



This is to certify that the  
dissertation entitled

THE IMPACT OF SCHOOL LOCATION ON PRINCIPAL  
LEADERSHIP'S ABILITY TO BUILD CAPACITY AT THE  
BUILDING LEVEL

presented by

RESCHE DEVONE HINES

has been accepted towards fulfillment  
of the requirements for the

Ph.D. degree in Educational Administration

Christopher Deenbar Jr  
Major Professor's Signature

June 8, 2006

Date

*MSU is an Affirmative Action/Equal Opportunity Institution*

LIBRARY  
Michigan State  
University

**PLACE IN RETURN BOX** to remove this checkout from your record.  
**TO AVOID FINES** return on or before date due.  
**MAY BE RECALLED** with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE

**THE IMPACT OF SCHOOL LOCATION ON PRINCIPAL LEADERSHIP'S ABILITY  
TO BUILD CAPACITY AT THE BUILDING LEVEL**

**By**

**Resche Devone Hines**

**A DISSERTATION**

**Submitted to  
Michigan State University  
In partial fulfillment of the requirements  
For the degree of**

**DOCTOR OF PHILOSOPHY**

**Educational Administration**

**2006**

## ABSTRACT

### THE IMPACT OF SCHOOL LOCATION ON PRINCIPAL LEADERSHIP'S ABILITY TO BUILD CAPACITY AT THE BUILDING LEVEL

By

Resche Devone Hines

The purpose of the current study was to examine the impact of school location (context) on the principal's leadership ability to build capacity at the school building level. This study was carried out through employment of quantitative methodology and the implementation of two theoretical models provided by Portz, Stein and Jones (1999) and Heck (1996). These models were used as the ideological foundation to empirically test the nature of the theorized relationships between school location and leadership actions for capacity building. The results indicated that school contexts may help to determine factors that will best assist principals in their decision-making process to effectively meet the leadership demands of accountability. These results prove that the effect of principal decision-making is a more complex matter, that is, that school location promotes a distinct but potentially complementary approach to understanding the effect of school context influence on principal decision-making

**Copyright by  
RESCHE DEVONE HINES  
2006**

## Dedication

This document is dedicated to my mother, Bonnie R. Rushing. I thank you for all your love, support, and sacrifice.

## ACKNOWLEDGEMENTS

First, I would like to give thanks to God for allowing me to reach this goal. I would like to express my utmost gratitude to all of the individuals who dedicated their expertise, time, patience, and support throughout the process that resulted in the completion of my dissertation. To my mother, stepfather, uncles, aunts, grandparents, godmother and godfather, brothers, sisters, nieces, nephews and entire family, and dear friends (Travaris Thomas, Morris Martin, Sterling Gibson, Kevin and Rickena Perry, Joe Philon, Misty Stanton, Keith Redmond, Thaddeus Walker, Jennifer Johnson, Joyce Piert, Shane Brown, Farrah Serrette, Christina Grange, Jakino and Quatoya Tyson, Naja Chikazunga, Faith Elizabeth Fletcher, Sheree Huxtable, Aisha Ford, Rolanda Pickett, Erica Jordan, Carl Thomas, Antoine Broxise, Jonathan Livingston and Family, Emanuel and Tamara Thomas, Jillian Henry, Michelle Rutledge, Council Rudolph, Dack Duncan, Aswad Mack, Darrell McGee, and Demeris C. Coney), thank you for your love, support, and encouragement to be the best I could be, and for your grounding when necessary. To my advisor and mentors, Dr. Karen Patricia William and Dr. Christopher Dunbar, my dissertation committee (Dr. Raykov and Dr. Mabokela), the entire Michigan State University Department of Educational Administration, and the Florida A & M psychology department thank you for training me to do research that I could be proud of and that would mean something in the community. Thank you for the countless hours of professional assistance and parental encouragement. Finally, I would like to thank all my classmates at Michigan State and Florida A&M University for your support and encouragement.



## TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER 1	
INTRODUCTION	1
Background	2
Reform Policies Impact on Principal Leadership	4
What are the effects of principal leadership?	9
Direct-Effects Model	14
Moderated-Effects Model	15
Mediated-Effects Model	16
Reciprocal-Effects Model	18
Standards-Based Reform	21
Effects of Leadership by the Principal	23
School Culture	24
School Context	25
Problem Statement	26
Study Purpose	26
Research Questions	27
CHAPTER 2	
REVIEW OF THE LITERATURE	28
Standards-Based Reform and Principal Leadership	29
Role of Principal Leadership	34
Characteristics of Effective Principals	35
Effects of Leadership by the Principal	36
School Context, Standard-based Reform, and Principal Leadership	42
CHAPTER 3	
METHODS	49
Theoretical Model	49
Research Questions	54
Sample	54
Instrumentation	55
Demographic Variables	59
Method of Statistical Analysis	60
Multiple Regressions Models	61
CHAPTER 4	
RESULTS	63
Descriptive Statistics	63

Correlations	64
Multiple Regressions	65
Structural Equation Modeling	70
Criteria for Evaluating Model Fit	73
SEM Analysis of the Hypothesized Model	75
CHAPTER 5	
DISCUSSION	78
Process of the Study	78
Discussion	81
Limitations of the Study	88
Directions for Future Research	89
Conclusion	90
BIBLIOGRAPHY	94
APPENDIX	101

## LIST OF TABLES

Table	Page
1. Demographic Characteristics of the Study Population.....	63
2. Inter-Correlations Matrix of the Study Population.....	65
3. Regression Model for Urban Population.....	66
4. Regression Model for the Suburban Population.....	67
5. Regression Model for the Rural Population.....	68
6. Perception of Influence.....	72
7. Perception of School Progress.....	72
8. Perception of Professional Development Importance.....	73
9. Decision-Making Activity.....	73
10. Intra-Class Correlation of the Study Population.....	75
11. Goodness of Fit Indices.....	75

## **LIST OF FIGURES**

<b>Figure</b>	<b>Page</b>
1. Structural Model for Principal Decision-Making Activity.....	71
2. Theoretical Model for Principal Decision-Making Activity .....	101
3. Results of SEM analysis for Total Sample Decision-Making Activity Model .....	102
4. Results of SEM analysis for Urban Sample Decision-Making Activity Model.....	103
5. Results of SEM analysis for Rural Sample Decision-Making Activity Model .....	104
6. Results of SEM analysis for Suburban Sample Decision-Making Activity Model..	105

## **CHAPTER 1**

### **INTRODUCTION**

Effective leadership is widely accepted as being a key element in achieving school improvement. Research findings from a variety of countries and diverse school contexts have revealed the influential effect of leadership in securing school development and change (Hallinger & Heck, 1999; Heck, 1996; West, Jackson, Harris & Hopkins, 2000). For example, early empirical research that assessed leadership practiced by principals in urban schools found that principals differed greatly in the kind of leadership they provided (Blank, 1987). Additionally, there is evidence to suggest that existing leadership theories only partially reflect and/or explain the current approaches to leadership in schools (Blank, 1987; Hallinger & Heck, 1996, 1998). Research findings have highlighted the idea that effective leadership is defined and driven by contextual value systems (Heck, 1996). Facing challenging contexts, the demands that schools place upon leaders requires principals to have a broad range of approaches that are underpinned by a core set of values. Furthermore, research has shown the importance of the principal in influencing student achievement through the management of meaning within school culture, the nurturing of a collaborative work environment with teachers, and the fostering of a resilient school culture (Deal, 1987; Sergiovanni & Moore, 1989).

This study examines the principal's ability to build capacity in three different contextual settings and the causal influence that a principal's response to standards-based accountability has on decision-making. Using cross-sectional survey data and quantitative methodology, the goal of this study is to provide scholars, practitioners, and policy makers with empirical data to better inform policy development and implementation

through a richer understanding of the relationship between school context and the leadership actions of the principal.

### *Background*

Throughout the history of American schooling there have been many government-sponsored initiatives intended to change school structure. Historically, education reform legislation has addressed many issues (desegregation, equality, equity, finance reform, and so on). Some of the more recent reform policies have centered on school accountability (e.g., Goals 2000 and No Child Left Behind). Both policies were designed and implemented to effect change in the leadership of the organization and the configuration of schools. Each legislation addressed one of the pressing issues of contemporary education, enhancing the impact of principal leadership on academic achievement, an issue educational leadership literature has struggled to answer since the conceptualization of the field (Hallinger & Heck, 1996).

Through the decades of the twentieth century the role of the principal in schools within the United States has greatly evolved and could generally be characterized as highly transformative. In the 1930s, the governing role of school principals was seen as a scientific manager. The principal's role transitioned to a democratic leader in the 1940s. In the 1970s the principal's role was viewed as a humanistic facilitator (Suskavcevic & Blake, 2004), and in the 1980s as an instructional leader (Beck & Murphy, 1993). The continued evolution of the principal as a leader over the span of the twentieth century raises the questions of how to define and what is the role of principal leadership, in particular, instructional leadership.

Though instructional leadership received much attention and pervaded leadership literature during the 1980s, this ideology was actually introduced a few decades earlier (Suskavcevic & Blake, 2004). Mackenzie and Corey (1954) were among the early writers who referred to the school principal as an instructional leader of a school. In terms of defining leadership, Rost (Rost, 1993) writes that leadership "...is an influential relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p. 102). Culbertson (1974) asserts that one of the more challenging tasks in educational leadership is to come to an understanding of what is or is not within the educational climate that positively influences student achievement. The quest to understand leadership is endless. We persist in our search because it goes to the heart of the human condition: our dual human nature as symbolic and physical beings... . Leaders help us to link these twin dialectics, one deeply individual, the other broadly societal" (Lipman-Blumen, 1996). De Bevoise (1984) used the term to designate the actions that a school principal takes or delegates to others to promote growth in student learning.

The focus of the current section will provide a thorough and extensive review of educational leadership literature to address the question: What impact does reform policy have on principal leadership for building capacity at the school building level? The primary objective of the text is to provide a critical analysis of the aforementioned inquiry through a critique of a series of secondary questions. First, the text will assess the impact of reform policies on principal leadership. The text will then address the following question: What are the effects of principal leadership on student academic achievement? In addition, the text will provide a review of the characteristics of an effective principal,

providing insight to significant personal and job-related attributes cited in the literature as essential to improving student achievement.

### *Reform Policies Impact on Principal Leadership*

A principle of American education is the belief that principal leadership impacts student learning. Early seminal research in educational administration supported this ideology (Bossert, Dwyer, Rowan & Lee, 1982; Culbertson, 1974; Erickson, 1967; Hallinger & Heck, 1996; Halpin, 1966; Lipham, 1964; Rost, 1993). Findings from these research publications identified various positive effects for principal leadership on school improvement facilitation and increased student achievement. In the early 1980s an ideological shift occurred. The school principal's role transitioned from a humanistic facilitator to an instructional leader (Beck & Murphy, 1993). With the redefining of the principal's role came a change in public opinion. For the first time in U.S. educational history, American schools and principal leadership were beginning to be seen as contaminated (*A Nation at Risk: The Imperative for Educational Reform*, 1983).

Questions were raised about the ability of public schools to educate urban American students adequately. Various research findings indicated that insufficient leadership, mismanagement of funds and poor learning environments, (i.e., high dropout rates, poor test scores, and low academic achievement) were identified as problematic characterizations of American school systems (*The Funding Gap: Low-Income and Minority Students Receive Fewer Dollars*, 2002; *A Nation at Risk: The Imperative for Educational Reform*, 1983; Porter & Soper, 2003). A national reprimand initiated to



address problematic areas of American school systems ushered in a new era of educational reform.

To address the need for educational reform local, state, and federal governments passed into law continuous educational reform policies (e.g., A Nation at Risk, Goals 2000, No Child Left Behind, high stakes testing, local educational bonds and millages). In recent years there has been heightening of federal demands related to the outcomes of various educational reforms. Thus, the discourse pertaining to an education reform policy has centered on increased school accountability (*The Funding Gap: Low-Income and Minority Students Receive Fewer Dollars*, 2002; *No Child Left Behind*, 2001). The driving force behind accountability is the perceived inability of public education to educate urban students comprehensively and effectively (i.e., disparity gap in academic achievement between students in urban and suburban school districts). Increased demands of accountability policies have paralleled increased expectations of principal leadership. National policy has changed principal leadership from a state of cautious alarm to suggested voluntary action to federal mandates for accountability.

A chronological review of reform policy traces the foundational shift underlined in accountability reform to the educational report A Nation at Risk (NAR) (Hallinger & Heck, 1998, 1999; *No Child Left Behind*, 2001). The primary finding of A Nation at Risk (1983) was that the secondary school curricula was homogenized, diluted and diffused to the point it longer had a central purpose. Others findings were: (1) compared to other nations, American students spend much less time on school work; (2) time spent in the classroom and on homework is often used ineffectively; and (3) schools were not doing enough to help students develop either the study skills required to use time well or the

willingness to spend more time on school work (A Nation at Risk, 1983). The A Nation at Risk report was the first time in the history of American education that the federal government sponsored an account that challenged the effectiveness of American schooling and in particular the role of the principal.

By the mid- to late-1980s a number of states had put in place a series of steps to improve the quality of their education. Goals 2000 (1993) was the outgrowth of the process that initiated state-led educational reform movements following the NAR report. Prior to the establishment of Goals 2000 the federal government had targeted improvement in student learning and teaching practices as critical factors for educational reform (*The National Education Goals Report - Summary Guide Building the Best*, 1993). The development of Goals 2000 provided a framework to reauthorize federal education programs to develop a voluntary national accountability and certification system to meet these critical factors (*The National Education Goals Report - Summary Guide Building the Best*, 1993). This legislation placed voluntary accountability benchmarks on principal leadership practices to initiate change in student achievement. The policy objectives of Goals 2000 were based on characteristics of state-led reform policies that placed great emphasis on the principal's role in increasing academic achievement (*A Report on Improving Student Performance in High-Poverty Schools. Report No. 96-86*, 1997). The turn of the century coincided with the completion of legislation for Goals 2000 and increased expectations for accountability and improvements at the building level.

The argument for the development of No Child Left Behind (NCLB) was the perceived historical failure of localized control of the educational system to effectively educate its students (*No Child Left Behind*, 2001). Supporters of the legislation cited the

continued historical decline in academic achievement as the primary need for drastic change in school ideology. Thus, NCLB was developed with three primary objectives for public schools and principal leadership: (1) accountability and high standards; (2) annual academic assessments; and (3) consequences for schools that fail to educate disadvantaged students. The structure of the third objective (consequences for schools that fail to educate disadvantaged students) had a direct impact on the conceptualization of the role of principal leadership. NCLB placed mandatory sanctions on principal leadership that failed to facilitate mandated change.

To engage institutional change, NCLB emphasized the use of data by the principal to evaluate school progress and to better inform site-based decision-making (*No Child Left Behind*, 2001). Additionally NCLB provides grants to state educational agencies, local educational agencies, state agencies for higher education, and eligible partnerships in order to accomplish the following (*No Child Left Behind*, 2001):

1. Increase student academic achievement through a number of strategies, such as improving teacher and principal quality, increasing the number of highly qualified teachers in the classroom, and ensuring highly qualified principals and assistant principals in schools; and
2. Hold local educational agencies and schools accountable for improvements in student academic achievement.

NCLB had a direct impact on the conceptualization of the role of principal leadership when a school failed to meet standards of accountability. When a school failed NCLB mandated that a School Improvement Plan (SIP) be developed. The SIP would be developed in consultation with parents, school staff, local educational agencies and

outside experts and would cover a two-year period. In the requirements for Corrective Action, the district must have taken one of the following actions:

1. Replace school staff relevant to the failure;
2. Institute and implement a new curriculum;
3. Significantly decrease management authority in the school;
4. Appoint outside experts to advise the school;
5. Extend school year or school day;
6. Restructure the internal organization of the school. (*No Child Left Behind*, 2001)

The structure of the sanctions associated with NCLB intensified the responsibility placed on the principal. This structure becomes evident when the processes involved with school restructuring are reviewed. Once a school fails to meet the benchmarks set in place by corrective action the school is required to develop a restructuring plan. There are two possible outcomes for a restructuring school plan: (1) the school will be reopened as a public charter school, or (2) all or most of school staff, including the principal need to be replaced (*No Child Left Behind*, 2001). Previous reforms merely heightened the awareness of principal leadership; NCLB impacted all aspects of principal functioning, including job maintenance. Though there has been a steady increase in the demands placed on principals through an accountability policy, research has found varying support for the impact of federal policies on principal leadership (St. John & Ridenour, 2002).

Rival ideologies concern the impact of the reform policy's ability to renovate a struggling school district or school. There is less scholarly agreement concerning the efficiency of reform to initiate and impact substantive change in principal leadership. One

position states that reform without policy guidelines specifically developed to engage principals who work in environments of failure would never initiate sustained change. For example, several researchers found results that indicated the reform policy has a significant effect on the policy the principal implemented at the building level (*No Child Left Behind*, 2001). The most conservative perspective from this standpoint theorized that reforms centered on high stakes accountability are the best methods for increases found in student achievement (*No Child Left Behind*, 2001).

The opposing ideology takes the position that principals are wearied with continuous ineffective reforms. Thus, change initiated by educational reform policies is not viable for increased student achievement. Research findings from this philosophical camp are divided into two major positions. Primarily, empirically sound studies are lacking that sustain the argument that continued educational reform policy is effective in the engagement of principal leadership to improve academic achievement (Hess, 1999; Tyack & Cuban, 1995). Results from the latter position indicate that constant implementation of the new reform policy hinders the ability of principals to engage the institution in meaningful change (Hess, 1999). Disagreement within the literature on educational leadership concerning the impact of educational reform policy on the principal indicates a need to establish what effect principal leadership has on student achievement.

### *What are the effects of principal leadership?*

There are many variations in the implementation of reform policies. In the literature, a frequently cited factor in implementation is the role of principal leadership (Hallinger & Heck, 1996). A current debate questions the effect of principal leadership

on educational reform (Hallinger & Heck, 1996, 1998; Witziers, Bosker & Krüger, 2003). Traditionally, much of the research on school reform argued that strong principal leadership was predictive of increases in student performance.

Since the conceptualization of educational leadership as a discipline, several comprehensive literature reviews have been conducted on school administrators and their roles in schooling. Two of the earliest literature reviews about school leadership were conducted by Lipham (Lipham, 1964) and Erickson (Erickson, 1967). Lipham focused his review on the research findings, whereas Erickson was primarily concerned with methodological issues. Erickson was able to highlight the methodological weaknesses of the studies, which were published in educational administration during the 1964-1966 periods. Through their synthesis of the effects of educational leadership both Lipham and Erickson drew similar conclusions that the majority of studies provided limited amounts of information because of flaws in the methodology of the studies.

