

An Investigation of the Relationship Between School Culture and Leadership Behavior On  
Organizational Commitment

**MODERATED BY SOCIAL IDENTITY FOR PUBLIC SCHOOL  
ADMINISTRATORS IN THE MID-ATLANTIC REGION**

**BY**

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## DEDICATION

I dedicate this work to my grandparents, Samuel and Susie Gray. The contributions their existence made to my life, and the ongoing relationship that ensues, is monumental, even in death. I can only hope I leave the same legacy.

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**ABSTRACT**

This research was an investigation of the relationship between school culture and leadership behavior on organizational commitment moderated by social identity. Given the increasing problems with teacher turnover and retention rates, it is important for educators to develop practices which thoughtfully respond to the current school culture/commitment issues within our educational structures. The purpose of this study was to investigate the relationship between leadership behavior, school culture and the impact on school (organizational) commitment moderated by social identity through an empirical analysis.

The conceptual framework was built around 4 theoretical constructs: Social Identity (Social Identity Theory), Leadership Behavior (Social Identity Theory of Leadership), School culture (Organizational Culture Theory), and Organizational Commitment (Organizational Commitment Theory). Within the context of the constructs, this study provided an empirical analysis between school culture, leadership behaviors, organizational commitment moderated through the lens of social identity. The unit of analysis were schools, school leadership, and school teachers. The data used

pre-existing valid and reliable survey instruments: Culture Self-Esteem Survey (measures social identity) Multi-Factorial Leadership Questionnaire, MLQs (measures leadership behavior), Organizational Commitment Questionnaire (measures commitment) and School Culture Triage Survey (measures school culture). There were three research questions that guided the research: 1) To what extent is there a relationship between leadership behaviors and organizational commitment 2) To what extent is there a relationship between school culture and organizational commitment and 3) To what extent does social identity mediate the effects of leadership behaviors, school culture, and organizational commitment? A self-administered questionnaire containing the 4 surveys instruments and a demographic survey was administered to 159 teachers. Data was quantified that provided both descriptive and inferential analysis. An ordinary least square regression analysis was performed. The Pearson r coefficient statistical formula was used to determine the relationship between the variables. Findings from this research indicated that a statistically significant relationship exists between leadership behaviors, school culture, social identity, and organizational commitment.

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## **CHAPTER I**

### **1.1 Introduction**

The purpose of this study was to determine whether a relationship existed between school culture, leadership behavior, organizational commitment, and if that relationship was moderated by social identity (as measured by the collective self-esteem scale). The first chapter provides an overview of the study and defines the purpose of examining the relationship between school culture, leadership behaviors, social identity and organizational commitment. Chapter II, the literature review, provides a detailed review of literature related to the study. The third chapter, Chapter III, includes the methodology utilized in this study. Chapter IV contains an analysis of the study's data. Chapter V contains the interpretation of the results as well as implications for future research.

#### **Relationships and Great Schools.**

Great schools are competent systems that serve to enhance achievement for all students. "A great school system is comprised of elements and relationships that are interlocking and interacting" (Zumuda, Kuklis, and Kline, 2004 p. 31). The United States of America could build amazing schools if educational leaders and administrators could understand the power of those relationships (Hinde, 2004; MacNeil, Prater, and Busch, 2009).

Studies of social identity within organizations have yielded poignant conclusions about the nature and power of relationships. Social identity, as both a process and as a category (Yon, 2000), moderates' relationships between the self and the social world. And as individuals, humans are interpersonally construed; as people, however, humans are representative of groups (Brewer and Garner, 1996). Within the educational context, it is not presumptuous to assume that studies of relational vitality would enhance our schools.

“As such, relationships are important; a leader sets the stage and basis for relationships within their group and thereby can affect the outcomes and strengths of relationships within schools” (Hollander, 2009 p. 59). With regards to school culture as well as organizational commitment, leadership plays a pivotal role within each school organization and the relationships that ensue. As schools are agents of the dominant society, communities surrounding schools become reflected within the culture of our schools (Hinde, 2004). School leaders are expected to build a school culture with people from diverse backgrounds and keep a shared commitment concomitantly. Albeit; as identity affects behaviors, esteem, and academic attainment (Yon, 2000) it is important that leaders acknowledge followers’ identifications and the inter-relational aspects of the followers within the organization (Hollander, 2009 p.81). This is the dynamic linkage of socio-cognitive and intergroup processes that have brought about the burgeoning of leadership research within the social identity tradition (Hogg, 2001).

#### Social Identity as a crucible.

The interactions of relationships within school systems are important in creating and sustaining a school’s culture and organizational commitment. These interactions and relationships are integral in creating healthy school environments. School culture motivates and creates relationships while organizational commitment sustains those relationships. According to MacNeil et al., (2009) paying attention to culture is the most important action a leader can perform. The importance of contextual relevance for leaders and their followers are also positively related to leadership endorsements (Platow and van Knippenberg, 2001). These relationships occupy pivotal positions in the social and behavioral worlds of education research (Abrahms and Hogg, 2004 p.98).

Antiquated leadership studies utilize Leader-Member Exchange theory (herein referred to as LMX) as a framework while ignoring the wider social context of the group as a whole. This is a limitation of the LMX theory (Hogg et al., 2005). As social identity moderates relationships between the self and the social world (Yon, 2000), Social Identity Theory of Leadership explores the mechanisms and processes through which leadership influences group level dynamics and normative behaviors. Theoretically, building an understanding of Social Identity can be a crucible for numerous levels of explanations regarding school culture, commitment and leadership ranging from interpersonal interactions and group processes to building highly sustainable social structures (Abrahms and Hogg 2004).

Although, delineating what creates healthy school environments conducive to student learning is somewhat elusive (Hinde, 2004), a clear understanding of the relationship between leadership behavior, school culture, and organizational commitment through the theoretical lens of social identity will construct and guide major change. Insights will help school-reform efforts and potentially increase student achievement (MacNeil et al., 2009).

This study provided an empirical basis for the examination of the relationship between school culture, leadership behavior, organizational commitment and social identity. The goal of this research is twofold. First, the researcher sets out to examine the relationship between school culture and leadership behaviors and both variables significance on organizational commitment. Secondly, the researcher will explore the moderating role of social identity to the relationships described within the first goal and the underlying processes that affect the relationship.

## **1.2 Background of the Problem**

Within our efforts of creating student achievement, schools are interested in creating healthy environments with committed school teams. Research has provided evidence that

healthy school environments increase student achievement (MacNeil, et al., 2009), but what has been defined as promising practices are fragmentally unclear and the descriptors difficult to reconcile (Fullan and Miles, 1992). All of this adds to the knowledge gap that perpetuates teacher attrition, leadership ineffectiveness, and other factors that obstruct educational leaders from creating achievement (Cedoline, 1982).

According to Mehta (2013), “U.S. schools still languish in the middle of international rankings, behind the schools of [such countries as] Estonia Slovenia” (para. 2). In 2011, 48% of American schools did not make adequate progress. Further, the Center on Education reports that “failure rates range from a low of 11% in Wisconsin to a high of 89% in Florida” (The Center on Education Policy report, as cited by USA Today, para 3, 2011). “Declining enrollments, budget cuts, and the decreasing quality of teacher work life are some of the problems which produce disturbances in the system’s internal equilibrium” (Cooke and Rousseau, 1981 p. 15).

School reforms are needed; how to create the needed change is a complicated issue (Beyer and Smith 1999, Cooke and Rousseau, 1981, Mehta 2013). “Common Core standards, charter schools, providing vouchers for private education, paying teachers based on their performance, No Child Left Behind, and Race to the Top have generated progress in some areas but has not led to widespread improvement” (Mehta para. 2, 2013). To make matters worse, Schein (2010) reports, “we are not much clearer today than we were twenty-five years ago about what is a good leader and what a leader should be doing” (Schein 2010b p. x). Ironically, as reform efforts are stagnate (Hinde 2004), the earliest organizational research uncovered organizational affects and group identity (Alderfer, 2010 p.51). The foci on group situations have lost their emphasis however, within the educational arena.

“Schools, as people-centered organizations pursuing complex goals in turbulent environments are especially prone to problems” (Dunning 2009, p.75). Sarason (1996) noted, “a great deal of federally mandated reforms fail[ed] due to school organizational climate, leadership, and characteristics of schools and teachers” (p. 77). Cooke and Rousseau (1981) agree that reform efforts are failing due to organizational maladaptation of environmental change and/or the organization’s inability to fully integrate members into their system. Anyon (1995) identified sociocultural differences of participants as a vitiation of school reform. The diversity of our school systems requires school leaders to be cultural managers (Schein 2000b p.363). Our school systems, however, lack the resources to accommodate this diverse workforce. Donahue (1997) purports that many reform efforts target the superficial aspects of schools but disregard the system aspect of school organizations. The ambiguity and defragmentation of what the actual issues are strains reform efforts even more resulting in little change (Hinde 2004).

As teachers follow directives of administrators, the district hierarchy creates the parameters that define whether or not the school will be successful. Our school leaders need to understand the processes that build organizational capabilities and identify what creates reform (Reeves 2009). Schoen and Teddlie (2008) support school culture, leadership, and organizational commitment as crucial variables of school improvement efforts. However, conceptual clarity is needed (p.148).

Cooke and Rousseau (1981) note the following:

The relevance of problem solving to system effectiveness and the organizational variables associated with successful problem solving have received considerable attention in the field of organizational theory. “Although these issues are directly relevant to school

organizations, they have received somewhat less attention in the area of educational administration” (p.15).

Wagner (2006) states:

Schools should be nurturing places for staff members and students alike. How people treat and value one another, share their teaching strategies, and support one another is important in today’s schools. Relational vitality with students, parents, the community, and especially with one another is the foundation for a healthy school culture and maximizing student learning. (p.44)

Mehta (2013) agrees that there needs to be a more comprehensive and systematic approach to educational reform (para.3). This research suggests the emphases of that reform be school culture, leadership behavior, school commitment, and social identity.

### **1.3 Purpose of Study**

The purpose of this study was to investigate the relationship between leadership behavior, school culture and the impact on school (organizational) commitment moderated by social identity through an empirical analysis.

### **1.4 The Need for the Study**

“Bass (2003) states, “there is a need for greater attention to be paid to understanding the mechanisms and processes through which leadership influences organizational culture and employee commitment, in order to develop a more complete understanding of the inner workings of leadership” (Avolio et al., 2004 p. 952). Ellemers, Gilder, and Haslam (2004) agree that “additional understanding of work motivation can be gained by incorporating insights into social

identity processes” (p. 459). “Since motivational processes may be processed in group contexts (similarly as they are [do] in individual goals or outcomes) it is advantageous to understand how people are energized to engage in behaviors that are significant primarily at a collective level” (p. 460).

The Leadership Member Exchange (LMX) theory, as a theoretical construct, excludes the examination of the collective by focusing on the function of individual needs and goals. This research will add support, that Social Identity Theory of Leadership (SITOL) is a more appropriate framework for school leader studies. Prior studies have not tested for the moderating effects of social identity (with regards to school culture and leadership behavior) within a collective context. Building our understanding of identities within organizations could yield practical ways of encouraging team-oriented behavior (Giessner, Steffen. Ullrich, Johannes. VanDICK, Rolf. 2011).

Dunning (2009) “identified problem solving as a key element of educative leadership” (p. 75). Cooke and Rousseau (1981) posit “failure to problem solve issues with input (staff, leadership), adaptation (social identity) (school culture), or maintenance (reinforcing school culture, organizational commitment) perpetuates [a]strain within the organization” (p.17). Cooke and Rousseau, in their article, *Problems of Complex Systems: A Model of System Problems Solving Applied to Schools*, agree that a study of school culture and leadership behaviors, along with organization commitment and social identity (identities affecting beliefs, values, and assumptions) will assist educators to think sophisticatedly in “comprehending complex relations in schools, processing inputs, determining the obstacles in front of change, and problem solving” (Recepoglu 2013 p. 43).

Cooke and Rousseau (1981) along with Dunning (2009), assert, “all systems are characterized by the property of entropy - the tendency to move toward a state of maximum disorder or disorganization” (Cooke and Rousseau, p.16, Dunning 2009). The field of education, as a complex system, has inefficient reform efforts against entropy. Fullan and Miles (1992) explain, “as reform is an even more complex system, reform as a systemic process needs to continuously explore the key [number] aspects of school inputs and the structures that create continuous improvement” (p. 746). Schoen and Teddlie (2008) express the need for “research with designs that include a variety of data sources on all the dimensions and levels of school culture” (p.146). “Prior research suggests that work experiences, personal and organizational factors serve as antecedents of organizational commitment” (Avolio et al. 2004, p. 952). Schools as organizations must process their inputs in such a way as to add value to it.

“An understanding of organizational viability may be acquired by exploring the variable attributes of school systems that contribute to organizational commitment” (Cooke and Rousseau, 1981, p. 16, Tucker 2011, p.30). Research findings have overwhelmingly verified some school- input impacts on student achievement, but they are conflicting. A gap in the literature facilitated the need of this research.

The proposed research examined the underlying process through which school culture and leadership behaviors influences follower’s organizational commitment. What made the study unique was the inclusion of an analysis through the theoretical lens of social identity. According to Knippenberg, Cremer, Hogg (2004), “the possibility that the leader’s self-definition (in terms of the group) could also impact leader behavior has been ignored” (p.659). De Cremer and Vanvugt investigated individual’s social value orientation but not social identity’s interaction within the collective context (DeCremer, David and Tyler, Tom. 2005). DeCremer and Vanvugt

have also assessed the moderating roles of the sense of collective self that is inherent in identification, but not within the context of leadership roles. Cohen (2006) a renowned researcher with several publications on organizational commitment, suggests that researchers routinely identify the ethnic and racial attributes of their samples. This study supports that the context of our work-related tasks affects our commitment to our organizations.

Abrahms and Hogg (2004) explain that social identity research “occupies pivotal positioning in the education arena, as it offers a crucible for numerous explanations ranging from individual cognition to interpersonal interaction, from group processes to social structures” (p.98). Social identity provides an identifiable context that can assist planning models in constructing major changes. Although research has demonstrated a strong positive relationship between leadership behaviors, school culture, and organizational commitment, not many have explored the role of social identity in moderating that relationship (Knippenberg 2003a). Hogg, Martin, Epitropaki, Mankad, Svensson, and Weeden (2005) in their publication, *Effective Leadership in Salient Groups*, agrees that there is a need for leadership to be “understood in the context of a deeper and more textured analysis of group process, intergroup behavior, and the nature of group membership” (p.993). Gee (2000) asserts that identity holds important implications for education’s socio structural variables, especially in changing times (p. 119) and Hogg (2001) concludes SIT can be used to cultivate solutions to collective action problems. Hogg et.al (2005) posit “cultural differences in self-conceptions affect leadership effectiveness” (p.998) and Giessner et al. (2011) challenges those researching social identity to include analyses of leaders of multiple groups and how those leaders manage both groups (e.g. one president for both Democrats and Republicans). Giesner et al. (2011) highlights the importance of researching SI’s influence on leadership and Abdelal, Herrera, Johnston, and Martin (2001), Lemke and

Miller (1998) reinforce the importance of using Social Identity as an analytical lens in the field of education. Prior research examining social identity and leader's influence on followers has been conducted within an experimental paradigm but not within a field environment. Giessner et al. (2011) agrees that similar results of "proto-typicality and laboratory research on leadership can be replicated within field settings" (p.664)

Van Knippenberg et al. (2003b) presents a research report on SITOL within the domain of leaders-as-followers but not with regards to leadership behaviors. SITOL, however, can "explain under what conditions followers are more receptive to leader influence" (p.659).

Giessner et al. (2011) in their research report, *Team-orientes Leadership: The Interactive Effects of Leader Group proto-typicality and Team Identification*, concludes that inquiry regarding the function of SI is pivotal in building teams, gaining trust and in increasing the levels of commitment (p.664).

As this research demonstrated a gap in the literature around social identity within the education arena, this study addressed that lacuna. This is the first study to explicitly test the predictability of school culture, leadership behaviors on organization commitment through the lens of social identity.

This research contributed to organizational culture and organizational commitment literature by providing empirical findings and theoretical interpretations regarding the role of social identity in explaining the interrelationships among organizational commitment, school organizational culture, leadership behaviors and social identity. The researcher contends that understanding how these variables' interplay within school structures can assist with enhancing school system's capacity and system restructuring.

This study built the perspective of the importance of context, in the form of social identity, in educational reform. Zumuda, A., Kuklis, R., and Kline, E. (2004) purports that context not only matters, but forms the crucial backdrop for any serious and enduring educational reform. School leaders may benefit from studies that include context, specifically with regards to social identification, as they strive toward tailored goals of transforming their schools to be high- achieving institutions. The article *The Significance of Assumptions Underlying School Culture in the Process of Change* states, “in order to understand the culture of an organization, hidden elements of the culture, that is hidden beliefs and assumptions must be uncovered” (Recepoglu, 2013 p. 47). Schein (1999) concurs, stating that successful change can't be realized if these assumptions aren't addressed.

Sarason (1982) assigned the high failure rate of school reform to a lack of understanding of school culture and suggests more descriptive studies of school culture. According to Recepoglu (2013), a study using Social Identity as a moderator will assist in creating compatible reform models which shape and mold school cultures and builds organizational commitment.

Sow (2006) supports the fact that the replication of a study leads to validation of previous research results (p. 251). This study would add validation and bring reinforcement to the growing body of organizational and psychological research that focuses on the role of follower self-concept/identity. The findings will suggest promising implications for advancing [psychological] relationships between individuals and organizations (e.g., De Cremer and Tyler, 2005; Hogg and van Knippenberg, 2003; Lord and Brown, 2004; Lord, Brown, and Freiberg, 1999; Van Knippenberg and Hogg, 2003a, b).

### **1.5 Significance of the Study**

This study adds to the Social Identity Theory of Leadership by providing empirical evidence of a relationship, if any, between school culture, leadership, and organizational commitment, as moderated by social identity as a critical variable. It adds veracity to the notion that a variety of different processes may be involved that have an outcome on achievement. This research explored the moderating role of social identity with respect to the relationship between school culture, leadership and organizational commitment. Lemke and Wilson (1998) assert that schools, specifically with distributive leadership models and team models, would benefit from social identity research. It is the hope of the researcher that policy makers recognize school culture, leadership, and commitment as leading indicators and precursors to future success. It is also an endeavor that the findings of this research encourage positive relationships within the variable's factions that lead to that success.

Schools and communities both benefit from research that adds clarification on what collective influences encourage relationships, discourse, and engagement (Meyer and Allen 1997). Kuo and Margalit (2012) report that “the identity category that people identify with first and foremost shifts quite significantly over time and is strongly influenced by situational triggers” (p. 5). Additionally, the effect of these triggers is conditioned by their salience, as well as by individual characteristics, most prominently education” (p. 5). Imagine the implications of comparative social identity research for the field of education.

Bateman and Strasser (1984) suggest that studies of organizational commitment have implications for “employee behaviors, performance effectiveness, attitudinal, affective, and cognitive constructs” (p. 95- 96). Meyer and Herscovitch (2001) characterize the future of organizational commitment research as “fruitful” (p.319). Ellemers et al., (2004) assert that

“additional understanding of work motivation can be gained by incorporating insights concerning self-categorization and social identity processes by examining the way in which these processes influence the motivation and behavior of people at work and within groups” (p. 459).

Knippenberg (2003b) asserts that social identity research findings evidenced team member’s self-perceived group proto-typicality’s predictability (of team member behavior) but again, does not extend that conclusion to the leadership domain (p.658). Giessner (2011) conducted an experiment whose results “implied that organizations might benefit from encouraging their leaders to identify as members of their teams rather simply as team leaders” (p.663). Albeit, Giessner’s experiment was conducted within a laboratory.

There are limited studies of social identity in school settings and the researcher couldn’t find any research that combines the variables of social identity with leadership behavior, school culture and organizational commitment. According to Knippenberg (2003b), this type of study (exploring the value of the self-definition in predicting leader behavior) has only started being explored “most recently within the last two decades” (p.658).

This study also adds value to the future of research within various facets of school structures, from employee recruitment/teacher preparation programs, “to fitting the right leader to the right context” (Platow and Van Knippenberg 2001). This study increased our understanding of the differing motivations of a diverse workforce and can even assist school systems with understanding employee retention. This study will have implications for building school cultures that support all students.

