the district's stated goals and strategies	.834	.696			
8. Demonstrate knowledge of teaching and learning	.833	.693			
9. Have established a coherent strategic plan	.751	.565			
10. Inspire me to provide leadership for my school	.884	.782			
11. Allow me professional autonomy to do what is best for my school	.806	.650			
12. Understand district needs	.911	.830			
13. Take personal responsibility for their actions	.870	.757			
14. Display behavior consistent with their beliefs	.869	.754			
15. Regularly adopt different improvement interventions	-.610	.372			
16. Provide a safe place for difficult conversations	.849	.720			
17. Facilitate shared decision making	.863	.745			
18. Maintain a visible presence in my school	.798	.636			
19. Understand student needs	.902	.813			
20. Promote a climate of collaboration	.911	.831			
Cronbach's Alpha =.97					
Extraction Method: Principal Axis Factoring					

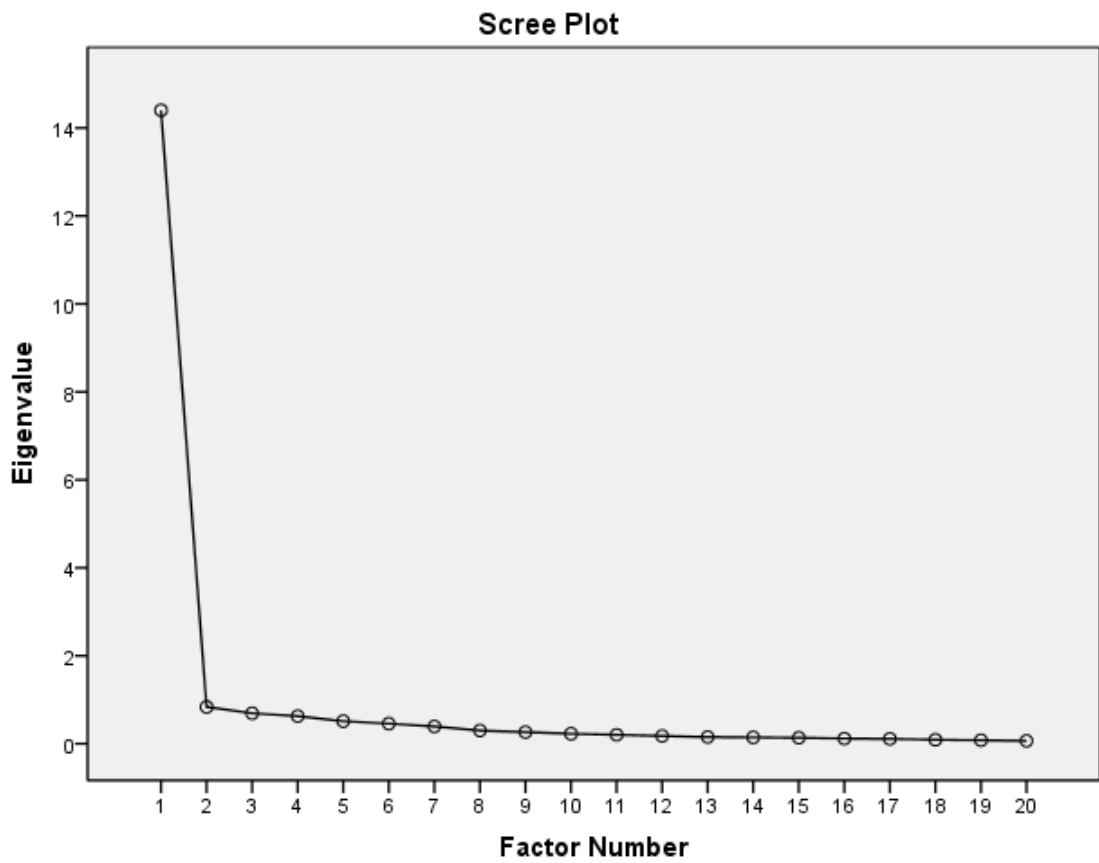


Figure 5.2 Exploratory Factor Analysis Results for Random Sample of CCOSA School Administrators

Table 5.4

Bivariate correlations between central administration trust, enabling district structure, and district commitment.

	Trust in Central Admin.	Enabling Dist. Structure	District Commitment
Trust in Central Admin	1.0	.80**	.72**
Enabling Dist. Structure		1.0	.69**
District Commitment			1.0

**p<.01

Differences in Principal Trust

The statewide sample was used to explore differences in principal trust in central administration. Guiding research questions included: *Are there differences in principal trust in central administration across urban, suburban and rural districts? Are there differences in principal trust in central administrators (PCTA) across elementary, middle/junior high, and high schools? Are there differences in the level of PTCA between Title I and non-Title I schools? Are there differences in PTCA based on principal gender?* Descriptive data were used to assess the mean difference in trust across the sample of principals. A one-way ANOVA tested the significance and size of the differences. Descriptive data for each question below may be found in Table 5.5

Are there differences in principal trust in central administration across urban, suburban, and rural districts? There were some differences in the

average perception of trust in central administration among urban, suburban and rural district principals (Table 5.5). Rural principals were more trusting of central administration (\bar{x} = 90.4) than suburban district principals or urban district principals. Suburban principals (\bar{x} =87.0) were more trusting than urban principals (\bar{x} =81.6). Even though there are differences in the average trust among administrators who work in different types of districts, the differences are not statistically significant ($F= 1.87$; $p=.16$). The size of the difference was small; only 2% of the variability in trust can be explained by the school type (partial eta squared = .02). In all likelihood, the differences are more likely a result of chance or randomness than systematic differences in central administration actions.

Are there differences in principal trust in central administrators across elementary, middle/junior high, and high schools? The data for school configuration show that the average perception of principal trust in central administration reflects only one difference. High school principals (\bar{x} = 91.4) and middle/junior high principals (\bar{x} =91.4) had higher average trust compared to elementary principals (\bar{x} =85.7) (Table 5.5). The difference was not statistically significant ($F=1.81$; $p=.17$), and the size of the difference was small (partial eta squared=.02). Again, the difference is more likely explained by randomness or chance rather than systematic effects of school grade configuration on trust in central administration.

Does principal gender make a difference in central administration trust?

Table 5.5 shows that there is virtually no average difference between males

(\bar{x} =88.2) and females (\bar{x} =88.4) regarding trust in central administration, with females being only slightly more trusting. The difference was not statistically significant ($F=.007$; $p=.93$) regarding principal trust in central administration in this sample.

Table 5.5

*Descriptive Statistics results for Random Sample of Principals
in Oklahoma Summary Table*

Dependent Variables: PTCA				ANOVA		
Demographic Variable	N	Mean	SD	F	Sig	Partial Eta Squared
School type	168	88.4	19.3	1.877	.156	.022
Urban	19	81.6	23.4			
Suburban	52	87.0	19.2			
Rural	97	90.4	18.3			
School Configuration	167	88.3	19.4	1.811	.167	.022
Elementary	89	85.7	21.2			
Middle/Jr. High	35	91.4	14.9			
High School	43	91.4	18.2			
Socioeconomic Status	169	88.3	19.3	6.394	.012**	.037
Title 1	118	85.9	20.5			
Non-Title 1	51	94.0	14.9			
Gender	169	88.3	19.3	.007	.932	.000
Male	92	88.2	19.2			
Female	77	88.4	19.5			

**p<.05; the only significant difference was between principals in Title 1 schools and Non-Title 1 schools. All other mean differences were not significant at p<.05

Does the socioeconomic level of the school, as defined by Title I designation, make a difference in principal trust of central administration? There was a difference in the average principal perception of trust in central administration between principals of Title I and non-Title I schools. Title I school principals report lower levels of trust ($\bar{x}=85.9$) than non-Title I school principals ($\bar{x}=94.0$). This was statistically significant ($F=6.39$; $p=.012$). Although there was a statistically significant difference in trust levels between Title I and non-Title I schools, the effect size was small (partial eta squared=.04). It is more likely that the challenges and pressures of meeting the needs of lower socioeconomic families in a Title I school create relational tension between principals and central administration that have implications for the presence of trust.