Bridges (1982) reviewed 322 research reports on school administrators published during 1967-1980 that focused on methodological issues. Bridges organized the body of empirical research on school administrators based on three components of Halpin's classic paradigm for research on administrative behavior (Halpin, 1966): (1) the behavior of the administrator, (2) the antecedent variables influencing administrator behavior, and (3) outcomes attributable directly and indirectly to the administrator. Bridges classified each study with respect to outcomes by making a distinction between those studies dealing with the impact that school administrators have on school outcomes and those studies dealing with ratings of the administrator's effectiveness. In the administrator impact studies, researchers attempted to determine whether administrators made

measurable differences in schools. As observed by Bridges (1982), when assessing the impact of a school administrator, researchers are far more likely to focus on organizational maintenance than organizational achievement.

Currently there is a theoretical split within the literature on education administration in relation to the effect of principal leadership on student achievement. One body of research suggests that effective principal leadership is essential to successful implementation of education reform and improvement in academic achievement (Berends, Bodilly & Kirby, 2002; Halpin, 1966; Teske & Schneider, 1999; Wang, Haertel & Walberg, 1993; Witziers, Bosker & Krüger, 2003). Several studies conducted over the past thirty years support this ideology, concluding that schools and principals do make a difference. Specifically, the principal does influence the school's capacity to change as well as the culture and the direction of the school (Berends, Bodilly & Kirby, 2002; Blase & Blase, 2003; Hallinger & Heck, 1996; Halpin, 1966; Teske & Schneider, 1999; Wang, Haertel & Walberg, 1993; Witziers, Bosker & Krüger, 2003).

The opposing ideology takes the position that previous research has found a weak connection between principal leadership and student achievement, therefore the connection between the two cannot be substantiated (Hess, 1999). Researchers who hold this theoretical position are critical of the previous perspective because of the positive bias cited in most of the research. Many investors allude to overlooked areas or conceptual gaps in the field that lead to failures in school performance. For example, principal mistreatment/abuse of teachers has been cited as an extremely harmful consequence that inhibits education reform. Blase and Blase (2003) cited poor leadership

as a lasting negative impact on the life of reform efforts in schools. To further articulate this point Hodgkinson (Hodgkinson, 1991) stated:

Undoubtedly, the failure of both academic and professional educators to study principal mistreatment of teachers, applying the same rigorous research protocols used to investigate other educational problems, has resulted in incomplete, naïve, and even false understandings of how some, perhaps a noteworthy percentage, of school leaders and teachers experience their work.

Moreover, this failure allowed principal mistreatment to continue without challenge and without hope of improvement (Ashforth, 1994; Einarsen, Hoel, Zapf & Cooper, 2003; Keashly, Trott & MacLean, 1994; Robinson & Bennett, 1995). In one perspective developed to provide a solution to the problem (school reform efforts that require principals and teachers to work together collaboratively to solve educational problems), researchers alluded to a need for principals to work toward collective ends that encompass all individuals and organizations associated with public education (Blase & Blase, 2003, 2004). In addition, investigators said that participants must be willing to confront administrative mistreatment that, most assuredly, undermines possibilities of reform (Blase & Blase, 2003).

Although there is substantive research beyond the examples presented that support the second ideology, the historical and current legislative climate mandates the pivotal role of the principal in leadership in school reform and student achievement. A review of educational administration literature will be pursued from the first theoretical perspective, which assumes that there are positive effects found for principal leadership on student achievement. The primary purpose of this section is to identify the seminal and current research studies that established theoretical and practical findings for the



effects of principal leadership. There are two seminal works in the literature of education administration that frame the theoretical perspective of the current section of the text.

One of the first theoretical attempts to address the effects of principal leadership was developed by Bossert, Dwyer, Rowan and Lee (1982) in their work on principal leadership entitled, *The Instructional management role of the principal*. Bossert et al. (1982) emphasized the perspective that a school principal, through his or her activities, roles, and behaviors in managing school structures, does not have a direct effect on student achievement in the manner that the teachers does (Bossert et al., 1982). However, classroom teaching may be impacted by the principal's actions, by setting and clearly communicating high expectations for all students, supervising instructional performance of the teacher evaluating student progress, and promoting a positive teaching/learning environment (Suskavcevic & Blake, 2004). Also, Bossert et al. (1982) developed a framework to test for a two-fold causal relationship between the principal and student outcomes: the effects of individual and organizational characteristics on principal behavior and the effect of principal behavior on student outcomes.

The work of Bossert et al. (1982) is used as a foundation for the conceptual understanding of principal leadership. The research published within the literature of educational leadership about the effect principal leadership has on student achievement can be classified into four categories. They are presented in the work of Hallinger and Heck (1996) entitled, *Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1985*. In determining investigation classifications Hallinger and Heck used Pitner's (Pitner, 1982) framework of administrator effects as criteria for the classification of 40 studies on instructional leadership and school outcomes published

during the period 1980-1995. Pitner identified four theoretical approaches to represent the conceptual models that served as a means for categorizing the reviewed studies of the effects the administrator has on school outcomes. These four models were direct-effects, moderated-effects, mediated-effects, and reciprocal-effects.

### *Direct-Effects Model*

According to Hallinger and Heck, the first classification, the direct-effects model, hypothesized that principals are directly responsible for outcomes related to student achievement. In addition, the model proposes that the main effect on school outcomes occurs primarily in the absence of intervening variables. Specifically, the authors described gaps in the model with the statement, “researchers who use this model do not statistically control for the effects of mediating variables” (Hallinger & Heck, 1996, 1998, 1999). Review of research that follow this model reveal several common themes that may be categorized as: (1) principal impact on student achievement, (2) teacher improvement, and (3) organizational function.

Principal leadership is a strong predictor of student performance (Andrews & Soder, 1987; Cheng, 1994; Krug, 1992; Larsen, 1987; K. Leithwood & Jantzi, 2000; K. A. Leithwood & Riehl, 2003; Levine, 1982). Several studies found that the school principal is critical in ensuring academic achievement, especially for Black and low-income students (Andrews & Soder, 1987; Cheng, 1994; Krug, 1992; Larsen, 1987; Leithwood & Jantzi, 2000; K. A. Leithwood & Riehl, 2003; Levine, 1982). Reports from a study by Florida (1997) suggest that school principals who exhibit strong leadership behaviors and

consistently focus on improving student performance makes a positive impact on academic performance in their schools.

A second theme that emerged suggested that principals have a measurable impact on student achievement through the selection of teachers and the setting of academically-oriented school goals (Andrews & Soder, 1987; Cheng, 1994; Krug, 1992; Larsen, 1987; Leithwood & Jantzi, 2000; Leithwood & Riehl, 2003; Levine, 1982). Leithwood and Jantzi, in a study of 1818 teachers and 6490 students in one large school district, found results that demonstrated greater academic growth of students who experienced more frequent engagement with the principal as compared with teacher sources of leadership. The study found that the effects of principal leadership were significant predictors of academic success, whereas the effects of teacher leadership were not significant.

The third theme found a strong relationship between leadership and the organizational functional process (Cheng, 1991, 1994). Findings from a study (Porter and Soper, 2003) that focused on classroom size reform initiatives in Tennessee and California indicated that the development of a clear vision and planning to support that vision are essential to the success of urban school reform (p. 5).

#### *Moderated-Effects Model*

According to Hallinger and Heck (1996) the next classification of Pitner (1982) is the moderated-effects model. This model assumes that some or all of the impact achieved by administrators on desired school outcomes occurs through manipulation of or interaction with features of school organization. The moderated-effects model hypothesizes that the relationship between principal leadership and student achievement

outcomes can be explained through a third intervening variable. This classification states that the effects of leadership attained by administrators on desired outcomes occur through manipulation of or interaction with features of school organization.

The themes that emerged for the moderated-effects model are similar to the themes that emerged in the direct-effects model. Where this approach differs from the direct-effects model is that in the design implementation, the direct-effects model does not account for contextual, personal and organizational characteristics that impact principal leadership. The overarching theme shows that the effect of principal leadership occurs indirectly through the principal's efforts to influence those who come into more frequent direct contact with students. Studying the moderated-effects model, Silins (1994) examined the nature of the relationship between transformational and transactional leadership and the nature of the relationships between specified school outcomes and the constructs of transformational and transactional leadership. The author applied canonical analysis and partial least-squares analysis to an empirically derived data set to yield two path models. These results indicated a link between a principal's use of transformational and transactional leadership strategies and positive outcomes for academic achievement (Silins, 1994).

#### *Mediated-Effects Model*

The third model cited by Hallinger and Heck (1996) is the mediated-effects model with antecedent variables. In this model the principal can be measured as both the dependent and independent variable. When the principal is the dependent variable the principal's behavior is subject to the influence of other variables within the school and its

environment. When the principal is the independent variable the principal influences the actions of teachers, the school organization and ultimately the learning of the students. The themes that emerged for the mediated-effects model with antecedent variables are similar to the emerged themes in the direct-effects and moderated-effects models. One of the primary themes found in the literature for this approach is the importance of the relationship between school context and leadership and between personal characteristics and leadership enactment in enhancing student achievement (Hallinger & Heck, 1996).

An example that supports this theme was a study by Eberts and Stone (1988) entitled *Student achievement in public schools: Do principals make a difference*. Based on data from a nationally representative sample of 14,000 elementary school children, the findings indicated that the behavior of the principal and the principal's attributes significantly influenced individual student achievement. In another example, Goldring and Pasternack (Goldring & Pasternack, 1994) examined the relationship between the principal's strategies to coordinate organizational activities and school effectiveness. Results of this study of elementary school principals suggest that the principal's role in framing school goals is more instrumental in establishing school effectiveness than other specific leadership behaviors.

A further theme emerged that indicated that school characteristics such as student social economic status, homogeneity, school size, community type and school level affect the manner in which principals approach their jobs. Kirby, Berends and Naftel (2001) found results to support this theme in an analysis of a sample of 71 New American Schools (NAS) that initiated whole-school reform. Results indicated there are several factors that need to be aligned for the implementation of an effective reform policy. The

factors included strong principal leadership, teachers who support the designs and have a strong sense of teacher efficacy, district leadership and support, clear communication and provision of materials, and design team staff support. The findings of this study suggest that without strong leadership, the promise of these designs to help schools improve is unlikely to be met.

Another example is provided by Louis and Marks (Louis & Marks, 1996), who examined common behaviors of principals in schools with high student achievement. Controlling for pertinent principal and school background characteristics, such as race/ethnicity, socioeconomic status and gender, Louis and Marks found that leaders in high achieving schools worked effectively to stimulate professional discussion and to create the networks of conversation that tied faculty together around common issues of instruction and teaching (p. 194). A common thread across all the themes is the link between principal leadership and academic achievement.

#### *Reciprocal-Effects Model*

Finally, the fourth type of principal effect model is reciprocal-effects. In these models principals have displayed leadership through adaptation to the organization in which they work, changing their thinking and behavior over time. The authors state that principal leadership has the ability to impact student achievement “to the extent that leadership is viewed as an adaptive process rather than as a unitary independent force (Hallinger & Heck, 1996). In the reciprocal process the principal may initiate changes in the school’s curriculum program or instructional practices. These changes may cause

changes in the conditions of the school that subsequently produce feedback causing reciprocal effects in leadership.

Research designed from the perspective of the reciprocal-effects model emphasizes the importance of the principal in influencing student achievement through the management of meaning within the school culture, the nurturing of a collaborative work environment with teachers, and the fostering of a resilient school culture (Deal, 1987; Sergiovanni & Moore, 1989). In terms of the principal's ability to handle building-level obstacles, research indicate a principal's response to adversity plays a crucial role in the development of successful school climates and student achievement (Rosenholtz, 1989; Stoltz, 2000). Cotton (1995), in her article *Effective Schooling Practices: A Research Synthesis 1995 Update*, stated that common themes in the literature that span all the models are those in which administrators and other instructional leaders:

- a. Believe that all students can learn and that the school makes the difference between success and failure
- b. Emphasize learning as the most important reason for being in school; public speeches and writings emphasize the importance and value of high achievement
- c. Have a clear understanding of the school's mission and are able to state it in direct, concrete terms. They establish an instructional focus that unifies staff
- d. Seek, recruit and hire staff members who will support the school's mission and contribute to its effectiveness
- e. Know and can apply validated teaching and learning principles; they model effective teaching practices for staff as appropriate

- f. Know educational research, emphasize its importance, share it and foster its use in problem solving
  - g. Seek out innovative curricular programs, observes these, acquaint staff with them and participate with staff in discussions about adopting or adapting them
  - h. Set expectations for curriculum quality through the use of standards and guidelines. They periodically check the alignment of curriculum with instruction and assessment, establish curricular priorities, and monitor the implementation of curriculum
  - i. Check student progress frequently, relying on explicit performance data. They make results public, work with staff to set standards, use those standards as points of comparison, and address discrepancies
  - j. Expect all staff to meet high instructional standards. They secure staff agreement on a school-wide instructional model, make classroom visits to observe instruction, focus supervision activities on instructional improvement, and provide and monitor staff development activities
  - k. Communicate the expectation that instructional programs will improve over time. They provide well-organized, systematic improvement strategies; give improvement activities high priority and visibility; and monitor implementation of new practices
  - l. Involve the full staff in planning implementation strategies. They set and enforce expectations for participation, ensure that others follow through on commitments, and rally support from the different constituencies in the school community
- (Cotton, 2001)



Recently, concerning the definition of the role of principals' leadership, there has been a second conceptual shift from research specifically addressing instructional leadership to research examining six different theoretical models of leadership: (1) instructional, (2) transformational, (3) contingent, (4) moral, (5) managerial and (6) cultural leadership (Liethwood & Duke, 1999). This shift has resulted in a substantial decrease in the number of studies focused on examining the instructional leadership style of school principals. The majority of the current empirical studies on instructional leadership and school effectiveness have been conducted in the context of the dominating loosely coupled educational system of governance in the U. S. (Suskavcevic & Blake 2002)

Recent changes related to the implementation of the standards-based reform movement re-emphasized the instructional leadership aspects of school leaders. There is a current conceptual shift in leadership conceptualization that leaves a theoretical gap in understanding the characteristics of an effective principal.

### *Standards-Based Reform*

Recently there has been a wave of standards-based reforms initiated to correct problematic areas of American schools. The central concern of the current reform policy is the inability of public education to educate students comprehensively and effectively in urban areas, in particular its inability to decrease the disparity for academic achievement between students in urban and suburban school districts (*The Funding Gap: Low-Income and Minority Students Receive Fewer Dollars*, 2002; Hess, 1999; Porter & Soper, 2003).

In addressing the need for education reform, local, state and federal governments have enacted various educational policies (Goals 2000, No Child Left Behind, high stakes testing, and local educational). These policies were designed and implemented to change what schools do and how they do it, that is, educational school reforms were established on the two main principles of alignment and capacity building:

Alignment means that in order to focus on improving outcomes, schools systems need to set clear standards and align curriculum and accountability mechanisms with those standards. Capacity building is developed in a coherent organization, built around aligned standards and assessment, which can produce increased capacity to deliver improved education. For example, when teachers know what to teach and the organization acts to support their efforts to achieve defined standards, this increases the collective capacity of the school or the district to deliver education (Carnoy & Loeb, 2002).

The most recent standards-based reform is No Child Left behind (NCLB). This legislation was enacted because of the perceived historical failure of locally controlled school districts to effectively educate its students (*No Child Left Behind*, 2001). Developers of NCLB set three primary objectives to address these apparent failures: (1) accountability and high standards, (2) annual academic assessments, and (3) consequences for schools that fail to educate disadvantaged students. Furthermore, legislation has sought to align locally controlled school districts with federal standards to build school and district capacity to initiate change.

An important component of standards-based accountability is improving education through increasing the quality of teachers and educational administrators (Carnoy & Loeb, 2002). This reform ideology demands changes in the way principals work and suggests that for education to improve, the principal's ability to build capacity has to be raised. It advocates that principals must have the ability not only to manage

schools but also to become instructional leaders of their schools (Carnoy & Loeb, 2002). In successful standards-based accountability the combination of instructional leadership and management skills constitute what is central to capacity building. In NCLB this process is displayed when principals make decisions that center on student academic achievement. Thus, increases in the demands of accountability policies run parallel with increased expectations of the principal as instructional leader and building manager. Furthermore, the impact of standards-based accountability has transitioned the role of the principal in a linear amplified manner from a state of cautious alarm (A Nation at Risk) to suggested voluntary action (Goals 2000) to federal mandates for institutional change (NCLB). Though there has been a steady increase in leadership demands placed on the principal through standards-based accountability policy, research findings show varying support for these policies, producing a direct effect on the impact of principal leadership for increasing academic achievement (St. John & Ridenour, 2002).

### *The Effects of Leadership by the Principal*

As stated earlier, a principle of American education is the belief that principal leadership impacts student learning. Early empirical research in educational administration supports this ideology. Findings from these studies indicate that the leadership of the principal indirectly facilitates school improvement and increases student achievement (Bossert et al., 1982; Hallinger & Heck, 1996; Rost, 1993). Research shows three areas in which principal leadership produces indirect effects: (1) how the principal establishes and monitors the school governance process, (2) how the principal's leadership contributes to school climate/culture, and (3) how the principal oversees the

instructional organization of the school (Heck, 1996). These areas for principal leadership effects were empirically derived from various educational settings. Though there is concurrence in the literature about the impact of principal leadership, there is still scholarly discourse about the impact of context on principal leadership.

### *School Culture*

School climate and culture are important contextual components cited in the literature with regard to understanding school context. Research findings indicate that culture as a learned process of expectations and norms are important relative to school improvement (Goldring & Hausman, 2001; Morris, 1994; Savage, 1999; Slater & Boyd, 1999). Within school culture there is a core set of values, beliefs, assumptions, and perceptions that school community members hold about their work. These cultural components together comprise a theory of organizational acceptability that guides how people behave and operate (Sergiovanni, 1996).

Principals typically are the educational leaders of their schools. They influence the conditions under which teachers teach and students learn. Research findings (Bauch, 2001) suggest that effective principals must be knowledgeable about their community and work environment for successful implementation of standards-based reform. A principal must be cognitive of how school and community culture affects their ability to build capacity. Further, this same research suggests that for principals to effectively build capacity, the underpinning of the school's values, beliefs, perceptions and assumptions must be aligned with standards-based reform to permit the school to shift its orientation and thinking, allowing for development of new paradigms. This process is achieved through recognition and consideration of school culture and context.

### *School Context*

School context includes the location of the school. The contextual understanding of schools in the United States has been assessed primarily through qualitative analysis. The research in this area has contributed enormously to the knowledge base of leadership by principals. It provides insight and voice to the contextual understanding of specific characteristics of various contextual settings of schools within the U.S. Research describing the contextual settings of schools in rural communities describe societies that are homogeneous, poorly educated and economically challenged, and who maintain a strong sense of community (Bauch, 2001). Additionally, this same research indicates that the ability of principals to build capacity in terms of increased student achievement in rural areas involves a unique set of norms and values that may differ from urban or suburban settings.