Hogg et al. (2005) call for LMX theorists to explain the effects of the dyadic, leader-follower relationship by including a social context. Leadership’s inclusivity of identity representations could effectuate change in their stakeholders’ loyalty as well as have an effect on

organizational commitment. School cultures, in promoting greater feelings of inclusivity, would encourage all employees to take greater responsibility in becoming more team-oriented and prototypical of a vision that inspires. It is the hope of the researcher that this study will stimulate more people to think about social identity and seek a deeper understanding of its operation within our school systems and ourselves.

## **1.6 Major Theoretical Frameworks**

This study is framed within the perspectives of Social Identity Theory, Social Identity Theory of leadership, Organizational Culture Theory, and Organizational Commitment Theory.

### **Social Identity Theory of Leadership.**

The theory of Social Identity (herein referred to as SI) is “a process of depersonalizations whereby people come to perceive themselves more as the interchangeable exemplars of a social category than as unique personalities” (Roccas and Brewer, 2002, p. 88). SI explains the fact that “representations of one’s in-groups have effects on the nature of relationships between self and others” (Roccas and Brewer, 2002, p. 88). Social Identity Theory of Leadership, herein referred to as SITOL, emerged from social identity theory. Past-dated views of leadership attempted to delineate the nature of leadership by ascribing content attributional characteristics to leadership. The next progressive theory, according to the constructivist tradition, had leadership understood as a phenomenon of subjective perception. As the outdated views of leadership, which excluded leadership as a relationship, dissipated the Leader-member exchange theory (LMX) and other implicit theories began to emerge. According to Yammarion, et al. (2005), “the study of implicit theories clarified the way in which leaders and their performance are perceived. Implicit theories of leadership are dyadic in nature and dependent on the cognitive processing of the observer” (Verlage and Rowold 2012, p. 69). Simplistically, “[L]eadership is

in the eye of the beholder” (Kenny, Blascovich, and Shaver, 1994, p. 409, Verlage and Rowold 2012, p.69). LMX theory, however, fails to describe why there is an “in-group” and an “out-group” nor does it prescribe any method or model for developing in-group relationships. Nonetheless, the study of implicit theories (LMX) and other binary relationship theories has provided insights into the development of explicit theories (SITOL) that helps us further explain those questions, and the phenomenon called leadership within group settings (Offermann et al., 1994, p. 45, Verlage and Rowold 2012).

The distinctions in contrasting LMX theory to Social Identity Theory are noteworthy. The leader-member exchange (LMX) theory makes every subordinate (follower) feel part of the in-group, in turn avoiding the inequities and negative implications of being in an out-group. LMX focuses on the function of individual needs and goals. While Leader-Member Exchange Theory (LMX) relates to individuality and leadership traits and behaviors, SITOL focuses on the role of follower self-concept and identity (Van Knippenberg and Van Knippenberg, 2005) and is the depersonalization of the LMX theory. As LMX theory explicates leader-follower relationships and has been the thought trend in leadership theories, a newer approach is emerging within leadership research frameworks.

Hogg, et al. (2005) criticizes current research for “emphasizing invariant properties of individuals and their personalities (LMX theory) and neglecting the effects of larger social systems from which the individual is embedded as it relates to SITOL” (p.992). Ellemers, Gilder and Haslam (2004) posit that “individual workers have to function in concert and cannot always be seen as representing independent entities” (p. 450). Ellemers, et al., (2004) stated the same succinctly: “workers are not necessarily driven by personal considerations only” (p. 450)

## Organizational Culture Theory.

Organizational culture is a broad construct (Schoen and Teddlie, 2008 p. 148). “Over the past several decades, organizational culture has drawn themes from anthropology, sociology, social psychology and cognitive psychology” (Schein 2010b). Although there are many competing frameworks for the study of organizational culture, the most widely used organizational culture framework is that of Edgar Schein. Edgar Schein is “one of the most quoted gurus on organizational culture” (Moniz 2011 p.1). He is “well-established as a prolific researcher and also a consultant on organizational learning, culture, and development” (Schein 2010b p.64). “From theories of group dynamics (which Schein called ‘Socio-Dynamic Theory’), Leadership Theory and Learning Theory, Schein adopted the anthropologist functionalist view and formulated a theory of culture formation” (p.16). Schein (1985) described culture as such:

A pattern of basic assumptions--invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration-- that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 9)

Schein (1985) opposed defining organizational culture in terms of values, norms, and beliefs. Schein (1985) contended that knowledge of values, norms, and beliefs without an understanding of the underlying patterns of deeply embedded assumptions (those that control the behavior of the members of the organization) would invalidate any claim of cultural awareness. In addition, if the leader holds conflicting assumptions, that conflict will become part of the organizational culture.

Table 1- Levels of organizational culture and research method

Schein's Levels of Organizational Culture	Conceptually Similar Constructs	Social Science Discipline Associated With This Behavior of Inquiry	Appropriate Research Methods
Artifacts	Symbolic Representations	Anthropology	Observation, Interviews
Exposed Beliefs	Organizational Climate School Climate	Psychology, Social Psychology, Sociology	Surveys, Structured interviews
Basic Assumptions	Organizational Culture School Culture	Psychology, Sociology Anthropology	Observations, Loosely or Non-structured Interviews

Figure 1 - Levels of school culture

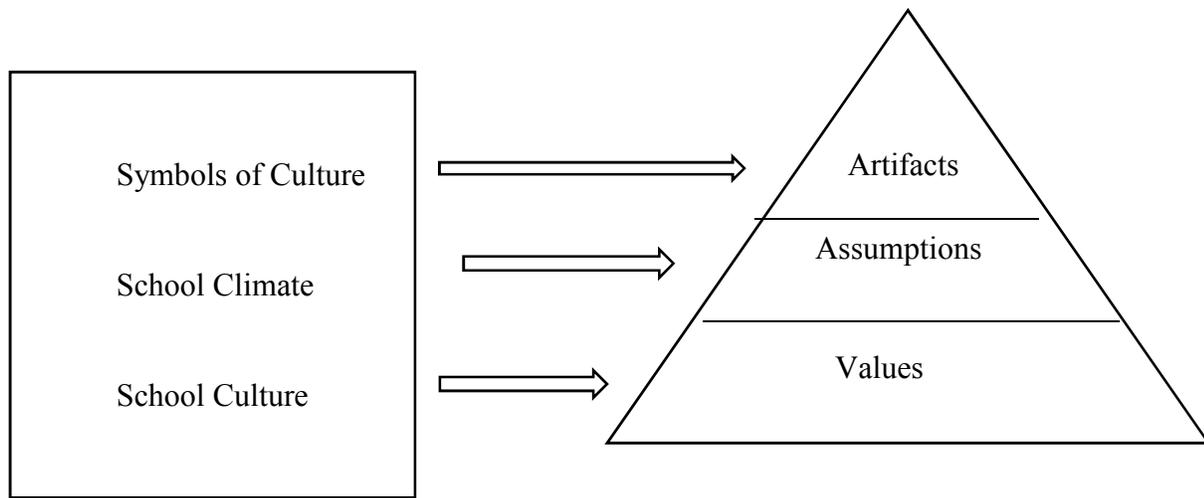


Table 1 and Figure 1 taken from Schoen and Teddlie (2008) p. 138

A big part of culture is how we communicate, and communication is based on how we socialize environmental cues. Research has discovered that the meanings that people derive from messages are based on their own experiences (Moniz 2010 p. 3). “This is why you should consider other’s experiences when communicating” (p. 4). Also, when joining a new organization, we are either formally or informally socialized. Through investiture and divestiture,

we are acclimated into professional and institutional norms (Moniz 2010). What employees do and what employees don't do creates the culture of an organization. Schein's Theory of School Culture has been found consistent many other works within the theory of organizations. It offers a viable framework for examining school culture across the four dimensions and within the three levels (Schoen and Teddlie 2008 p. 143). For additional information on school culture, see Table 1 and Figure 1.

#### Social Identity Theory.

“The underlying assumptions of Social Identity Theory (SIT) are that an individual can have multiple selves depending on his/ her surrounding social context, and that an individual's inner feelings of collectiveness and belonging to a particular group act as a powerful source of motivation” (Hewapathirana 2012 p. 491). A group is any given body of people who considers themselves as so. Within any group of people who share a culture operates certain sets of mechanisms, roles, institutions, values and symbols which fundamentally condition the member's perception of the world and its challenges. The members of each culture group have operations, customs and norms that guide their interactions with one another and strangers (Abrahms and Hogg 2004, Burke and Stets 1998). This describes social identity theory.

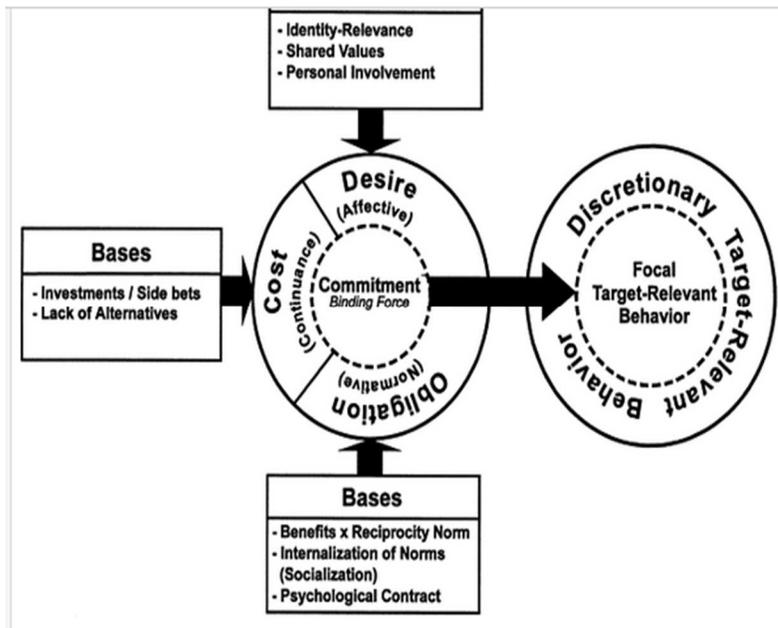
Social Identity Theory, herein referred to as SIT, is a meta-theory. The three constructs are Social Categorization, Social Comparison and Social Identification (Tajfel 1978). SIT has “self-categorization and the often-accompanying depersonalization as the primary cognitive processes” (Deaux and Burke 2010). Wendt (1994) describes social identity as sets of meaning that an actor attributes to it while taking the perspective of others. SIT is the “assimilation to others (social category) or significant social (symbolic) groups” (Brewer and Gardner 1996).

Social identity has been described as a “depersonalized sense of self, a shift towards the perception of self as an interchangeable exemplar of some social category and away from the perception of self as a unique person” (Turner, Hogg, Oakes, Reicher and Wetherell 1987 p. 50). Social identities have poignant implications within school environments. Theories of stratification demonstrate that “everyday school bureaucratic practices, whether intentionally or unintentionally, function to sort and stratify students” (Mehan, Hertweek, and Meihls, 1986 p. 28). Literature has looked at how school as an institution positions various sorts of children (e.g. Mehan et al., 1986; Varenne and McDermott, 1998). “There are also systematic disadvantages based on a set of socially constructed norms. These hegemonic norms are detrimental to many students” and demonstrate the implications of social identities (Stovall 2006, p.9).

#### Organizational commitment Theory.

The study’s conceptualization of the Commitment construct is from the framework for organizational commitment derived from Meyer and Herscovitch Model of Workplace Commitment (see Figure #2). Meyer and Herscovitch’s (2001) model incorporates a number of propositions derived from existing theory” (p. 319). As illustrated in Figure #2, “commitment has a core essence and binding force” (p. 323). Meyer and Herscovitch (2001) suggest, “this model serves as a guide for commitment research regardless of the context in which it is being studied” (p. 323).

Figure 2 - General Model of Workplace Commitment



This research will have comported with the theorized structure of J.P. Meyer and L. Herscovitch Organizational Commitment Model to measure the constructs of Affective, Continuance, and Normative commitment.

### 1.7 Hypotheses

Based on the theoretical assumptions the researcher has the following hypotheses:

- H1. There will be a positive statistical significant relationship between leadership behaviors and organization commitment.
- H2. There will be a positive statistical significant relationship between school culture and organization commitment.
- H3. Stronger social identity will enhance organizational commitment between school leaders' behaviors and school culture.

## **1.8 Research Questions**

RQ1. To what extent is there a relationship between leadership behaviors and organizational commitment?

RQ2. To what extent is there a relationship between school culture and organizational commitment?

RQ3. To what extent does social identity mediate the effects of leadership behaviors, school culture, and organizational commitment?

## **1.9 Definition of Terms**

Culture - “a pattern of basic assumptions--invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration-- that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein 1985 p.9).

Organizational commitment – “Organizational commitment refers to the extent to which the employees of an organization see themselves as belonging to the organization (or parts of it) and feel attached to it” (Meyer, Kam, Goldenberg and Bremner, 2013).

## CHAPTER II

### 2.1 Literature Review

This literature review will begin by defining and discussing the roles of school culture, school leadership, organizational commitment, identity, and social identity. The researcher will then synthesize the literature to provide a coherent basis for the variables' interplay and interdependence within school systems.

School culture.

“School culture is like the air we breathe. No one notices it unless it becomes foul” (Freiberg 1998, as cited in Hinde 2004, p.3).

The definition of school culture is “elusive and difficult to define” (Hinde 2004 p.2). Kluckhohn (1952) “produced a book that compiled definitions of culture and came up with more than 250 conceptualizations” (Whitehead 2004 p.8). The ambiguity of culture's definition could be attributed to culture's “all-encompassing nature” (Hinde 2004 p.2, Schoen and Teddlie 2008). Schein (1999) in *Sense and Nonsense of Climate and Culture* defines organizational culture (the pre-text of school culture) as both a static state of an organization and the human process of constructing shared meaning (p.3).

School culture should not be confused with school climate. School climate is a part of the culture as school culture includes school climate as a component (Schoen and Teddlie 2008). Hoy and DiPaola (2008) describes school culture as vision, facilitative leadership, teamwork, and a learning community. Reeves (2009) described school culture as “the behavior, attitudes, and beliefs of individuals and groups” emphasizing that policy change without cultural change is an exercise in futility and frustration (p.37).

The concept of school culture was originally borrowed from the field of anthropology (Tucker 2011). “In 1932 education scholar Willard A Waller, known for writing the ‘Sociology of Teaching’, had underlined the importance of culture, rituals, ceremonies, and values in his analysis of school as a social system” (Van Houette 2005 p.72). Mostly ignored until the 80’s, the concept of school culture began to emerge as a factor associated with organizational performance (Schoen and Teddlie, 2008, p. 132). Schoen and Teddlie compare “school culture akin to school effectiveness, underscoring the importance of school culture to educational outcomes” (Schoen and Teddlie, 2008 p.130).

Described by Hinde (2004) as nebulous, ubiquitous, and all encompassing, school culture surrounds and envelopes teachers forming their perspectives and influencing their decisions and actions. Van Houtte (2005) asserts that school culture is most accurately described as “a school’s cognitive structures” (p.71). Hinde (2004) further explains that school culture “influences every aspect of a school’s pedagogy” (p.1).

According to Wagner, school’s culture affects student achievement (2006, p. 41). Melton-Shutt (2002) study of 61 schools in Florida (Cunningham, 2003) provided results in school culture’s positive relationship with student achievement. A school’s culture also provides “stability, fosters certainty, solidifies order and predictability and creates meaning” (Bolman and Deal, 2002, p. 25). “A school’s culture has far more influence on the life and learning in the school-house than the school board, the teachers, or even the principal could ever have” (Barth, 2002, p. 6). “School culture, as a pervasive element of schools, affects all aspects of schools” (Hinde 2004, p.2). Hoy and DiPaola (2008) have concluded through investigations spanning several decades “school culture anchored in values and norms of faculty trusting students and parents facilitates positive outcomes, including high academic achievement (p.vii)”. Recepoglu

(2013) asserts, “School culture, which affects and guides the behaviors of the entire school population positively or negatively, may become a point of support or a big obstacle in front of change” (p. 43).

Van Houette (2005) concluded that school culture was the better frame from which to study school effectiveness and school improvement (Schoen and Teddlie 2008, p. 129). School culture has been identified as moderating student achievement (Deal and Kennedy 1983, Wagner 2002). Phillips (1996) conducted research on school culture for 25 years and concluded that the most important aspects of school are school culture, staff member satisfaction, parent engagement, and community support (p. 42). A working knowledge of a school’s culture is required for reform efforts to be accepted. This is primarily the reason that school culture needs analysis, as to equip staff and administrators with a conscience awareness of the school’s values, beliefs, tradition and rituals.

#### Leadership.

Defined as being “complex, ambiguous, and problematic” (Dunning 2009, p.74), all critics agree that “leadership involves three things: a leader, a follower, and a situation” (Goodnight 2004). Ross et al. (1991) promotes the importance of acknowledging leadership peripheries in defining the leadership. As it stands, leadership is ambiguous in nature as “over 60 percent of the authors who have written on leadership since about 1910 did not define leadership in their works” (Van Vugt, 2006 p.7). “The great deal of research in the leadership field over the past 3 decades had contradictory results of the effects of leadership on student outcomes” (Robinson et al., 2008, p.637). Early research concentrated on a list of personality traits of leaders that were attributional in nature; recent research, however, focuses on leadership functions and styles as assessed by behaviors (Mark Van Vugt, 2006).

Bass (1985) first introduced the concepts of transformational and transactional leadership in his treatment of political leadership. Burns' (1978) Model of Leadership presented a dichotomy, of which morality describes the duality (Goodnight, 2004). Burn's assumption: morality is a motivator and is the method of attracting people to the values and to the leader. With regards to the researches' topics of leadership, school culture, and organizational commitment, Burns paradigm illustrates how powerful social and spiritual values are as a motivational lever. According to Burns, "transactional leadership is more commonplace than transformational leadership, yet less dramatic in its consequences (Judge and Piccolo, 2004, p. 755). Building and extending on the work of Burns (1978), Bass (1985) added elaborations by positing that leadership was composed of three domains: transformational, Transactional and laissez-faire (Hauserman 2013 p. 187). Bass (1985) disagreed that transactional and transformational leadership operated as polarized types opposite to each other and theorized that the best leaders could be both types (Judge and Piccolo 2004 p. 755). Bass (1985) extension of Burns work developed transformational leadership theory and also initiated a study of transformational leadership with an open-ended questionnaire (Bass and Avolio, 1993) that led to the development of the Multifactor Leadership Questionnaire see (*MLQ5X*) (Hauserman 2013).

### *Leadership Behaviors.*

School leaders create and sustain the school's culture, again emphasizing the importance of educational leaders' knowledge of understanding of organizational cultural functioning in promoting organizational commitment (Schein 1999). Avolio et al. (2004) asserts that leadership is a "key determinant of organizational commitment" (p.952). Decuyper Et al., (2010) and Raes (2013) agree that leadership behaviors matter because they facilitate psychological collective

security, which is crucial to team effectiveness. Leadership cannot be looked at uni-dimensionally, as it is the practices and behaviors that explain the leader (Robinson et al., 2008). Leadership is delineated as being periphery (skills) and content (knowledge) based. Leadership peripheries are described as “traits, personality characteristics, ‘born or made’ issues, greatness, group facilitation, goal attainment, effectiveness, contingencies, situations, goodness, style, and above all, the management of organizations (Rost 1993 p.3)”.

There are three behaviors of leaders that have distinct dimensions: Transformation, Transactional and Laissez-faire.

Transformation Leadership.

According to Hauserman (2013), “transformational leaders seek innovative ways of doing things and are less likely to support the status quo. In creating and in shaping the environment, the transformational leader encourages followers to be a part of the school’s culture of learning” (p. 188).