Summary

Two field tests were conducted in this study to ascertain the validity and reliability of the Principal Trust in Central Administration Scale. Face and content validity were established prior to the distribution of the survey via a group of site and central office administrators. Results of the exploratory factor analyses provide evidence for construct validity and a Cronbach's Alpha coefficient was high on all data runs in both samples, providing evidence for excellent reliability. Correlational evidence for concomitant validity was provided by establishing positive relationships between principal trust in central administration and principal efficacy, principal district commitment and enabling district structures. Tests of mean differences exploring principal perceptions of trust as related to various external conditions were also conducted. These

external conditions demonstrated no statistical significance in differences, with the exception being differences in trust between principals of Title I and non-Title I schools. Overall, the psychometric results provided evidence that the Principal Trust in Central Administration Scale is both valid and reliable.

CHAPTER 6: DISCUSSION

The purpose of this study was to develop a valid and reliable measure of principal trust in central administration. As with other trust scales, item construction was based on the general definition of trust and generally accepted responsibilities of central administration. In this section, results of the empirical investigation are discussed and implications for effective school performance considered. Three specific areas are addressed: the interconnected nature of principal trust in central administration, formation of principal trust in central administration, and implications for school leaders.

Trust in Central Administrators: An Interconnected Construct

The issue of how to capture a principal's perception of trustworthiness in central administration has not been specifically addressed in the literature. Using Hoy and Tschannen-Moran's (1999) conceptual definition of trust, central administration practices and behaviors that are conducive to continuous school improvement were identified. These behaviors were then aligned with the five facets of trust, thereby providing a foundation for the development of items for the Principal Trust in Central Administration Scale (PTCA).

As demonstrated in the literature review, Mishra (1996) identified trust as a multifaceted construct. Building from Mishra's work, Hoy and Tschannen-Moran describe multiple facets of trust that lead a person or group to risk vulnerability. The facets of trust consist of honesty, openness, competence, reliability, and benevolence (Hoy & Tschannen-Moran, 1999). For principal trust in central administration to form, the degree of trustworthiness based on

social exchanges with central administrators occur during vision setting, curriculum planning and development, and professional development activities, using data appropriately within all activities as well as engaging in relationship-building behaviors. It could be perceived that the facets of trust and the multiple responsibilities of central office administrators act as distinct, individual sources of trust beliefs; but consistent with other trust forms identified in the literature (i.e., faculty trust in colleagues, parent/student trust in teachers) the facets of trust are interrelated and combine to shape trust beliefs. In other words, trust beliefs are informed by the combination of trust facets, with no facet providing dominance or standing alone as the sole determinant. While trust involves beliefs and actions, it stands as a complex construct with interconnected facets.

The exploratory factor analysis performed on two separate samples in this study supported the interdependent nature of the facets of trustworthiness. In both samples, finding one eigenvalue exceeding 13.0, and 71% of the variance explained by one factor provided strong evidence that actions of the central administration in aggregate form a trust belief. Strong factor loadings (ranging from .72 - .93 in Sample One and .60 - .91 in Sample Two) indicated that the observed facets of trust cohere around one common factor, *trust*. A test of communalities, or each item's correlation to all the other items, provided evidence for moderately strong correlations among the items. Again, this held true for both samples. Further, a Cronbach's Alpha test (.97 for both samples) provided strong evidence of reliability in the PTCA Scale.

The strong factor loadings revealed in the exploratory factor analysis, along with moderately strong correlations among the items, lend support to the assertions that trust is an interconnected construct. While isolated incidents of trust formation may appear to be based on the presence of one trust facet only, the consistently high factor loadings of the items onto a single construct, *trust*, and the consistent evidence of interrelationships among the factors as indicated by the communalities supports the idea of the interconnectedness of the facets- benevolence, reliability, competence, openness and honesty.

The findings in this study also support what has been demonstrated in the literature (Bryk & Schneider, 2002; Hoy & Kupersmith, 1984). Just as faculty trust in principals is grounded in repeated interactions and based on the presence of trust facets, principal trust in central administration is based on social exchanges in which central administrators are perceived to be open, competent, reliable, benevolent, and honest. Just being competent is not enough to elicit trust beliefs; central administrators must also act openly, benevolently, reliably, and honestly. It stands to reason that if central administrators act in ways that are consistent with the integration of trust facets, trust will be present, and central administrators will be more effective in fulfilling their responsibilities for district improvement.

Principal Trust in Central Administration: Formation and Effects

The primary purpose of this study was to develop a valid and reliable measure of principal trust in central administration. That stated, results of the empirical investigation offer informative insight into the formation of principal

trust in central administration. Some conjectures can be drawn from the correlational evidence used to test concomitant validity and the ANOVA results used to test for group differences.

When correlations were run between the Principal Trust in Central Administration Scale and other similar constructs such as principal efficacy, enabling district structures, and principal district commitment, positive relationships were evidenced among all the variables. In the Urban Sample, bivariate correlations between trust in central administration, principal efficacy for instructional leadership ($r=.50, p<0.01$), principal efficacy for management ($r=.52, p<0.01$), and total principal efficacy ($r= .54, p<0.01$) established additional evidence for construct validity with significant positive relationships. This correlational evidence established concomitant validity for the Principal Trust in Central Administration Scale. As noted earlier, principal self-efficacy influences the development of leadership strategies and the competent execution of those strategies (McCormick, 2001). Leadership self-efficacy, in turn, has been related to the skills necessary, including the formation of trust, to affect improvement in schools. Since principals' sense of efficacy is significantly positively correlated to both teacher and student/parent trust (Tschannen-Moran & Gareis, 2004), the positive correlation in this study between principal trust in central administration and principal efficacy led to the conclusion that principal trust formation in central administration parallels the development of trust forms at the school level, which, in turn, have the potential to influence practices related to effective school performance. The positive correlational evidence

between principal trust in central administration and principal efficacy shows that trust beliefs are related to perceptions that have consequences for leadership beliefs and actions.

In the state-wide sample, correlations between trust in central office administration and enabling district structures ($r=.80$, $p<0.01$) and principal district commitment ($r = .72$, $p<0.01$) were investigated. Strong positive relationships between trust in central office and these two additional constructs were also demonstrated. The positive correlation found in this study between principal trust in central administration and enabling district structures also parallels findings regarding faculty trust in principals and enabling school structures (Hoy & Sweetland, 2001). An enabling school structure is a hierarchy that provides a system of rules and regulations that guides problem solving rather than punishes failure at the school level. The data in this study support the idea that enabling district structures relate to principal trust in central office as well, an idea also supported by Daly (2009) who asserts that coercive, top-down, bureaucratic procedures are most often observed in district-school relationships when trust is not present. Central office mandates, when handed down arbitrarily and without explanation or input from others, probably occur in districts where trust is low. Enabling district structures require the presence of trust and trust, in turn, likely allows for more enabling structures.

Finally, principal district commitment is another construct that correlates positively with principal trust in central administration. Significant correlations as previously mentioned give credence to the idea that the formation of trust

relationships between principals and central office administrators create for the principal an emotional attachment to the district that leads to increased role longevity and commitment to district visions and goals. These three constructs— principal efficacy, enabling district structures, and principal district commitment—are significantly related to principal trust in central administration and lead one to believe that principal-central office administrator trust formation and its effects on school improvement occurs in much the same way as faculty-principal trust.