In comparison, other research (Gardner & Talbert-Johnson, 2000) indicates that urban school districts are characterized as large and bureaucratic and that bureaucratic nature contributes to ineffective school organization. Thus, leadership in urban schools tends to be less stable than in suburban areas. Jelier and Hula (1999) suggest that size and bureaucracy intensify the contradiction between teaching and learning as person/human activities and the standardization that is expected to make urban schools efficient, fair and impartial. In addition, this same research suggests that the inter-relatedness of the aforementioned components shape ineffective school organization and perpetuate urban school teaching and administration that is detached from the community and family resources.

### *Problem Statement*

In assessing the impact of principal leadership across cultural settings, contextual comparisons cannot be made without an appropriate understanding of the leadership environment (Hess, 1996). Within this literature the majority of the research published compares American schools to foreign schools, such as in Europe, the Pacific islands and Southeast Asia (Hess, 1996; Hopkins 2000; West et al, 2000). Though this body of research generates important theoretical and practical insight for understanding the contextual differences in principal leadership, a conceptual gap still persists. There is little to no research comparing the impact of contextual differences on principal leadership for schools within the U.S. There is, however, research about the contextual realities of schools in specific environments that shows that there are considerable differences in how principals define and implement leadership roles. The research also shows that the context may act either as a catalyst or a limitation for principal leadership, enabling or hindering the ability and the resources the principal has to implement sustained and effective change.

### *Study Purpose*

The purpose of the current study is to examine the impact of school location (context) on the principal's leadership ability to build capacity at the school building level. This study will be carried out through employment of quantitative methodology and the implementation of two theoretical models provided by Portz, Stein and Jones

(1999) and Heck (1996). These models will be used as the ideological foundation to empirically test the nature of the theorized relationships between school location and leadership actions for capacity building.

### *Research Questions*

Specifically, this research will study the following questions:

1. Does the location of the school (urban, suburban and rural) cause the principal to predict social demographic factors that differ regarding building capacity used to sustain and institute an accountability policy?
2. Does the location of a school (urban, suburban and rural) cause principals to have different predicative models of decisions that they implement to build capacity in order to sustain and institute an accountability policy?

## CHAPTER 2

### REVIEW OF THE LITERATURE

Throughout the history of American education there have been many government-sponsored initiatives that addressed numerous issues, from gender equity to desegregation, to change the structure of schooling. The most recent policies, Goals 2000 and No Child Left Behind, enacted standards-based accountability. The policy makers mandated that policies implemented in rural Iowa and suburban Boston have the same outcomes as in inner city Los Angeles. No Child Left Behind was designed and implemented to effect change in school leadership, organization and configuration, that is, what schools do and how they do it. This policy also addressed a pressing issue of contemporary education: how to enhance the role and impact of principal leadership. Mandates within the legislation were designed to monitor the ability of principal leadership to build school capacity in terms of academic achievement.

A problem with No Child Left Behind is that it neglects to provide a blueprint for how the principal is to develop capacity. One possible solution for this problem is to examine the impact of school context (the school climate, culture and location) on the mandated outcomes of No Child Left Behind. In support of this perspective research (Deal, 1987; Sergiovanni & Moore, 1989; Horne, 1997) has shown the importance of the principal's leadership ability to influence student achievement through the combination of effective school management and understanding of school culture. The research findings also indicate that those principals who are successful at building capacity produce a nurturing collaborative work environment that fosters a resilient school culture.



The focus of the current review is to provide a thorough and extensive assessment of the literature of educational leadership. A secondary focus is the examination of school location and its impact on the principal's leadership ability to build capacity at the school building level. The primary objective of this chapter is to provide a critical analysis of the aforementioned inquiry through a series of questions. Initially, I will synthesize standards-based reform policies and evaluate their impact on principal leadership. Then, with reference to the cited effects of the principal's leadership ability to build capacity, I will conceptualize the role of the principal and assessment of reported effects in terms of increasing academic achievement. Finally, I will provide a review of contextual characteristics of distinct school locations (rural, urban, and suburban) and argue that there is a conceptual gap in the literature with regard to the impact of context on the ability of principal leadership to build capacity.

#### *Standards-Based Reform and Principal Leadership*

To address the need for educational reform local, state and federal governments have legislated standards-based educational reform policies (such as A Nation at Risk, Goals 2000 and No Child Left Behind). These policies have increased the demands related to student academic outcomes, and have established a discourse in educational policy centered on increased school accountability (*The Funding Gap: Low-Income and Minority Students Receive Fewer Dollars*, 2002; *No Child Left Behind*, 2001). The most recent standards-based accountability policy, No Child Left Behind, was developed and implemented with outcomes focused on standardized test scores. The driving force behind No Child Left Behind is the perceived inability of public education to educate

urban students comprehensively and effectively (and to close the gap in academic achievement between students in urban and suburban school districts).

A chronological review of recent reform policy traced the foundational shift outlined by standards-based accountability to the educational report: *A Nation at Risk* (Hallinger & Heck, 1998, 1999; *No Child Left Behind*, 2001). The *Nation at Risk* report was the first federally sponsored account that challenged the effectiveness of American schooling, in particular the role of school leadership. The years following the release of *A Nation at Risk* led to the development of *Goals 2000*. The passage of *Goals 2000* authorized the development of a voluntary standards-based accountability and certification system to initiate change in public schooling (*The National Education Goals Report - Summary Guide Building the Best*, 1993). The end of the twentieth century coincided with the completion of *Goals 2000* legislation and a lack of sustained improvement for public education outcomes. The federal government responded with the initiation of a punitive standards-based accountability policy, *No Child Left Behind* (NCLB). To stimulate institutional change, NCLB placed an emphasis on the use of data and mandated the principal's use of data to evaluate school progress and to better inform site-based decision-making (*No Child Left Behind*, 2001).

Currently there are rival perspectives regarding standards-based accountability policy to improve struggling districts/schools and to produce substantive change in principal leadership. One perspective suggests that standards-based accountability has been effective in the initiation of meaningful change. Also, this perspective articulates leadership as a critical factor related to the success of these reforms. Findings from this body of research suggests that effective principal leadership is essential to the successful

implementation of education reform and improvement in academic achievement (Berends, Bodilly & Kirby, 2002; Halpin, 1966; Teske & Schneider, 1999; Wang, Haertel & Walberg, 1993; Witziers, Bosker & Krüger, 2003).

Researchers have used quantitative, qualitative and mixed methods methodology to both study and derive the positive effects on academic achievement for the principal's leadership abilities. Studies conducted over the past 30 years that used qualitative methodology to support the aforementioned perspective have primarily employed two methodological designs: ethnographic case studies (Slaughter-Defoe, Andrews & Zhang, 2002), and structured/semi-structured qualitative interviews (Bloom et al., 2001; St. John & Ridenour, 2002; Teske & Schneider, 1999). Themes from the studies that employed qualitative interviews indicated that reform policy is a successful catalyst for the principal to build school capacity by allowing principals to focus on areas of school culture and organizational structure (Deal, 1987; Teske & Schneider, 1999).

Studies that employed quantitative methodological research designs have produced results that indicated the success of the reform policies in the initiation of institutional change at the building level. The two types of research design methodologies employed to assess these findings were the large-scale survey of school districts (Berends et al., 2002; Pearson, 2002) and meta-analyses summarizing effect sizes of previous research (Borman, Hewes, Overman & Brown, 2003). Research findings using quantitative methodology identified themes similar to those identified by qualitative methodology. For example, Kirby, Berends and Naftel (2001) initiated a whole-school reform study of 71 New American Schools. Results indicated that there are several factors needing to be aligned for effective reform policy implementation. These factors

include: (1) strong principal leadership, (2) teachers who support the designs and have a strong sense of teacher efficacy, (3) district leadership and support, (4) clear communication and provision of materials, and (5) design team staff support.

The opposing perspective, that there is a negative impact of standards-based reform policy, suggests that current reform policy has been ineffective in production of substantive change. This perspective says that the current reform policy has been ineffective because reform legislation has produced an environment where principals are wearied by continuous ineffective reforms (Hess, 1999). Sarason and Lorentz (1998) argue that the language and principles of reform often conflict with traditional school culture, which prohibits the deep change necessary for successful implementation. Research that supports this perspective has also employed both quantitative and qualitative methodologies.

Results from quantitative research identify a scarcity of empirically rigorous studies for the argument that reform policy is an effective lever to improve academic achievement by way of the principal's leadership (Hess, 1999; Tyack & Cuban, 1995). Results from qualitative research identify themes that suggest that the constant implementation of new reform policies has hindered the ability of principals to engage schools in meaningful change (Datnow, 2002, 2005; Hess, 1999). Datnow (2005) reviewed 13 schools that had implemented school reforms and found that only four schools were successful in maintaining reform efforts. Furthermore the success of those school that had maintained reform efforts was dependent on pre-existing conditions, such as strength of leadership, district context and school culture.

Researchers are critical of the first perspective because a positive bias is apparent in the literature. Researchers argue that findings from the first perspective (the positive impact of standards-based reform) over-report the positive effects of the impact on reforms in order to facilitate substantive change made by way of the principal's leadership. To make this point many investigators allude to overlooked areas and/or conceptual gaps in the literature that lead to failures in the standards-based reform policy. For example, researchers indicate that principal mistreatment/abuse of teachers by principals has been cited as an extremely harmful consequence that inhibits education reform (Blase & Blase, 2003, 2004). To articulate this point further, Blase and Blase (2003) cited poor leadership as having a lasting negative impact on the life of reform efforts in schools. Additionally, Hodgkinson (1991) stated the following:

Undoubtedly, the failure of both academic and professional educators to study principal mistreatment of teachers, applying the same rigorous research protocols used to investigate other educational problems, has resulted in incomplete, naïve, and even false understandings of how some, perhaps a noteworthy percentage of, school leaders and teachers experience their work.

Although there is substantive research beyond the examples presented that support the second perspective (i.e., that current reform policy has been ineffective in production of substantive change), the current legislative climate mandates the principal leadership's pivotal role in school reform and student achievement. Specifically, NCLB has set three primary objectives that address failures of previous reform policies and district/school leadership: (1) accountability and high standards, (2) annual academic assessments and (3) consequences for schools that fail to educate disadvantaged students. Thus a review of the literature of educational administration is undertaken from the first

theoretical perspective, first assessing and defining the role of principal leadership, then synthesizing the effects of principal leadership for improvements in academic achievement.

### *The Role of Principal Leadership*

Through the decades of the twentieth century, the role of the principal in schools within the United States has greatly evolved and could generally be characterized as highly transformative (Suskavcevic & Blake, 2004). In the 1930s, the governing role of school principals was seen as a scientific manager. In the 1940s, the principal's role transitioned to a democratic leader. Later, in the 1970s, the school principal was viewed as a humanistic facilitator (Suskavcevic & Blake, 2004). And in the 1980s the school principal's role transitioned to that of an instructional leader (Beck & Murphy, 1993). The continued evolution of the principal as a leader over the span of the twentieth century raises the questions of how to define and what is the role of principal leadership, in particular instructional leadership.

Though the concept of instructional leadership received much attention and pervaded the leadership literature during the 1980s, this ideology was introduced a few decades prior (Suskavcevic & Blake, 2004). Mackenzie and Corey (1954) were among the early writers who referred to the school principal as an instructional leader of a school. In terms of defining leadership Rost (Rost, 1993) defined it as "... an influential relationship among leaders and followers who intend real changes that reflect their mutual purposes" (p. 102). De Bevoise (1984) used the term to designate the actions that the school principal takes or delegates to others in order to promote growth in student

learning. Culbertson (1974) asserted that one of the more challenging tasks in educational leadership is to come to an understanding of what is or is not within the educational climate that positively influences student achievement. Lipman-Blumen agrees:

The quest to understand leadership is endless. We persist in our search because it goes to the heart of the human condition: our dual human nature, as symbolic and physical beings... Leaders help us to link these twin dialectics, one deeply individual, the other broadly societal... (Lipman-Blumen, 1996).

To frame the role of leadership in terms of reform policy implementation Murphy and Datnow (2003) articulate that principals are crucial to the success of school reform and that successful reform policies can be achieved when principals: (1) accept and support reform efforts, (2) help identify resources that buffer reform efforts from external distractions and (3) nurture teacher involvement and leadership (Lashway, 2003; Murphy & Datnow, 2003). Additionally, Barr and Bizar (2001) state that for the change to occur, it must be supported and sustained through the leadership of the principal. Ultimately, principals must become directly involved in instructional concerns, developing mutual trust and respect with teachers, who are essential components for shared decision-making (Barr & Bizar, 2001).

### *Characteristics of Effective Principals*

Determination of the characteristics of an effective principal is complex. Research indicates that there is no “one size fits all” ideology to provide insight or to define an effective principal (Liethwood & Duke 1999). Leithwood and Riehl (2003) argue that there must first be a conceptualization and definition of effective leadership before one can determine what makes an effective principal. They define effective school leadership

in terms of two functions: providing direction and exercising influence. Other research indicates that a principal with effective leadership characteristics has the capacity to mobilize resources and work with others to achieve shared organizational goals. Moreover, Leithwood and Riehl (2003) indicated that effective leaders do not merely impose goals on followers, but work to create a shared sense of organizational purpose and direction.

### *The Effects of Leadership by the Principal*

As stated earlier, a principle of American education is the belief that principal leadership impacts student learning. Early empirical research in educational administration supported this perspective. Findings from these mostly qualitative case studies of exceptional schools show indirect positive effects of principal leadership on school improvement and increases in student achievement (Bossert et al., 1982; Erickson, 1967; Hallinger & Heck, 1996; Rost, 1993). Additionally, research indicates that the indirect effect of principal leadership falls into three areas: 1) how the principal establishes and monitors the school governance process; 2) how the principal contributes to school climate/culture; and 3) how the principal oversees the instructional organization of the school (Heck, 1996).

One of the first conceptualizations of the effects of principal leadership was constructed by Bossert, Dwyer, Rowan and Lee (1982). The authors emphasized that a school principal, through his or her activities, roles, and behaviors in managing school structures, does not have a direct effect on student achievement in the manner the teachers does (Bossert et al., 1982). However, classroom teaching may be impacted by



the principal's actions in setting and clearly communicating high expectations for all students, supervising the teacher's instructional performance, evaluating student progress, and promoting a positive teaching/learning environment (Suskavcevic & Blake, 2004). Additionally, Bossert et al. (1982) developed a framework to test causal relationships between principal behavior and student outcomes in two areas. Research is cited on the effects of the individual and organizational characteristics of principal behavior on student outcomes:

A principal's managerial behavior is shaped by school context (external and district) and the principal's personal characteristics. At the same time, a principal's managerial behavior directly influences school climate and instructional organization, and indirectly influences outcomes (student learning and performance) (Suskavcevic & Blake, 2004).

There have been a variety of studies employed to conceptually test the effects of principal leadership. Research cited from this perspective has employed quantitative, qualitative and mixed methods methodologies. Most past research used to assess the effects of leadership by the principal employed qualitative and quantitative methods. According to Hallinger and Heck (1998), studies used to conceptualize principal effects studies across all methodological approaches can be synthesized into three types of models: direct-effects, mediated-effects and reciprocal-effects. The most commonly employed technique is the direct-effects model. This model hypothesizes that principals are directly responsible for student achievement outcomes and proposes that the effects of leadership by the principal occur primarily in the absence of intervening variables. Some researchers who use the direct-effects model include antecedent factors, but these are not

hypothesized to be variables interacting with leadership or mediating its effects on the selected outcomes (Hallinger & Heck, 1996).

According to Hallinger and Heck (1998), the second conceptual model is the mediated-effects model. This model hypothesizes that some or all of the impact attained by administrators for desired school outcomes occurs through manipulation of or interaction with features of school organization (Hallinger & Heck, 1996). In addition, this model implies that the relationship between principal leadership and student achievement outcomes can be explained through a third intervening variable. The role of the teacher, social economic status of the students and environment of the school can all be used as intervening variables to explain the relationship between leadership and student achievement outcomes.

The third model is the reciprocal-effects model. In this model the principal displays leadership through adaptation to the organization, which changes their thinking and behavior over time. Specifically, the authors assert that principal leadership has the ability to impact student achievement “to the extent that leadership is viewed as an adaptive process rather than as an unitary independent force” (Hallinger & Heck, 1996).

Across all the conceptual models there are three overarching themes cited in the literature for the effects of leadership by the principal on academic achievement: how the principal establishes and monitors the school governance process, how the principal contributes to school climate/culture and how the principal oversees the instructional organization of the school (Heck, 1996). The methodological approaches used to assess the various conceptual models in studies of the effects of leadership by the principal employed both quantitative and qualitative methodologies.

As with quantitative studies assessing the impact of standards-based reforms, there are primarily two types of methodologies employed to assess these findings, that of the large-scale survey of successful school districts, and meta-analyses summarizing effect sizes of previous research. The findings from quantitative research cite common themes across all studies that have employed quantitative methodologies. Several studies reported themes that indicated that principal leadership is a strong predictor of student performance. Principal leadership is a critical factor in ensuring the successful implementation of policy to increase academic achievement, and there is a strong relationship between leadership and the organizational functional process that impacts academic achievement (Andrews & Soder, 1987; Cheng, 1994; Krug, 1992; Larsen, 1987; Leithwood & Jantzi, 2000; Leithwood & Riehl, 2003; Levine, 1982).

In a study of 1,818 teachers and 6,490 students in one large school district Leithwood and Jantzi (2000) cited findings that suggested there were greater student engagement effects displayed by the principal as leader compared with the teacher as leader. Specifically, the authors concluded there was a significant effect for principal leadership on improvement in academic achievement. Another example of quantitative research is a study by Eberts and Stone (1988) entitled *Student achievement in public schools: Do principals make a difference?* Using a sample of 14,000 elementary school children, the results indicated that the personality attributes and job-related behavior of the principal significantly influenced student achievement (Eberts & Stone, 1988).

Similar to the findings associated with quantitative methodology, research that employed qualitative methodologies cite findings that support leadership of the principal as a strong predictor of academic achievement. The methodologies employed in

qualitative research were case studies of successful principals, protocol interviews and focus groups of successful principals in metropolitan areas. The themes that emerged across qualitative studies can be categorized into the aforementioned cited indirect effects for principal leadership (Goldring & Pasternack, 1994; Hallinger & Heck, 1996; Teske & Schneider, 1999). Goldring and Pasternack (1994) examined the relationship between principals' strategies to coordinate organizational activities and school effectiveness. The authors interviewed a sample of elementary school principals. Results suggested that the principal's role in establishing school goals is instrumental in implementing effective school policy. In a qualitative study of eight successful principals, Teske and Scheider (1999) examined the role of leadership as a factor in the creation of high achieving schools in New York City. Results indicated that the ability of the principal to achieve autonomy and to display strong leadership are essential components of academic achievement.