Robinson et al. (2008) research results have indicated that “the average effect of instructional leadership on student outcomes was three to four times that of transformational leadership” (p. 635). Many empirical studies have concluded that transformational leadership correlates with leadership efficacy and follower satisfaction across organizational contexts and around the globe. (Smith, Matkin, and Fritz, 2004; House and Aditya, 1997; Judge and Piccolo, 2004; Rowold and Heinitz, 2007, Bass and Riggio, 2006, Verlage and Rowold, 2012). Judge and Piccolo’s 2004 study of transformational and transactional leadership concluded that “transformational leadership failed to predict leader job performance” (p. 755), as “transformational leadership appears to display stronger relationships with criteria that reflects follower satisfaction and motivation than with criteria that reflect performance” (p. 760).

According to Judge and Piccolo (2004) both Burn's (1978) and Bass' (1985) conceptualizations of transformational leadership view effective leaders as those who cause followers to identify with the goals the leader articulates" (p. 757).

#### Transactional Leadership.

According to Hauserman (2013), "A transactional leader is one who operated within a defined system and followed its rules and control was maintained through processes" (p. 188). Bass and Steidlmeier (1998) and Hauserman (2013) "claimed that transactional leadership skills were foundational to the development of transformational leadership skills" (Hauserman 2013 p.188).

#### Laissez-Faire Leadership.

Dubbed as "abdication of responsibility" and characterized as the "best or worst" of leadership styles by Ronald Goodnight (2004), laissez-faire leadership is classified as a "hands off" approach or a noninterference leadership style. Laissez-Faire leaders give employees autonomy of job-related choices. The benefits: team members gain a greater sense of responsibility, which can increase motivation and team spirit. Hersey, Blanchard, and Johnson (2000) propose that "leaders do not have just one style of leadership, but rather have many varying styles depending upon the situation" (Goodnight 2004 p.822).

*Comparing Leadership behaviors.*

Table 2 - Burn's Dichotomous Model

	(Moral)		(Amoral)
Dimensions	Transformational	Transactional	Laissez-Faire
First	Characterized/idealized influence	Contingent reward	
Second	Inspirational motivation	Management by exception – active	
Third	Intellectual stimulation		Management by exception - passive.
Fourth	Individualized consideration		

According to Avolio et al., (2004), leadership behaviors can explain how leaders are perceived and the leadership outcomes obtained at both individual and organizational levels. This interaction “facilitates the quality of communication between the leader and their followers” (p.955). Leadership behaviors also may influence leadership effectiveness. Avolio et al., (2004) contends leadership behaviors that establish personal contact produce higher performance levels in followers (p.955). Successful school-level change is likely to occur when school leadership closely engages staff in a collaborative supportive way (Fullan and Miles 1992).

Table 3 Leadership Criteria and Correlates

*Relationships of Management by Exception (Active and Passive) and Laissez-Faire Leadership to Leadership Criteria*

Criteria	MBE-active			MBE-passive			Laissez-faire		
	<i>k</i>	<i>N</i>	$\hat{\rho}$	<i>k</i>	<i>N</i>	$\hat{\rho}$	<i>k</i>	<i>N</i>	$\hat{\rho}$
Follower job satisfaction	—	—	—	—	—	—	2	392	-.28 <sup>a,b</sup>
Follower satisfaction with leader	11	2,272	.24 <sup>a</sup>	8	3,255	-.14	5	838	-.58 <sup>a,b</sup>
Follower motivation	11	1,879	.14 <sup>a,b</sup>	11	3,441	-.27 <sup>a</sup>	6	1,302	-.07
Leader job performance	6	684	.13 <sup>a,b</sup>	4	355	.00	2	301	-.01
Group or organization performance	11	1,579	-.09	9	1,976	-.17 <sup>a</sup>	—	—	—
Leader effectiveness	14	2,117	.21 <sup>a</sup>	8	2,627	-.19 <sup>a</sup>	11	1,920	-.54 <sup>a,b</sup>

*Note.* Dashes indicate data are not reported because there were too few (less than two) correlations to meta-analyze. *k* = number of correlations; *N* = combined sample size;  $\hat{\rho}$  = estimated true score correlation; MBE = management by exception.

<sup>a</sup> 90% confidence interval excluded zero. <sup>b</sup> 80% credibility interval excluded zero.

### Organizational Commitment

Essential to any organization in completing their goals is a committed workforce (Sahoo et al., 2010). Organizational commitment is “multidimensional in nature and involves an employee’s loyalty to the organization, willingness to exert effort on behalf of the organization, degree of goal and value congruency with the organization, and desire to maintain membership” (Bateman and Strasser 1984, p.95; Meyer and Allen 1997). Organizational commitment can be thought of as the level of attachment felt toward the organization in which one is employed (Bartlett, 2001) or “the psychological link between the employee and his or her organization that makes it less likely that the employee will voluntarily leave the organization” (Meyers and Allen, 1996. p. 252). “Inarguably, organizational commitment influences organizational effectiveness and employee well-being” (Meyer and Herscovitch 2001. p. 299). Sahoo et al., (2010) expresses organizational commitment as such:

The importance of individual commitment to the bottom line of the organization is highly essential for improved performance, improved production, higher employee loyalty, increased satisfaction, high quality of product and services, and customer satisfaction (p. 40).

“Organizational commitment’s importance has landed it as a central concept with an important role in organizational studies” (Meyers and Allen, 1996. p.252).

Early studies of organizational commitment embraced a single dimension; attitudinal perspective: embracing identification, involvement and loyalty (Porter, Steers, Mowday and Boulian, 1974; Meyer and Allen 1996 p. 252). Meyer and Allen (1984) proposed a two dimensionality component of organizational commitment: affective attachment as “positive feelings of identification with, attachment to and involvement in the work organization” (p.375) and continuance as a felt obligation to stay, “the extent which employees feel committed to their organization by virtue of the costs that they feel are associated with leaving” (p.375). Allen and Meyer modified their early findings and proposed a three-component model of organizational commitment in 1990: affective attachment to the organization, perceived costs of leaving it (normative), and a felt obligation to stay (Continuance). Allen and Myers three-component conceptualization of organizational commitment can be regarded as the current multidimensional dominant model in organizational commitment research (Cohen 2003, Allen and Meyers 1996, p.252).

The commitments espoused include behavior terms, in the focal and discretionary behaviors (Jaros, 2005). Focal behaviors are those which maintain membership in the organization. Discretionary behaviors are optional behavioral terms of the employee.

Organizational commitment has attracted much attention as an attitudinal research topic over the last 20 years (Cohen, 2003; Erdheim, Wang, and Zickar, 2006). It has been shown to predict important work outcomes such as withdrawal, performance, absenteeism, and tardiness (Cohen, 1996) and linked to positive job performance outcomes (Hunt 1994). “Employees who experience positive exchanges with the organization, the job, or the work group will reciprocate

with higher levels of commitment, which will motivate them to contribute to the organization in other ways, such as reduced turn-over and absenteeism or better performance” (Cohen, 2006, p.108). Research has demonstrated that employees with high organizational commitment not only tend to remain longer with their organization but also exhibit more positive on-the-job behaviors (e.g., attendance, task performance and contextual performance), experience more job satisfaction, job involvement, and cope better with stressors at work (Begley and Czajka, 1993; Cohen, 2006). Meyer and Allen (1997) make reference to “two-sided faces” of Organizational commitment. Meyers and Allen (1997) posits this “two-sided faces” as the downside of employee commitment. “A blind commitment to an organization can lead employees to accept the status quo even if it ultimately means that the company loses its ability to innovate and adapt to change” (p.3).

Identity/ Social identity.

“While Identity Theory is ultimately a sociological theory and Social Identity Theory a psychological theory, the researcher feels it imperative to provide a detailed explanation of both in justifying the usage of SIT” (Hogg et al., 1995).

Erik Erikson (1950) brought the concept of Identity into the social and behavioral science (Deaux and Burke, 2010). Erikson’s (1968) theory is the meta-theory that provides the parameters, in addition to being the precursor, to social identity. Erikson’s Theory of Identity development states that during the school-ages, if children experience unresolved feelings of inadequacy and inferiority among their peers, they can have serious problems in terms of competence and self-esteem. Influenced by increasing interests in Identity Theory and rising interests of intergroup phenomena, Tajfel and Turner developed Social Identity Theory during the early 1980’s (Tajfel, 1978; Tajfel and Turner, 1979; Abrahms and Hogg, 2004). The

researcher believes Gee’s (2001) interpretation of identity encompasses both broad constructs: Identity as a social category and identity “as a deep-rooted aspect of an individual that is the basis of their self-respect or dignity” (Kuo and Margalit, 2010 p. 6). Gee’s (2001) ideas of identity also blends the primordial, situationist, and rationalist views of identity by acknowledging that “identity is multidimensional with some identities being cross-cutting and interdependent” (Kuo and Margalit, 2010 p. 9). It is with the purpose of sharing that perspective that the researcher presents Gee’s positioning of identity.

Gee (2001) delineates four ways to view identity:

Table 4 - Four Ways of Viewing Identity

Identity	Explanation
Nature (N - Identity)	based not anything an individual has done or accomplished, but who they are powered by nature, i.e. race, gender, ethnicity
Institutional (I - Identity)	who an individual is, i.e. student, professor, powered by a set of authorities or an “institution”
Discursive (D- Identity)	processed through recognition, i.e., charismatic. powered by the discourses dialogue of other rational people
Affinity (A - Identity)	powered by “distinctive practices”. Affinity groups are dispersed among large spaces and group members share “allegiance, access, and participation” of specific practices which provide each member the requisite experiences. (p.105).

Gee (2001) asserts that all four identities are “processed through interpretive systems and that many memberships can be understood as having multiple identities” (p.107). Gee explains that being African American can be understood as an I-Identity for the ways institutions interact to the race, i.e. Jim Crow laws. Also, Gee asserts that being an African American is also an N-

identity as rooted in African genetic inheritance and other biological factors. The D-Identity of being an African American is ascribed as it relates to the dialogue of Ebonics or stereotypical correspondence or responses in certain distinctive ways within interactions. Yon (2001) suggests the same: that race identity is situational, and in its discursive meaning, race can be a social construct as history dictates.

The A-Identity is generated not through “blood” (an N-Identity) or an “institutional category” (an I-Identity) nor the response of distinctive ways (a D-Identity), but through participation in practices (e.g. clothing, celebration of holidays, cultural events) or lifestyles that create that affinity (p. 108-109). It’s apparent that the discursive view of identity impacts social identities within school systems, as it’s capable of eroding, sustaining, or increasing interactive capabilities and effectiveness.

SIT does not exclusively address in-group and out-group situations. Tajfel and Turner (1979) and Gee (2001) assert that SIT explains the paradoxical discursive responses of minority and other subordinate groups to their disadvantaged position. “For Tajfel and Turner, the central idea was that both behavior and identity could shift along a continuum with extremely unique and personal aspects at one end and extremely common and collective aspects at the other” (Abrahms and Hogg, 2004 p.99). It is within this context of SIT that education research can recognize and delineate why people function as members of their groups. SIT can also give meaning and value to the concept of identity and certain kinds of behaviors of group members, as social identity explains origins of perspectives.

Social identity has been compared with group proto-typicality (GPT). According to Van Knippenberg and Hogg (2003b) “SI is conceptually different from GPT in that it captures an extended sense of self that includes the group, rather than perceived similarity to the group

prototype [GPT]” (Giessner, et al., (2013 p.662). Giessner lists the following as antecedents of SI: group status, group distinctiveness, subjective uncertainty interpersonal treatment, and interpersonal attraction. So as identity acts as an important agent of the function of social identification, “group prototypicality assumes importance as a function of group identification” (Giessner et al., 2011 p.662; Brewer, 1991; Hogg, 2007).

Fordham and Ogbu (1986) have researched oppositional Social identity and its impact on minority students. They purport “one major reason black students do poorly in school is that they experience inordinate ambivalence and affective dissonance in regard to academic effort and success” (p. 1). Their study, as well as other identity studies, are “useful concepts in explaining people’s preferences or behavior” (Kuo and Marglit 2010 p.7), as “social identity studies involve internal processing of socio-cognitive experiences of individuals and group/intergroup processes” (Deaux and Burke, 2010, p.1 para. 2). Studies of this nature illustrate a narrative story of intergroup behavior. As suggested by Lemke and Wilson (1998), identifying the links between collective action, social identity, and disengagement increases a school’s capability.

*As a moderator: Social identity.*

The literature, overwhelmingly suggest that “people’s social identity supports inequities and/or privilege” (English 2011 p.27). Understanding how social identity can moderate behaviors will assist in the development of an educational praxis that confronts social issues within the school structures. Whitehead (2004) asserts, “in order to understand why certain behaviors emerge and persist, we must understand the socio-cultural contexts, socio-cultural processes, and sociocultural meanings” (Whitehead, 2004, p.13).

Social identification has “far reaching consequences for subordinates’ relations to their leader” (Hogg t al., 2005 p. 993). Antonakis et al., (2003) acknowledge the contextual nature of

leadership. Hogg et al., (2005) further explain that “leaders lead groups that furnish people with a sense of identity and that identity exists in a wider intergroup comparative context” (p. 993). Van Knippenberg et al., (2005) present the notion of follower self-concept, as both moderator and moderator in the relationship between leadership and follower behavior, in their publication *Leadership, self, and identity: A review and research agenda*. “Identity is positively related to leadership endorsement” according to Platow and van Knippenberg (2001) study of prototypically and fairness reports social identity can explain a variety of behaviors (p. 1517).

As SIT theory can be used to explain a wide variety of intergroup phenomena, it can be used to explain leadership behaviors and disengagement (see, inter alia, Abrahms, Dominic and Hogg, 2004; Ang et al., 2003). SIT also explains what change tools leaders select towards transformation of school’s culture. Giessner et al., (2011) succinctly asserts their views of social identity and leadership behaviors:

Group-defining characteristics are likely the guiding principles of behavior for leaders who perceive themselves as prototypical because they care intrinsically about the team and adhere to team norms and characteristics (p.663).

Giessner et al., (2011) were “among the first to apply the central variables of the Social Identity Perspective of Leadership to the psychology of leaders rather than followers” (p.664). Johnson, Venus, Lanaj, Mao, and Chang (2013) agree that research has shown that social identity processes can predict leadership behaviors.

Can social identity processes, however, predict school culture? We produce school culture through perpetual enactment and sense making and within those same social events we bring and are building social identities (Schein, 1999). Shared identity is a pre-condition of collective action. A strong school culture fosters the acceptance of shared group goals (Lietwood

and Riehl, 2003). Carter (2011) describes great school cultures as an environment that teaches stakeholders to work together both for the individual and collective good. The association between social identity and school culture are clearly defined. Anyon (1995), in his study of *Race, social class, and educational reform in an inner-city school*, associates socio-cultural differences as a factor of failed reform. “Culture is constantly reenacted and created by our interactions with others and shaped by our own behavior” (Schein, 2010b, p.3). According to Hinde (2004) change that is introduced, especially changes that are foreign to a teacher’s lived experiences, is likely to be met with resistance. All too often change programs fail because they do not consider what the underlying culture is and how it connects to societal values and the norms of the individual’s social identity (Schein, 1999). Carter (2009) made a salient point that connects both school culture and social identity:

School cultures, in building pro-social identities, are likely to be explicit about what is valued, about what is truly good, and about what they aim for. The link is clear: school culture presents a clear understanding of what the community values, nurtures the personal confidence and individual character of each person in the community and creates a team spirit committed to achieving the same goals. (p.18)

As social identity relates to commitment, Meyer and Allen (1997) purport alienation as the opposite of commitment. Meyer and Allen (1991) suggest that normative commitment derives from socialization [or exchange] processes within organization. “As personal characteristics and situational conditions contribute to the development of high commitments, organizational commitment and social identity are relevant to understanding a person’s self-interests and well-being” (p.9). Mowday et al., (1992) investigations found that the characteristics and experiences that a person brings to an organization can predict their

commitment to the organization (Meyer and Allen, 1997). Mowday (1979) defines organizational commitment as “the relative strength of an individual's identification with and involvement in a particular organization (p. 226)”. Porter et al., (1974) makes the link between social identity and commitment clear: “an attachment to the organization, characterized by an intention to remain in it; an identification with the values and goals of the organization; and a willingness to exert extra effort on its behalf” (p. 604). “Identification and internalization were negatively related to turnover intention, turnover and positively related to prosocial behavior” (Meyer and Allen 1997b p.14). Thomas Hugh Feeley’s Erosion model (Feeley, Moon, Kozey, and Slowe (2010) also further explicates how social identity and organizational commitment can be connected. The Erosion model suggests that employees with fewer bonds will be most likely to quit the organization. In addition, Social embeddedness - the degree to which the actions individuals choose are importantly refracted by the social relations within which they function, also summarizes a person's links to the organization, the community, and his sense of fit with that organization and community. We can better understand when and how commitments develop and how they help shape attitudes and behaviors “by acknowledging employee’s identities and building an understanding of the relationship between an organization and the social identity of its employees” (Meyers and Allen, 1997 p.ix). There are other commitments of employees that social identity could potentially mediate, i.e., “commitment to the work group, manager, occupation, profession, career, and union” (Meyers and Allen, 1997, p.ix). Building our knowledge of how social identity effects workplace commitments will help organizations to be in a better position to anticipate the impact that change will have and to manage change effectively. Linking social identity and organizational commitment also builds comprehension of context. Organizational commitment, within the wrong context, is not advantageous to the

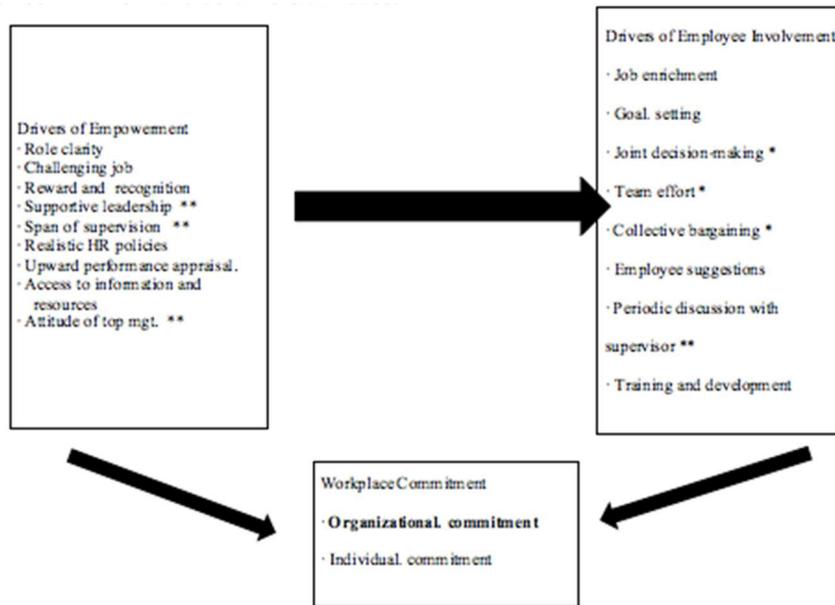
organization. This two-side face of commitment makes it required for success but also undesirable. Organizational commitment can be undesirable if it leads to a “blind-commitment” that negatively influences employees to accept and sustain the status quo. This makes change difficult (Meyer and Allen, 1997 p. 3). “It is important to know how strong the connection is between employees' commitment and their willingness to "go to the wall" for the organization, as well as their tendency to blindly follow” (Meyer and Allen, 1997). Acknowledging the latter statement, researchers are positioning themselves to make an informed judgment about the benefits and cost of commitment by examining the interconnectedness of social identity and organizational commitment. How social identity can be linked/identified as moderating relationships between the variables, has been demonstrated through this literature review.

#### Linking the variables.

The current body of literature presents several examinations of leadership and organization commitment. The fact that “most leadership research is conducted within the organizational field of study”, demonstrates the two variables interconnectedness (Hogg et al., 2005 p.994). Eval and Roth (2011) in a study of the relationship between transformational leadership and motivation, concluded that “leadership style is a significant factor in the motivation of teachers” (Hauserman, 2013, p.191). “Better student learning, cohesiveness of a school’s faculty, and more committed teachers were associated with school principals demonstrating transformational leadership” (p.191). In addition, leadership is listed as key determinant of organizational commitment (Mowday et al., 1979). “There is considerable research suggesting that transformational leadership is positively associated with organizational commitment in a variety of organizational settings and cultures” (Avoilo et al., 2004 p.953).

According to Porter, et al., (1974), research has found significant relationships between commitment and behaviors/attitudes.