ANOVA results used to test group differences were consistent with existing evidence on the formation of trust. When testing for differences in principal trust across urban, suburban, and rural districts, results showed only a small mean difference that was more likely the result of chance than systematic differences in central administrative actions. There was also only a small difference in trust among elementary, middle/junior, and high school principals. Again, this difference was more likely random and not based on systemic differences across school configurations. Differences in principal gender were nonexistent. The small differences in school type and configuration seem reasonable. Trust is the product of relationships and school type or configuration do not account for the quality of relationships between principals and central administrators.

The poverty level of the school (Title I or non-Title I) was one condition that had a statistically significant relationship with principal trust in central administration. Principals in Title I schools had lower trust than principals in

non-Title I schools. Even though the difference was statistically significant the effect size was small. It is likely the challenges and pressures of being a Title I school can create relational tension between principals and central administrators that have consequences for trust. More research into this finding is warranted.

Implications for District Leadership

The development of processes in a district seeking true improvement reflects genuine and appropriate behaviors and practices by central administrators that also reflect the facets of trust. A case can be made for the establishment of trust between principals and central office administrators via appropriate, positive actions and interactions that are open, benevolent, competent, and honest, which results in the building of reliable, interactive relationships similar to those between principals and teachers. The Principal Trust in Central Administration Scale can be used by school districts to measure the degree to which the behaviors of central administrators support site improvement through the establishment of strong relationships between principals and the central office. Trust in central administration can also be viewed as a lens or framework through which to examine central office actions and interactions to determine if those behaviors lead to loosely coupled systems or a strong district student-learning culture. Firestone (2009) asserts that only in districts that create visions and missions leading to authentic behaviors and practices in the areas of curriculum, assessment, and use of data (i.e., student-learning systems) will trust be found. And only in districts that

infuse communication and relationship building with trust facets (benevolence, competence, reliability, openness, and honesty) while implementing those missions will trust be perceived as present. The Principal Trust in Central Administration Scale can help districts measure perceptions of principals toward the words and actions of central administrators.

In general, central administrators who act in ways perceived as competent, open, reliable, and honest as they design and support the implementation of district goals and strategies are likely to engender trust. How do central administrators move forward in establishing trust with site principals? Evidence from this study combined with studies of other trust forms (e.g. teacher trust in principal) point to the importance of district culture and leadership behaviors and practices.

The idea that trust in central administration is positively related to an effective organizational culture is supported by the finding in this study that principal trust in central administration is positively related to district structures perceived as enabling. Additionally, principals committed to the district had higher trust. Other forms of trust, like teacher-principal and parent-school, are shaped by supportive norms characteristic of positive school climate and culture (Adams & Forsyth, 2007a, Hoy, Sabo & Barnes, 1996; Tschannen-Moran & Hoy, 1998; Tschannen-Moran, Parrish, & DiPaola, 2006). There is also support from school leadership research that lends credence to the idea that principal-central administration trust and healthy district cultures contribute to a positive reciprocal relationship (Chuuon et al., 2008; Daly & Finigan, 2010; Firestone,

2009; Louis, 2006). More research into the relationship between district structures and culture and trust in central administration is needed.

A second idea that warrants further research is the notion that actions and interactions are drivers of central administration trust. Bryk and Schneider's (2002) relational trust theory hinges on the idea that leadership style can facilitate positive teacher trust discernments. The intentions of principals are judged by their actual leadership behaviors and practices, with the expectation that principals are attuned to the needs of teachers, open to teacher feedback, and to building a healthy culture. Mixed findings in the literature suggest that while contextual conditions may be related to different forms of trust, (i.e., district size, grade configuration, principal experience, gender, or ethnicity), these conditions are not as important as the actions and interactions of central administration. This premise is supported by the findings in this study. Items for the PTCA measure were generated based on behaviors identified in the literature as imperative for district continuous improvement and linked to the established facets of trust: benevolence, reliability, competence, honesty, and openness. Principal trust in central administration is likely affected more by actions and social interactions than by contextual conditions. This is consistent with Bryk and Schneider's (2002) findings that while some contextual school conditions do appear to matter in the formation of trust, socially defined role expectations and actual behaviors and interactions are more important than contextual conditions.

Conclusion

This study focused on the creation of a valid and reliable measure of principal trust in central administration. Results were encouraging. The survey had high factor loadings, good validity, and strong reliability. Two samples were analyzed, one group of urban principals and a larger, more representative sample of principals across Oklahoma. Both samples, however, were relatively small and confined to one state in one part of the country. Replicative studies to confirm the validity and reliability of the Principal Trust in Central Administration measure (PTCA) in other settings are necessary.

Future research is also needed to explore sources and effects of trust in central administration. The descriptive, contextual evidence suggests that school type (urban, suburban, rural), school configuration (elementary, middle/junior high, high school), or principal gender do not make a difference in the trust attitudes that principals feel toward the central office. The socioeconomic status of a school, as defined by Title I status, may contribute to principal trust beliefs in some way; but the effect of being a Title I school is likely to be a mediating or moderating condition that is related to external pressures or factors that affect the quality of relationships between principals and central office administrators. The fact that a school serves a low socioeconomic student population does not mean that there will be a lack of trust.

There are other contextual variables that could also be studied in future research. Level of principal experience overall, years in the current school, ethnicity, and level of education are a few factors that may also contribute to

trust beliefs. While significant relationships may be revealed through statistical analysis, qualitative investigation that describes in rich detail actions and characteristics of central administrations with high trust are also important. There is no evidence about how central administration practices affect trust beliefs. This is an area that requires future study.

The creation of the Principal Trust in Central Administration Scale contributes to the research that supports the presence of trust in an educational environment. Principal trust in central administration is likely a function of the same behavioral, cultural, and social factors that shape other trust forms. Supportive actions, open communication, clear expectations, and competent strategies are important for the formation of principal trust in central administration. Although additional study is needed, the Principal Trust in Central Administration Scale can be one more tool in the researcher's arsenal to use to identify positive structures for school improvement for school practitioners.

REFERENCES

- Adams, C.M. (2008). Building trust in schools: A review of the empirical evidence. In W. K. Hoy & M. DiPaola (Eds.), *Improving schools: Studies in leadership and culture*. (pp.29-54). Charlotte, NC: Information Age.
- Adams, C.M. & Forsyth, P.B. (2007a). *Determinants of parent-school trust: A multilevel analysis*. A paper presented at the annual meeting of The American Educational Research Association, Chicago, IL.
- Adams, C.M. & Forsyth, P.B. (2007b). Promoting a culture of parent collaboration and trust: An empirical study. *The Journal of School Public Relations*, 28, 32-56.
- Adam, C.M. & Forsyth, P. B. (2009). Conceptualizing and validating a measure of student trust. In Wayne K. Hoy and Michel DiPaola (Eds.), *Studies in school improvement* (pp. 263-281). Charlotte, NC: Information Age.
- Adams, C.M., Forsyth, P.B., & Mitchell, R.M. (2009). The formation of parent-school trust: A multilevel analysis. *Educational Administration Quarterly*, 45 (4), 4-33.
- Adler, P.S. (1999). Building better bureaucracies. *Academy of Management Executive*, 13, 36-49.
- Alexander, L. (1991). *America 2000: An education strategy*. Washington DC: U.S. Department of Education.
- Allen, N. J. & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Al-Mutairi, M. S., Hipel, K.W., & Kamel, M. S. (2007). Trust: Different views, one goal. *Journal of Business and Technology*, 3(1), 43-55.
- Baier, A. (1986). Trust and antitrust. *Ethics*, 96(2), 231-260.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Barber, B. (1983). *The logic and limits of trust*. New Brunswick, NJ: Rutgers University Press.