Though there have been many studies that cite the positive effectiveness of leadership by the principal, many investigators argue that the research findings based on direct-effect models (the most commonly used model) have produced inconclusive results (Hallinger & Heck, 1996, 1998; Witziers et al., 2003). These inconclusive results apply to studies that have been empirically derived and that use both quantitative and qualitative methods. To articulate this perspective Witziers et al. (2003) states the following:

Is educational leadership related to student achievement? In answering this question, first of all the results of a rigorous statistical meta-analysis of studies that sought evidence for the direct effects of educational leadership on student achievement were presented... These suggest that in general, effect sizes are small... More refined analyses show that there is no evidence for a direct effect of educational leadership on student achievement in secondary schools... A variety

of explanations account for why our further test of the direct effects model has been inconclusive. .... Most studies consist of surveys that depend on naturally occurring variation. This leads by definition to small effects. Given the restrictions in variability in leadership behaviors and the fact that school effects are by definition small (achievement differences are best explained by student characteristics), samples of schools tend to be too small to detect significant effects.

Due to inconclusive associations of principal leadership with academic achievement, investigators argue that in educational leadership there is the need to work towards better conceptualization of the phenomenon of principal leadership (Hallinger & Heck, 1996, 1998; Witziers et al., 2003). The lack of complexity in research designs and methodological conceptualization continues to hinder the ability of educational leadership literature to produce conclusive results. Additionally, with the recent changes associated with standards-based reform policy, there has been greater emphasis on the ability of the principal to build capacity in terms of academic achievement. Due to the aforementioned re-emphasis and the lack of conclusive results for leadership effects, a conceptual gap exists with regard to conceptualization of effective principal leadership.

To address this conceptual gap researchers state that future research must employ complex methodological approaches that integrate contextual factors and instructional leadership to determine more conclusive results for the impact of leadership (Hallinger & Heck, 1996, 1998; Leithwood & Riehl, 2003). Schorr (Schorr, 1997) suggests that if we are to understand the impact of standards-based reform, then we must also understand the people and places that create the context for reform. Thus, the purpose of the next section is to recapitulate the association of context defined in terms of school location and principal leadership, specifically, to evaluate the effect of context and culture (both

societal and organizational) as vital elements for the successful implementation of standards-based reforms.

*School Context, Standard-based Reform, and Principal Leadership*

The impact of standards-based reforms on the ability of principal leadership to improve academic achievement is often discussed free of context. In the initiation of standards-based reform policies, policy makers mandated that policies implemented in rural Iowa and suburban Boston have the same outcomes as in inner city Los Angeles. Elmore (2000) writes that standards-based policies have had drastic impacts on school leadership conceptualization, and that these policies demand a redefinition of principal leadership in terms of restructuring both leadership roles and decision-making for improvement in instructional leadership. Specifically Elmore articulates:

Schools are being asked by elected officials, policy leaders, if you will, to do things they are largely unequipped to do. School leaders are being asked to assume responsibilities they are largely unequipped to assume, and the risks and consequences of failure are high for everyone, but especially high for children. Many believe that a new structure for educational leadership is critical, with a renewed focus on the management of instruction, rather than on the management of the structures and processes of instruction (Elmore, 2000).

One way to potentially meet the demands of standards-based reforms that were articulated by Elmore (2000) is to assess how context, policy, and leadership intersect.

In terms of evaluating how context and leadership intersect, Heck (1996) theorizes that principals must be knowledgeable of contextual factors (the community, culture and school climate) that impact educational reforms. Heck (1996) developed a model to test conceptual and methodological issues in a comparative analysis of principal

leadership across cultural settings. Specifically, Heck (1996) theorizes that leadership comparisons across cultural context (American schools vs. foreign schools) cannot be understood without a contextual understanding of the leadership environment. Using Heck's theory as the theoretical foundation for the assessment of how context, standards-based reform policy and leadership intersect reveals a strong tension for the practical implementation of standards-based reform by school leaders; that is, schooling and leadership are trapped between two theoretical arguments for how to effectively implement standardized reform, according to Crowson and Boyd (2001):

Arguments on one side of the issue are that to be effective, schools must find an outreach way to influence parenting and the social-capital environment of their pupils. The argument on the other side is that the schools cannot do it all and should focus on that which they can accomplish well: learning in classrooms and teaching the 3 Rs.

To further frame this tension it must be noted that historically, principals have been viewed as the educational leaders of their schools. According to Goldring and Hausman (2001), principals influence the conditions under which teachers teach and students learn, and they are most effective when they are knowledgeable about the intersections of their community and work environment. If principals are to effectively build capacity, they must be cognitive of the underpinning of their environment (the values, beliefs and perceptions), and that these processes are achieved through recognition and consideration of school culture and context. Though many researchers agree with the assessment of context as a critical factor for building capacity, there is a lack of depth in educational leadership literature for how to define and assess context. For the most part, research only examines context in terms of within-school variables,

ignoring the effect of contextual factors outside the control of the school, such as school location.

School climate and culture are often cited as important contextual components critical to successful implementation of reform policy designed for building school capacity. Various researchers define culture as a learned process of expectations and norms that are important factors relative to school improvement (Goldring & Hausman, 2001; Morris, 1994; Savage, 1999; Slater & Boyd, 1999). Researchers have limited their definition of cultural components of school context to processes related to the daily functioning within schools, disregarding the external environment. For example, Goldring and Hausman (2001) articulated that, for the purpose of capacity building within school culture, there is a core set of values, beliefs, assumptions and perceptions that school community members (principal, teachers and staff) hold about their work. And these cultural components collectively comprise a theory of organizational acceptability that guides how people behave and operate (Sergiovanni, 1996). This limited definition can be seen in terms of how the field has defined the core set of norms, values and critical factors related to context. For example, researchers articulate the importance of the principal's ability to influence student achievement through the management of school culture, the nurturing of a collaborative work environment with teachers, and the fostering of a resilient school culture (Deal, 1987; Sergiovanni & Moore, 1989). Although there is an important component of school functioning that is attained from evaluation within school processes, again it is noted that it limits the assessment of school context.



Although research assessing school context has generated important theoretical and practical insight, a conceptual gap still persists. The majority of the findings cite evidence about specific contextual realities of schools that are derived from research assessing the within-school contextual environments. Research has indicated that effective leadership is defined and driven by contextual value systems (Crowson & Boyd, 2001; Schorr, 1997) and that communities are complex, diverse places, and schools reflect these complexities (Coleman, 1988, 1999; Driscoll & Kerchner, 1999). Analysis of within-context findings indicates that there are considerable differences in how principals define and implement leadership roles. However, there is little to no research that compares the impact of the similarities and differences of community contextual factors (i.e., school location) and how the leadership of the principal impacts schools within the U.S.

In the literature of education there is a limited amount of research that has assessed school context in terms of school location. The majority of the studies have utilized qualitative case study analysis of successful schools in various settings (Comer, Haynes, Joyner & Ben-Avie, 1996; Gardner & Talbert-Johnson, 2000; Morris, 1994; Savage, 1999; Schorr, 1997; Slater & Boyd, 1999). Though the research in this area is limited, it has the potential to contribute enormously to the knowledge base of principal leadership. It has provided insight and voice to the understanding of specific characteristics of various contextual setting of schools within the U.S.

For example, research regarding rural communities illustrates the contextual settings of schools in rural communities that are homogeneous, poorly educated and in economically challenged areas that maintain a strong sense of community (Bauch, 2001).

Research also described communities that are closed societies and distrustful of educational input from individuals that the community deems as outsiders, such as teachers, principals, and school board members, state and federal policy makers and non-residential business leaders who do not live or were not reared in the community. The ability of principals to build capacity in terms of increased student achievement in rural areas involves a unique set of norms and values that may differ from urban or suburban settings (Bauch, 2001). In rural areas principals must be cognitive of societal economic structures and how the impact of increased educational attainment by students may be seen as a violation of community trust and a hindrance of community structural norms.

In comparison, urban schools are often faced with challenges beyond basic learning. (Gardner & Talbert-Johnson, 2000) Urban school districts are characterized as large and bureaucratic, with an inert bureaucratic nature that contributes to ineffective school organization. Leadership in urban schools tends to be less stable than in suburban areas. The size of the bureaucracy intensifies and creates detachment, which often prevents school personnel from understanding the lives, needs and interests of their students (Weiner, 1999). That, in turn, creates an impersonal educational experience. Though research describes a challenging contextual setting for urban schools, it also provides insight about urban schools that has helped them succeed in educating their students. Qualitative case studies of high achieving urban schools have described orderly and structured environments that are conducive to learning, as generally characterized by effective urban schools. Within these schools there are systems for regular assessment of student progress that are aligned with policy, structured curricula and achievement-focused goals.

In conclusion, leadership of the principal is widely debated as being a key element in acquiring school improvement and increasing academic achievement. The three broad categories of school practices that have been found critical for school leadership success are: (1) setting directions, (2) developing people (3) and developing the organization (Leithwood & Riehl, 2003). To support this ideology, Leithwood and Riehl articulated that within each category of successful leadership are specific competencies, orientations and considerations that a principal must achieve to successfully lead her/his school. The authors suggest that effective principals must first identify and articulate a vision for their school in order to establish a successful direction. “Effective educational leaders help their schools to develop or endorse visions that embody the best thinking about teaching and learning” (Leithwood & Riehl, 2003).

There is limited evidence of a direct effect for principal leadership and increased achievement. The methods employed to test hypothesized effects are inadequate. The evidence in support of the effects of leadership by the principal have cited that there are indirect positive effects for principal leadership on school improvement facilitation and increases in student achievement (Bossert et al., 1982; Culbertson, 1974; Erickson, 1967; Hallinger & Heck, 1996; Halpin, 1966; Lipham, 1964; Rost, 1993). Specifically, there is research on the effects of leadership by the principal on academic achievement: how the principal establishes and monitors the school governance process, how the principal contributes to school climate/culture, and how the principal oversees the instructional organization of the school (Heck, 1996).

Research findings from case studies in diverse contexts of highly effective schools indicate that in those environments effective leadership is defined and driven by

an understanding of the within-school contextual value systems. Though this body of research has generated important theoretical and practical insight for understanding the contextual differences of principal leadership, it still leaves a conceptual gap. Specifically, there is little to no research that utilizes quantitative analysis to rigorously assess and evaluate the generalizability of cited contextual effects for successful schools, and a lack of research that compares the effect that school location has on principal leadership of schools within the U.S.

## CHAPTER 3

### METHODS

This chapter provides the empirical framework for the investigation of the impact of school location on a principal's ability to build capacity at the building level, the subject of this dissertation. Based on the theoretical model presented in this chapter, research questions are introduced that illuminate the links between the principal, the school location, the site-based decisions and the perceptions of the policy of accountability, that is, principals' decision-making actions and their perceptions as related their decision-making actions. After describing the Student and Staffing Survey (SASS, 1999-2000), the database from which this study will draw its sample, demographic characteristics of principals will be detailed and used in the study. An explanation follows of the proposed empirical measures to be employed in the investigation. The chapter concludes with a review of the methodology and analytic approach for the study.

#### *Theoretical Model*

Previous research on the effects of leadership by the principal has argued that there are indirect positive effects of principal leadership through the facilitation of school improvement, that in turn increases student achievement (Bossert, Dwyer, Rowan & G., 1982; Hallinger & Heck, 1996), specifically, how the principal establishes and monitors the school governance process, contributes to school climate/culture and oversees the instructional organization of the school (Heck, 1996). Case study research of highly effective schools from diverse contexts suggests that effective leadership is driven by

principals having an understanding of their school context and value systems. The majority of this research defines context in term of processes happening within the structure of the school, such as professional learning communities, teacher-principal relationships, working atmosphere and others. Though this body of research has generated important theoretical and practical knowledge, its claims have yet to be subjected to rigorous testing. It has relied on a narrow definition of context.

The current study defines school context in terms of the geographic locations of the school's urban, suburban and rural areas. Using quantitative methodology implementing two theoretical models, the current study explores the relationships between school location and principals' ability to build capacity at the building level. The theoretical foundation for the relationship between principal leadership and school level capacity building is adapted from Portz, Stein and Jones (1999). Heck's (1996) methodology is utilized to test empirically the nature of hypothesized relationships that exist between the school location and leadership actions for capacity building.

The theoretical model guiding this study integrates two stages of analysis. The first stage frames an exploration of how the location of schools influences the actions of principals regarding building capacity. The theoretical understanding of capacity building is adapted from Portz, et al. (1999) who defined capacity in terms of civic capacity. Civic capacity is the ability to build and maintain effective alliances among representatives from governmental, business, nonprofit and community sectors to work toward a collective problem-solving goal (Stone, 1993). According to Portz, et al. (1999), civic capacity in education is defined as a purposeful effort, starting in either the school system or the community, to build a collaborative constituency for change and improvement in

schools. The researchers assert that educational capacity is developed through a reciprocal relationship where institutions shape and constrain the interests, strategies and actions of leaders, and the leaders build and transform institutions (Portz, Stein & Jones, 1999). The authors assert that institutions provide the empirical context in which collective actions are conceived and implemented. In addition, institutions provide the foundation for building capacity through formal structures, rules and procedures that shape the strategies as well as the actions of individuals (Portz et al., 1999). The authors note that leadership is the critical element to building capacity.

If institutions represent the building blocks for civic capacity, leadership provides the catalyst for creating civic alliances and infusing institutions with the resources and purpose to address major policy concerns. Leaders play a critical role developing common interest and building an institutional platform to realize those interests. Leaders bring together individual and organizations around common purposes, even as they strive to raise to a higher level those very goals and aspirations (Portz et al., 1999).

The current study evaluates institutions in terms of an accountability policy implemented to shape and constrain the interests, strategies and actions of leaders. Specifically, institutions will be defined according to the principal's perceptions of various aspects of accountability policies at the building level. Accountability will be assessed using empirical measures of the principal's perception of school progress, professional development perception and perception of principal influence. In the current study, leadership is defined as the actions of the principal toward building capacity to sustain and institute an accountability policy. Leadership will be assessed through the empirical assessment of the types of decisions made by the principal to implement an accountability policy. The hypothesis of the study is that, because of

school location (urban, suburban and rural), the school principal will make differing decisions regarding capacity building. This will identify differing reciprocal relationships for capacity building in each school location.

The second stage of analysis theorizes that, because of the location of the school, principals will institute and sustain an accountability policy by pursuing different models of actions regarding building capacity. The location of the school will lead the principals to make different decisions and endorse different types of predictive factors determining how best to build capacity. Heck's (1996) model of comparative contextual analysis is the theoretical model utilized to empirically assess these theorized relationships. Heck developed this model to test conceptual and methodological issues in a comparative analysis of principal leadership across cultural settings. Specifically, Heck theorizes that leadership comparisons across cultural context (U.S. schools vs. foreign schools) cannot be understood without a contextual understanding of the leadership environment. To articulate the importance and possible problematic areas of this research perspective, Heck suggests the following:

The investigation of leadership models and the methods through which they are researched across settings is potentially a rich area for empirical exploration, in that it may both broaden and deepen our understanding of how cultural context may impact the theory and practice of school administration. Conducting such studies, however, will not be without considerable problems in terms of understanding the assumptions about knowledge embedded in this type of research, describing conceptualizations of leadership that might be useful in comparing practices between cultures, and using methods of investigation that can provide answers to the types of research questions implied in such comparisons.



The current study addresses the problematic areas suggested by Heck (1996) when making leadership comparison for schools within the U.S. (e.g., the school being located in urban, suburban and rural geographic locations).

Heck (1996) employed his model to test the interactions between principals and teachers in three domains cited in the literature on the effects of leadership by the principal: (1) how a principal establishes and monitors the school governance process (making decisions, solving problems and implementing policies), (2) contributes to school climate/culture (setting schools mission, expectations for students, support and communication), and (3) oversees instructional leadership (coordination of curriculum, resource allocation, supervision of teaching and staff development activities). To provide a foundation for this assertion Heck states the following:

It is important to recognize the necessarily incomplete nature of any model that attempts to reduce the complexity of organizational life to a series of measured variables focusing on principal behavior. These constructs are not the ones that could be measured, but they are three that have been found to affect school effectiveness.

The current study proposes to employ Heck's model to assess how a principal's ability to build capacity as defined in the three domains above is conditional on school location (urban, suburban and rural geographic location). The comparative conceptual analysis model developed by Heck (1996) is used as the framework for the empirical testing of measures that will be developed to assess the theoretical relationship between leadership and institutions as proposed by Portz, et al. (1999). The current study theorizes that school principals make different decisions regarding capacity building because of school location (urban, suburban and rural), and that, due to these different decisions,

there will be different predicative models for capacity building used to sustain and institute an accountability policy. The utilization of these models is theorized to provide empirical rigor and clarity through the assessment of the following research questions:

### *Research Questions*

1. Does the location of the school (urban, suburban and rural) cause the principal to predict social demographic factors that differ regarding building capacity used to sustain and institute an accountability policy?
2. Does the location of a school (urban, suburban and rural) cause principals to have different predicative models of decisions that they implement to build capacity in order to sustain and institute an accountability policy?

### *Sample*

The sample used in this study is derived from the Schools and Staffing Survey (SASS). SASS is the nation's largest sample survey of American K-12 public and private schools and is conducted by the National Center for Education Statistics (NCES). The SASS survey collects information about the principal's demographic characteristics, training, experience, salary and perceptions about school decision-making and school climate. The current sample will be drawn from the public school principal survey collected from August 1999 to June 2000 and will use the public use dataset. This is a restricted data set where the respondents' identifying information is removed from the data files; a school identification number is used to connect principal data to data from

the schools in which they work. The researcher will be restricted in the range and information available for data analyses.

### *Instrumentation*

The researcher in this current study developed four empirical measures that represent the three SASS domains of the effects of principal leadership. The four measures are: (1) perception of principal influence, (2) perception of school progress, (3) perception of professional development, and (4) the principal's decisions to build capacity. The independent variables are: (1) perception of principal influence, (2) perception of school progress, (3) perception of professional development, and (4) school location. The dependent variable is the principal's decisions to build capacity. All the variables are described below.