Figure 3 - Relationship between Commitment and Behaviors/Attitudes in the Workplace



This literature review also demonstrates that leadership and school culture are too interconnected. Schein (2010b) refers to leadership as “the architect of culture (pix)” and “as culture managers (363)”. Leadership provides direction and exerts influence in order to achieve the school’s goals, as it relates to school culture (Lietwood and Riehl, 2003; Scribner, Cockrell, Cockrell, and Valentine, 1999). Reeves (2009) implies a relationship between both leadership behaviors and school culture by asserting that organizational culture will change with leadership actions. Lietwood and Riehl (2003) ascribe leadership behaviors as a core component of school culture (p.5), and Macneill et al., (2009) suggests that “successful school principals focus on the development of the school’s culture as a learning environment to improved teacher morale and student achievement” (p. 74). Schein (1985) declares the significance of the relationship between

leadership and organizational culture by signifying, “the only thing of real importance that leaders do is create and manage culture” (p. 2). He believed that “the most important way of staying focused in this sea of possibilities is to keep exploring how leadership and culture are fundamentally intertwined” (p. 2).

School culture, as defined as the human process of shared meaning, is perpetually changing. Ultimately, the school leader, as a change agent, is responsible for the creation, management, and destruction of school culture (Schein, 2010b; Schein, 1999). Reeves (2009) reemphasizes the association between leadership and school culture by noting that a change in school culture cannot be solved by someone who “provides answers from on high”. Reeves further expounds that change in culture requires relentless personal attention and “scut work” by the leader (p.39). Giessner (2011) suggests that the leader of school culture clarify what is central and what is peripheral to increase the effects of SI” (p. 663). Through intentional practices and purposeful interactions, leadership can transform school cultures (MacNeil, et al., 2009).

Great school cultures have highly committed school communities (Carter 2009). “A positive organizational culture in academic settings improves faculty job satisfaction and deters intentions to quit” (Callister, 2006, as cited by Springer et al., 2012). Hinde (2004) “acknowledges that a school with a positive school culture has a sense of shared ethos and commitments. The other side of commitment is demonstrated when schools have toxic cultures with oppositional staff that are unwilling to change” (P.29). A conflict of culture has a positive relation with employee turnover and “can be the impetus for teachers to leave” (Hinde, 2002). Leadership, school culture/commitment and social identity, although easily contrived, are interconnected under the supervision of leadership.

This literature reviews supports the connectedness and interdependence of leadership and organizational commitment, as well as leadership and school culture.

Frameworks in depth:

*Social Identity Theory.*

The Theory of Social Identity (SIT) is “the perspective of connectedness and belonging entailing the fundamental differences in the way the self is individuated or interpersonally construed” (Brewer and Gardner, 1996). “SIT implies a psychological merging of self and group that leads individuals to see the self as similar to other members of the collective, to ascribe group-defining characteristics to the self, and to take the collective’s interest to heart”

(Hogg and van Knippenberg, 2003, p. 827). The categorizations vary and span from “Self-categorization with all human beings (social identity theory) to self-categorization with no one else (self-categorization theory)” (Platow and van Knippenberg, 2001, p. 1509). The shift from personal to social identity begins with the “cognitive representation of the self as the same, identical, or interchangeable with others at some level of abstraction” (Platow and van Knippenberg, 2001. p. 1509). Within the context of SIT, the “relational self-construal renders mutual benefits and mutual interests more salient and motivates the individual to take the other’s interest to heart” (van Knippenberg et al., 2004. p. 828). The process of categorization itself homogenizes perceived variability of group’s attributes and behaviors (McCarty, 1999). Since the development of SIT, Social Identity Theory has come to dominant the field of inter-group dynamics (Brown and Capozza, 2000).

Michael A Hogg and Daan van Knippenberg et al. have several publications on Social Identity Theory and Collective Identity. Hogg and Martin et al., (2005) published *Effective Leadership in Salient Groups: Revisiting Leader-Member Exchange Theory From the*

*Perspective of the Social Identity Theory of Leadership* which compared Leader-Member Exchange Theory (LMX) with Social Identity Theory of Leadership. LMX posits leaders as “unique individuals who differ from other group members, in a personalized manner” (p.991). Social Identity Theory of Leadership posits that “effective leaders relate to their subordinates as undifferentiated members of the group, in a depersonalized manner” (p.991).

“It’s focus on dyadic leader-member relationships fails to consider relationships which occur in a wider social context of the group as a whole” Hogg remarks of the LMX approach (Hogg et al., 2005 p.992). Hogg et al., (2005) further compares LMX’s focus on “quality interpersonal dyadic leadership that hinges on personalized leader-member exchanges; while SIT of Leadership focuses on a group-oriented (depersonalized) exchange of which leader interpersonal styles are preferable in low-salient groups and a depersonalized style may be preferable in a high-salience group” (p.993). According to Social Identity Theory “the group member who is perceived to be the most prototypical is most likely to emerge as a leader” (Platow and Van Knippenberg, 2001). Breakwell (1993) contends that Social Identity Theory can be used to describe the processes at work in shaping social representations. Social Identity Theory has received a large amount of empirical support within a variety of contexts (Sherriff, 2007).

#### *Social Identity Theory of Leadership.*

Hogg introduced Social Identity Theory of Leadership (SITOL) in 2001. Social Identity Theory of Leadership posits that leadership is principally a function of group level dynamics and normative behaviors. In SITOL people are not driven by personal considerations. Abrahms and Hogg (2004) assert “people act not only as individuals but also as group members with shared perceptions, goals, and identity” (p. 99). “Individual motivation is adapted to the

needs, goals, and expectation of the group” (Ellemer, 2004 p. 459). The difference is this: LMX compares a leader to an individual follower and SITOL compares a leader to a group theoretical model.

Platow and van Knippenberg (2001) also endorse a social identity analysis of leadership in their article *A Social Identity Analysis of Leadership Endorsement: The Effects of Leader In-group Proto-typicality and Distributive Intergroup Fairness* (2001). They conclude that the data from the research presented “clear evidence for social identity processes in leadership endorsement, citing leadership endorsement as positively related to levels of social identification” (Plato and van Knippenberg, 2001, p.1517).

Van Knippenberg (2005) in his review of leadership, self, and identity, notes:

The way that we perceive ourselves, our self-concept or identity has profound effects on the way we feel, think, and behave, and for the things we aim to achieve. Therefore, if leadership can change the way in which followers perceive themselves, leadership may have great consequences for organizational, work group, and individual functioning. (p. 827)

Hogg et. al. (2005) reinforces Van Knippenberg study with his research of salient groups. Although his research approximates group identification (instead of directly measuring identification), it also provides preliminary evidence of social identification’s influence of leader-follower relationships.

Hogg et al., (2005) asserts “as people identify more strongly with a group, leadership endorsement and effectiveness become increasing[ly] influenced by how group prototypical the leader is perceived to be” (p.993). “Members of high-salience groups may consider the leader to be acting unfairly by adopting personalized leader-member relations. This marginalizes/alienates group members which reduces group identification, thus threatening the leader’s legitimacy in

the eyes of the group” (p. 994). “When the definition of self-shifts from being personal ("I") to collective ("we"), exactly the same motivational processes that apply to the individual self may come to apply to the collective self” (Ellemer, 2004 p. 464).

“Individually, motivation is projected on, informed by, and adapted to the needs, goals, expectations, or rewards of the team or organization in which individuals work” (Ellemer 2004, p. 460).

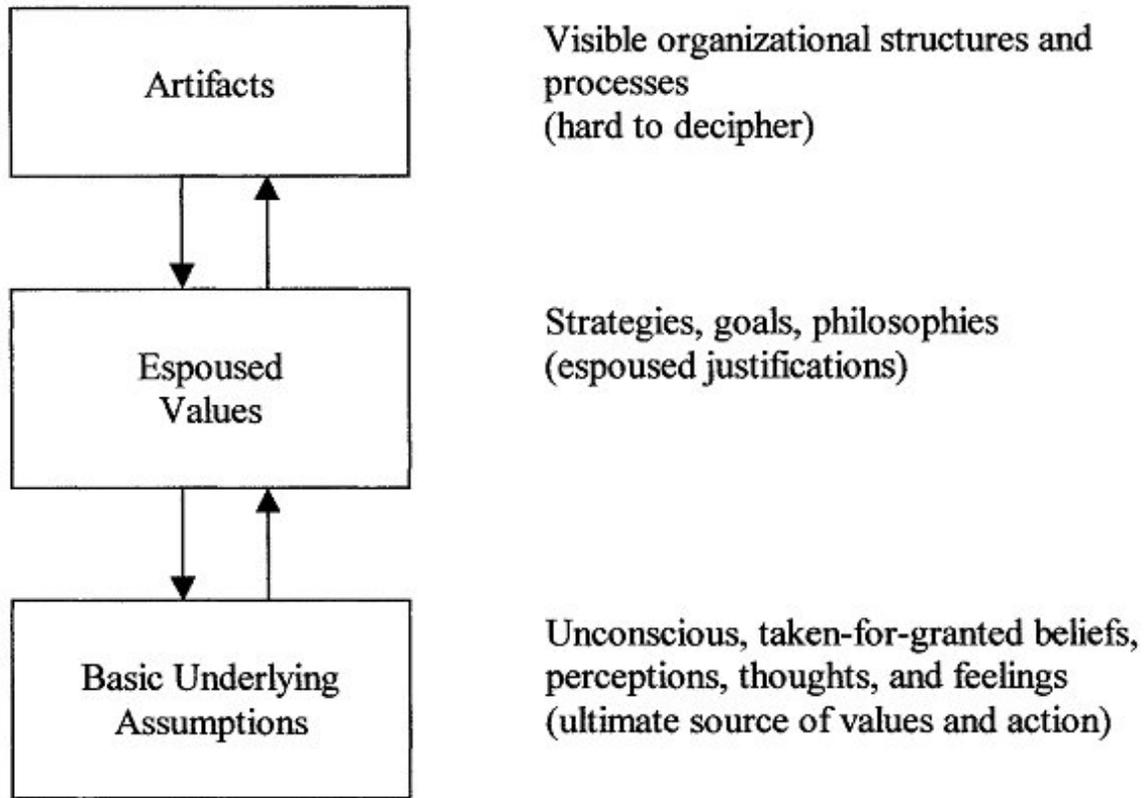
The literature supports Social Identity Theory of Leadership as a supporting framework for the study of leadership, school culture, social identity, and commitment.

#### *Organizational Culture Theory.*

The most widely used framework for culture theory is that of Edward Schein. “Schein’s theory is consistent with other researchers who studied organizational culture in school systems” (Schoen and Teddlie, 2008 p.138). Schein’s Model of Organizational Culture has four dimensions that manifest themselves at three-levels: artifacts, espoused belief, and basic assumptions (see figure 2).

Figure 4 - Schein's Levels of Culture

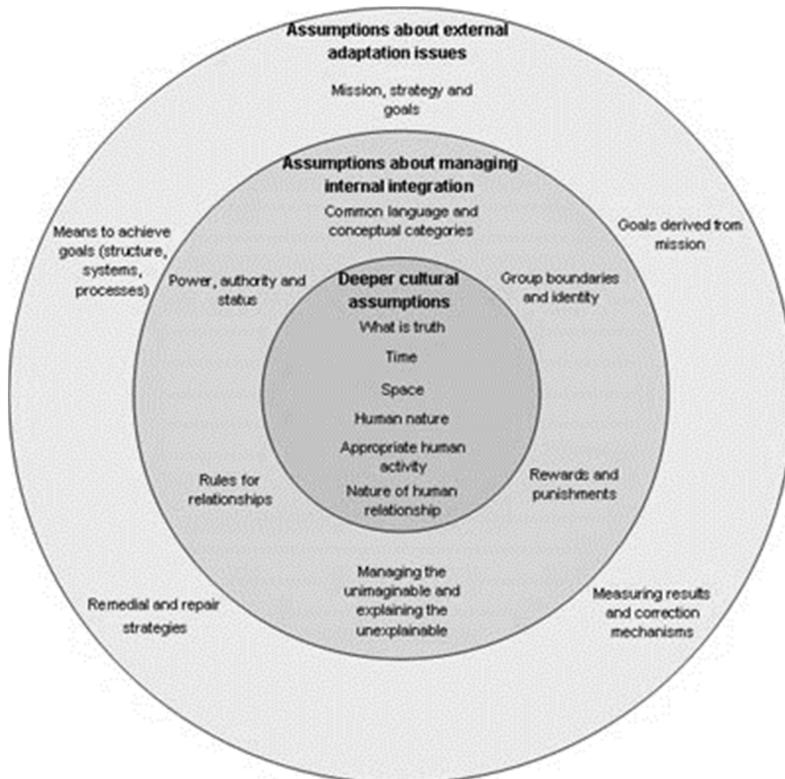
### Uncovering the Levels of Culture



Source: Schein (1992 p.17)

Figure 5 - Schein's Assumptions

As illustrated, the base level of Schein's theory is Basic Assumptions. This is a shared set of tacit understandings about the nature of things and problem solving of the organizations (Schoen and Teddlie, 2008 p.138). Espoused values are unconscious beliefs that are not visible. Artifacts are the tangible things we see.



By Chad Renando, taken October 26 from <http://thehypertextualcom/2013/01/17/edgar-schein-organizational-culture-and-leadership/>

Table 5- Definitions of the dimensions of school culture

*The four dimensions that exists in school culture are illustrated below:*

Professional Orientation	Organizational Structure
The activities and attitudes that characterize the degree of professionalism present in the faculty.	The style of leadership, communication, and processes that characterize the way the school conducts its business
Quality of the Learning Environment	Student-Centered Focus
The intellectual merit of the activities in which student are typically engaged	The collective efforts and programs offered to support student achievement

Table 5 Definition of the dimensions of school culture taken from Schoen and Teddlie (2010) p. 140

Table 5 illustrates how school culture and school climate are of the same constructs. Interestingly noteworthy, school climate is a differing level of school culture. According to Schoen and Teddlie (2010), “Psychometric surveys used to study school climate are ways of eliciting espoused beliefs which is one of three levels of Schein’s Levels of Organizational Culture” (p. 139).

Additionally, in support of Schein’s School Culture Theory, Schein’s model was compared and consistent with the following works:

- Getzels and Guba’s Organizational Theory (1957)
- Murphy’s Description of Restructuring (1991, 1992)

(Schoen and Teddlie, 2008 p.143)

*Organizational commitment Theory.*

Organizational commitment Theory is based on the Social Exchange Theory and the Norm of Reciprocity. Meyer and Allen (1997) states that “a clearer understanding of an employee's relationship with an organization can be gained by considering the strength of all three forms of commitment together than by trying to classify it as being of a particular behavior”. Albeit, Meyer and Allen’s three component model of organizational commitment is the most widely regarded in organizational commitment research (Cohen, 2003). The three forms of commitment are affective, normative, and continuance (Cohen, 2003). “Members of the organization who are bound into the system by personal objectives consistent with the organization are more likely to make great contributions to that system” (Cooke and Rousseau, 1981 p.21).

Conclusion – The interactivity between culture, commitment, leadership, and social identity.

“Creating and sustaining a healthy organizational culture in academic institutions requires leadership and staff involvement in developing professional values such as trust, fairness, consistency, shared decision making” (Springer et al., 2012. p.86). Leadership develops both school culture and organizational commitment. According to Carter (2009), it is through an organization’s commitment to principles that forms the school culture, and that culture defines what is appropriated and acceptable forming social identities within the school. “Leadership behaviors, through intentional actions and purposeful interactions, reinforce the expectations of school culture, organizational commitment, and the various social identities” (Carter, 2009, p.18).

## 2.2 Summary

We can derive from the literature review that “for any organization to thrive, the administration and faculty must have a shared purpose” (Springer et al., 2012 p. 86).

S.I. has been used in research for the creation of polices and even political conflict (Kuo and Margalit, 2012). Sow (2006) maintains that a certain level of both identification and commitment is needed in the survival of any organization, but strong identification and organization commitment are needed [in schools] in order for our learning institutions to achieve its goal (p. 249). Springer et al., (2012) and the literature both support that leadership, school culture, and organizational commitment affect each other in various ways and that a focus on these variables will contribute to school success” (p. 86). The concepts introduced into this literature review demonstrate the interplay between leadership, school culture, organization commitment, and social identity.

## CHAPTER III

### 3.1 Methodology

Research design.

A cross-sectional non-experimental quantitative research design utilizing survey data was implemented in the research study. A quantitative research design was most appropriate for this study because the researcher is seeking to employ traditional modes of research (e.g. empirical data, statistical patterns) which have already existing procedures and rules (Cresswell, 2003 p.22). Babbie (1990) suggests the use of surveys within a cross-sectional design as an attempt to create generalizations from a sample to a population. This also presented a greater basis for the findings to be generalized beyond those participants included in this research. According to Babbie (2005), survey research provides the researcher an opportunity to “collect original data for describing a population too large to observe directly” (p. 252). Tucker (2011) states that “surveys provide a method of collecting data on a myriad of subjects and may be cost effective for researchers with limited money and time” (2011, p. 41).

According to Cresswell (2003), a quantitative approach is best for the understudying of predictors of outcomes (p. 22). Also, a quantitative approach has been the design of choice for post positivists since the late 19th century and throughout the 20th for empirical observations and measurements (p.13). Further, a quantitative approach is ideally useful in experiments with multiple variables and in assessing the collective strength of multiple variables (pp.13-14).

The units of analysis’ were the perceptions of school leadership, school culture, and organizational leadership, the self-esteem’s membership construct and the interaction of the variables. A survey methodology was the preferred mode of data collection for the proposed research study because it provided for numeric descriptions of trends, orientations and attitudes

of a population through the analysis of a sample of that population (Babbie, 2005).

Questionnaires were utilized to collect data from teachers.

The validity of the survey instruments are found Table 7- Study's Instrumentation. All instruments demonstrate strong evidence for validity. Construct validity explained with factor analyses support the study's survey instrument's stability in research settings.

A considerable number of methods estimate the reliability of psychometric tests. This research utilized Cronbach's alpha. Table 8 Internal Consistency Values (Cronbach  $\alpha$ ) referenced on page 60 of this documents and demonstrates that all four scales had reliability scores at acceptable levels.

#### *Study subjects.*

Participants for this study were 102 teachers from two elementary schools, within a school district of New Castle County, Delaware.

According to Babbie (2005), the purpose of sampling is "to select a set of elements from a population in such a way that descriptions of those elements accurately portray the total population from which the elements are selected" (p. 196). The researcher employed purposive sampling in order to obtain the most representative group of respondents, study subjects of the North Wilmington area in the Mid- Atlantic region of the United States of America. According to Babbie (2005), a sample "is representative of the population from which it is selected if the aggregate characteristics of the sample closely approximate those same aggregate characteristics in the population" (p. 195). The researcher actively sought and recruited participants for the study during the fall semester of the 2016-2017 school year. A population of approximately 159 teachers and instructional leaders were asked to participate in this study. No assumptions were made of the principals' leadership skills; participating schools weren't selected for participation

based on their principal’s performance. A sample size formula was utilized in order to determine the appropriate sample size that would likely yield significant results. The researcher expected a very high sample size to complete the survey instruments. Babbie (2005) states that inferential statistical analysis makes the assumption that all respondents within a sample will complete and submit their survey instrument questionnaire. This is atypical in survey research. Also, according to Babbie (2005), a “response rate of fifty percent is adequate for analysis and reporting, sixty percent is good and seventy percent is very good” (p. 272). Thus, the researcher achieved a sample size of 30 teachers out of 36 from school #1 and 72 teachers out of 115 from school #2, 67.5% of the total population of teachers or 102 teachers participating out of 151 teachers.

VARIABLES	INSTRUMENTATIONS	AUTHOR(S) )	CROHNBACH'S ALPHA
LEADERSHIP BEHAVIOR	MLQ6S	AVOLIO AND BASS (2004)	TRANSFORMATI ONAL STYLES FROM 0.83 TO 0.70 TRANSACTIONA L LEADERSHIP FROM 0.75 AND 0.69 LAISSEZ-FAIRE 0.71
SCHOOL CULTURE	SCHOOL CULTURE TRIAGE SURVEY	PHILLIPS (1996)	.925

ORGANIZATIONAL COMMITMENT	ORGANIZATIONAL COMMITMENT SURVEY	MEYERS AND ALLEN (1997)	.90
SOCIAL IDENTITY	COLLECTIVE SELF-ESTEEM SCALE (CSE)	LUHTANE N AND CROCKER (1992)	>.73

Table 6 - Study's Variables

*Variables.*

Independent	Dependent
School Culture	Organizational commitment
Leadership behaviors	Moderator variable
	Social Identity

Instrumentation

Table 7- Study's Instrumentation

Assessment of Social Identity/Collective Self-Esteem Scale (CSE).