- Bass, B.M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rded.). New York: Free Press.
- Bateson, P. (2000). The biological evolution of cooperation and trust. In D. Gambetta (Ed.), *Trust, Making and breaking cooperative relations*, (pp. 14-30). Department of Sociology: University of Oxford.
- Berry, B., Hoke, M., & Hirsh, E. (2004, May). The search for highly qualified teachers. *Phi Delta Kappan*, 85(9), 684-689.
- Bertalanffy, K. (1968). *General system theory: Foundations, development, applications*. New York: George Braziller.
- Bigley, G.A., & Pearce, J.L. (1998). Straining for shared meaning in organization science: Problems of trust and distrust. *Academy of Management Review*, 23,405-421.
- Black, P. & Wiliam, D. (1998). Inside the black box: Raising standards through classroom assessment. *Phi Delta Kappan*, 80(2), 139-144.
- Blake, M., & MacNeil, A. J. (1998). Trust: The quality required for successful management. In Y. Cano, F. H. Wood, & J. C. Simmons (Eds.), *Creating high functioning schools: Practice and research* (pp.29-37). Springfield, IL: Charles C. Thomas.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford.
- Bryk, A. S. & Schneider, B. (1996). *Social trust: A moral resource for school improvement*. (Contract No. R117Q00005-95). Washington, DC: Office of Educational Research and Improvement.
- Bryk, A.S., & Schneider, B. (2002) *Trust in schools: A core resource for improvement*. New York: Russell Sage Foundation.
- Bryk, A., & Schneider, B. (2003, March). Trust in schools: A core resource for school reform. *Educational Leadership*, 60(6). Retrieved February 13, 2010, from Academic Search Elite database.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19, 533-546.
- Burt, R.S. & Knez, M. (1996). Trust and third-party gossip. In R.M. Kramer & T.R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 68-69). Thousand Oaks, CA: Sage.

- Butler, J. K., & Cantrell, R. S. (1984). A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates. *Psychological Reports, 55*, 81-105.
- Center on Education Policy. (2006). *From the capital to the classroom*. Retrieved April 21, 2010, from <http://www.cep-dc.org/nclb/Year4/Press/>
- Center on Education Policy. (2007). *What now? Lessons from Michigan about Restructuring schools and next steps under NCLB*. Washington, DC: Author.
- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Belknap Press of Harvard University Press.
- Corbett, H. D., & Wilson, B. L. (1992). The central office role in instructional improvement. *School Effectiveness and School Improvement, 3*(1), 45-68.
- Corcoran, T., Fuhrman, S. H., & Belcher, C. L. (2001). The district role in instructional improvement. *Phi Delta Kappan, 83*(1), 78-84.
- Cummings, L. L., & Bromiley, P. (1996). The organizational trust inventory (OTI): Development and validation. In R. M. Kramer & T.R. Tyler (Eds.), *Trust in Organizations* (pp. 302-319). Thousand Oaks, CA: Sage.
- Cunningham, W. G. & Gresso, D. W. (1993). *Cultural leadership: The culture of excellence in education*. Boston: Allyn and Bacon.
- Chhuon, V., Gilkey, E.M., Gonzalez, M., Daly, A.J., & Chrispeels, J.H. (2008). The little district that could: The process of building district-school trust. *Educational Administration Quarterly, 44*, 227.
- C-Spanvideo [Producer]. (2001). Administration Education Plan. [Testimony of Secretary Rod Paige about President Bush's proposed education policies, collectively call No Child Left Behind.] Retrieved from www.c-spanvideo.org/videoLibrary/mobilevideo.php?proqid=171038
- Daly, A.J. (2009). Rigid response in an age of accountability: The potential of leadership and trust. *Educational Administration Quarterly, 45*, 168-216.
- Daly, A. J., & Chrispeels, J. (2005a). From problem to possibility: Leadership for implementing and deepening effective schools processes. *Journal for Effective Schools, 4*, 7-25.

- Daly, A. J., & Chrispeels, J. (2005b). *Trust and leadership as a mediator for threat-rigidity*. Paper presented at the annual meeting of the American Educational Association, Montréal, Québec, Canada.
- Daly, A. J., & Chrispeels, J. (2008). A question of trust: Predictive conditions for adaptive and technical leadership in educational contexts. *Leadership and Policy in Schools, 7*(1), 30-63.
- Daly, A.J., & Finigan, K. S. (2010). A bridge between worlds: Understanding network structure to understand change strategy. *Journal of Educational Change, 11*, 111-138.
- Daly, A.J., & Finigan, K S. (in press). The ebb and flow of social network ties between district leaders under high stakes accountability. *American Educational Research Journal, 48*(1), 39-79.
- Darling-Hammond, L., Pacheco, A., Michelli, N., LePage, P., Hammerness, K., & Youngs, P. (2005). Implementing curriculum renewal in teacher education: Managing organizational and policy change. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world* (pp.442-479). San Francisco, CA: Jossey-Bass.
- Datnow, A. & Castellano, M. (2003). Leadership and success for all. In J. Murphy and A. Datnow (Eds.), *Leader for school reform: Lessons from comprehensive school reform designs* (pp.187-208). Thousand Oaks, CA: Corwin Press.
- Datnow, A. & Stringfield, S. (2000). Working together for reliable school reform. *Journal of Education for Students Placed At Risk, 5*(1), 183-204.
- DeBray-Pelot, E. & McGuinn, P. (2009). The new politics of education: Analyzing the federal education policy landscape in the post-NCLB era. *Educational Policy, 23* (15), 15-42.
- De Dreu, C. & Van De Vliert, E. (1997). *Using conflict in organizations*. Thousand Oaks, CA: Sage.
- Deming, W. E. (1986). *Out of the crisis*. Cambridge: Massachusetts Institute of Technology Center for Advanced Engineering Study.
- Deming, W.E. (1994). *The new economics for industry, government, education*. Cambridge: Massachusetts Institute of Technology Center for Advanced Engineering Study.
- Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution, 2*, 265-279.

- Deutsch, M. (1960). The effect of motivational orientation upon trust and suspicion. *Human Relations*, 13, 123-139.
- Deutsch, M. (1973). *The resolution of conflict*. New Haven, CT: Yale University Press.
- Dimmock, C. & Hattie, J. (1996). School principals' self-efficacy and its measurement in the context of restructuring. *School Effectiveness and School Improvement*, 7(1), 62-75.
- Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science*, 1(4), 450-467.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for organizational research. *Journal of Applied Psychology*, 87, 611-628.
- Dyer, J. H., & Chu, W. (2003). The role of trustworthiness in reducing transaction costs and improving performance: Empirical evidence from the United States, Japan, and Korea. *Organization Science*, 14, 57-68.
- Farkas, S., Johnson, J., & Duffett, A. (with Syat, B., & Vine, J.). (2003). *Rolling up their sleeves: Superintendents and principals talk about what's needed to fix public schools*. New York: Public Agenda.
- Fehr, E., & Schmidt, E. (1999). A theory of fairness, competition and cooperation. *Quarterly Journal of Economics*, 114(3), 817-841.
- Finn, C.E. (1989). A nation still at risk. *Commentary*, 87, 17-23.
- Firestone, W. A. (2009). Culture and process in effective school districts. In W. Hoy & M. DiPaola (Eds.), *Studies in school improvement* (pp. 177-203). Charlotte, NC: Information Age Publishing, Inc.
- Firestone, W. A. & Bader, B. D. (1992). *Redesigning teaching: Professionalism or bureaucracy?* Albany, NY: SUNY Press.
- Forsyth, P.B., Adams, C. M., & Hartzler, K. D. (2007). *Teacher-principal relational trust: A study of its formation*. A paper presented at the annual meeting of The American Educational Research Association, Chicago, IL.
- Forsyth, P. B., Adams, C. M. & Hoy, W. K. (2011). *Collective trust: Why schools can't improve without it*. New York: Teachers College Press.