Principal's Decisions to Build Capacity – The principal's decision to build capacity will be developed as a construct because the educational leadership literature identifies the site-based decisions of the principal as a critical factor in the success of a standards-based reform policy. Barr and Bizar (2001) state that the principal plays a pivotal role in capacity building, and, for change to be effectively implemented, it must be supported and sustained through the leadership of the principal. Ultimately, principals must become directly involved in instructional concerns, developing the mutual trust and respect with teachers who are essential components of capacity development (Barr & Bizar, 2001). The construct of the Principal's Decisions to Build Capacity will be developed from the question: *"In the last month, approximately how often did you engage in the following activities in your role as principal of this school"?* Principals

were asked to rate the frequency of their actions (1= never, 2=once or twice a month, 3= once or twice a week, and 4=daily) on the following sub-items:

1. Facilitate achievement of the school's mission through such activities as consensus building, planning, obtaining resources, monitoring progress, etc.
2. Supervise and evaluate faculty and other staff
3. Provide and engage staff in professional development activities
4. Facilitate student learning (e.g., eliminate barriers to student learning, establish high expectations for students)
5. Guide the development and evaluation of curriculum and instruction
6. Build professional community among faculty and other staff

Perception of Principal Influence – Murphy and Datnow (2003) and Porter and Soper (2003) indicate that the attention paid by the principal to influences on policy implementation often determines the success of the policy. Therefore, the construct of Perception of Principal Influence is developed from the question, *“Using the scale 1-5, where 1 is “No influence” and 5 is “A great deal of influence,” how much ACTUAL influence do you think each group or person has on decisions concerning the following activities?”* The principals were asked to rate the strength of their perceptions on the following sub-items at their school:

1. Setting performance standards for students
2. Establishing curriculum
3. Determining the content of in-service professional development for teachers
4. Evaluating teachers in this school
5. Hiring new full-time teachers at this school
6. Setting discipline policy at the school
7. Deciding how your school budget will be spent

Perception of School Progress – This construct is developed from the question:

*“Please indicate how far along you think your school is in:”*

1. Implementing educational goals
2. Implementing organizational/governance goals
3. Developing a student assessment system
4. Involving parents in the school

Principals were asked to rate their perceptions according to the scale: 1=just beginning, 2=long way to go, 3=almost there, 4=we’ve reached our goal, 5=not applicable. For the purpose of reliability analysis, the “not applicable response” is recoded to zero. Principal Perception of School Progress will be developed as a construct because within the educational leadership literature there is an abundance of qualitative information that indicates that schools successful in various environments are led by leaders with established goals and a positive perception of the school’s progress.

Perception of Professional Development Importance – This is developed as a construct because the educational leadership literature cites principal leadership as a critical factor in the successful development of capacity. Youngs and Bruce (2002) indicate that effective principals can sustain high levels of capacity by establishing trust and creating structures that promote teacher learning. Additionally, the literature indicates that leadership for the successful development of capacity schools must be supportive of the professional development of teachers. Thus, the Perception of Professional Development Importance construct will be developed from the question: *“Using the scale 1-5, where 1 is ‘Not important at all’ and 5 is ‘Very important’, how important is each of*

*the following in determining the in-service professional development activities of teachers in this school?"* The principals were asked to rate the strength of their perceptions on the following sub-items:

1. Special state-level initiatives
2. District-level initiatives or district improvement plans
3. School improvement plan
4. Implementation of state or local academic standards
5. Implementation of state or local skill standards

The current study uses an empirical assessment of the measures to evaluate each construct through psychometrical procedures. Each empirical measurement will be tested to determine Cronbach's Alpha (testing the measures for internal consistency and reliability) and factor analyses (computing the factor loading of each measure).

Cronbach's Alpha is a measure of internal consistency and is generally used for measures where participants respond to questions on a scale (1 to 3, 1 to 4, 1 to 5, etc.). The internal consistency of a scale may refer to the consistency of answers to all questions within a scale, or it may refer to the consistency of answers at two different points in time when no change in the construct has occurred during the time interval. The current study will assess internal consistency from the first perspective. Reliability coefficients are the product of internal consistency analysis and its scores (alphas) may range from zero to one, with zero meaning that the answers to the questions are unrelated to one another, usually because they measure different traits. A coefficient of one indicates that all answers are perfectly intercorrelated, a condition that occurs if answers

to all questions are identical or nearly identical. If a scale has an alpha coefficient above .60, it is usually considered to be reliable/internally consistent.

Factor analysis is used to uncover the latent structure (dimensions) of a set of variables. It reduces attribute space from a larger number of variables to a smaller number of factors and as such is a "non-dependent" procedure and is employed in a variety of manners (Factor). The SASS 1999-2000 questions will be tested for their factor loading, that is, the degree to which an item appears to be correlated with a factor. For example, if a test is supposed to measure two independent factors, half the items should load heavily (+.40-.80) on the first factor, but have near zero negative loadings on the second factor. The other items should not load on the first factor, but load highly on the second factor. Generally, it is expected that items measuring a certain factor to have a loading of at least +.30 with factor. In the current study factor analysis is employed to validate the empirical measures by demonstrating singular factor loading for the questions used to construct each question.

### *Demographic Variables*

Age, salary, education, sex and race will be assessed to obtain demographic information for each participant. Each variable will be measured categorically. Frequency analysis will be assessed for all the variables to ensure a normal distribution across all categories of each variable. Age is a created variable in the public use 1999-2000 SASS data set. The SASS survey includes a categorical variable with five intervals where principals identified their age by providing their year of birth. The current study proposes

to collapse the age into a variable with four categories (44 or younger, 45 to 49, 50 to 54, and 55 and older). Survey respondents were asked to report their current annual salary before taxes and deductions to determine the salary variable. Salary is a created variable in the public use 1999-2000 SASS data set and is assessed with five categories that range from less than \$49,000 to \$90,000 or more.

To determine educational level principals were asked to report the highest degree they had earned. Principals were provided with six choices ranging from no degree to professional/doctoral degree. The current study proposes to collapse education into a variable with three categories (Masters Degree or lower, Educational Specialist, and PhD) to assure equal group variance. The sex variable will be created from participants answering the question: “*Are you male or female*”? Finally, in the formation of the race variable participants were asked to answer the question: “*What is your race*”? Initially, the race variable had four categories. The current study proposes to collapse race into three categories (Black-non-Hispanic, White-non-Hispanic and Other) to assure equal group variance.

### *Method of Statistical Analysis*

Initial data analysis was conducted using SPSS 14.0. Frequencies, descriptive statistics and distributions were examined for all variables, both at the aggregate level and then by school location: urban, suburban and rural. Item level data analysis was carried out before creating the composites, and reliability estimates for each composite were calculated. Next, multiple regressions for comparisons based on race, gender, sex, salary and school improvement plan were conducted on the dependent variable (principal’s



decisions to build capacity) in the model. Next, structural equation models were estimated using the EQS 6.1 program (described later).

### *Multiple Regressions Models*

Multiple regression analyses were performed to assess the relationships between the principal's decision-making activity and social demographic variables (age, salary, gender, education, race and school improvement plan) by school location (urban, suburban and rural). Multiple regression analyses were performed using SUDAAN. Unstandardized partial regression coefficients and p-values are provided for each independent variable, in addition to  $R^2$ . The theorized model employed in the current study is displayed below.

$$Y = b_1x_1 + b_2x_2 + \dots + b_nx_n + e$$

$$\text{Decision Making} = \text{intercept} + b_1\text{age} + b_2\text{salary} + b_3 \text{gender} + b_4\text{education} + b_5 \text{race} + b_6\text{school improvement plan} + \dots + b_p * X_p + e$$

### *Structural Equation Modeling*

The current study proceeded through five sequential stages: (1) development of a theoretical model, (2) classification of data, (3) testing fit of data to the theoretical model, (4) specifying and testing a measurement model, and (5) specifying and testing a structural model.

By means of Structural Equation Modeling (SEM) the current study examined the level of overall prediction of each of the measured variables in the model and the exclusive, separate contribution of each predictor variable to each dimension of the

principals' capacity building ability. This model makes possible the examination of simultaneous relationships between independent and dependent variables. Additionally, SEM was used because it provided the opportunity for simultaneous estimation of the hypothesized regressions using the covariance matrix of the observed variables.

Before examining the direct and indirect effects in the model, the overall fit of the model to the data was assessed. The EQS program provides several indices of the model fit. The most common index of fit is  $\chi^2$  values, which indicates the overall fit of the model to the data by assessing the discrepancy between the observed covariance matrix and the reproduced covariance matrix. Other fit indices were examined, including RMSEA (Root Mean Square Error of Approximation), and CFI (Comparative Fit Index). Finally, the fit of the structural model was compared using separate samples of principals from different school locations. Thus, SEM was employed to evaluate whether observed interrelationship patterns in the data are consistent with a specified causal model. Additionally, SEM was utilized to evaluate whether one model fit the observed relations among the variables better than another model.

## CHAPTER 4

### RESULTS

#### *Descriptive Statistics*

Table 1 displays the distribution of principals in the 1999-2000 SASS samples by social demographic characteristics.

Demographics	Urban		Suburban		Rural		
	N	%	N	%	N	%	
<u>Age</u>							
44 and under	307	16.4	664	20.1	934	27.9	
45-49	434	23.2	821	24.9	788	23.5	
50-54	661	35.3	1147	34.7	976	29.1	
55 and older	468	25.0	669	20.3	655	19.5	
<u>Salary</u>							
less than 60,000	335	17.9	702	21.3	2062	61.5	
60,000 to 69,999	553	29.6	823	24.9	863	26.6	
70,000 to 79,000	592	17.9	801	24.3	322	9.6	
80,000 or greater	390	20.9	975	29.5	76	2.3	
<u>Gender</u>							
Male		976	52.2	2077	62.9	2428	72.4
Female	894	47.8	1224	37.1	925	27.6	
<u>Education</u>							
Masters or lower	1018	54.4	1702	51.6	2084	62.2	
Educational Specialist	585	31.3	1186	35.9	1082	32.2	
PhD		267	14.3	413	12.5	187	5.6
<u>Race</u>							
Other		194	10.4	200	6.1	197	5.9
Black, Non-Hispanic		423	22.6	234	7.1	169	5.0
White, Non-Hispanic		1253	67.0	2867	86.9	2987	89.1
<u>School Improvement Plan</u>							
No		110	5.9	410	12.4	456	13.6
Yes		1760	94.1	2891	87.9	2897	86.4
<b>Total N</b>		<b>1870</b>		<b>3301</b>		<b>3353</b>	

Note: Total N = sample size for number of principals surveyed at each school location

Table 1. Demographic Characteristics of Study Population (Total Sample Size = 8,524)

An examination of the descriptive statistics for the social demographic variables shown in Table 1 reveals several insights. Across all school locations, the largest categories of participants were between 50 and 54 years of age. For salary in rural school, 62% of the principals earned less than \$60,000 a year, the lowest salary category, compared to suburban principals, whose largest percentage of participants earned \$80,000 or more per year. In terms of education, across all school locations, over 50% of the participants earned a Masters Degree or lower.

When assessing the demographic characteristics for school improvement plans, over 86% of the principals in each school location reported that their school had a school improvement plan. Additionally, 26.7% (n = 2,017) of the participants who reported that their schools had a school improvement plan also reported that their schools were actively engaged in a comprehensive school reform plan. In the analysis of gender, 64.3% of the participants were males (n = 5,481), and 43.6% of the participants were female (n = 3,043). Finally, for the assessment of racial composition, 6.9% of the participants were categorized as Others (n = 591), 9.7% of the participants reported their racial composition as Black, non-Hispanic (n = 826), and 83.4% of the participants identified their racial composition as White, non-Hispanic (n = 7,107).

### *Correlations*

Table 2 shows the inter-correlations matrix for the study variables.

	<b>Prog</b>	<b>Dec</b>	<b>DevPrep</b>	<b>DevAct</b>	<b>Influ</b>
<b>Prog</b> .....	1	.113**	.077**	.191**	.146**
<b>Dec</b> .....		1	.203**	.299**	.193**
<b>DePrep</b> .....			1	.406**	.237**
<b>DevAct</b> .....				1	.271**
<b>Influ</b> .....					1

Note: N = 8524 \*\*p < .01 Prog = School Progress, Dec = Decision-Making Activity, DePrep = Professional Development Perception, DevAct = Professional Development Activity, Influ = Perception of Influences

Table 2. Inter-Correlations Matrix of the Study Population (N=8,524)

An examination of the inter-correlations displayed in Table 2 revealed several insights. First, significant positive correlations were found between all study variables. Specifically, a positive and significant correlation was found between Principal’s Perception of Influence (Influ) and Decision-Making Activity (Dec) ( $r = .193, p < .001$ ). This result indicated that there was a positive relationship between the principals’ perception of their ability to lead and the decisions made by the principal for implementation of an accountability policy.

### *Multiple Regressions*

Tables 3 through 6 display the results of multiple regression analyses for the relationships between principals’ decision-making activity and sociodemographic variables (age, salary, gender, education, race and school improvement plan) by school location (urban, suburban and rural). Multiple regression analyses were performed using

The First Fitted Model is:

$$DM = \text{intercept} + b_1\text{age} + b_2\text{salary} + b_3\text{gender} + b_4\text{education} + b_5\text{race} + b_6\text{school improvement plan} + \dots + b_p X_p + e$$

Table 3 displays the regression results for principals who worked in urban areas.

Source	DF	F	B	P	R <sup>2</sup>
Overall	12	1.7		.00***	.016
Gender			.111	.05*	
School improvement plan			.139	.07	
Education			-.014	.34	
Race			-.038	.42	
Salary			.008	.52	
Age			-.009	.97	
Intercept			2.96	.00***	

Note: \*p<0.05, \*\*p<0.01, \*\*\*p<0.001  
 DF = Degrees of Freedom, B = Beta, R<sup>2</sup> = R-Squared

Table 3. Regression Model for Urban Population (N=1,870)

The results of the regression analyses for principals in urban areas indicated that the R<sup>2</sup> of the model was significant in the population. Thus, there was a discernable linear relationship between predictor variables and dependent variable:  $F(12, 88) = 1.17, p = .00, R^2 = .016$ . In an effort to obtain a parsimonious model, the number of predictors in the original model was reduced according to significance. A new model was developed where the predictor variable with the highest non-significant p-value was removed from the original model. This process was repeated until the final model included only predictor variables with p-values lower than .05. The results for the so-obtained reduced

predictor variables with p-values lower than .05. The results for the so-obtained reduced model indicated an overall model significance:  $F(2, 88) = 5.69, p < .05, R^2 = .02$ . Specifically, a significant effect was found for school improvement plan:  $F(1, 88) = 3.64, p < .05$ ; principals whose school had an improvement plan had a higher rate of accountability decision-making frequencies. In addition, a significant effect was found for gender:  $F(1, 88) = 8.53, p < .05$ ; that is, female principals had a higher decision-making frequency score compared to their male counterparts.

Table 4 displays regression analysis results for principals who worked in suburban areas.

Source	DF	F	B	P	R <sup>2</sup>
Overall	2	7.18		.000***	.042
Race			-.022	.000***	
Salary			.037	.015*	
Gender			.138	.032*	
Education			.028	.048*	
Age			.001	.728	
School Improvement Plan			.027	.024*	
Intercept			2.62	.000***	

Note \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$   
 DF = Degrees of Freedom, B = Beta, R<sup>2</sup> = R-Squared

Table 4. Regression Model for the Suburban Population (N=3,301)

These results for principals in suburban areas indicate that the R<sup>2</sup> of the model was significant in the population. Thus, there was a discernable linear relationship between predictor variables and dependent variable:  $F(12, 88) = 7.18, p < .001, R^2 = .042$ . In an effort to obtain a parsimonious model, the original model was reduced. A new model was developed where the predictor variable with the highest non-significant p-value was removed from the original model. This process was repeated until the final

model included only predictor variables with p-values lower than .05. The results for the so-obtained reduced model indicated an overall model significance:  $F(9, 88) = 9.21, p < .001, R^2 = .053$ . Specifically, a significant effect was found for school improvement plan:  $F(1, 88) = 5.22, p < .05$ ; those principals whose school had an improvement plan had a higher rate of accountability decision-making frequencies compared with schools without a school improvement plan.

There was also a significant effect for salary:  $F(3, 88) = 3.66, p < .05$ ; principals who earned \$60,000 to \$69,999 had lower decision-making frequencies compared to principals who earned \$70,000 or above. There was a significant effect for education:  $F(2, 88) = 5.69, p < .05$ ; principals with PhD degrees had higher decision-making frequencies compared to principals with Specialist degrees or lower. There was a significant effect for race:  $F(2, 88) = 5.69, p < .05$ ; White, non-Hispanic principals had higher decision-making frequencies compared to principals for the Other racial group but lower decision-making frequencies compared to Black, non-Hispanic principals. Finally, there was a significant effect for gender:  $F(1, 88) = 38.61, p < .05$ ; that is, female principals had a higher decision-making frequency score compared to their male counterparts.

Table 5 displays regression analysis results for principals who work in rural areas.

Source	DF	F	B	P	R <sup>2</sup>
Overall	12	5.72		.000***	.027
Race			.060	.000***	
Gender			.091	.017*	
Salary			.049	.083	
Age			-.005	.517	
Education			.051	.135	
School Improvement Plan			.153	.001***	
Intercept			2.69	.000***	



Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$   
DF = Degrees of Freedom, B = Beta,  $R^2$  = R-Squared

Table 5. Regression Model for the Rural Population (N=3,353)

These results for principals in rural areas indicate that the  $R^2$  of the model was significant in the population. Thus, there was a discernible linear relationship between predictor variables and dependent variable:  $F(12, 88) = 7.18, p < .01, R^2 = .027$ . In an effort to obtain a parsimonious model, the original model was reduced. A new model was developed whereby the predictor variable with the highest non-significant p-value was removed from the original model. This process was repeated until the final model included only variables with p-values of .05 or lower. The results for the so-obtained reduced model indicated an overall model significance:  $F(7, 88) = 8.85, p < .01, R^2 = .030$ . A significant effect was found for school improvement plan:  $F(1, 88) = 12.43, p < .05$ ; principals whose school had an improvement plan had a higher rate of accountability decision-making frequencies compared to principals from rural areas whose schools did not have a school improvement plan.

Additionally, there was a significant effect for salary:  $F(3, 88) = 3.28, p < .05$ ; principals who earned \$60,000 to \$69,999 had a lower decision-making frequency compared to principals who earned \$80,000 or higher. There was also a significant effect for race:  $F(2, 88) = 19.91, p < .05$ ; White, non-Hispanic principals had lower decision-making frequencies compared to Black, non-Hispanic and Other principals. Finally, there was a significant effect for gender:  $F(1, 88) = 7.46, p < .05$ ; that is, female principals had a higher decision-making frequency score compared to their male counterparts.

## *Structural Equation Modeling*

To examine further the study research questions, structural equation modeling (SEM) was conducted using the EQS 6.1 computer program (Bentler, 2004). By means of SEM, the level of overall prediction of each of the measured variables in the model and the exclusive, separate contribution of each predictor variable to each dimension of Principals' Capacity Building Ability was examined. This model makes possible the examination of simultaneous relationships between independent and dependent variables. Additionally, SEM was used because it provided the opportunity of simultaneous estimation of the hypothesized regressions using the covariance matrix of the observed variables. Thus, SEM was employed to evaluate whether observed interrelationship patterns in the data are consistent with a specified causal model. Additionally, SEM was used to evaluate whether one model fit the observed relations among the variables better than another model.

The overall model described relationships between principals' decision-making activities and principals' perception of their personal influences, school's progress and professional development ideologies, and is presented in Figure 1. The model contains four latent variables of main intent: principals' decision-making activities and principals' perception of their personal influences, school progress and professional development ideologies (Each of the latent variables had two indicators. Randomly splitting questionnaire items in half determined each indicator.