The Collective Self-Esteem Scale (herein referred to as CSE) was used to measure the social identity (SI) of the study's participants. "This scale was constructed to assess individual

differences in collective (rather than personal) self-esteem with four subscales: Membership esteem, Public collective self-esteem, Private collective self-esteem, and importance to Identity” (Luhtanen and Crocker 1992 p.302). Items on the questionnaire correspond to the four subscales as follows:

Items 1, 5, 9 and 13 = Membership self-esteem.

Items 2, 6, 10 and 14 = Private collective self-esteem.

Items 3, 7, 11, and 15 = Public collective self-esteem.

Items 4, 8, 12, and 16 = Importance to Identity.

With the focus of self-perception on the collective self, the member self-esteem subscale was utilized to measure the social identity construct for this research.

Assessment of School culture and the School Culture Triage Survey.

“Schein calls for use of psychometrics such as surveys, those similar to what has been used to study school climate (Schoen and Teddlie, 2008, p. 146). Schein suggest that data that includes surveys are functional in determining the homogeneity and strength of school culture’s aspects (Schoen and Teddlie, 2008 p. 147). Researchers could include ethnographic independent inquiries for school culture, in addressing the concern for context. This can be done quantitatively, as proscribed by Wagner (2004) and presents a holistic means of contextual analysis (p. 6). The researcher opted to use the School Culture Triage Survey.

School Culture Triage Survey.

School Culture Triage Survey, espoused belief measurement, was developed and refined by Phillips (1996) and has been used both in the United States and Canada to quickly measure school culture (Wagner, 2006). Wagner (2006) asserts that the school culture triage survey accurately assesses school culture. The 24 item pencil and paper assessment measures the

degree to which professional collaboration, affiliate and collegial relationships, and efficacy and self-determination are present in the school. Per Wagner's (2006) suggestion, the surveys were completed independently and anonymously.

#### Assessment of Leadership Behaviors.

MLQ 6S Measures of Transformational leadership.

The Multifactor Leadership Questionnaire (MLQ—also known as MLQ 6S standard MLQ, is a quantitative instrument in which teachers rate school principals. According to Bass and Avolio (1994), most of the research on transformational leadership has used the MLQ. According to Lunenburg (2003), research studies have verified the conceptual adequacy and psychometric qualities of the MLQ as well as provide support for the MLQ's predictive validity (p. 5). "This instrument has been validated across a variety of sectors, including businesses, schools, and the armed forces" (Hauserman, 2013, p. 187). The current version of the MLQ Form 6S includes 45 items that are broken down into 9 scales with 5 items measuring each scale. "The MLQ measures Transactional, laissez-faire, and transformational leadership factors" (Hauserman, 2013, p. 186). Anatonakis (2013) tested MLQ's validity and results "indicate[d] strong and consistent evidence that the nine-factor model best represented the factor structure underlying the MLQ (Form 5X) instrument" (p. 283).

The survey was administered to school teachers. "Based on the responses, the principals (school leadership construct) will be stratified into categories according to whether they possessed high or low levels of transformational leadership qualities" (Bass and Avolio, 1997. p.184).

#### Assessment of Organizational commitment.

Organizational Commitment Questionnaire (OCQ).

“Meyer and Allen’s three-component Model of Organizational commitment (TCM) has become the dominant model for study of workplace commitment, as numerous studies have used the Affective (ACS), Continuance (CCS), and Normative Commitment (NCS) Scales to assess organizational commitment” (Jaros, pg.7, 2008). According to Allen and Meyer (1990), a person’s total commitment would reflect the net sum of these three psychological states. The Organizational Commitment Questionnaire, herein referred to as the (OCQ), has a high degree of internal consistency (Mayer and Schoorman, 1992, as referenced by Lam, 1998). “Numerous studies have assessed the construct validity of the scales” (p.8). “There now exists a considerable body of evidence regarding the psychometric properties of the measures and construct validity results strongly support use of the scales in substantive research” (Meyer and Allen, 1996, p. 252). “Median reliabilities of the ACS, CCS, and NCS are .85, .79, and .73, respectively, and with very few exceptions, all reliability estimates exceed .70; all the test–retest reliabilities are within an acceptable range and consistent with those reported for comparable measures” (Meyer and Allen, 1996, p. 255). Meyers and Allen’s (1996) work justifies usage of the commitment measures for this research.

Plotting the three commitment scores yielded a commitment profile for school units. According to Meyer and Allen, 1991; Meyer and Herscovitch, 2000, the optimal profile should be one in which ACS scores are high, and the CCS is considerably lower. Allen and Meyer (1990), offers a full discussion of the development and factor analysis of the affective, continuance and normative commitment scales.

#### Control Variables.

This research included highest level of education, amount of time spent with school district, teacher years of experience, and educational level as demographic variables. Teacher

respondent's number of years in the district was used as a control variable. Prior studies have demonstrated that this demographic variable is a potential predictor of organizational commitment (Ang, Dyne, and Begley, 2003; Mathieu and Zajac, 1990).

## **Data Collection**

In accordance with the established Institutional Review Board (IRB) of Delaware State University, consent was obtained from the university's Human Subject Protection committee to continue research. Upon approval, the researcher selected a school district, then the two individual schools, followed by their administrators for consent to conduct research within their buildings. Principals were contacted by phone and asked for approval to contact teaching staff for voluntary participation in the study. The participants solicited were informed of the objectives, significance, and procedures of the study and be assured of anonymity. The data collected was confidential.

Participants for the study were recruited from a north Wilmington school district roster with 639 teachers. Two schools were selected to participate in this research labeled as School A and School B with approximately 159 instructional teachers, comprising approximately 25% of all district teachers. The levels of analysis were level of school culture, perception of school leaders and teacher's self-esteem. School 1 and School 2's teachers/leaders were asked to invite their team members to complete short surveys and to participate in the research. The researcher attended teacher in-services and professional development meetings to recruit teacher participation. After explaining the research and the questionnaire, as well as reiterating the anonymity of participation, the researcher collected data from a heterogeneous sample of (102) teachers from the two elementary schools of one school district in the North Wilmington region. The surveys were coded so that the researcher could identify and match leaders (principals) and their teams (teachers). Each school leader had at least fifty percent of their follower's (per leader) surveys returned in order to be included in the study. All survey instruments were in English and on-line as well as paper format. If participants had chosen the written format, they

received a packet containing the study's background information and detailed directions on completing the assessments. Cole et al., (2006) supported "configural, metric, scalar, measurement error, and relational equivalence across administration modes, indicating that the psychometric properties, whether administered as a paper-and-pencil or web-based measure, are similar" (p. 339). The survey responses utilized a five-point Likert scale where zero represents "not at all" and four represents frequently, "not often". The research required 50% return rate for surveys, or at least 80 surveys were needed.

#### Data Analysis.

##### *Descriptive statistics and correlations.*

Data analysis was produced via Statistical Packages for the Social Sciences (SPSS) version 20. Both descriptive statistical analysis (mean, standard deviation, and range of scores) and inferential analysis (statistical tests) were used to report the independent and dependent variables means and inter-correlations. While correlation is necessary for establishing causal relationships, it is not sufficient for demonstrating causation; however, correlation was used to determine the strength, direction, and linearity of relationships among the study's variables (deVaus, 2002). The variables data was parameterized and ranked. Because both the independent and dependent variables are in the form of nominal/ordinal data with greater than two categories respectively, the research used a series of 2 regression analysis labeled as Model One and Model Two.

This research followed Aiken and West's (1991) suggestion by standardizing leadership behavior, school culture, and organizational commitment data points and centering the variables (by subtracting the mean scores to create meaningful zero points) before computing the interaction of social identity. The results were computed Figure 6 - Moderation of

Transformational Leadership by Collective Membership Self-Esteem Predicting Organizational Commitment and Figure 7 - Moderation of School Culture by Collective Membership Self-Esteem Predicting Organizational Commitment. Frequency tables display participation numbers and percentages per various categories, to include age, length of time on job, length of time in field, and highest level of education highest level of education in the field (see Table 11 - Descriptive of Study Participants). Tables of correlation coefficients were constructed to assess covariance among school culture, leadership behaviors, school commitment and social identity (see Table 13 and Table 14).

Tavakol and Dennick (2011) noted that the alpha statistic, developed by Lee Cronbach, provides a measure of the internal consistency of a scale as a function of its reliability. The measure of alpha ranges between a value of 0 and 1 with higher scores generally indicating better reliability. Scores of .70 or higher suggest that a scale has an acceptable level of reliability (James et al., 1984). As suggested by James et al., (1984), the r value needed to be above the value of .70 to justify the aggregation of teacher’s responses to leadership behaviors.

Cronbach Alpha

Table 8 Internal Consistency Values (Cronbach  $\alpha$ )

Scale	$\alpha$
ORGCOM: Organizational Commitment Scale	.752
CSE: Collective Self-Esteem Scale	0.838
SCT: School Culture Triage Survey Scale	0.944
MLQ6S: Measure of Transformational Leadership Scale	0.911

As Table 8 illustrates, all four scales demonstrate acceptable reliability.

Table 9 - Equations of Interactions

EQUATION	
(RQ1)	X1 on Y
(RQ2)	X2 on Y
(RQ 3)	X1M on Y
	X2M on Y
	M on Y

*Regression and Moderation Analysis.*

Multivariate regression analysis estimated the effects of leadership behaviors, school culture, and social identity on the outcome variable of organizational commitment (deVaus, 2002). “Multiple regression is commonly used in social and behavior analysis” (Fox, 1991). Significance was set at alpha  $p=0.05$  level to establish a less than 5% chance that variation in the dependent variable is the result of chance thereby reducing the chance of Behavior I and Behavior II errors to levels commonly accepted in social research or confounded by social identity (deVaus, 2002). A regression analysis determined if there are quantifiable predictive attributes (e.g. regression equation) between school culture, leadership behaviors and school

commitment, as well as demonstrate an interaction analysis of the effect size of school culture, school leaders' behaviors and social identity as significant predictors of organizational [school] commitment. As suggested by Giessner et al., (2013) the researcher “analyzed the simple slopes of this interaction following procedures suggested by Dawson and Richter (2006) and Aiken and West (1991) [see Figure 6 - Moderation of Transformational Leadership by Collective Membership Self-Esteem Predicting Organizational Commitment and Figure 7 - Moderation of School Culture by Collective Membership Self-Esteem Predicting Organizational Commitment]. The coefficient of determination was computed to reveal school commitment's variability due to school culture and leadership behaviors. The order of entry was based on the strength of Beta values derived from standard entry, which estimates the relative amount of variance explained by each of the independent variables (deVaus, 2002). The overall estimation of variance in organizational commitment data was accounted for by the proposed model and was estimated by the resulting adjusted coefficient of determination,  $R^2$  value. \*Number of years in the district was controlled for, as it's projected that variable may have an effect on organizational commitment.

The major research questions and hypotheses necessitated moderation analysis as prescribed by Aiken and West (Aiken and West, 1991). Aiken and West moderation analysis suggest a series of regression analyses which is appropriate since the variables have predictive capability. The research assessed the role of social identification on leadership, culture, and commitment through simple moderation using a technique called “centering”, as suggested by Aiken and West (1991). Centering is accomplished by subtracting the means of the values of the predictor variable, thereby creating a new variable “transformed” with a mean of zero.

According to Aiken and West (1991) this reduces the issue of multicollinearity and improves the overall interpretation of regression models.

Post hoc procedures can assess moderation of social identity while isolating the predicting interactions of leadership and culture on organizational commitment. Based on the procedure, moderation is assessed by entering an interaction term into a regression model. A new variable was created that is an interaction between one of the independent variables, and takes the moderator variable's score and multiplies it by the other independent variables score for each individual.

According to Wuensch (2016) moderation effects are difficult to interpret without a graph. It helps to see the effect of the independent value at different values of the moderator. Visually, moderation is seen in graphs by non-parallel lines. Graphs were created using Excel software to see this. Parallel lines demonstrate the effect of neither variables changes as a function of the level of the other variable. Non-parallel lines determine that the effect of a variable changes depending on the level of the other variable. In testing for moderation, the regular variables of self-esteem/identity and transformational leadership are entered as predictors into a regression equation. The new variable of the interaction term is also entered into the regression equation. If the interaction variable is significant, it would indicate that the effect of transformational leadership on organizational commitment varies as a function of the level of self-esteem/identity. That is, self-esteem/identity moderates the relationship between transformational leadership affecting organizational commitment.

If the independent variable is categorical, its effect is measured through mean differences, and those differences are easiest to see with plots of the means. If the independent variable is continuous, the effects are measured through a slope of the regression line. The predicted values

of those regression lines will be plotted. Moderation says that the slope of the regression line is different at every value of the moderator. (Yes, that one regression equation really represents many different lines—one for every possible value of the moderator). If the moderator itself is continuous, you could potentially choose an infinite number of values at which to plot the effect of the independent variable. Plotting the effects of the independent variable at only a few values of the moderator are usually needed to see patterns.

*Assumptions, Anomalies, and Testing for Violations.*

The presence of an analytic interaction between a moderator and a predictor (the product of the two variables) is model-dependent; the same data may show zero or non-zero moderator by predictor interactions depending on which analytic models (e.g., logistic or linear model) are used to fit the data. This can lead to confusion in interpreting analysis results and even conflict with the conceptual definition of such processes.

The research model used in this study has the advantage of providing correlational evidence for social identity as a predictor.

## CHAPTER IV

### 4.1 Results Overview

This study sought to investigate the relationship of leadership behavior and school culture with school (organizational) commitment, and whether these relationships are moderated by social identity. It is proposed that both transformational leadership within the organization and a more positive school culture will increase organizational commitment. It is also proposed that social identity (specifically measured by one's collective membership self-esteem) will increase organizational commitment. In addition, it is further proposed that collective membership self-esteem will moderate the effects of transformational leadership and school culture on organizational commitment; that is, the effect of transformational leadership will be even greater in increasing organizational commitment when there is greater collective membership self-esteem, and the effect of school culture will be even greater in increasing organizational commitment when there is greater collective membership self-esteem. The goal of the research was to first examine the relationship of leadership behaviors with organizational commitment and the relationship of school culture with organizational commitment. Secondly, the research explored the moderating role of social identity to these relationships described within the first goal.

An examination of correlations (see Table 10 - Nonparametric Correlations) revealed that the variables of "Number of years in current position", "number of year in the field", and "number of years worked for company or district" were all highly correlated. Those significant correlations established the use of "number of years worked for in the district" as an adjustment

variable with consideration of the outcome of interests (organizational commitment). This will allow the analysis to isolate the unique effects of transformational leadership and school culture on organizational commitment.

Table 10 - Nonparametric Correlations

			About how many years have you been in your current position?	What is the highest level of school you have completed or the highest degree you have received?	Number of years in the field?	Number of years you worked for your company or district?
Spearman's rho	About how many years have you been in your current position?	Correlation Coefficient	1.000	-.076	.374**	.707**
		Sig. (2-tailed)	.	.450	.000	.000
	N	102	102	102	102	
	What is the highest level of school you have completed or the highest degree you have received?	Correlation Coefficient	-.076	1.000	.075	.035
Sig. (2-tailed)		.450	.	.455	.727	
N	102	102	102	102		
Number of years in the field?	Number of years in the field?	Correlation Coefficient	.374**	.075	1.000	.314**
		Sig. (2-tailed)	.000	.455	.	.001
	N	102	102	102	102	
	Number of years you worked for your company or district?	Correlation Coefficient	.707**	.035	.314**	1.000
Sig. (2-tailed)		.000	.727	.001	.	
N	102	102	102	102		

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Response rate and overall demographics.

### Demographic Characteristics of Respondent

The demographic characteristics of the sample (N = 102) are reported in Table 9 which also provides the demographic data set percentages and frequencies. The plurality of the survey respondents were participants from School #B (70.6%). The majority of the respondents had also earned a graduate degree (54.9%) and 20.5% earned post-graduate education while 24.5% had earned a B.A. The overwhelmingly majority of teacher participants had been in the field of

education for 10 or more years (71.6%) while 38.2% of the respondents reported being in the field for at least 5 years but less than 10 years. Of the 102 participants polled 39.2% of the surveyed reported being in the district for at least 10 years, while 19.6% reported being there for 3-5 years and 16.7% reported being there for 5-10 years.

Table 11 - Descriptive of Study Participants

	Frequency	Percent
School		
School 1	30	29.4%
School 2	72	70.6%
Highest Degree		
BA	25	24.5%
Graduate Degree	56	54.9%
Ed.D. or Ph.D.	9	8.8%
other Post graduate degree	4	3.9%
other Post graduate degree	8	7.8%
Years in Current position		
Less than 1 year	14	13.7%
At least 1 year but less than 3 years	18	17.6%
At least 3 years but less than 5 years	16	15.7%
At least 5 years but less than 10 years	15	14.7%
10 years or more	39	38.2%
Years in the Field		
Less than 1 year	1	1.0%
At least 1 year but less than 3 years	1	1.0%
At least 3 years but less than 5 years	5	4.9%
At least 5 years but less than 10 years	22	21.6%
10 years or more	73	71.6%
Years in the District		
Less than 1 year	12	11.8%
At least 1 year but less than 3 years	13	12.7%
At least 3 years but less than 5 years	20	19.6%
At least 5 years but less than 10 years	17	16.7%
10 years or more	40	39.2%

The reliabilities of the scales of the main variables to be analyzed are presented in

Table 12.

Table 12 - Descriptive and Reliabilities of Main Variable Scales

	<i>M</i>	<i>SD</i>	Min	Max	Cronbach's <i>α</i>
Organizational Commitment	4.64	1.17	1.29	7.00	.752
Collective Self-Esteem, Membership sub-scale	5.91	0.93	3.25	7.00	.696
School Culture	3.23	0.82	1.00	4.82	.944
Transformation Leadership sub-scale	2.60	0.95	1.00	4.00	.941

*Note.* *N* = 102.

Transformational leadership and school culture will be examined separately in two different models: Model one examines the effects of collective membership self-esteem, transformational leadership, and the interaction of these two in predicting organizational commitment; Model two examines the effects of collective membership self-esteem, school culture, and the interaction of these two in predicting organizational commitment. As demonstrated in Figure 6 and Figure 7, because the number of years someone has been a part of an organization likely increases commitment to that organization and may also influence collective membership self-esteem, both models will adjust for the effect of the length of time the participant has reported working in the district.

The descriptive statistics for all measures have been reported. Next, Model One and Model Two results of the regression analysis evaluating leadership behaviors and school culture on organizational commitment and both variables interaction with social identity will be presented. Lastly, the research questions and hypothesis will be presented.

### Model One

The predictors of transformational leadership and membership collective self-esteem were centered at their respective means, and an interaction term was computed from these two

centered predictors. The model also adjusted for “the number of years” participants had worked in the district. An ordinary least squares regression was used, and collectively these three predictors and the interaction term explained a significant 32.7% of the variance in organizational commitment,  $R^2 = .327, p < .001$ .