- Forsyth, P. B., Barnes, L. L. B., & Adams, C. M. (2006). Trust-effectiveness patterns in schools. *The Journal of Educational Administration, 44*(2), 122-141.
- Freiberg, K. L., & Freiberg, J. A. (1996). *Nuts! Southwest Airlines' crazy recipe for business and personal success*. Austin, TX: Bard Press.
- Frost, T., Stimpson, D. V. & Maughan, M. R. (1978). Some correlates of trust. *The Journal of Psychology, 99*, 103-108.
- Fullan, M. (2001). *The new meaning of educational change* (3rd ed.). New York: Teachers College Press.
- Fullan, M. (2010). *All systems go: The change imperative for whole system reform*. Thousand Oaks, CA: Corwin, a Sage Company.
- Fullan, M., Bertani, A., & Quinn, J. (2004). New lessons for districtwide reform. *Educational Leadership, 61*(7), 42-46.
- Gabarro, J. J., (1978). The development of trust, influence, and expectations. In A. G. Athos & J. J. Gabarro (Eds.), *Interpersonal behavior: Communication and understanding in relationships* (pp. 290-303). Englewood Cliffs, NJ: Prentice Hall.
- Gambetta, D. (1988). Can we trust? In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 213-238). Cambridge, MA: Basil Blackwell.
- Garfinkel, H. (1963). A conception of, and experiments with, trust as a condition of stable concerted actions. In O. Harvey (Ed.), *Motivation and social interaction: Cognitive determinants* (pp. 187-239). New York, NY: Ronald.
- Geist, J., & Hoy, W. K. (2004). Cultivating a culture of trust: Enabling school structure, teacher professionalism, and academic press. *Leading and Managing, 10*, 1-18.
- Goddard, R. D., Salloum, S. J., & Berebitsky, D. (2006, April). *An empirical examination of the importance of relational trust to academic achievement*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.
- Goddard, R. D., Tschannen-Moran, M., & Hoy, W. K. (2001). Teacher trust in students and parents: A multilevel examination of the distribution and effects of teacher trust in urban elementary schools. *Elementary School Journal, 102*(1), 3-17.

- Golembiewski, T. T. & McConkie, M. (1975). The centrality of interpersonal trust in group processes. In C.L. Copper (Ed.), *Theories of group processes*. New York: John Wiley.
- Good, D. (1988). Individuals, interpersonal relations, and trust. In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 31-48). Cambridge, MA: Basil Blackwell.
- Goodlad, J.I. (1984). *A place called school: Prospects for the future*. New York: McGraw- Hill.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Granovetter, M. (1985). Economic action and social structure: The problems of embeddedness. *American Journal of Sociology* 91, 481-510.
- Hair, J. F., Andersen, R. E., Tatham, R. L. and Black, W. C. (1995), *Multivariate data analysis with readings*. (4thed.). Englewood Cliffs, NJ: Prentice Hall.
- Hansen, J., & Sullivan, B. A. (2003). Assessment of workplace stress: Occupational stress, its consequences, and common causes of teacher stress. In J.E. Wall & G. R. Walz (Eds.), *Measuring up: Assessment issues for teachers, counselors, and administrators* (pp. 611-621). Greensboro, NC: CAPS Press.
- Henderson, J. E., and Hoy, W. K. (1982). Leader authenticity: The development and test of an operational measure. *Educational and Psychological Research*, 3(2), 63-75.
- Hoffman, J. D., Sabo, D., Bliss, J., & Hoy, W. K. (1994). Building a culture of trust. *Journal of School Leadership*, 3, 484-501.
- Hogan, R., Curphy, G., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. *American Psychologist*, 49, 493-504.
- Homans, G. (1950). *The human group*. New York: Harcourt Brace Jovanovich.
- Honig, M. (2003). Building policy from practice: District central office administrators' roles and capacity for implementing collaborative education policy. *Educational Administrative Quarterly*, 39, 292-338.
- Honig, M. (2008). District central offices as learning organizations: How socio-cultural and organizational learning theories elaborate district-central-office administrators' participation in teaching and learning improvement efforts. *American Journal of Education*, 114, 627-664.

- Honig, M., & Hatch, T. (2004). Crafting coherence: How schools strategically manage multiple, conflicting demands. *Educational Researcher*, 33(8), 16-30.
- Hosmer, L.T. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review*, 20(2), 379-403.
- Hoy, W.K. (2002). Faculty trust: A key to student achievement. *Journal of School Public Relations*, 23(2), 88-103.
- Hoy, W. K., & Kupersmith, W. J. (1984). Principal authenticity and faculty trust: Key elements in organizational behavior. *Planning and Changing*, 15(2), 80-88.
- Hoy, W. K., & Kupersmith, W. J. (1985). The meaning and measure of faculty trust. *Educational and Psychological Research*, 5, 1-10.
- Hoy, W. K., & Miskel, C. G. (2001). *Educational administration: Theory, research, and practice* (6th ed.). New York: McGraw Hill.
- Hoy, W.K. & Sabo, D.J. (1998). *Quality middle schools: Open and healthy*. Thousand Oaks, CA: Corwin.
- Hoy, W.K., Sabo, D. J., & Barnes, K. (1996). Organizational health and faculty trust: A view from the middle level. *Research in Middle Level Education Quarterly*, 19, 21-39.
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal*, 86(2), 38-49.
- Hoy, W. K., & Sweetland, S. R. (2001). Designing better schools: The meaning and measure of enabling school structures. *Educational Administration Quarterly*, 37(3), 296-321.
- Hoy, W. K. & Tarter, C. J. (1995). *Administrators solving the problems of practice: Decision-making concepts, cases, and consequences*. Boston: Allyn & Bacon.
- Hoy, W.K. & Tarter, C. J. (2006). School mindfulness and faculty trust: Necessary conditions for each other? *Educational Administration Quarterly*, 42, 236-255.

- Hoy, W. K., Tarter, C. J., & Wiskowskie, L. (1992). Faculty trust in colleagues: Linking the principal with school effectiveness. *Journal of Research and Development in Education*, 26, 38-58.
- Hoy, W. K., & Tschannen-Moran, M., (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, 9, 184-208.
- Hubbard, L., Meehan, H., & Stein, M. K. (2006). *Reform as learning: When school reform collides with school culture and community politics*. New York: Routledge.
- Johnson-George, C. E., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology*, 43, 1306-1317.
- Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *The Academy of Management Review*, 3, 531-546.
- Kanter, R. M. (1968). Commitment and social organization: A study of commitment mechanisms in utopian communities. *American Sociological Review*, 33, 499-517.
- Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81, 36-51.
- Kochanek, J. (2005). *Building trust for better schools: Research-based practices*. Thousand Oaks, CA: Corwin Press.
- Kramer, R. M. (2006). Organizational trust: Progress and promise in theory and research. In R. Kramer (Ed.), *Organizational Trust* (pp. 1-17). Oxford, UK: Oxford University Press.
- Kramer, R.M., Brewer, M. B., & Hanna, B. A. (1996). Collective trust and collective action: The decision to trust as a social decision. In R. Kramer & T. Tyler (Eds.). *Trust in organizations* (pp.357-389). Thousand Oaks, CA: Sage Publications.
- Larzelere, R. E. & Huston, T. L. (1980). The Dyadic Trust Scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family*, 42, 595-604.