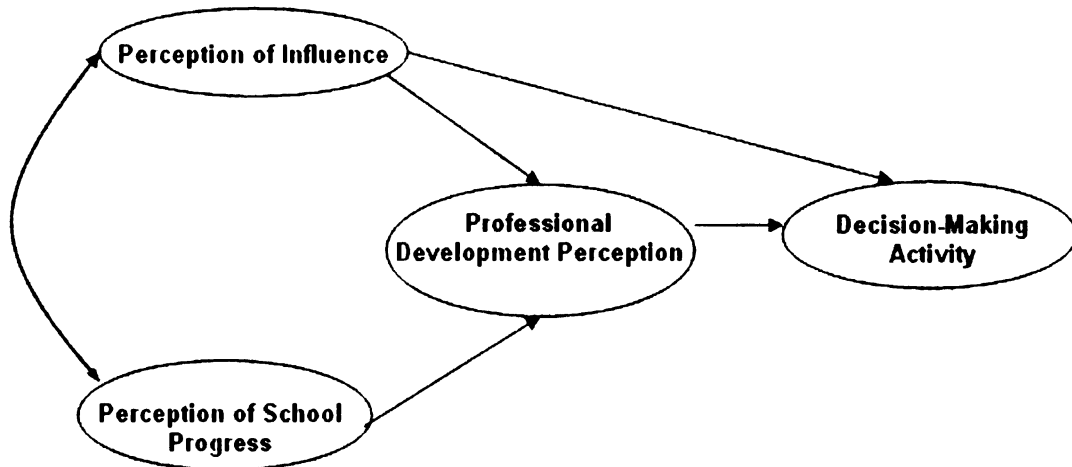


Figure 1. Structural Model for Principal Decision-Making Activity

Tables 6 through 9 display the Cronbach’s Alpha and questions used to develop each latent variable). All measured variables are based on principal-level data. Decisions about the inclusion of variables and paths within the model were guided by theoretical considerations. As noted in the literature review and early in the current section, many factors are related to principals’ decision-making processes.

Two exogenous (i.e., predictor) latent variables in the model—perception of influence and perception of school progress—represented the principal attributes thought to impact capacity building to increase student achievement. (Each of the latent variables had two indicators. Randomly splitting questionnaire items in half determined each indicator). Because of the strong positive relations between perception of influence and perception of school progress, covariances between these variables were estimated in the model. The structural model also contained an endogenous (outcome) variable: decision-making activity. Both exogenous variables were predicted to have direct and positive

relationships with environmental factors. In addition, a direct positive pathway between perception of influence and the two endogenous variables was specified.

Tables 6-9 show the Indicator Cronbach's Alpha for Perception of Influence, Perception of School Progress, Professional Development Importance and Decision-Making Activity.

<b>Source</b>	<b>Questions (Items)</b>	<b>Alpha</b>
Indicator I		.703
	Setting performance standards for students of this school	
	Establishing curriculum at this school	
	Setting discipline policy at the school	
Indicator II		.616
	Determining the content of in-service professional development for teachers in this school	
	Evaluating teachers in this school	
	Hiring new full-time teachers at this school	
	Deciding how your school budget will be spent	
Total		.768

Note: Total= Total Alpha of Construct

Table 6. Perception of Influence

<b>Source</b>	<b>Questions (Items)</b>	<b>Alpha</b>
Indicator I		.669
	Implementing educational goals	
	Implementing organizational/governance goals	
	Developing a student assessment system	
Indicator II		.563
	Establishing a secure financial base	
	Attracting and retaining students	
	Involving parents	
Total		.740

Note: Total= Total Cronbach's Alpha of Construct

Table 7. Perception of School Progress

<b>Source</b>	<b>Questions (Items)</b>	<b>Alpha</b>
Indicator I		.824
	Implementation of state or local academic standards	
	Implementation of state or local skill standards	
Indicator II		.628
	District-level initiatives or district improvement plan	
	School improvement plan	
	Special state-level initiatives	
<b>Total</b>		<b>.771</b>

Note: Total= Total Cronbach's Alpha of Construct

**Table 8. Perception of Professional Development Importance**

<b>Source</b>	<b>Questions (Items)</b>	<b>Alpha</b>
Indicator I		.683
	Facilitate achievement of the school's mission through such activities such as consensus building, planning, obtaining resources, monitoring progress, etc.	
	Guide the development and evaluation of curriculum and instruction	
	Facilitate student learning (e.g., eliminate barriers to student learning, establish high expectations for students)	
Indicator II		.613
	Supervise and evaluate faculty and other staff	
	Provide and engage staff in professional development activities	
	Build professional community among faculty and other staff	
<b>Total</b>		<b>.789</b>

Note: Total= Total Cronbach's Alpha of Construct

**Table 9. Decision-Making Activity**

*Criteria for Evaluating Model Fit*

Evaluating causal models involves ascertaining how well the proposed model “fits” or adequately replicates the observed patterns between variables (Byrne, 1994). In the current study, the guidelines suggested by Raykov, Tomer and Nesselroade Raykov,

Tomer & Nesselroade (1991) were followed for reporting the results of the structural models. Model fit tests include the chi-square statistic, comparative fit index (CFI; Bentler, 1990), and root mean square residual error of approximation (RMSEA).

Chi-square is a statistic that tests the degree of misfit between the hypothesized model and a saturated model. With large samples, the saturated model provides a good baseline for comparing alternative models for an improvement in model fit. Significant values suggest that the covariance matrix associated with the hypothesized model does not resemble well the underlying population or observed covariance matrix structure. One issue with chi-square is that it tends to be overly sensitive to sample size.

In difference to chi-square, the comparative fit index (CFI) relates the lack of fit of a specified model to that of the null model (Byrne, 1994). CFI values range from 0.0 to 1.0 with values of .90 or higher, suggestive of a good fit (Hu & Bentler, 1999). Finally, RMSEA indicates the lack of fit per degree of freedom in a model. RMSEA is zero when a model perfectly fits the population covariance matrix, and increases with greater model misspecification. Additionally the RMSEA is the only fit index that is not affected by the sample sizes used to evaluate the goodness of fit of a model. Values of .06 or less indicate a good fit (Hu & Bentler, 1999).

Prior to conducting SEM analysis the intra-class correlations values were computed for each of the observed variables entered into a SEM structural model. The results of this intra-class correlation analysis are displayed in Table 10 and indicate that all observed variables were associated with intra-class correlation values less than .05, which can be considered indicative of negligible nesting effect.

Source	ICC
Decision-making activities	
DM1	.04
DM2	.02
Perception influences	
PI 1	.01
PI 2	.03
School progress	
SP 1	.02
SP 2	.01
Professional development perception	
PD 1	.03
PD 2	.02

Note: ICC = Intra-class correlation

Table 10. Intra-Class Correlation of the Study Population (N=8,524)

### *SEM Analysis of the Hypothesized Model*

Table 11 presents the theorized models for predicting capacity building in the total sample and in each school location for the study variables illustrated in Figure 1.

Model	DF	N	$\chi^2$	NFI	CFI	RMSEA	RMSEA CI
Overall	15	8524	112.67	.999	.998	.028	(.023, .032)
Urban	15	1870	34.21	.999	.999	.026	(.014, .036)
Suburban	15	3301	52.05	.998	.999	.031	(.022, .041)
Rural	15	3353	39.07	.999	.999	.026	(.015, .034)

Note: DF= Degrees of Freedom, N = Sample Size,  $\chi^2$ = Chi-Square, P = Chi-Square Statistic , NFI = Normed Fit Index  
CFI = Comparative Fit Index, RMSEA = Root Mean Square Residual Error of Approximation, CI = Confidence interval

Table 11. Goodness of Fit Indices

For the total sample (n = 8,524), the overall hypothesized model was found to have a good fit to the data as indicated by a RMSEA = .028, CI = (.023, .032). For the urban sample (n = 1,870), the overall hypothesized model was found to have a good fit to the data as indicated by a RMSEA = .026 CI = (.014, .036). For the suburban sample (n =

3,301), the overall hypothesized model was found to have a good fit to the data as indicated by a RMSEA = .031, CI = (.022, .041). For the rural sample (n = 3,353), the overall hypothesized model was found to have a good fit to the data as indicated by a RMSEA = .026, CI = (.015, .034).

The standardized parameter estimates for the structured paths among the observed variables in the four models are presented in Figures 2 through 5, which are displayed in the Appendix.

Paths between the exogenous variables and the endogenous variable were all significant and positive in the total sample and in the rural sample (see Figures 2 and 4). Specifically, principal perception of influence, school progress and professional development policy importance were significant and positive in the rural sample and in the total sample. These variables also accounted for 12% of the variance for decision-making activity in the rural sample, and 11 % of the variance of decision-making activity in the total sample. In addition, there was a significant and positive pathway from principal perception of influence to principal decision-making activity for principals in all locations.

A positive and significant path was identified from principal perceptions of influence to principal perceptions of professional development policy importance for principals in each school location (total sample  $B = .342$ ,  $P < .001$ ). In contrast, the path from school progress to principal perception of professional development policy importance was positive but not significant for the suburban sample ( $B = .008$   $P > .05$ ), while it was negative and not significant for the urban sample ( $B = -.002$   $P > .05$ ). It is also interesting to note that the direct path from perception of principal influence to



decision-making activity scores was significant in the urban sample ( $B = .178, P < .001$ ).

There was a direct path from perception of principal influence to decision-making activity that was significant in the suburban sample. However, the path from perception of professional development policy importance was the strongest path in the rural sample ( $B = .251, P < .01$ ).

## **CHAPTER 5**

### **DISCUSSION**

The purpose of this study was to examine the impact of school location (context) on the principal's leadership ability to build capacity at the school building level. Specifically, to explore a model how school location impacts the relationships between the principal's decision-making activities and the principal's perception of their influence on job functions, the school's progress and professional development ideologies. This chapter presents a summary and discussion of the findings as well as their implications for educators. The contributions of the study to the conceptualization, measurement and methodology of educational leadership research in education are discussed, as well as the study's limitations and suggestions for future research.

#### *Process of the Study*

This study evolved through a process that is somewhat obscured by the traditional organization of the dissertation. The objective at the outset of this study was to examine the impact of school location on principal's leadership ability to build capacity at the school building level. This began with an exploration of the relationship between standards-based reform and principal leadership in current educational literature.

Carnoy and Loeb (2002) provided the framework for the initial theoretical evaluation of these concepts. The authors framed the conceptualization of these concepts by suggesting that standards-based accountability policies were designed and implemented to change what schools do and how they do it. Thus, they concluded that

educational school reforms were established on the main principles of alignment and capacity building.

“Alignment means that in order to focus on improving outcomes, schools systems need to set clear standards and align curriculum and accountability mechanisms with those standards. Capacity building is developed in a coherent organization, built around aligned standards and assessment, which can produce increased capacity to deliver improved education. Furthermore, the authors articulate that standards based reform ideology demands changes in the way principals work; these policies suggest that for education to improve the principals’ ability to build capacity has to be raised. It advocates that principals must have the ability to not only manage schools, but also become instructional leaders of their schools (Carnoy & Loeb, 2002).

The study next framed the relationship between leadership, achievement and context. Initially, the review of literature indicated that three broad categories of school practices have been found critical for school leadership success: setting directions, developing people, and developing the organization (Leithwood & Riehl, 2003). In the conceptualization of leadership, a review of current educational inquiry literature found that there are indirect effects for the relationship of principal leadership on student achievement. Research shows three areas in which principal leadership produces indirect effects: (1) how the principal establishes and monitors the school governance process, (2) how the principal’s leadership contributes to school climate/culture, and (3) how the principal oversees the instructional organization of the school (Heck, 1996).

The central argument of the study is built upon the idea that while there is concurrence in the literature regarding the impact of principal leadership, there is ambiguity in scholarly discourse regarding the relationship between school context and principal leadership. Additionally, various researchers have called for greater clarity in the conceptualization of leadership effects.

A significant amount of research frames the relationship between context and leadership in terms of school culture. Various researchers define culture as a learned process of expectations and norms, and the cultural components of school culture are important factors in implementing school improvement (Goldring & Hausman, 2001; Morris, 1994; Savage, 1999; Slater & Boyd, 1999). They articulate that within school culture there is a core set of values, beliefs, assumptions and perceptions that school community members hold about their work. Those cultural components together comprise a theory of organizational acceptability that guides how people behave and operate (Sergiovanni, 1996).

The ideology for this study was developed on the premise that principals are typically the educational leaders of their schools. They influence the conditions under which teachers teach and students learn. Effective principals must be knowledgeable about their community and work environment for the successful implementation of standards-based reform, and they must be cognitive of how the school and community culture affect the ability to build capacity. The study theorized that because of school location (urban, suburban and rural), school principals make different decisions regarding capacity building (cultural contextual development) and that due to these different decisions there will be different predicative models of capacity building to sustain and institute accountability policy. Thus, the aim of the study was to to examine the impact of school location (context) on the principal's leadership ability to build capacity at the school building level in doing so develop theoretical conceptual models showing the relationship between context and culture that captures aspects of the relationship between school context and leadership.

This study was guided by two basic research questions: a) Are there differences in how and from whom the principal makes decisions related to instructional leadership and an accountability policy? b) Does the location of the school influence how principals present, describe and adhere to an accountability policy?

In addition, the specific aims of this study were to: 1) analyze decisions made by the principal to effectively develop instructional leadership in various school locations; 2) assess how differences in decisions made by principals differ by school locations; 3) ascertain how principal demographic characteristics, training, experience, salary and perceptions of school climate intersect within and between urban, suburban and rural school settings for principals to build capacity in terms of instructional leadership; and 4) provide clarity for educational leadership's conceptualization of how instructional leadership and school context intersect through illuminating contextual differences and similarities for principal decision-making actions in a cross-sectional population of public school principals.

### *Discussion*

The major findings of this study are the results of the tests that were performed. Before interpreting these findings, it is important to note shortcomings of the present study. Data are cross-sectional and indicate that no information is known about the causal direction of the results.

Descriptive analysis was used to provide a statistical identity for the social demographic characteristics of the sample. These results also provide insight about the inequitable conditions that remain in the public school system. One glaring instance can

be found when the demographic characteristics of principal salary are examined across school location. As noted in Table 1 there is considerable difference in pay for principals in suburban areas and principals in rural and urban areas. These findings may suggest that there is still great disparity in district capital, because previous research indicates that in most areas principal salary is related to the economic capital of a district.

Analysis and results from multiple regression models were interesting results as well. Demographic variables employed in the descriptive analyses were utilized in the multiple regression analyses as predictor variables. First, there were discernable linear relationships between predictor variables and the dependent variable for principals in all school locations. The results of the regression analysis for urban principals indicated that only two demographic characteristics—gender and school improvement plan—were predictive of decision-making activity. These results indicate that differences for the decision-making activity of urban principals can only be found when gender and school improvement plan are assessed. Urban principals are almost a homogeneous sample in their decision-making activity.

In comparison, for suburban principals, five out of the six demographic characteristics were significant predictors of decision-making. These variables were school improvement plan, salary, education level, race and gender. These results suggest that a complex combination of demographic characteristics is needed to explain the actions of suburban principals in the assessment of decision-making activity, that is, that in the assessment of decision-making activity in suburban principals, the combination of a principal's age, race, salary, educational level and school's improvement plan must be identified to best evaluate differences in decision-making for principals in suburban areas.

Finally, for rural principals, four out of the six demographic characteristics were significant predictors of decision-making. These variables were school improvement plan, salary, race and gender of the principal. These results are similar to the suburban sample: in the assessment of decision-making activity in rural samples, the combination of a principal's age, race, salary and school's improvement plan must be identified to best evaluate differences in decision-making for principals in rural areas.

The discussion of specific predictive factors for the multiple regression analysis across and within school locations revealed several interesting insights. First, when gender is closely examined, women endorsed higher decision-making activity compared to their male counterparts across all school locations. This is an interesting finding because across the sample this pattern was consistent despite the fact that males were the majority population in each school location. This may suggest that women principals are more willing to and cognitive of implementing building-level policy that is aligned with accountability. Additionally, this finding supports previous research that indicates that personal characteristics are not a factor in effective leadership. Specifically, Leithwood and Jantzi (1997) found that positive perceptions of effective leadership are based on what has been done, such as principal actions and their perceived effects, not on their personal characteristics, such as age or gender of the principal.

The results from using the principal's salary as a predictive variable were interesting. Significant and positive effects were reflected for suburban and rural principals, but little to no relationship was shown for principals in urban areas. Principals who earned higher salaries in suburban and rural areas did more frequent decision-making activities. This may suggest that higher salaries as a motivation factor for

principals to implement accountability policy may be context-specific. In suburban and rural areas salary may be a critical motivational factor for the principal's decision-making in terms of accountability. This is supported by the fact that in rural and suburban areas principals with higher salaries made more decisions related to the implementation of an accountability policy. Thus, it can be theorized that a positive relationship exists between higher salaries and informed decision-making.

The results of the first two stages of analysis, when reviewed holistically, may suggest the need for a context-specific approach in order to effectively conceptualize leadership. The importance of these analyses is best understood in relationship to Heck's (1996) theoretical model. Heck theorized that leadership comparisons across cultural contexts could not be understood without a contextual understanding culture and environment of the leader. The current study began with the empirical exploration of Heck's theoretical framework. The study's extensive evaluation of predictive factors within and between varying school contexts may begin to inform educational inquiry and may assist in the determination of factors that will best assist principals in their decision-making process to effectively meet the leadership demands of accountability.

Though the results of the regression analysis displayed several interesting results, the social demographic variables only accounted for less than 8% of the variances in decision-making actions in each of the samples. The various patterns found from the results of the regression analyses provide the empirical foundation for further exploration of decision-making actions through implementation of structural equation modeling.

Structural Equation Modeling (SEM) was a third series of analyses and was employed to assess the theoretical model developed for the current study (see Figure 1).



The four measured variables used were: (1) the principal's decision-making activities, (2) the principal's perception of his/her personal influences, (3) the school progress and (4) the professional development ideologies.

Results of the SEM analysis indicate that all theorized relationships were positive and significant for the structural model, both for the total and the rural samples. When these results are examined within each school location the results indicate that, for urban and suburban principals, perception of influence was the strongest predictor of decision-making. These results seem to suggest that the more principals believe in their ability to perform their job, the more they will take decision-making actions to implement an accountability policy. An additional explanation regarding the strength of the relationship between the perception of influence and decision-making is provided by Mischel's (1977) theory of strong/weak situations. "According to Mischel, strong situations convey strong cues for the desired behaviors, whereas weak situations do not provide clear incentive, support or normative expectations of what behaviors are desired. At the same time, strong situations constrain the expression of personality, so behavior is more a function of the situation than of personality" (Baker & Cooper, 2005). Thus, it is theorized that the impact of working in various school environments is a factor that contributes to the perception of the principal's ability to make decisions; that is, strong environments where a contextual culture is established assist the principal in making decisions for the implementation of accountability.