The coefficients of the predictors of the model are shown in

Table 13. As seen, when adjusting for the effects of leadership, collective membership self-esteem, and their interaction, the number of years working in the district significantly predicts increased organizational commitment. Transformational leadership and collective membership self-esteem, because of the presence of the interaction term, each represent the effects for these variable at the mean level of the other variable when adjusting for years in the district, and both are significant. That is, when adjusting for years in the district, transformational leadership at the mean level of collective membership self-esteem predicts a significant increase in organizational commitment and collective membership self-esteem at the mean levels of transformational leadership predicts a significant increase in organizational commitment. The interaction between transformational leadership and collective membership self-esteem is not significant, although the coefficient is in the direction of higher levels of collective membership self-esteem leading to a greater effect of transformational leadership increasing organizational commitment and the upper bound of the confidence interval indicates a coefficient as large as  $B = .394$  is consistent with the data. This (non-significant) interaction of the effects of transformational leadership depending on the level of collective membership self-esteem is

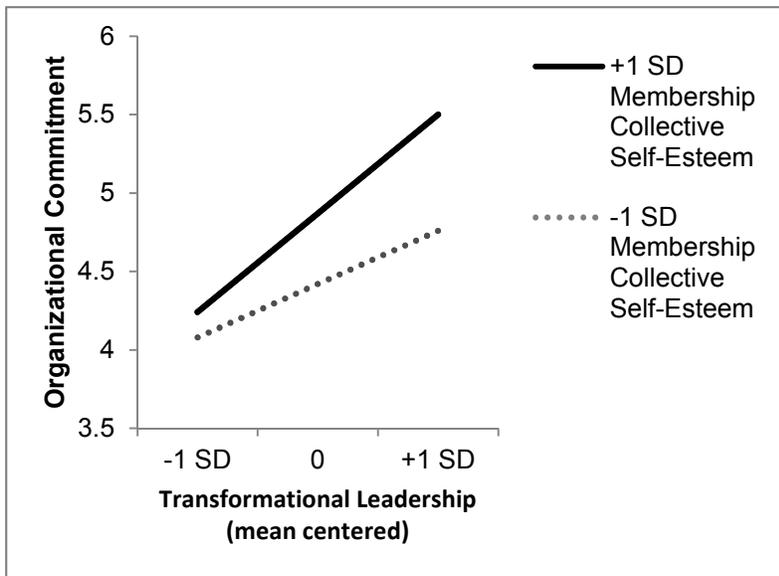
shown visually in Figure 6 - Moderation of Transformational Leadership by Collective Membership Self-Esteem Predicting Organizational Commitment.

Table 13 - Regression Results Predicting Organizational Commitment: Model One

	B	SE(B)	$\beta$	<i>t</i>	<i>p</i>	95% CI of B
Years worked in district	0.202	0.069	0.245	2.916	0.004	.064-.339
Transformational leadership	0.511	0.104	0.415	4.907	<.001	.305-.718
Collective membership self-esteem	0.244	0.106	0.195	2.296	0.024	.033-.456
Leadership x self-esteem	0.167	0.115	0.124	1.454	0.149	-.061-.394

Note. *N* = 102

Figure 6 - Moderation of Transformational Leadership by Collective Membership Self-Esteem Predicting Organizational Commitment



Note. *N* = 102. The model also adjusts for years worked in the district.

Model Two

The predictors of school culture and membership collective self-esteem were centered at their respective means, and an interaction term was computed from these two centered predictors. The model also adjusted for the number of years they had worked in the district. An ordinary least squares regression was used, and collectively these three predictors and the interaction term explained a significant 31.1% of the variance in organizational commitment,  $R^2 = .311, p < .001$ .

The coefficients of the predictors of the model are shown in

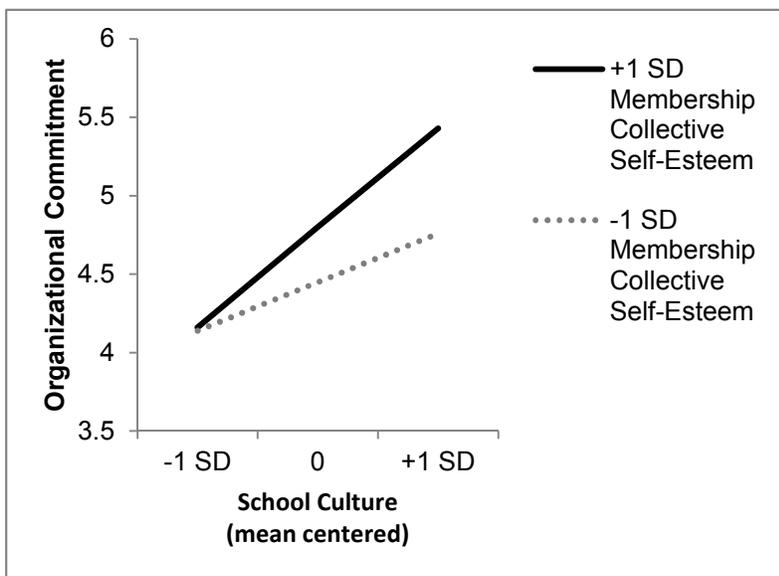
Table 14 - Model Two Regression Results Predicting Organizational Commitment. As seen, when adjusting for the effects of school culture, collective membership self-esteem, and their interaction, the number of years working in the district significantly predicts increased organizational commitment. School culture and collective membership self-esteem, because of the presence of the interaction term, each represent the effects for each of these variable at the mean level of the other variable when adjusting for years in the district; there is a significant effect of school culture but a non-significant but marginally effect ( $p = .088$ ) of collective membership self-esteem. That is, when adjusting for years in the district, school culture at the mean level of collective membership self-esteem significantly predicts an increase in organizational commitment, while collective membership self-esteem at the mean levels of school culture only marginally predicts an increase in organizational commitment. The interaction between school culture and collective membership self-esteem is not significant but marginally close ( $p = .078$ ), and the coefficient is in the direction of higher levels of collective membership self-esteem leading to a greater effect of school culture increasing organizational commitment. This (marginally-significant) interaction of the effects of school culture depending on the level of collective membership self-esteem is shown visually in Figure 7.

Table 14 - Model Two Regression Results Predicting Organizational Commitment

	B	SE(B)	$\beta$	<i>t</i>	<i>p</i>	95% CI of B
Years worked in district	0.198	0.070	0.241	2.816	0.006	.058-.338
School culture	0.580	0.123	0.407	4.725	<.001	.336-.824
Collective membership self-esteem	0.184	0.107	0.147	1.721	0.088	-.028-.397
School culture x self-esteem	0.217	0.122	0.151	1.782	0.078	-.025-.459

Note. *N* = 102.

Figure 7 - Moderation of School Culture by Collective Membership Self-Esteem Predicting Organizational Commitment



Note. *N* = 102. The model also adjusts for years worked in the district.

The research questions and the results were as follows:

Research Question 1: To what extent is there a relationship between leadership behaviors and organizational commitment?

Null Hypothesis (H0a): There will be no statistical significant relationship between leadership behaviors and organization commitment.

The null hypothesis is rejected. As noted in the regression analysis of Model One (see Table 13), transformational leadership behaviors significantly predicted increased organizational commitment.

Research Question 2: To what extent is there a relationship between school culture and organizational commitment?

Null Hypothesis (H0b): There will be no statistical significant relationship between school culture and organization commitment.

The null hypothesis is rejected. As noted in the regression analysis of Model Two (see Table 14), school culture significantly predicted increased organizational commitment.

Research Question3: To what extent does social identity moderate the effects of leadership behaviors and school culture on organizational commitment?

Null Hypothesis (H0c): Stronger social identity will not enhance the effect of leadership behaviors and school culture on organizational commitment.

Multiple moderation analysis were conducted to test the interaction of the social identity construct of self-esteem with transformational leadership in one model and with school culture in another model, both predicting organizational commitment (see Table 13 and

Table 14). The results of both were in the direction predicted such that greater social identity enhances the effect of leadership behavior and school culture in predicting organizational commitment, but neither was statistically significant. Thus, the null hypothesis cannot be rejected and there was not significant evidence for this moderation.

### Summary

There is a significant relationship of transformational leadership and school culture each predicting increased organizational commitment when controlling for years in the district, in

support of research questions one and two. Social Identity's collective self-esteem measure also predicts increased organizational commitment (in model two this effect is only marginal, but with the interaction term this represents the effect at the mean level of school culture rather than its overall effect). However, Social Identity did not significantly moderate the relationship between transformational leadership behavior and organizational commitment nor did it significantly moderate the relationship between school culture and organizational commitment.

## CHAPTER V

### 5.1 Discussion Summary and Conclusions Recommendations

#### Overview

This chapter will present a summary of the study, discussion of the findings and the important conclusions and recommendations drawn from the data reported in Chapter Four.

Schools are in dire need of exploring relationships within their structures to improve organizational commitment. This study was designed to examine the relationship between leadership behaviors and school culture on organizational commitment moderated by social identity. The purpose of the study was to increase organization's viability through examining relationships that are significant to organizational commitment. The literature review presented in chapter two documented the idea that research exploring the variables of school leadership, school culture, organizational commitment, and social identity increase our knowledge of relationships and thus helps sustain school's organizational viability. The results of this study are based on frame-work models of Social Identity Theory, Social Identity Theory of Leadership, Organizational Culture Theory, and Organizational Commitment Theory.

Participants were selected from their association as full-time teachers at two elementary schools within a school district of North Wilmington. These teachers were administered confidential and anonymous surveys electronically via survey monkey website. The instruments used to collect data for this research were a demographic survey, the collective self-esteem scale, the school culture triage survey, and the organizational commitment survey, as well as the MLQ6s survey to measure leadership. The five questionnaires measured participant demographics, leadership behavior, school culture, social identity, and organizational commitment. To explore the role of leadership behavior, school culture and social identity on

organizational commitment, three research hypotheses were formulated. Both descriptive statistical analysis (mean, standard deviation, and range of scores) and inferential analysis (statistical tests) were used to report the independent and dependent variable's means and inter-correlations using regressive analysis. The level of significance was set at  $p < .05$ . The findings and conclusions drawn from the data are discussed in this chapter with implications for future research.

### *Discussions and Findings*

This study resulted in several major findings, each with specific implications for existing theory, future research and practice.

This study adds support to the interconnectivity of school culture, leadership behaviors, and organizational commitment discussed in the literature review of this document. Judge and Piccolo's Meta-Analytic test of Transformational and Transactional Leadership discussed in Chapter two of the literature review (on page 26) and Eval and Roth (2011) as well as Hauserman (2013) all agree that cohesiveness of a school's faculty and more committed teachers were associated with school principals demonstrating transformational leadership. The research mentioned above also concluded that transformational leadership had a strong relationship with criteria that reflects follower satisfaction, motivation, and commitment. School district policy makers should recognize school culture, leadership, and organizational commitment as leading indicators and precursors to school success.

The findings suggest promising implications for advancing relationships between individuals and organizations. Given the findings of this research, there is a strong relationship between transformational leadership, school culture, and organizational commitment. This adds clarification on what collective influences encourage relationships, discourses, and engagement.

Preparatory school leader programs should focus on facilitating transformational behaviors and attitudes of participants. Also, school administrator's in-service preparation can use the findings as a guide in planning and executing meaningful professional development.

### *Supplemental Findings*

Listed below are other supplemental findings revealed during various levels of the statistical analysis:

Van Knippenberg's publication "*Leadership, self, and identify: A review and research agenda*" (see pg. 35) posits the notion of follower self-concept as both a moderator in the relationship between leadership behavior. The findings suggest that we can't exclude the importance of context in tailoring goals that transform schools to high-achieving institutions. Previous research has presented clear evidence for social identity processes in leadership endorsement (see pg.43) and this research supports those findings. The field of education needs more research on the role of social identity in explaining the inter-relationships among organizational commitment, school culture, leadership behaviors, and social identity.

### *Implications of Findings*

By providing support that a relationship exists between school culture, leadership behavior, social identity and organizational commitment, this research provides evidence that the role of relationships within school systems can provide explanations for intergroup processes and group-level dynamics. It advances the role of social identity in the educational arena. The findings from this research may also help to increase institutional and political sensitivity in response to current transformations of social life as it pertains to our personal and collective identities. The results expand the current growing body of knowledge between the socio-cognitive arena and education.

### *Implications for Theory.*

By providing support that social identity has significance on organizational commitment, this research strengthens the SITOL. The research provides empirical evidence that follower's identifications should be acknowledge.

### *Implications for Research.*

In continuing this research, researchers could add data that includes ethnographic independent inquiries for school culture, to satisfy the concern for context. This can be done quantitatively too, as proscribed by Wagner's (2006) *The School Leader's Tool for Assessing and Improving School Principal Leadership*, and the researcher believes this would provide a holistic means of contextual analysis.

Also, more sensitive measures could give greater variability of the data. The histograms of the data set values for school culture and social identity (collective membership scale) on page 129 and 128 demonstrate a positively skewed data set.

Potentially, research with instruments gauging objective constructs in comparison to participation's perceptions could be interesting to compare.

The confidence intervals, in reviewing the tables of the study's models, have some data point values that indicate some level of interaction with social identity self-esteem's measurement. A larger sample size would expand this research and possible conclude significant support of this interaction.

### *Limitations of the Findings*

It's important to acknowledge some of the potential issues arising from the study's design. The following limitations are presented in this research:

Due to research being conducted in North Wilmington, Delaware [schools], these findings can only be generalized to that population, or similar populations.

The measurements of culture, leadership behaviors, and school commitment are limited to the factors included on the surveys.

The demographic survey of this research included an education variable (see Table 15) that needs to be transformed in order to capture correlations. With “other” being the first variable option, bachelor’s degree the next, and the different graduate degrees following as higher options, the variable was treated as an ordinal measure when in reality it doesn’t exist as such. In order to derive accurate meaning, the question and the analysis of the question would need to be transformed for future research.

Table 15 - Highest level of education

	Frequency	Percent	Valid Percent	Cumulative Percent
Other (please specify)	8	7.8	7.8	7.8
Bachelor degree	25	24.5	24.5	32.4
Graduate degree	56	54.9	54.9	87.3
Valid Ed.D. or Ph.D.	9	8.8	8.8	96.1
other Post graduate degree	4	3.9	3.9	100.0
Total	102	100.0	100.0	

There was also a lack a variability in the survey respondents’ self-esteem. The preponderance of the respondents had high levels of self-esteem. Increasing the sample size could produce a more heterogeneous data set.

*Conclusion*

This research provided a theoretical contribution to the current body of knowledge with regards to social identity and school leadership, school culture, and organizational commitment.

The four variables all together have received almost no attention previously within the field of education. In consideration of the decrease in quality for teachers entering into the workforce, organizations need to actively seek solutions to failed reform efforts and retaining teachers long-term. In summary, the findings suggest that social identity, school leadership, and school culture have effect on organizational commitment. The findings in this research demonstrate the potential for merging theory and practice and adding to the existing body of knowledge in the educational arena.

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# APPENDIX

## IRB APPROVAL LETTER



### DELAWARE STATE UNIVERSITY

Institutional Review Board – Human Subjects Protection Committee

February 24, 2017

Ms. Erinn Chioma  
Department of Education  
College of Health, Education and Public Policy  
Delaware State University  
Dover, Delaware 19901

Ms. Chioma

Delaware State University's Institutional Review Board (IRB)-Human Subjects Protection Committee has reviewed the modifications for the research project titled "**An Investigation of the Relationship between Leadership Behavior and School Culture on Organizational Commitment Mediated by Social Identity for Public School Administrators in the Mid-Atlantic Region**".

The Committee has **approved** the application and requires that a Final Study Report be submitted on or before February 24, 2018. Please send this report to:

Institutional Review Board  
Office of Sponsored Programs  
Attention: Chanel Haman  
Delaware State University  
1200 N. DuPont Highway  
Dover, DE 19901

Sincerely,



Dr. Brian Friel  
Chair—Human Subjects Protection Committee

ckh

## Demographic Survey

Instructions: Please respond to the following questions regarding you, your school, and your school district.

1. What is your age? \_\_\_\_\_
2. What is your gender? (Check one):  
 Male  
 Female
3. Years of administrative experience: \_\_\_\_\_
4. Years in your current position: \_\_\_\_\_
5. Highest degree attained (check one):  
 Master's Degree  
 Doctoral Degree in Administration and Supervision  
 Doctoral Degree in another field
6. Grade range of students in your school: \_\_\_\_\_
7. Number of years in the field: \_\_\_\_\_
8. Number of schools in your district: \_\_\_\_\_
9. Number of years you have worked with current district: \_\_\_\_\_

## Collective Self-esteem scale

### CSE

		Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree Somewhat	Agree	Strongly Agree
1.	I am a worthy member of the social groups I belong to.	1	2	3	4	5	6	7
2.	I often regret that I belong to some of the social groups I do.	1	2	3	4	5	6	7
3.	Overall, my social groups are considered good by others.	1	2	3	4	5	6	7
4.	Overall, my group memberships have very little to do with how I feel about myself.	1	2	3	4	5	6	7
5.	I feel I don't have much to offer to the social groups I belong to.	1	2	3	4	5	6	7
6.	In general, I'm glad to be a member of the social groups I belong to.	1	2	3	4	5	6	7
7.	Most people consider my social groups, on the average, to be more ineffective than other social groups.	1	2	3	4	5	6	7
8.	The social groups I belong to are an important reflection of who I am.	1	2	3	4	5	6	7
9.	I am a cooperative participant in the social groups I belong to.	1	2	3	4	5	6	7
10.	Overall, I often feel that the social groups of which I am a member are not worthwhile.	1	2	3	4	5	6	7

11.	In general, others respect the social groups that I am a member of.	1	2	3	4	5	6	7
12.	The social groups I belong to are unimportant to my sense of what kind of a person I am.	1	2	3	4	5	6	7
13.	I often feel I'm a useless member of my social groups.	1	2	3	4	5	6	7
14.	I feel good about the social groups I belong to.	1	2	3	4	5	6	7
15.	In general, others think that the social groups I am a member of are unworthy.	1	2	3	4	5	6	7
16.	In general, belonging to social groups is an important part of my self image.	1	2	3	4	5	6	7

# School Culture Triage Survey

SCORING: 1 = NEVER 2 = RARELY 3 = SOMETIMES 4 = OFTEN 5 = ALWAYS OR ALMOST ALWAYS

## Professional Collaboration

1. Teachers and staff discuss instructional strategies and curriculum issues. \_\_\_\_\_ 1 2 3 4 5
2. Teachers and staff work together to develop the school schedule. \_\_\_\_\_ 1 2 3 4 5
3. Teachers and staff are involved in the decision-making process with regard to materials and resources. \_\_\_\_\_ 1 2 3 4 5
4. The student behavior code is a result of collaboration and consensus among staff. \_\_\_\_\_ 1 2 3 4 5
5. The planning and organizational time allotted to teachers and staff is used to plan as collective units/teams rather than as separate individuals. \_\_\_\_\_ 1 2 3 4 5

## Affiliative Collegiality

1. Teachers and staff tell stories of celebrations that support the school's values. \_\_\_\_\_ 1 2 3 4 5
2. Teachers and staff visit/talk/meet outside of the school to enjoy each others' company. \_\_\_\_\_ 1 2 3 4 5
3. Our school reflects a true "sense" of community. \_\_\_\_\_ 1 2 3 4 5
4. Our school schedule reflects frequent communication opportunities for teachers and staff? \_\_\_\_\_ 1 2 3 4 5
5. Our school supports and appreciates the sharing of new ideas by members of our school. \_\_\_\_\_ 1 2 3 4 5
6. There is a rich and robust tradition of rituals and celebrations including holidays, special events and recognition of goal attainment. \_\_\_\_\_ 1 2 3 4 5

## Self-Determination/Efficacy

1. When something is not working in our school, the faculty and staff predict and prevent rather than react and repair. \_\_\_\_\_ 1 2 3 4 5
2. School members are interdependent and value each other. \_\_\_\_\_ 1 2 3 4 5
3. Members of our school community seek alternatives to problems/issues rather than repeating what we have always done. \_\_\_\_\_ 1 2 3 4 5
4. Members of our school community seek to define the problem/issue rather than blame others. \_\_\_\_\_ 1 2 3 4 5
5. The school staff is empowered to make instructional decisions rather than waiting for supervisors to tell them what to do. \_\_\_\_\_ 1 2 3 4 5
6. People work here because they enjoy and choose to be here. \_\_\_\_\_ 1 2 3 4 5

School Culture Triage Survey

Multifactor Leadership Questionnaire (MLQ)

**Multifactor Leadership Questionnaire (MLQ) Form 6S**

**INSTRUCTIONS:** This questionnaire provides a description of your leadership style. Twenty-one descriptive statements are listed below. Judge how frequently each statement fits you. The word others may mean your followers, clients, or group members.