- Lee, J., & Wong, K. (2004). The impact of accountability on racial and socio-economic equity considering school resources and achievement outcomes. *American Research Journal*, 41(4), 797-833.
- Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust in work relationships. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations*, (pp.114-139). Thousand Oaks, CA: Sage Publications.
- Lewis, J. D. & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63, 967-985.
- Likert, R. (1967). *The human organization*. New York: McGraw-Hill.
- Lindsfold, S. (1978). Trust development, the GRIT proposal, and the effects of conciliatory acts on conflict and cooperation. *Psychological Bulletin*, 85, 772-793.
- Louis, K. S. (2006). Changing the culture of schools: Professional community, organizational learning, and trust. *Journal of School Leadership*, 16, 477-487.
- Louis, K. S. (2007). Trust and improvement in schools. *Journal of Educational Change*, 8, 1-24.
- Louis, K. (2008). Learning to support improvement-next steps for research on district practice. *American Journal of Education*, 114(4), 681-689.
- Luhmann, N. (1979). *Trust and power*. New York: Wiley.
- Luhmann, N. (1988). Familiarity, confidence, trust: Problems and alternatives. In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 94-108). Oxford, UK: Basil Blackwell.
- Marsh, J. S., Kerr, K. A., Ikemoto, G. S., Darilek, H. Suttorp, M. Zimmer, R. W., et al. (2005). *The role of districts in fostering instructional improvement*. Santa Monica, CA: RAND.
- Marsh, J. S., Kerr, K. A., Ikemoto, G. S., & Darilek, H. (2006). Developing district intermediary partnerships to promote instructional improvement: Early experiences and lessons about the Institute for learning. In K. Wong & S. A. Rutledge (Eds.), *System-wide efforts to improve student achievement*. Greenwich, CT: Information Age Publishing.
- Massell, D. (2000). *The district role in building capacity: Four strategies*. Philadelphia, PA.: Consortium for Policy Research in Education.
- Massell, D., & Goertz, M. E. (2002). District strategies for building instructional capacity. In A. Hightower, M.S. Knapp, J. A. Marsh, & M. W. McLaughlin

- (Eds.), *School districts and instructional renewal*. New York. NY: Teachers College Press.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.
- McCormick, M. J. (2001). Self-efficacy and leadership effectiveness: Applying social cognitive theory to leadership. *Journal of Leadership Studies*, 8(1), 22-23.
- McLaughlin, M., & Talbert, J. (2003). Reforming districts: How districts support school reform (R-03-6). Washington, D.C.: Center for the Study of Teaching and Policy.
- McKnight, D.H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *The Academy of Management Review*, 23, 473-490.
- Michaels, R. E., Cron, W. L., Dubinsky, A. J., & Joachimsthaler, E. A. (1988). Influence of formalization on the organizational commitment and work alienation of salespeople and industrial buyers. *Journal of Marketing Research*, 25, 376-383.
- Mintrop, H. (2003). The limits of sanctions in low-performing schools: A study of Maryland and Kentucky schools on probation. *Education Policy Analysis Archives*, 11(3). Retrieved April 30, 2010, from <http://epaa.asu.edu/epaa/v11n3.html>
- Mintrop, H., & Trujillo, T. (2007). *School improvement under test-driven accountability: A comparison of high and low performing middle schools in California* (CSE Tech. Rep. No.717). Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing.
- Mishra, A.K. (1996). Organizational responses to crisis: The centrality of trust. In R. Kramer & T. Tyler (Eds.), *Trust in Organizations* (pp. 261-287). Thousand Oaks, CA: Sage.
- Moe, T.M. (2003). Politics, control, and the future of school accountability. In P. E. Peterson & M. R. West (Eds.), *No Child Left Behind? The politics and practice of school accountability* (pp. 80-106). Washington DC: The Brookings Institution.
- Mowday, R. T., Porter, L. W. & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism and turnover*. New York: Academic Press.

- Muijs, D., (2004). *Doing quantitative research in education with SPSS*. Los Angeles: Sage.
- Musella, D. (1995). How CEOs influence school system culture. In K. Leithwood (Ed.), *Effective school district leadership: Transforming politics into education* (pp. 223-244). Albany: SUNY Press
- Nadler, D. A., & Tushman, M. L. (1980). A model for diagnosing organizational behavior: Applying a congruence perspective. *Organizational Dynamics*, 9(3), 35-51.
- National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for school reform*. Washington DC: U.S. Office of Education.
- Paglis, L. & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior*, 23, 215-35.
- Parrish, T. B. & Wolman, J. (2004). How is special education funded? Issues and implications for school administrators. *NASSP Bulletin*, 88(640), 57-68.
- Porter, L.W., Steers, R.M., Mowday, R. T. & Boulian, P.V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59, 603-609.
- Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 295-336). Greenwich, CT: JAI Press.
- Powell, W. W. (1996). Trust-based forms of governance. In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 521-67). Thousand Oaks, CA: Sage.
- Reese, S. (2004, November). The highly qualified teacher under NCLB. *Techniques: Connecting Education & Careers*, 79(8), 33-35.
- Ray, B. (1997). *Home schooling across the United States*. Retrieved from <http://nche.hslda.org/docs/stydt/ray1997/03.asp>.
- Rosenholtz, S.J. (1989). *Teachers' workplace: The social organization of schooling*. New York: Longman Inc.
- Rotter, J. B. (1967). A new scale for the measurement of interpersonal trust. *Journal of Personality*, 35, 651-665.

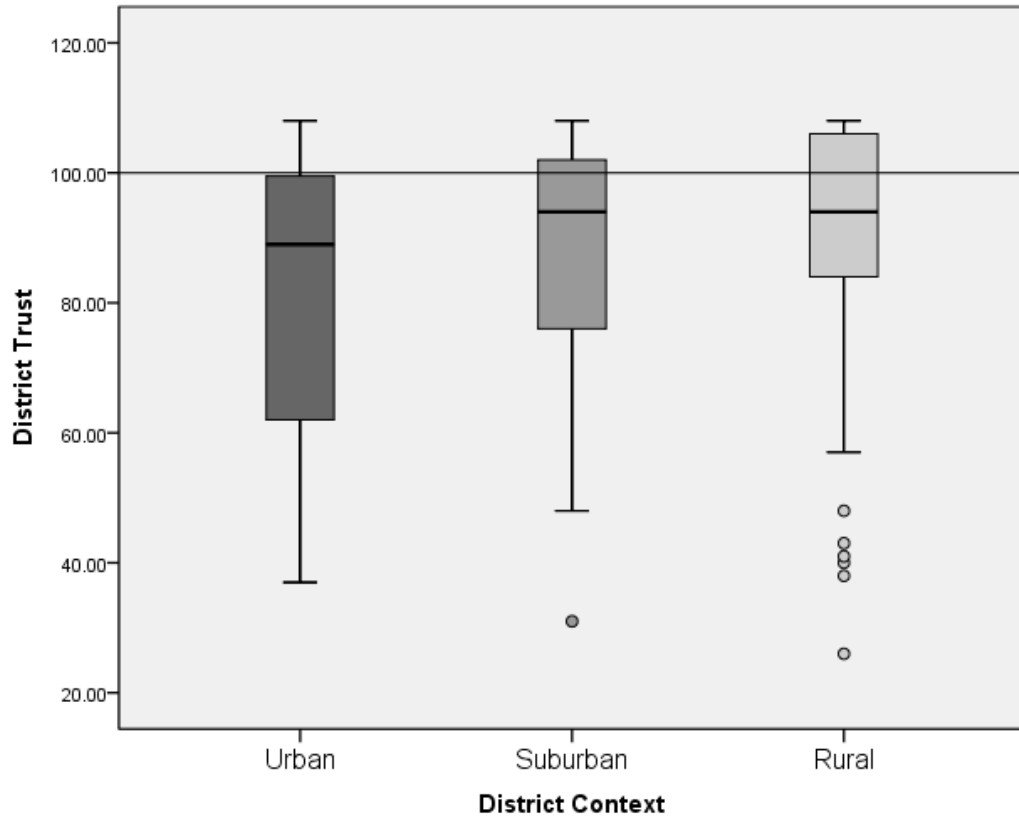
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist*, 35, 1-7.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23, 393-404.
- Senge, P. M., Kleiner, A., Roberts, C., Ross, R. B., & Smith, B. J. (1994). *The fifth discipline field book*. New York: Doubleday.
- Shapiro, D., Sheppard, B. H., & Cheraskin, L. (1992). Business on a handshake. *Negotiation Journal*, 8, 365-377.
- Sheppard, B. H., & Tuchinsky, M. (1996). Micro-ob and the network organization. In R. Kramer & T. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 140-165). Thousand Oaks, CA: Sage Publications.
- Smith, P. A., Hoy, W. K., & Sweetland, S. R. (2001). Organizational health of high schools and dimensions of faculty trust. *Journal of School Leadership*, 11(2), 135-151.
- Smylie, M. A. (2010). *Continuous school improvement*. Thousand Oaks, CA: Corwin Press.
- Smylie, M. A. & Hart, A. W. (1999). School leadership for teacher learning and change: A human and social capital perspective. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (pp. 421-441). San Francisco: Jossey-Bass.
- Snipes, J., Doolittle, F., & Herlihy, C. (2002). *Foundation for success: Case studies of how urban school systems improve student achievement*. Washington, D. C.: MDRC report.
- Spillane, J. P. (1996). School districts matter: Local educational authorities and state instructional policy. *Educational Policy*, 10(1), 63-87.
- Spring, J. H. (1991). *American education: An introduction to social and political aspects*. White Plains, NY: Longman Publishing Group.
- Spuck, D. W. & MacNeil, A. J. (1999, November). *Understanding trust relationships between principals and teachers*. Paper presented at the annual meeting of the University Council for Educational Administration, Minneapolis, MN.