In the assessment of rural principals the predictor with the highest coefficient for decision-making was the indirect relationship between the principal's perception of influence and school progress regarding decision-making activities that was explained

through the relationship with the importance of professional development policies. These results suggest that there is a more complex relationship involved in the decision-making process of the rural school principal. This finding supports the argument made by Bauch (2001), who articulates that the ability of principals to build capacity in terms of increased student achievement in rural areas involves a unique set of norms and values that may differ from urban or suburban settings. In rural areas principals must be cognizant of societal economic structures and how the impact of increased educational attainment by students may be seen as a violation of community trust and a hindrance of community structural norms (Bauch, 2001).

### *Policy Impact*

From a policy perspective these findings suggest a potential strength and a potential weakness of standards-based accountability and NCLB's mandates to close the racial achievement gap through increasing the consequences for principals. The primary goal of NCLB is to close the academic achievement gap between urban and suburban schools. This seems eminently feasible with support types of interventions and accountability structure put into place and a thorough understanding of school context. In doing so NCLB policy must support significant professional development in reading, mathematics and science, which are context specific. If these goals are realized, principals should have at their disposal a corps of teachers that can not only raise achievement for all students at their schools, but can also provide the special attention their specific school needs. An understanding of how the principal makes decisions may be a key component in understanding other factors related to the elimination of

achievement gaps. The assessment of decision related to implementation of the accountability structure, by being primarily school-context-based, reinforces this component.

Principals thus have a strong incentive to institute instructional practices that will close the gap. Recent research has revealed that most school administrators do not believe it is possible to achieve the NCLB mandate (Farkas et al., 2003). However, rather than looking at the goal of school-wide proficiency by 2013 as a non-starter, principals should be given empirical evidence of how best to make choices relevant to improvements in their school. Greater assessment of the contextual components of schooling provide principals with a further understanding of the ways in which they have been previously powerless in reducing inequality between their schools.

The policy instruments of increased professional development and accountability do not speak to issues of contextual issues that exist between schools; other policies are required. Perhaps equalizing resources between urban, suburban and rural schools would begin to facilitate change. The Federal Government or the states should begin to understand that there are similar contextual issues that effect urban, suburban and rural schools in different manners. Recently, since the resegregation of many schools districts, residential patterns have become increasingly segregated, thus a thorough understanding of school context is becoming critical, if not necessary, for the successful implementation of federal policy.

Many options are possible, but research is required to learn the most effective method for reducing the academic achievement gap. Political support is needed for what may amount to an extremely expensive policy. As this study indicates, if policymakers

want to attain the dream of NCLB, they are going to have to move beyond the current range of policy instruments contained in the current version of schooling.

### *Limitations of the Study*

While the study provides several contributions to existing research on principal leadership in education, the application of the findings is necessarily limited due to the nature of the data, the sample, and the theoretical base for the model. The cross-sectional nature of the data creates a serious limitation in our understanding of the impact of school location on principal decision-making. The factors in the model were measured at the same point in time, and while they may coexist and covary, the relationships among them are tentative rather than confirmatory. Longitudinal research is necessary to infer a more causal model of this process. The sample of principals in the study represents various regions of and states in the nation. The findings of the study are based on self-reported data. Therefore, this model should be cross-validated using other samples of teachers working with the principal as a cross-reference for principal findings.

The theoretical base for the study left several questions unanswered when the model did not explain the experiences of principals. Because the study did not assume any difference in the measurement models for principals from the same geographic location, separate measurement models were not specified. While the comparison of principals from the same geographic location was somewhat beyond the scope of this study, the findings of similarities in the model fit for suburban and urban principals indicates that further development of a final structural model must be theorized to better

generalize the experiences of these principals. This study merely offers a starting point for future research into the mediating effects of the impact of contextual differences.

### *Directions for Future Research*

In many ways, this study raises more questions than it answers. As much as the study sought to make a serious contribution to the existing research on principal leadership in education, the results reveal that the assumption about a single explanatory model of the impact of school location on the relationships between principals' decision-making activities and principals' perception of their influence on their job functions, schools progress and professional development ideologies was an uninformed one. In this way, perhaps the limitation can be seen as a contribution; it points to several directions for future research that would have remained obscured without an investigation of this type:

- a) Are there differences in how and from whom principals make decisions related to instructional leadership and accountability policy
- b) Does the location of the school influence how principals present, describe, and adhere to accountability policy?
- c) What do principals perceive about their decision-making authority and does it influence the patterns of decision made?
- d) Is there an interrelationship between how principal demographic characteristics, training, experience, salary and perceptions of school climate intersect within and between urban, suburban and rural school settings for principals to build capacity in terms of instructional leadership?

To understand the relationship between school context and principal leadership, longitudinal research is necessary.

Qualitative research has contributed much of what we know about the inequality of school context and leadership, and there is need for further qualitative and mixed methods research. These methods offer the most promise for further understanding the differential effects and mechanisms of principal leadership based on school context, gender, class and ethnicity. Theory-building work, especially to understand the experiences of urban school leaders, is essential to move the concept of principal leadership forward as a valuable construct in the study of educational inquiry.

### *Conclusion*

The importance of the current findings may be best understood in relation to Heck's (1996) study. He theorizes that leadership comparisons across cultural context cannot be understood without a contextual understanding of the leadership culture and environment. Heck articulates:

It is important to recognize the necessarily incomplete nature of any model that attempts to reduce the complexity of organizational life to a series of measured variables focusing on principal behavior. These constructs are not the ones that could be measured, but they are three that have been found to affect school effectiveness.

Thus, an extensive evaluation of predictive factors within and between varying school contexts may help to determine factors that will best assist principals in their

decision-making process to effectively meet the leadership demands of accountability. These results support previous research by Hannaway and Talbert (1993), who found that distinct and differential patterns for schools in urban and suburban settings lead to different leadership decisions by principals. Furthermore, the authors make the argument that contextual factors, specifically school location, need to be taken into account in assessment of leadership in American schools.

Additionally, these results suggest that examining the effect of principals' decision-making activities and perception of their personal influences, their school's progress and professional development ideologies with a contextual analysis falls short of fully capturing the leadership phenomenon. These results prove that the effect of principal decision-making is a more complex matter, that is, that school location promotes a distinct but potentially complementary approach to understanding the effect of school context influence on principal decision-making.

This study offers a basis for ongoing conceptual development by helping researchers and practitioners to move either/or toward approaches to thinking and working (Lewis et al., 2002). It makes several additions to our knowledge in the realm of school leadership. First, context and intermediate factors should be taken into account in future research because they can provide needed insight into the role of school leaders in developing and sustaining these cultures as defined by their decision-making. Secondly, this study attempts to address the ideological concerns of Leithwood and Riehl (2003), who suggest that educational administration inquiry must begin to address complex questions to better inform policy development and begin by asking the question: "How

can educational leaders balance their leadership and managerial responsibilities to move their schools forward?"

Thirdly, it addresses issues raised by Hallinger and Heck (1996, 1998) and additional researchers who have called for complex methodological analyses, such as the reciprocal theoretical models and the structural equation modeling techniques, to continue to move educational leadership forward to better inform policy development. This notion is embedded in a framework within the study that assumes an association between particular leadership values and behaviors on one hand and the existence of a specific culture on the other.

Finally, the study provides a foundational methodology for how to derive and test clear hypotheses of complex relationships related to leadership. Leadership research suggests that leaders not only shape cultures but also adapt to them. Successful instructional leadership, based on Heck's (1996) work, depends on the principal's own beliefs and value preferences, organizational and political variables associated with the school, and community context such as level of schooling, students, socioeconomic and language backgrounds, and pressure from the local education office, community and staff.

Therefore, to promote the instructional leadership role, the principal should strive to be knowledgeable about teaching and learning, be skillful in working with and through people, be committed to academic goals, have a strong sense of vision, and have a thorough understanding of the contextual factors of their school. Research indicates that these qualities will pay dividends to the school as a working environment, in teacher morale and professional growth, in students' academic achievement, and in parent and



community satisfaction and support. The current study provides windows into how the principal is to achieve these processes.

## BIBLIOGRAPHY

- Andrews, R. L. & Soder, R. (1987). Principal Leadership and Student Achievement. *Educational Leadership, 44*(6), 9-11.
- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Barr, R. & Bizar, M. (2001). Insights into leadership during times of school reform. In R. Barr & M. Bizar (Eds.), *School leadership in times of urban reform* (pp. 229 – 252). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Bauch, P. A. (2001). School-Community Partnerships in Rural Schools: Leadership, Renewal, and a Sense of Place. *Peabody Educational Journal, 76*(2), 204-221.
- Beck, L. G. & Murphy, J. (1993). Understanding the Principalship: Metaphorical Themes 1920s-1990s. *Teachers College, Columbia University New York and London*.
- Berends, M., Bodilly & Kirby, S. N. (2002). Looking back over a decade of school reform: The experience of New American Schools. *Phi Delta Kappan, 84*(2), 168-175.
- Blank, R. K. (1987). The role of principal as leader: analysis of variation in leadership of urban high schools. *Journal of Educational Research, 81*(2), 69-80.
- Blase, J. & Blase, J. (2003). *Breaking the silence: Overcoming the problem of principal mistreatment of teachers*. Thousand Oaks, CA: Corwin.
- Blase, J. & Blase, J. (2004). *Implications of the Dark Side of School Leadership for Administrator Preparation and Research*. Thousand Oaks, CA: Corwin.
- Bloom, H., Rock, J., Ham, S., Melton, L., O'Brien, J., Doolittle, F., et al. (2001). *Evaluating the accelerated school approach: A look at early implementation and impacts on student achievement in eight elementary schools*. New York, NY: Manpower Demonstration Research Corporation.
- Borman, G. D., Hewes, G. M., Overman, L. T. & Brown, S. (2003). Comprehensive school reform and achievement: A meta-analysis. *Review of Educational Research, 73*, 125-230.
- Bossert, S., Dwyer, D., Rowan, B. & Lee, G. (1982). The instructional management role of the principal. *Educational Administration Quarterly, 18*(3), 34-64.

- Carnoy, M. & Loeb, S. (2002). Does external accountability affect student outcomes? A cross-state analysis. *Educational Evaluation and Policy Analysis*, 24(4), 305-331.
- Cheng, Y. C. (1994). Principal's leadership as a critical indicator of school performance: Evidence from multi-levels of primary schools. *An International Journal of Research, Policy, and Practice*, 5(3), 299-317.
- Coleman, J. S. (1988). Social capital and the creation of human capital. *American Journal of Sociology*, 94, 95-120.
- Coleman, J. S. (1999). Social capital. In J. S. Coleman (Ed.), *Foundations of social theory* (pp. 300-321). Cambridge: The Belknap Press of Harvard University.
- Comer, J. P., Haynes, N. M., Joyner, E. T. & Ben-Avie, M. (1996). *Rallying the whole village: The Comer process for reforming education*. New York: Teachers College Press.
- Crowson, R. L. & Boyd, W. L. (2001). The New Role of Community Development in Educational Reform. *Peabody Educational Journal*, 76(2), 9-29.
- Culbertson, J. (1974). Educational leadership: The uses of adversity. *Educational Leadership*, XV(4).
- Datnow, A. (2002). Can We Transplant Educational Reform, and Does It Last? *Journal of Educational Change*, 3, 215-239.
- Datnow, A. (2005). The Sustainability of Comprehensive School Reform Models in Changing District and State Contexts. *Educational Administration Quarterly*, 41(1), 121-153.
- Deal, T. E. (1987). The culture of schools. In L. Sheive & M. Schoenheit (Eds.), *Leadership: Examining the elusive. The 1987 Yearbook of the Association for Supervision and Curriculum Development* (pp. 1-15). Alexandria, VA.
- Driscoll, M. E. & Kerchner, C. T. (1999). The implications of social capital for schools, communities, and cities. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (Vol. 2nd, pp. 385-404). San Francisco: Jossey-Bass.
- Eberts, R. W. & Stone, J. A. (1988). Student Achievement in Public Schools: Do Principals Make a Difference? *Economics of Education Review*, 7(3), 291-299.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: The Albert Shanker Institute.

- Erickson, D. A. (1967). The school administrator. *Review of Educational Research*, 37(4), 417-432.
- Factor, A. from <http://www2.chass.ncsu.edu/garson/pa765/factor.htm>
- The Funding Gap: Low-Income and Minority Students Receive Fewer Dollars.* (2002). Washington, DC.
- Gardner, R. & Talbert-Johnson, C. (2000). School Reform and Desegregation: The Real Deal or More of the Same? *Education and Urban Society*, 33(1), 74-87.
- Goldring, E. B. & Hausman, C. (2001). Civic capacity and school principals: The missing links for community development. In R. Crowson (Ed.), *Community development and school reform* (pp. 193–209). London: Elsevier.
- Goldring, E. B. & Pasternack, R. (1994). Principals' Coordinating Strategies and School Effectiveness. *School Effectiveness and School Improvement*, 5(3), 239-253.
- Hallinger, P. & Heck, R. H. (1996). Reassessing the principal role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly*, 32(10), 5-44.
- Hallinger, P. & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*, 9, 157-191.
- Hallinger, P. & Heck, R. H. (1999). *Can leadership enhance school effectiveness?* London: Paul Chapman.
- Halpin, A. W. (1966). *A paradigm for research on administrator behavior.* New York: The Macmillan Company.
- Heck, R. H. (1996). Leadership and culture: Conceptual and methodological issues in comparing models across cultural settings. *Journal of Educational Administration*, 34(5), 74-97.
- Hess, F. (1999). *Spinning Wheels: The Politics of Urban School Reform.* Washington, DC: Brooking Institution Press.
- Hodgkinson, C. (1991). *Educational leadership: The moral art.* Albany, NY: State University of New York Press.
- Krug, S. E. (1992). *Instructional Leadership, School Instructional Climate, and Student Learning Outcomes. Project Report.* MI: MetriTech/Urbana, IL: National Center for School Leadership.

- Larsen, R. J. (1987). *Identification of Instructional Leadership Behaviors and the Impact of Their Implementation on Academic Achievement*. Paper presented at the Annual Meeting of the American Educational Research Association, Washington, DC.
- Lashway, L. (2003). *Role of the school leader: Trends and Issues*
- Leithwood, K. A. & Jantzi, D. (2000). Principal and Teacher Leadership Effects: a replication. *School Leadership & Management*, 20(4), 415-434.
- Leithwood, K. A. & Riehl, C. (2003). *What we know about successful school leadership*. Philadelphia, PA: Laboratory for Student Success, Temple University.
- Levine, D. (1982). Successful Approaches for Improving Academic Achievement in Inner-City Elementary Schools. *Phi Delta Kappan*, 63(8), 523-526.
- Lipham, J. M. (1964). Organizational character of education: Administrative behavior. *Review of Educational Research*, 34(4), 435-454.
- Lipman-Blumen, J. (1996). *The connective edge: Leading in an interdependent world*. San Francisco, CA: Jossey-Bass Publishers.
- Morris, J. E. (1994). *Community in an all-Black neighborhood school: Implications for immersion schools*. Paper presented at the annual meeting of the University Council for Educational Administration, Philadelphia, PA.
- Murphy, J. & Datnow, A. (2003). *Leadership Lessons from Comprehensive School Reforms*. Thousand Oaks, Ca: Corwin Press.
- The National Education Goals Report - Summary Guide Building the Best*. (1993). Department of Education
- No Child Left Behind*. (2001). Department of Education
- Pearson, S. S. (2002). *Finding common ground: Service-learning and education reform-A survey of 28 leading school reform models*. Washington, DC: American Youth Policy Forum.
- Porter, K. & Soper, S. (2003). *Closing the Achievement Gap: Urban Schools*. Washington, DC: National Clearinghouse for Comprehensive School Reform.
- Portz, J., Stein, L. & Jones, R. R. (1999). *City Schools and City Politics: Institutions and Leadership in Pittsburg, Boston and St. Louis*. Lawrence, Kansas: University Press of Kansas.
- Rost, J. C. (1993). *Leadership for the twenty-first century*. Westport, CT: Praeger.

- Sarason, S. B. & Lorentz, E. M. (1998). *Crossing boundaries: Collaboration, coordination, and the redefinition of resources*. San Francisco: Jossey-Bass.
- Savage, C. J. (1999). *The agency of African American teachers in Franklin, Tennessee: 1890–1967. Because we did more with less*. Paper presented at the The annual meeting of the American Educational Research Association, Montreal, Canada.
- Schorr, L. B. (1997). *Common purposes: Strengthening families and neighborhoods to rebuild America*. New York: Anchor.
- Sergiovanni, T. J. (1996). *Leadership for the schoolhouse*. San Francisco: Jossey-Bass.
- Sergiovanni, T. J. & Moore, J. H. (1989). Teachers and learners: The cornerstone of reform. In T. J. Sergiovanni & J. H. Moore (Eds.), *Schooling for tomorrow: Directing reforms to issues that count*. Boston, MA.
- Slater, R. O. & Boyd, W. L. (1999). Schools as polities. In J. Murphy & K. S. Louis (Eds.), *Handbook of research on educational administration* (Vol. 2, pp. 323-335). San Francisco: Jossey-Bass.
- Slaughter-Defoe, D. T., Andrews, A. & Zhang, D. (2002). *African American Children and Successful Public Elementary Schools*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- St. John, E. P. & Ridenour, C. S. (2002). School Leadership in a Market Setting: The Influence of Private Scholarships on Educational Leadership in Urban Schools. *Leadership and Policy in Schools, 1*(4), 317-344.
- Suskavcevic, M. & Blake, S. (2004). *Principal Leadership and Student achievement: an Examination of the TIMSS 1999*. Paper presented at the The 1st IEA International Research Conference, Lefkosia, Cyprus.
- Teske, P. & Schneider, M. (1999). *The Importance of Leadership: The Role of School Principals*. Arlington, Va.
- Tyack, D. & Cuban, L. (1995). *Tinkering Toward Utopia: A Century of Public School Reform*: Harvard University Press.
- Wang, M. C., Haertel, G. D. & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research, 63*(3), 249-294.
- Weiner, L. (1999). To teach or not to teach in an urban school? Teaching in urban public schools is different. *English Journal, 88*(5), 21-24.
- West, M., Jackson, D., Harris, A. & Hopkins, D. (2000). Learning through leadership: leadership through learning. In K. A. Riley & K. S. Louis (Eds.), *Leadership for*

*Learning: International Perspectives on Leadership for Change and School Reform.* London: Routledge Falmer.

Witziers, B., Bosker, R. J. & Krüger, M. L. (2003). Educational Leadership and Student Achievement: The Elusive Search for an Association. *Educational Administration Quarterly*, 39(3), 493-98-44258.