**KEY**

0 - Not at all 1 - Once in a while 2 = Sometimes 3 = Fairly often 4 = Frequently, if not always

- 1. I make others feel good to be around me.....0 1 2 3 4
- 2. I express with a few simple words what we could and should do.....0 1 2 3 4
- 3. I enable others to think about old problems in new ways.....0 1 2 3 4
- 4. I help others develop themselves.....0 1 2 3 4
- 5. I tell others what to do if they want to be rewarded for their work.....0 1 2 3 4
- 6. I am satisfied when others meet agreed-upon standards.....0 1 2 3 4
- 7. I am content to let others continue working in the same ways always.....0 1 2 3 4
- 8. Others have complete faith in me.....0 1 2 3 4
- 9. I provide appealing images about what we can do.....0 1 2 3 4
- 10. I provide others with new ways of looking at puzzling things.....0 1 2 3 4
- 11. I let others know how I think they are doing.....0 1 2 3 4
- 12. I provide recognition/rewards when others reach their goals.....0 1 2 3 4
- 13. As long as things are working, I do not try to change anything.....0 1 2 3 4
- 14. Whatever others want to do is OK with me.....0 1 2 3 4
- 15. Others are proud to be associated with me.....0 1 2 3 4
- 16. I help others find meaning in their work.....0 1 2 3 4
- 17. I get others to rethink ideas that they had never questioned before.....0 1 2 3 4
- 18. I give personal attention to others who seem rejected.....0 1 2 3 4
- 19. I call attention to what others can get for what they accomplish.....0 1 2 3 4
- 20. I tell others the standards they have to know to carry out their work.....0 1 2 3 4
- 21. I ask no more of others than what is absolutely essential.....0 1 2 3 4

**SCORING**

The MLQ-6S measures your leadership on seven factors related to transformational leadership. Your score for each factor is determined by summing three specified items on the questionnaire. For example, to determine your score for factor 1, Idealized influence, sum your responses for items 1, 8, and 15. Complete this procedure for all seven factors.

	<b>TOTAL</b>
Idealized influence (items 1, 8, and 15)	_____ Factor 1
Inspirational motivation (items 2, 9, and 16)	_____ Factor 2
Intellectual stimulation (items 3, 10, and 17)	_____ Factor 3
Individual consideration (items 4, 11, and 18)	_____ Factor 4
Contingent reward (items 5, 12, and 19)	_____ Factor 5
Management-by-exception (items 6, 13, and 20)	_____ Factor 6
Laissez-faire leadership (items 7, 14, and 21)	_____ Factor 7

**Score range: HIGH = 9-12, MODERATE = 5-8, LOW = 0-4**

**Organizational Commitment Questionnaire (OCQ)**

You are being asked to participate in a survey to provide information that will help improve the working environment for employees. Participation in this survey is voluntary and confidentially is assured. No individual data will be reported. **THANK YOU!**

The following statements concern how you feel about your work environment. Please indicate the extent of your agreement or disagreement with each statement by circling a number from 1 to 5. Please do not put your name on this questionnaire.

<b>STRON GLY DISAG REE 1</b>	<b>DISAGR EE 2</b>	<b>NEITHE R AGREE NOR DISAGR EE 3</b>	<b>AGREE 4</b>	<b>STRON GLY AGREE 5</b>
--	----------------------------	---	--------------------	--------------------------------------

*Affective Organizational Commitment*

1. I do not feel like part of a family at (name of school). ..... 1 2 3 4 5
2. I feel emotionally attached to (name of school)..... 1 2 3 4 5
3. Working at (name of school) has a great deal of personal meaning for me..... 1 2 3 4 5
4. I feel a strong sense of belonging to (name of school)..... 1 2 3 4 5
5. (Name of school) does not deserve my loyalty. .... 1 2 3 4 5
6. I am proud to tell others that I work at (name of school)..... 1 2 3 4 5

7. I would be happy to work at (name of school) until I retire..... 1 2 3 4 5

8. I really feel that any problems faced by (name of school) are real so my problems ..... 1 2 3 4 5

9. I enjoy discussing (name of school) with people outside of it..... 1 2 3 4 5

<b>STRONG DISAGREE 1</b>	<b>DISAGREE 2</b>	<b>NEITHER AGREE NOR DISAGREE 3</b>	<b>AGREE 4</b>	<b>STRONG AGREE 5</b>
----------------------------------	-----------------------	---	--------------------	-------------------------------

*Continuance Organizational Commitment*

1. I am not concerned about what might happen if I left (name of school) without having another position lined up..... 1 2 3 4 5

2. It would be very hard for me to leave (name of school) right now, even if I wanted to..... 1 2 3 4 5

3. Too much in my life would be disrupted if I decided I wanted to leave (name of school) now..... 1 2 3 4 5

4. It wouldn't be too costly for me to leave (name of school) now..... 1 2 3 4 5

5. Right now, staying with (name of school) is a matter of necessity as much as desire.  
..... 1 2 3 4 5

6. One of the few, serious consequences of leaving (name of school) would be the scarcity of available alternatives..... 1 2 3 4 5

7. One of the reasons I continue to work for (name of school) is that leaving would require considerable sacrifice – another organization may not match the overall benefits I have here..... 1 2 3 4 5

Strongly Disagree 1	Disagree 2	Neither Agree Nor Disagree 3	Agree 4	Strongly Agree 5
------------------------	---------------	---------------------------------	------------	---------------------

*Normative Organizational Commitment*

- 1. I do not feel any obligation to remain with (name of school). (R)..... 1 2 3 4 5
- 2. Even if it were to my advantage, I do not feel it would be right to leave (name of school) now..... 1 2 3 4 5
- 3. I would feel guilty if I left (name of school) now..... 1 2 3 4 5
- 4. (Name of school) deserves my loyalty..... 1 2 3 4 5
- 5. It would be wrong to leave (name of school) right now because of my obligation to the people in it..... 1 2 3 4 5
- 6. I owe a great deal to (name of school)..... 1 2 3 4 5
- 10. I do not feel "emotionally attached" to this organization..... 1 2 3 4 5
- 11. I would feel guilty if I left my organization now..... 1 2 3 4 5
- 12. I do not feel like "part of the family" at my organization..... 1 2 3 4 5

Table 7 Means and Inter-correlations for Variables

Variable	M	S	D
1. Leadership behavior			
2. School Culture			
3. Social Identity			
5. Organizational commitment			

*Table 9 Regression Analysis*

Organizational commitment

---

Variable

*B*

$B^2$

*B*

---

Step 1

---

Leadership

Interaction

(LI)

School

Culture (SC)

---

Step 2

---

LI x SC

---

Letter of Participation – Superintendent

To: Dr. Dusty Blakey  
From: Erinn Chioma  
Date: January 22, 2016  
Re: Letter of Participation

Please consider participating in this research study. To do so complete the following steps:

1. Sign and date the letter of consent.
2. Return the above materials in the self-addressed, stamped envelope.

I look forward to working with you. Please let me know if you desire feedback about the overall findings of the research study.

Sincerely,

Erinn Chioma

mzchioma@yahoo.com

(302) 397-9040

Letter of Consent – Superintendent

To: Dr. Dusty Blakey

From: Erinn Chioma

Date: January 22, 2016

Re: Consent for Principals to participate in research

Project Title: Leadership Behavior and School Culture on Organizational commitment  
Moderated by Social Identity for Public School Administrators in the Mid-  
Atlantic Region. Mid-Atlantic Region

Researcher: Erinn Chioma

Faculty Sponsor: Dr. Richard Phillips, Professor: Delaware State University

Your school principals are being asked to take part in a research study conducted by Erinn Chioma for a dissertation project under the supervision of Dr. Richard Phillips from Delaware State University. Your principals are being asked to participate because of your school districts' schools location and area demographics.

Please read this form carefully and ask any questions of the researcher before agreeing to give consent for your principals to participate. You may contact the researcher at [mzchioma@yahoo.com](mailto:mzchioma@yahoo.com) or (302) 397-9040 or the Office of sponsored programs at (302) 857-6810.

**Purpose:**

The purpose of this research is to examine the relationship between leadership behavior and school culture on organizational commitment moderated by social identity.

**Procedure:**

\_\_\_\_\_ (Superintendent, Name of district) has agreed to participate in this study. School Principals will complete a short demographic survey and four questionnaires regarding his/her transformational leadership behaviors, school culture, and social identity. Should teachers agree to participate, they will be asked to complete the rater version of one of the instruments to provide your perceptions of the transformational leader behaviors and three other surveys that will gauge school culture and teachers social identities. Participation in the study will require approximately 20 minutes of your administrators and teachers time.

**Risks/Benefits:**

There are no foreseeable risks involved in participating in this research. There are no direct benefits to you from participation. However, given research has tremendous implications for school reform efforts, principal training, professional development and hiring practices.

**Confidentiality:**

Only the researcher will have access to the raw data. The identity of all respondents will be kept strictly confidential. No identifying information for participants or their schools will be presented in the results of the study. Data from the schools will be aggregated, with no discernible connections included between the data from the principal and the data from his or her superintendent. The consent forms and questionnaires will be stored in two different locked file cabinets in the researcher's office. These forms will be destroyed one year following the final defense and approval of the dissertation.

**Voluntary Participation:**

Please understand that your administrators and teachers participation in this research is completely voluntary. There is no penalty for deciding not to participate. In addition, they are free to withdraw from participation at any time, for any reason, with no penalties whatsoever.

**Contacts and Questions:**

If you have any questions about this research study, please feel free to contact Erinn Chioma at [mzchioma@yahoo.com](mailto:mzchioma@yahoo.com) or (302) 397-9040. You may also contact Dr. Richard Phillips at [rphillips@desu.edu](mailto:rphillips@desu.edu) and/or the Office of Sponsored Programs at (302) 857- 6810.

**Statement of Consent:**

Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to allow participation in this research study.

\_\_\_\_\_ Date \_\_\_\_\_

*Superintendent's Signature Date*

Letter of Participation – Principals

To:  
From: Erinn Chioma  
Date: January 15, 2016  
Re: Letter of Participation

Please consider participating in this research study. To do so complete the following steps:

1. Sign and date the letter of consent.
2. Complete the demographic survey.
3. Answer only the highlighted items from the MLQ.
4. Return the above materials in the self-addressed, stamped envelope.

I look forward to receiving your results. Please let me know if you desire feedback about the overall findings of the research study.

Sincerely,

Erinn Chioma

[Mzchioma@me.com](mailto:Mzchioma@me.com)

(302) 397-9040

Purpose:

The purpose of this research is to examine the relationship between leadership behavior and school culture on organizational commitment moderated by social identity.

Procedure:

\_\_\_\_\_ (Principal, Name at School) has agreed to participate in this study. School Principals will complete a short demographic survey and four questionnaires regarding his/her transformational leadership behaviors, school culture, and social identity. Should teachers agree to participate, they will be asked to complete the rater version of one of the instruments to provide your perceptions of the transformational leader behaviors and three other surveys that will gauge school culture and teachers social identities. Participation in the study will require approximately 20 minutes of your time.

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Confidentiality:

Only the researcher will have access to the raw data. The identity of all respondents will be kept strictly confidential. No identifying information for participants or their schools will be presented in the results of the study. Data from the schools will be aggregated, with no discernible connections included between the data from the principal and the data from his or her superintendent. The consent forms and questionnaires will be stored in two different locked file cabinets in the researcher's office. These forms will be destroyed one year following the final defense and approval of the dissertation.

**Voluntary Participation:**

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**Contacts and Questions:**

If you have any questions about this research study, please feel free to contact Erinn Chioma at [mzchioma@yahoo.com](mailto:mzchioma@yahoo.com) or (302) 397-9040. You may also contact Dr. Richard Phillips at [rphillips@desu.edu](mailto:rphillips@desu.edu) or the Office of Sponsored Programs at (302) 857- 6810.

**Statement of Consent:**

Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

---

*Participant's Signature Date*

Please return this consent form with 2 questionnaires  
in the enclosed, pre-addressed envelope.

### Invitation to Study Letter

*Leaders, school culture, and commitment: A study through the lens of Social Identity*

Dear \_\_\_\_\_,

My name is Erinn Chioma and I am a doctoral candidate in the Education Department Delaware State University and am conducting a research study as part of the requirements of my degree in Educational Leadership. I am writing because you educate our children and I would like to invite you to participate.

I am studying leadership, school culture, and commitment. You are being asked to complete 4 short surveys. The results of the study may be published or presented at professional meetings, but your identity will not be attached to survey documents. Please do not write your name on the study materials.

We will be happy to answer any questions you have about the study. You may contact me at 302-397-9040 or my faculty advisor, Dr. Richard Phillips (rphillips@desu.edu) if you have study related questions or problems. If you have any questions about your rights as a research participant, you may contact the Office of Research Compliance at Delaware State University at (302) 857-6810.

Thank you for your consideration. Please complete the enclosed surveys or log on to the survey website.

With kind regards,

Erinn Chioma, M.Ed.

cc: Richard Phillips

Erinn Chioma, M.Ed.

302-397-9040

[mzchioma@me.com](mailto:mzchioma@me.com)

Letter of Permission to use copyrighted material

*Name and address of copyright owner indicated in copyright notice*

[jcrocker@umich.edu](mailto:jcrocker@umich.edu)

[info@mlq.com.au](mailto:info@mlq.com.au)

Dear \_\_\_\_\_.

I am a doctoral candidate at Delaware State University. I would like to reproduce and distribute material, for which I believe you hold the copyright, to complete my research of the Investigation of the Relationship of School Culture and Leadership on Organizational commitment moderated by Social Identity.

I intend to have the survey reproduced using an office copier for 200 survey participants. This material will be reproduced and distributed only for the purposes of this research. We will include your copyright notice in our copies of this material

I would greatly appreciate permission to use the Organization Commitment Questionnaire and would be grateful if you would consider waiving any permissions fee or keeping the permissions fees as low as possible. If you do not hold the copyright for this work, would you kindly please let me know who does?

Please indicate your consent by via email.

Your assistance with this matter is greatly appreciated.

Sincerely,

Erinn Chioma

```
USE ALL.
COMPUTE filter_$=(COMPLETECASES = 1).
VARIABLE LABELS filter_$ 'COMPLETECASES = 1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
*****
*****
* ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~
* ~ * ~ * ~ * ~ *
* Reliabilities .

* Reliability for Organizational Commitment .

RELIABILITY
  /VARIABLES=OrgCommQ1 OrgCommQ2 OrgCommQ3rev OrgCommQ4
OrgCommQ5 OrgCommQ6 OrgCommQ7rev
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.
```

## Reliability Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	102	100.0
	Excluded <sup>a</sup>	0	.0

Total	102	100.0
-------	-----	-------

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.752	7

\* Reliability for School Culture .

#### RELIABILITY

```

/VARIABLES=SchoolCltr_ProfCollab1
SchoolCltr_ProfCollab2 SchoolCltr_ProfCollab3
SchoolCltr_ProfCollab4
SchoolCltr_ProfCollab5 SchoolCltr_AffilCollg6,
SchoolCltr_AffilCollg7 SchoolCltr_AffilCollg8,
SchoolCltr_AffilCollg9 SchoolCltr_AffilCollg10,
SchoolCltr_AffilCollg11 SchoolCltr_SelfDet12,
SchoolCltr_SelfDet13 SchoolCltr_SelfDet14,
SchoolCltr_SelfDet15,SchoolCltr_SelfDet16
SchoolCltr_SelfDet17
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

```

## Reliability

### Scale: ALL VARIABLES

#### Case Processing Summary

	N	%
Valid	102	100.0
Cases Excluded <sup>a</sup>	0	.0
Total	102	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.944	17

\* Reliability for Leadership: Transformational leadership .

RELIABILITY

```

/VARIABLES=Leadership_1 Leadership_2
           Leadership_4 Leadership_5 Leadership_6
Leadership_7
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.
    
```

## Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	102	100.0
	Excluded <sup>a</sup>	0	.0
	Total	102	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.941	6

\* Reliability for Collective self-esteem: Membership self esteem .

RELIABILITY

```
/VARIABLES=CollSE1 CollSE5rev CollSE8 CollSE12rev  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA.
```

## Reliability

### Scale: ALL VARIABLES

Case Processing Summary

		N	%
Valid		102	100.0
Cases Excluded <sup>a</sup>		0	.0
Total		102	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.696	4

```

*****
*****
* ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~
* ~ * ~ * ~ * ~ *
* Descriptives of main variables (IV predictors will be
mean centered for regression) .

```

```

DESCRIPTIVES VARIABLES=OrgComm_MEAN CollSE_MEMBERSHIP
SchoolCulture_MEAN Leadership_Transformational
/STATISTICS=MEAN STDDEV RANGE MIN MAX.