- Stullich, S., Eisner, E., McCrary, J., & Roney, C. (2006). *National assessment of Title I*. Washington, DC: U.S. Department of Education.
- Sunderman, G. L., Kim, J. S., & Orfield, G. (2005). *NCLB meets school realities: Lessons from the field*. Thousand Oaks, CA: Corwin Press.
- Tarter, C.J., Bliss, J. R., & Hoy, W.K. (1989). School characteristics and faculty trust in secondary schools. *Educational Administration Quarterly*, 25, 294-308.
- Tarter, C. J., Sabo, D., & Hoy, W. K. (1995). Middle school climate, faculty trust and effectiveness: A path analysis. *Journal of Research and Development in Education*, 29, 41-49.
- Tschannen-Moran, M. (2001). Collaboration and the need for trust. *Journal of Educational Administration*, 39, 308-331.
- Tschannen-Moran, M. (2003). Fostering organizational citizenship in schools. In W. K. Hoy & C. G. Miskel, *Theory and Research in Educational Administration*. Greenwich, CT: Information Age Publishing.
- Tschannen-Moran, M. & Gareis, C. R. (2004). Principals' sense of efficacy: Assessing a promising construct. *Journal of Educational Administration*, 42(5), 573-585.
- Tschannen-Moran, M., & Hoy, W. K. (1998). Trust in schools: A conceptual and empirical analysis. *Journal of Educational Administration*, 36, 334-352.
- Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, 70(4), 547-593.
- Tschannen-Moran, M., Parish, J., & DiPaola, M. F. (2006). School climate: The interplay between interpersonal relationships and student achievement. *Journal of School Leadership*, 16, 386–415.
- Togneri, W., & Anderson, S. E. (2003). *Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools*. Washington, D.C.: Learning First Alliance and the Association for Supervision and Curriculum Development.
- Tyler, T. R., & DeGoey, P. (1996). Trust in organizational authorities. In R. M. Kramer & T. R. Tyler (Eds.). *Trust in organizations: Frontiers of theory and research* (pp. 331-350). Thousand Oaks, CA: Sage.

- Tyler, T. & Kramer, R. (1996). Whither trust? In R. Kramer & T. Tyler (Eds.), *Trust in organizations* (pp. 1-15). Thousand Oaks, CA: Sage.
- Uline, C. L., Miller, D. M., & Tschannen-Moran, M. (1998). School effectiveness: The underlying dimensions. *Educational Administration Quarterly*, 34, 462-483.
- United States Department of Education. (2001). *The no child left behind act of 2001 executive summary*. Retrieved December 31, 2010, from <http://www2.ed.gov/print/nclb/overview/intro/execsumm.html>
- United States Department of Education (2010). *ESEA reauthorization: A blueprint for reform*. Retrieved December 31, 2010, from <http://www2.ed.gov/policy/elsec/leg/blueprint/index.html>
- U.S. Department of Education. (2008). *A nation accountable: Twenty-five years after a nation at risk*. Washington, D.C., author. Retrieved from <http://www.ed.gov/rschstat/research/pubs/accountable/>
- Vogt, W. P. (2007). *Quantitative research methods for professionals*. Boston, MA: Pearson, Allyn and Bacon.
- Weick, K. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21(1), 1-19.
- Whitehead, A. (1925). *Science and the modern world*. Cambridge, MA: Cambridge University Press.
- Williamson, O. (1993). Calculativeness, trust and economic organization. *Journal of Law and Economics*, 36, 453-486.
- Winter, P., & Morgenthal, J. R. (2002). Principal recruitment in a reform environment: Effects of school achievement and school-level on applicant attraction to the job. *Educational Administration Quarterly*, 38, 319-340.
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, 9, 141-159.
- Zand, D. E. (1971). Trust and managerial problem solving. *Administrative Science Quarterly*, 17, 229-239.
- Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure, 1840-1920. In B. M. Staw & L. L. Cummings (Eds.). *Research in organizational behavior*, 8, 53-111. Greenwich, CN: Jai Press.

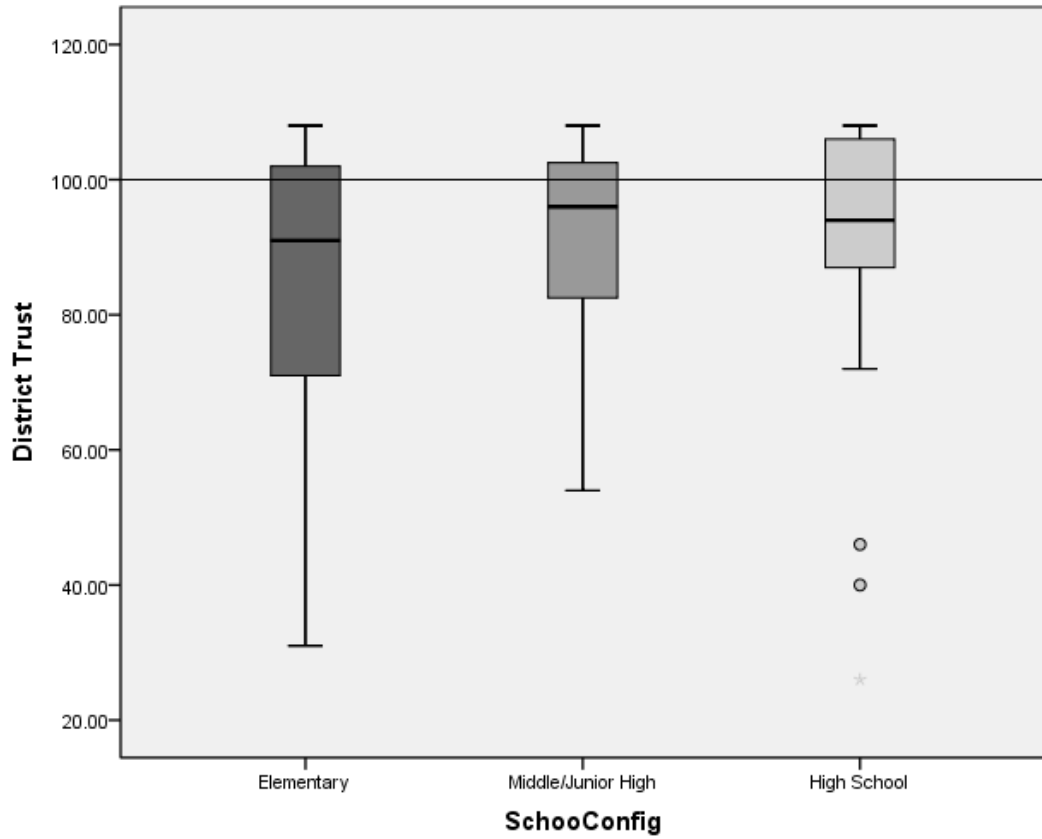
APPENDIX A

Differences in Principal Trust in Central Office Related to School Type.