## **APPENDIX**



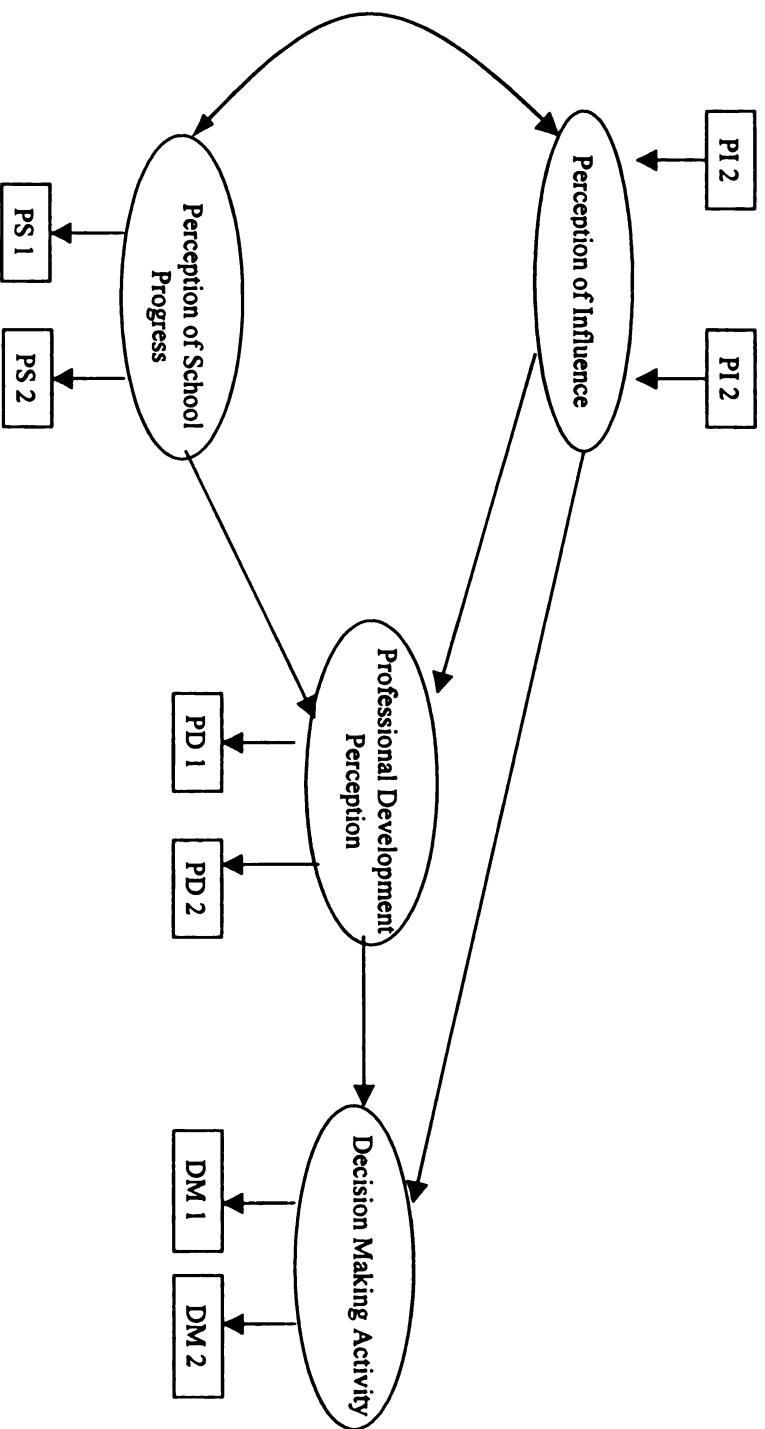
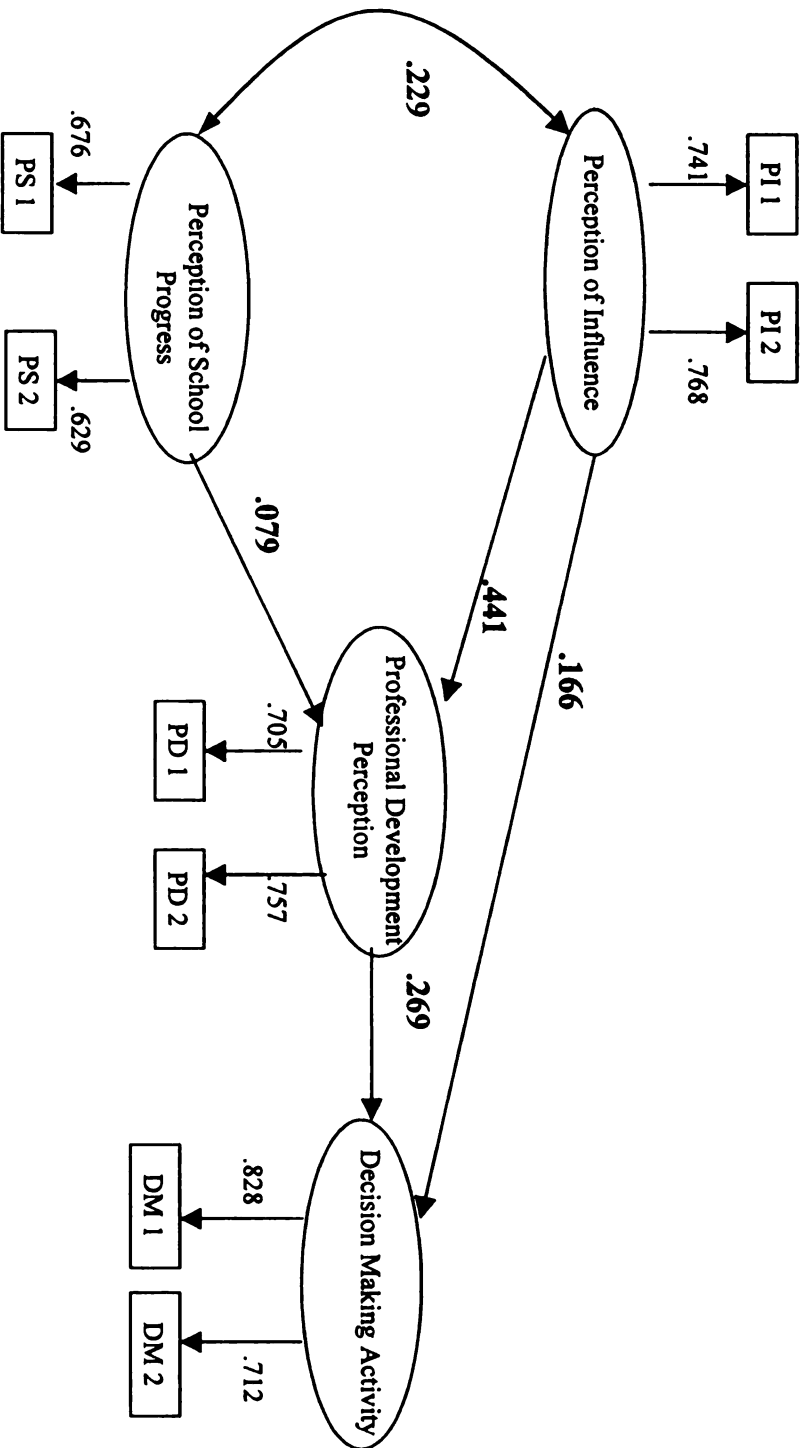
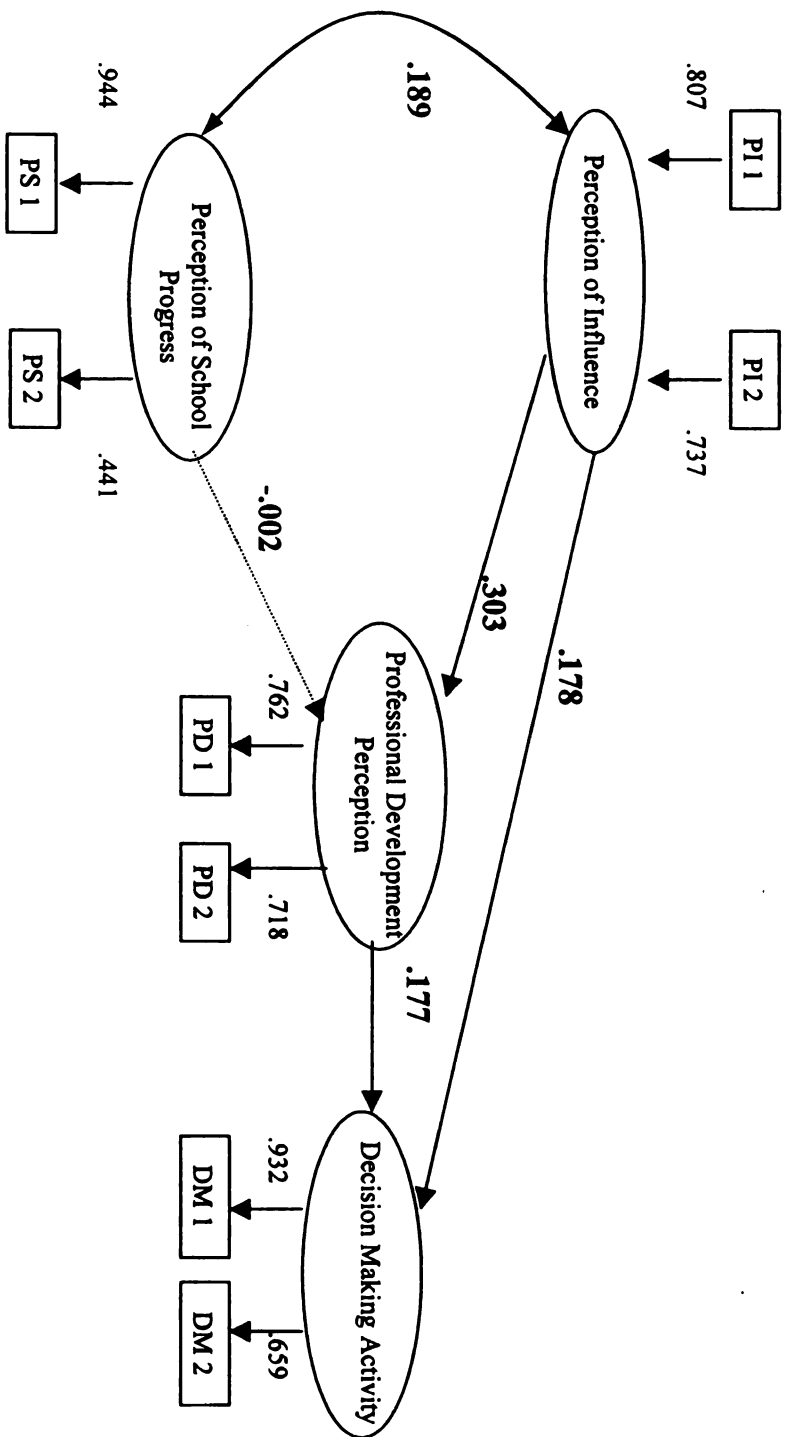


Figure 2. Theoretical Model for Principal Decision-Making Activity



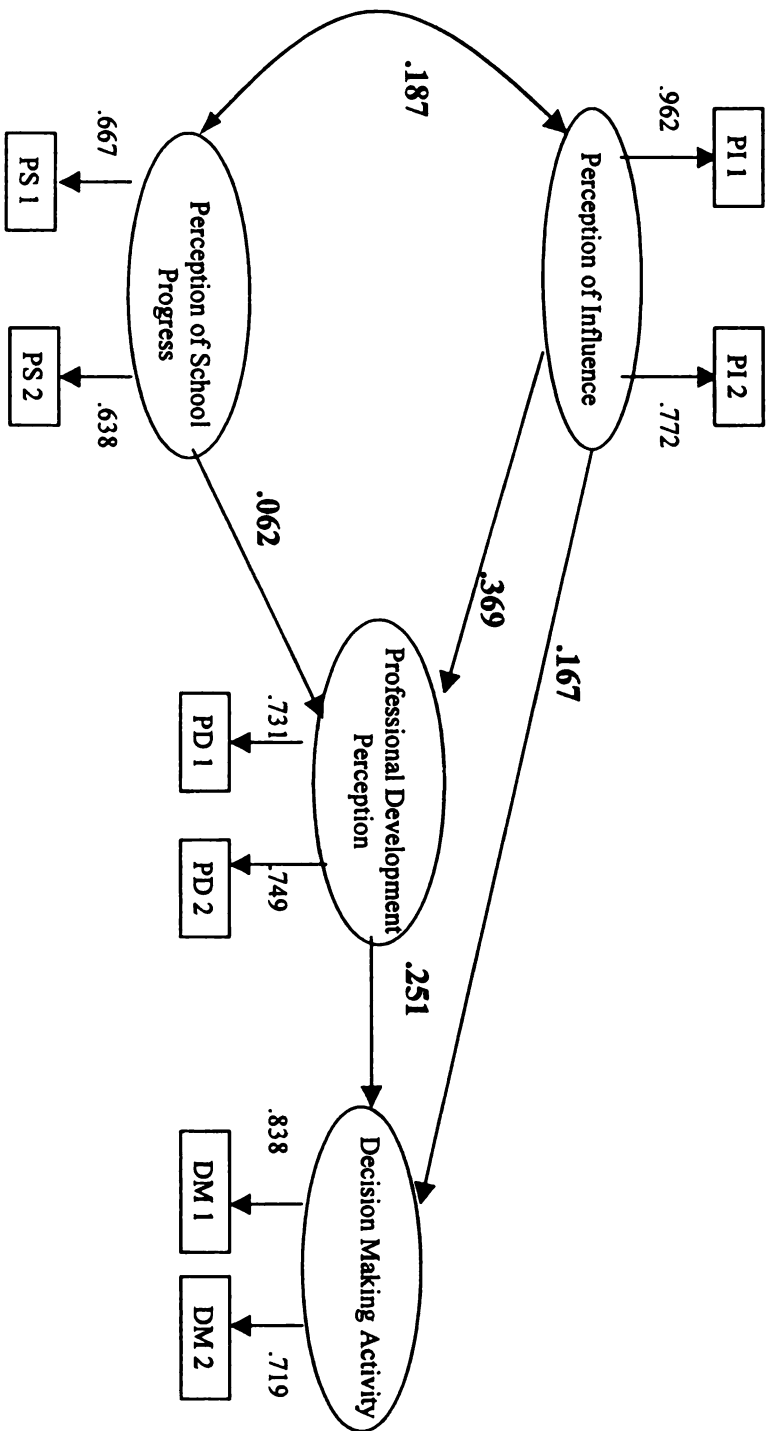
Note: Solid lines indicate significant paths and correlations. Dotted lines indicate non-significant paths

Figure 3. Results of SEM analysis for Total Sample Decision-Making Activity Model



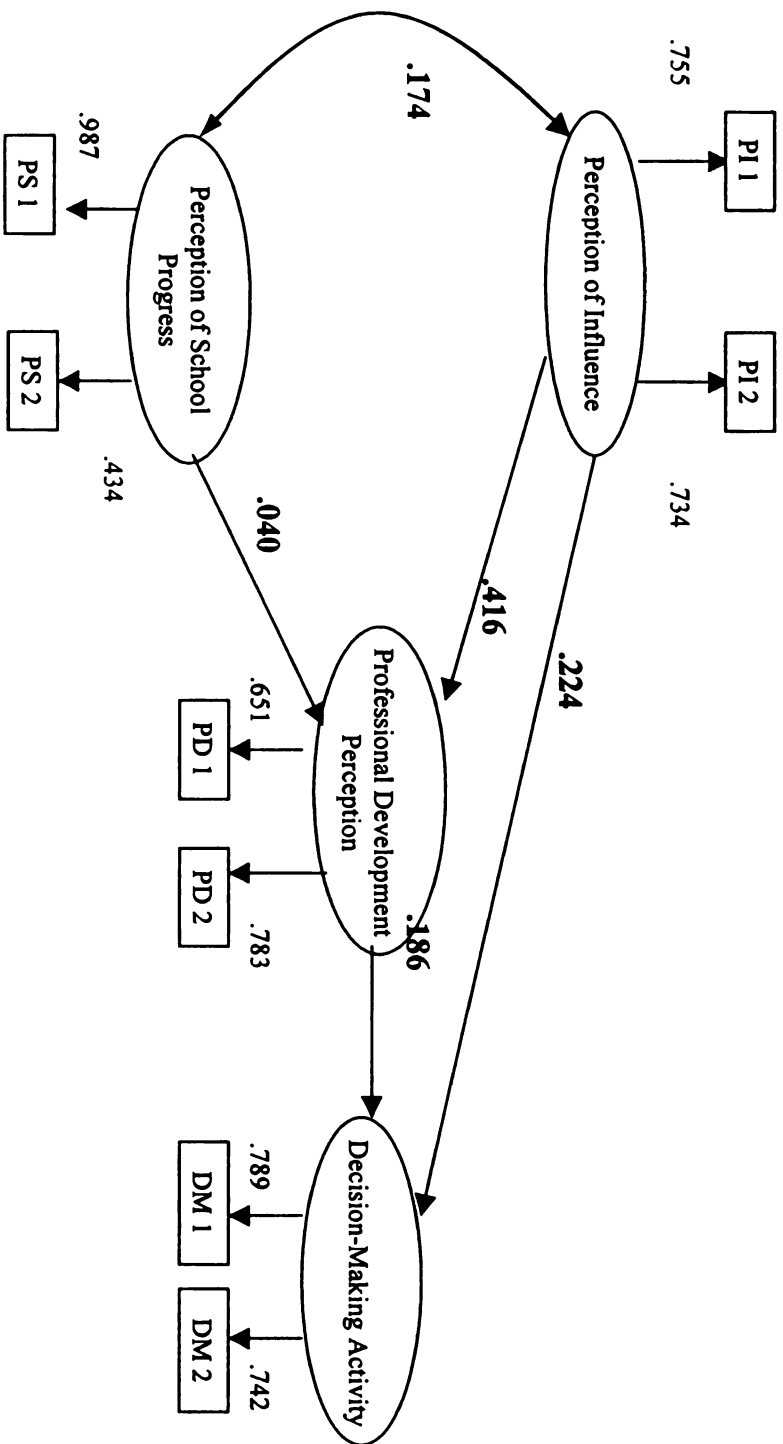
Note: Solid lines indicate significant paths and correlations. Dotted lines indicate non-significant paths

Figure 4. Results of SEM analysis for Urban Sample Decision-Making Activity Model



Note: Solid lines indicate significant paths and correlations. Dotted lines indicate non-significant paths

Figure 5. Results of SEM analysis for Rural Sample Decision-Making Activity Model



Note: Solid lines indicate significant paths and correlations. Dotted lines indicate non-significant paths

Figure 6. Results of SEM analysis for Suburban Sample Decision-Making Activity Model

MICHIGAN STATE UNIVERSITY LIBRARIES



3 1293 02845 4522