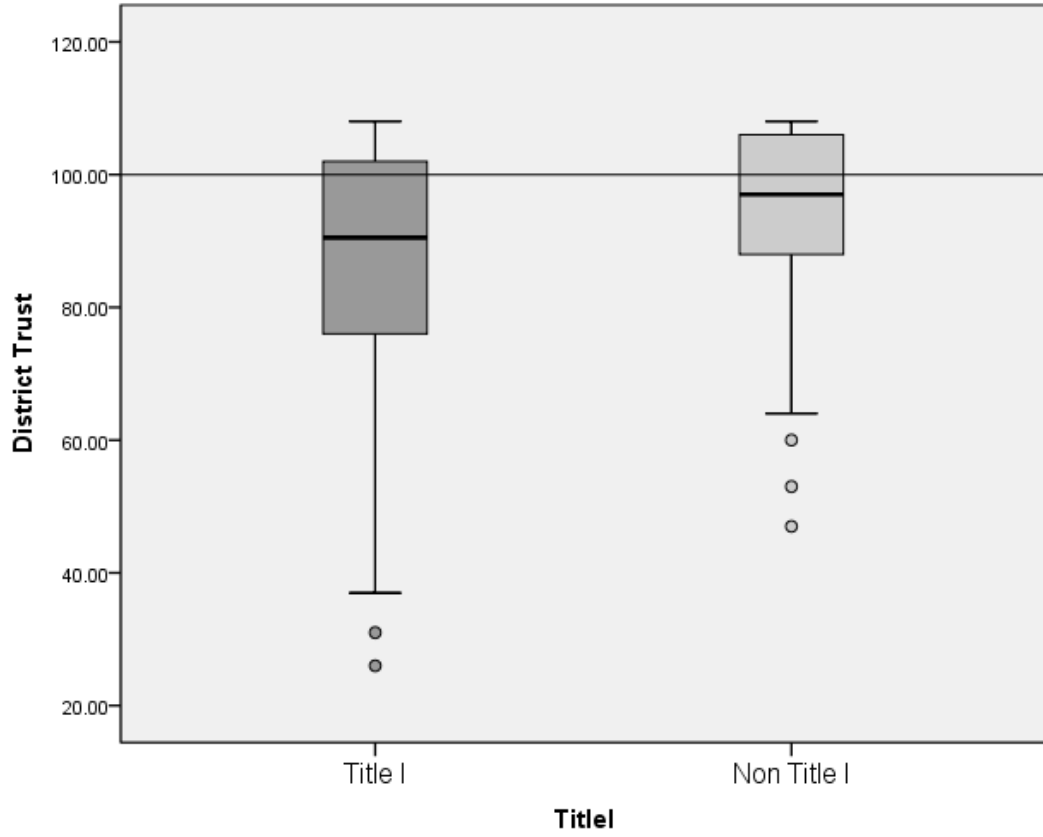
APPENDIX B

Differences in Principal Trust in Central Administration Related to School Configuration



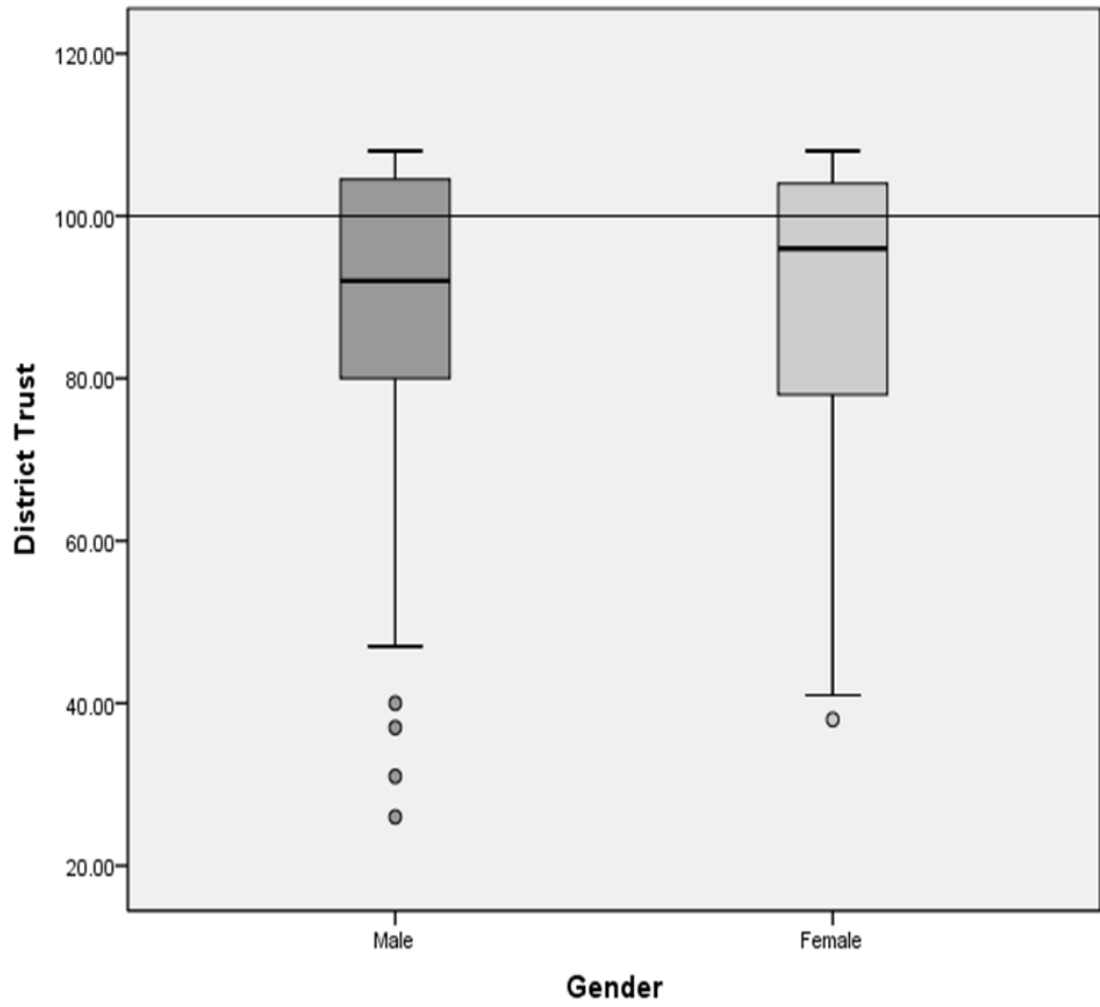
APPENDIX C

Differences in principal trust in central administration related to socioeconomic level (Title I)



APPENDIX D

Differences in Principal Trust in Central Administration Related to Gender



APPENDIX E

Institutional Review Board Approval Letter



**Institutional Review Board for the Protection of Human Subjects
Approval of Initial Submission – Exempt from IRB Review – AP01**

Date: August 07, 2012

IRB#: 0936

Principal Investigator: Debra Ann Potts Burchfield

Approval Date: 08/06/2012

Exempt Category: 2 - Observation public behavior

Study Title: Conceptualizing and Validating a Measure of Site Administrator Trust in District Administration and a Measure of Principal Optimism

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in black ink that reads 'Lara Mayeux'.

Lara Mayeux, Ph.D.

Vice Chair, Institutional Review Board