```

## Descriptive

Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
OrgComm_MEAN	102	5.71	1.29	7.00	4.6443	1.16557
CollSE_MEMBERSHIP	102	3.75	3.25	7.00	5.9118	.93054
SchoolCulture_MEAN	102	3.82	1.00	4.82	3.2255	.81706
Leadership_Transformational	102	3.00	1.00	4.00	2.5964	.94527
Valid N (listwise)	102					

```

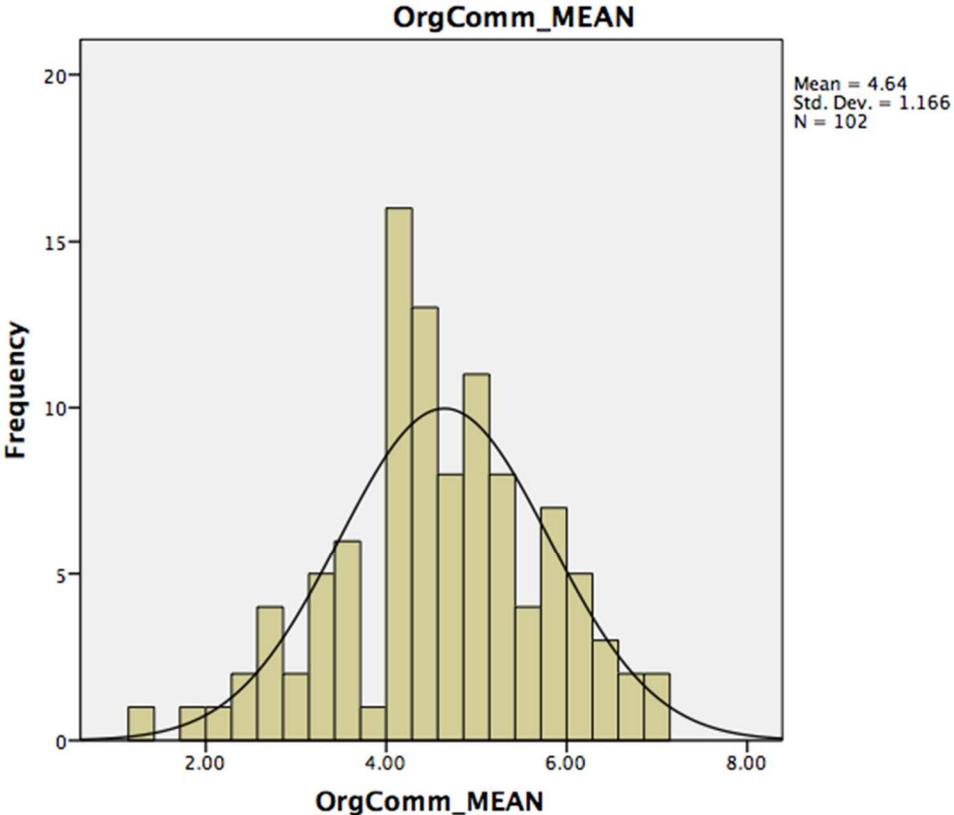
FREQUENCIES VARIABLES=OrgComm_MEAN CollSE_MEMBERSHIP
SchoolCulture_MEAN Leadership_Transformational
/FORMAT=NOTABLE
/STATISTICS=STDDEV MINIMUM MAXIMUM MEAN
/HISTOGRAM NORMAL
/ORDER=ANALYSIS.

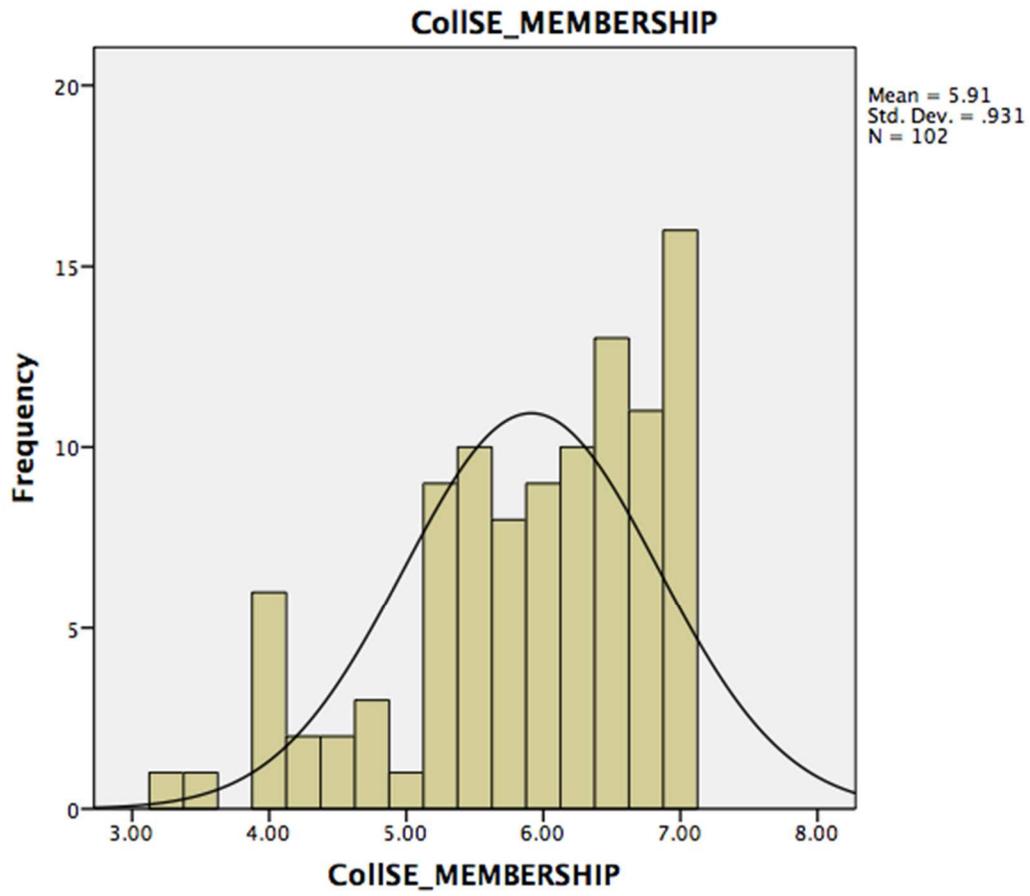
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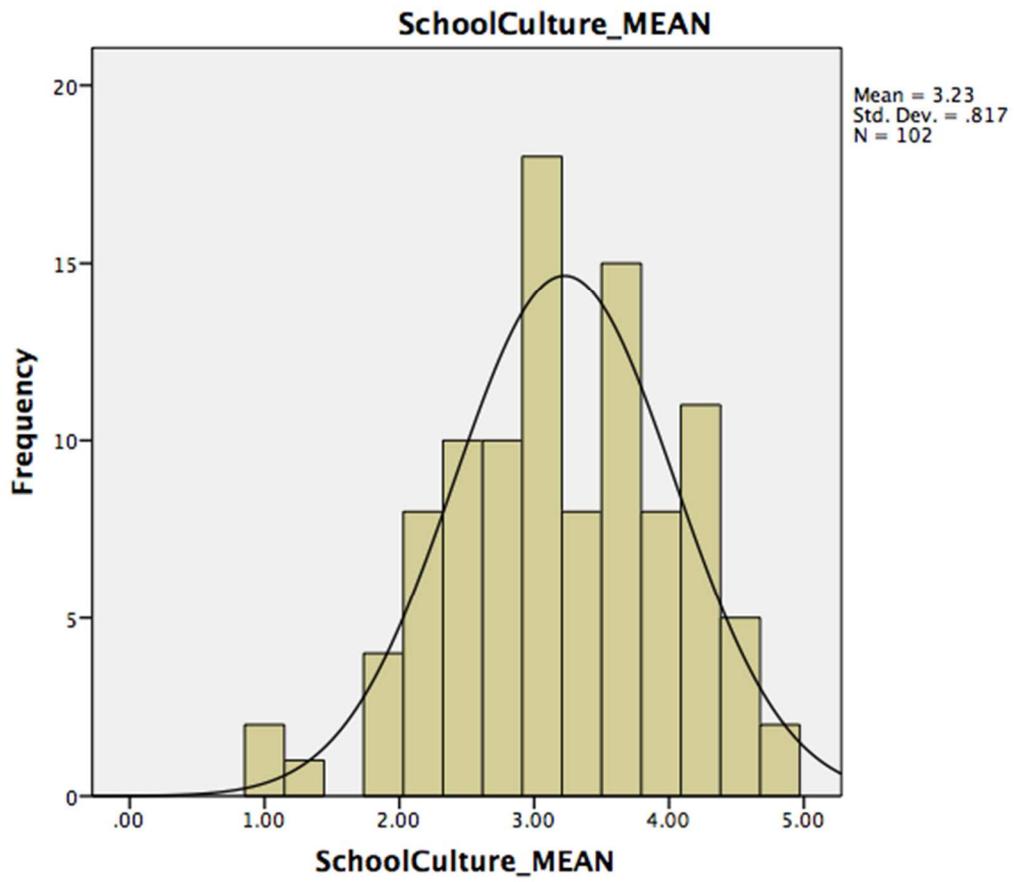
# Frequencies

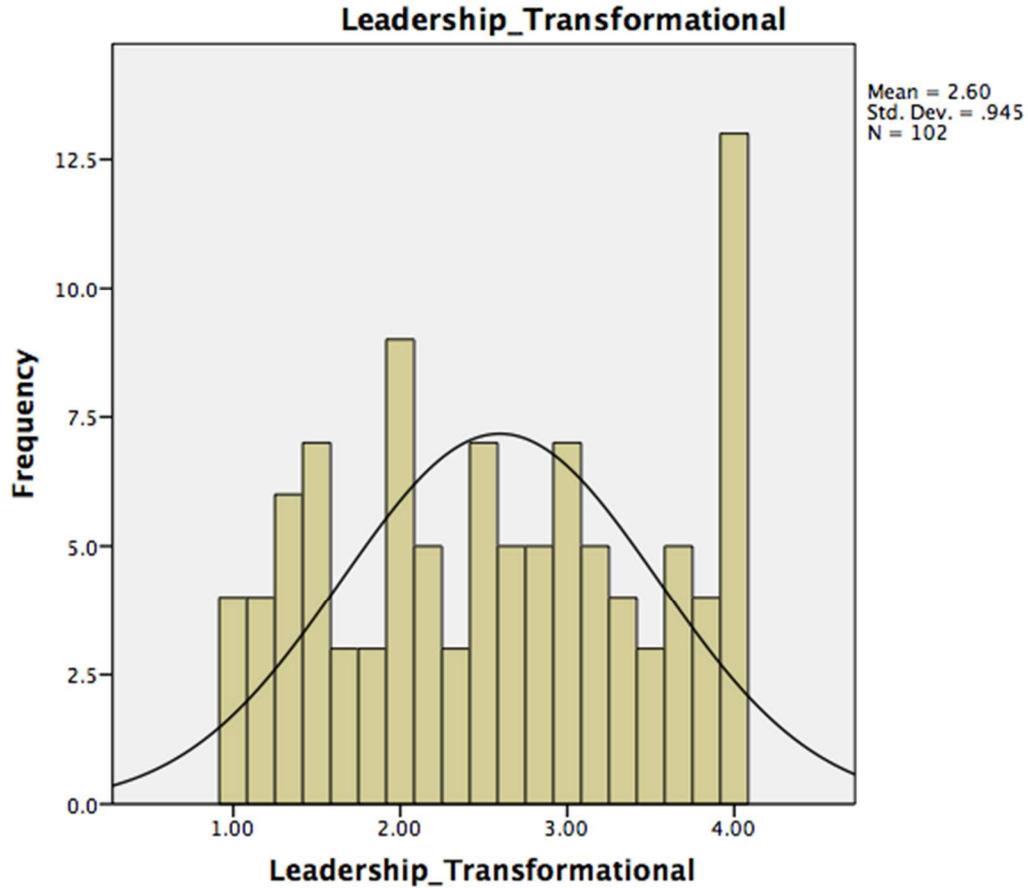
		Statistics			
		OrgComm_MEAN	ColISE_MEMBERSHIP	SchoolCulture_MEAN	Leadership_Transformational
N	Valid	102	102	102	102
	Missing	0	0	0	0
Mean		4.6443	5.9118	3.2255	2.5964
Std. Deviation		1.16557	.93054	.81706	.94527
Minimum		1.29	3.25	1.00	1.00
Maximum		7.00	7.00	4.82	4.00

# Histogram









```

*****
*****
* ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ *
* ~ * ~ * ~ * ~ *
* Possible Adjustment variables .

```

```

FREQUENCIES VARIABLES=YearsPosition Education YearsField
YearsCompDistrict
  /HISTOGRAM
  /ORDER=ANALYSIS.

```

## Frequencies

### Frequency Table

About how many years have you been in your current position?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 1 year	14	13.7	13.7	13.7
At least 1 year but less than 3 years	18	17.6	17.6	31.4
At least 3 years but less than 5 years	16	15.7	15.7	47.1
At least 5 years but less than 10 years	15	14.7	14.7	61.8
10 years or more	39	38.2	38.2	100.0
Total	102	100.0	100.0	

What is the highest level of school you have completed or the highest degree you have received?

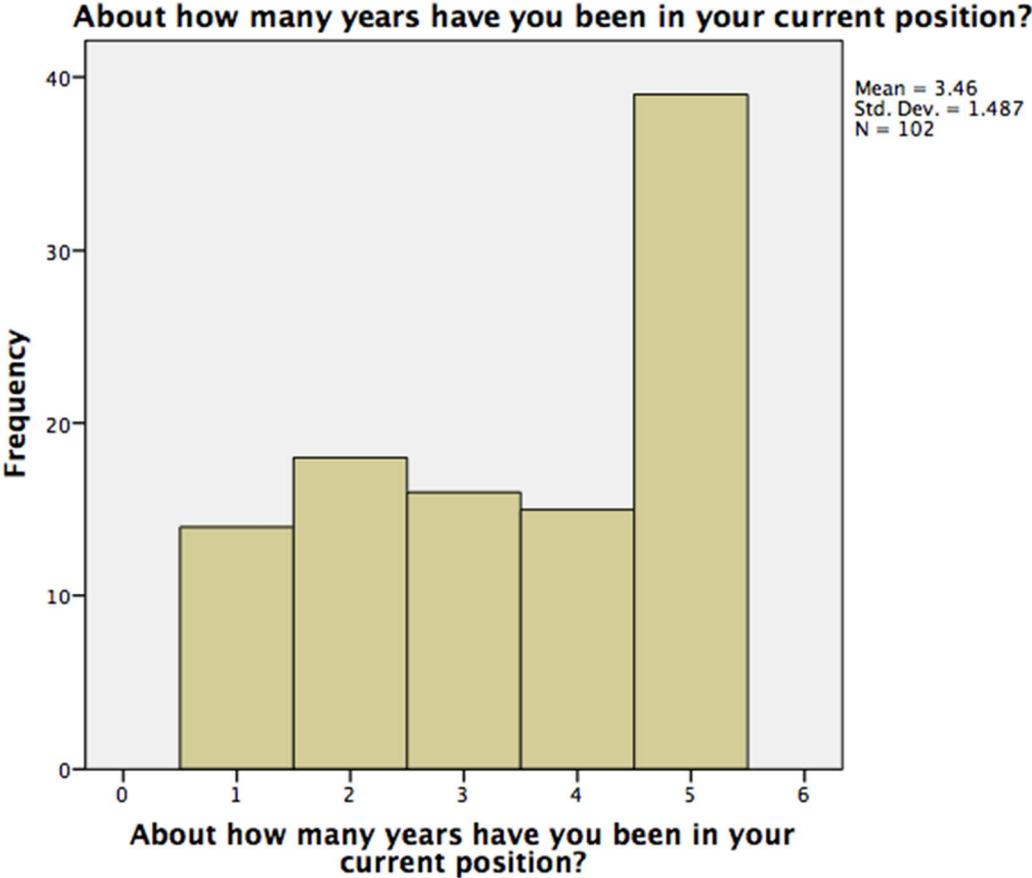
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Other (please specify)	8	7.8	7.8	7.8
Bachelor degree	25	24.5	24.5	32.4
Graduate degree	56	54.9	54.9	87.3
Ed.D. or Ph.D.	9	8.8	8.8	96.1
other Post graduate degree	4	3.9	3.9	100.0
Total	102	100.0	100.0	

Number of years in the field?

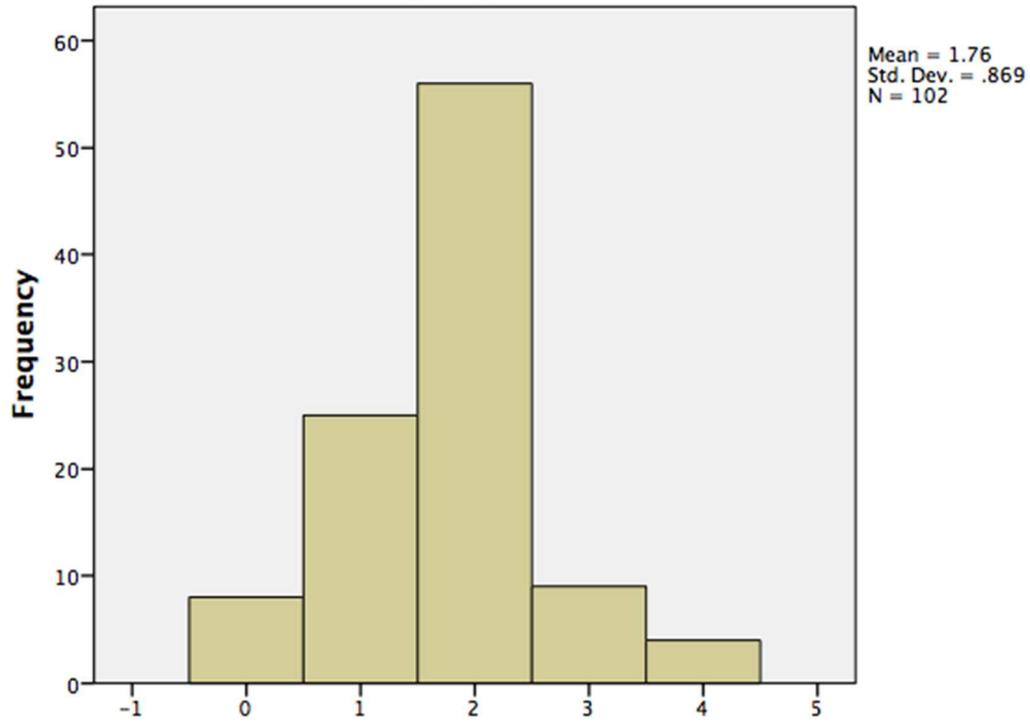
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 1 year	1	1.0	1.0	1.0
At least 1 year but less than 3 years	1	1.0	1.0	2.0
At least 3 years but less than 5 years	5	4.9	4.9	6.9
At least 5 years but less than 10 years	22	21.6	21.6	28.4
10 years or more	73	71.6	71.6	100.0
Total	102	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 1 year	12	11.8	11.8	11.8
At least 1 year but less than 3 years	13	12.7	12.7	24.5
At least 3 years but less than 5 years	20	19.6	19.6	44.1
At least 5 years but less than 10 years	17	16.7	16.7	60.8
10 years or more	40	39.2	39.2	100.0
Total	102	100.0	100.0	

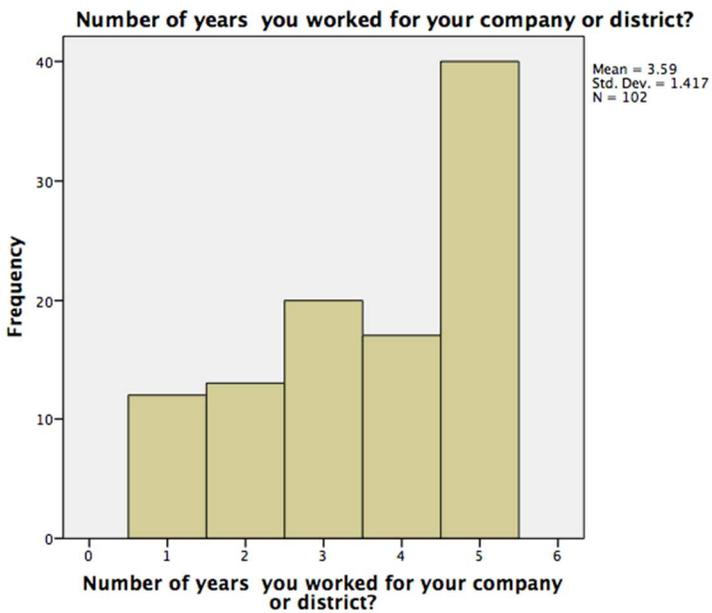
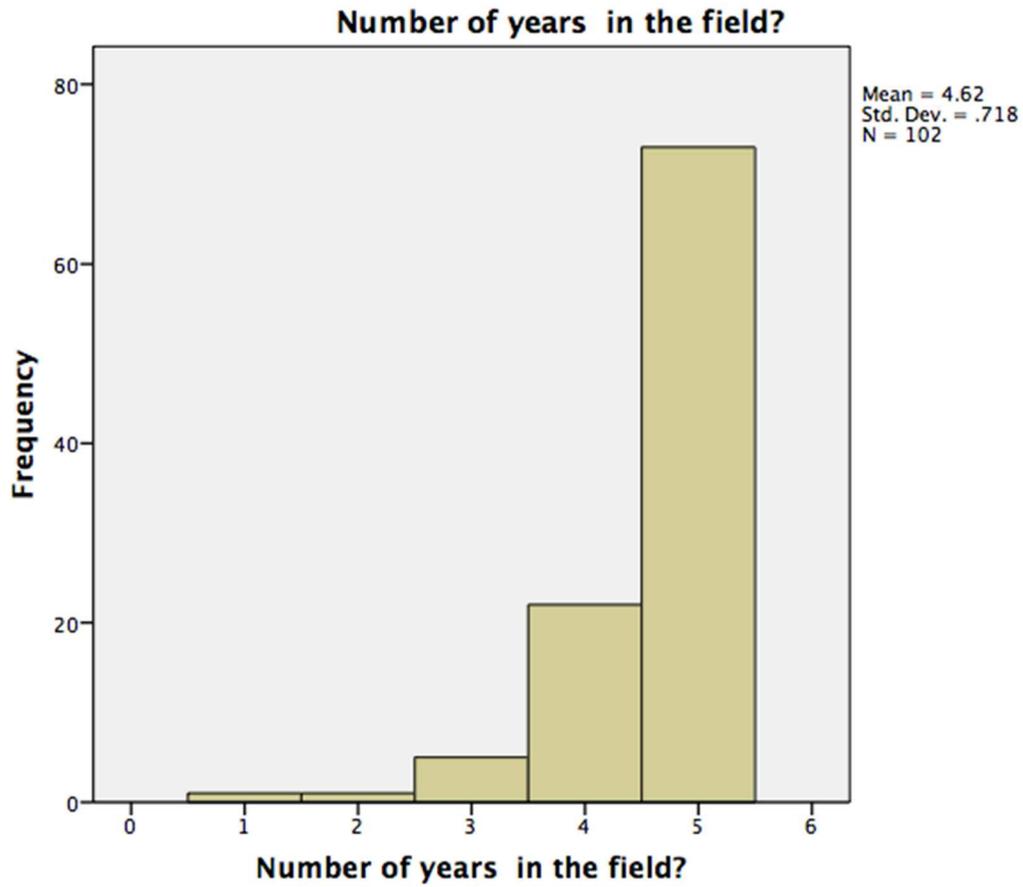
# Histogram



What is the highest level of school you have completed or the highest degree you have received?



What is the highest level of school you have completed or the highest degree you have received?



NONPAR CORR

/VARIABLES=YearsPosition Education YearsField  
 YearsCompDistrict  
 /PRINT=SPEARMAN TWOTAIL NOSIG  
 /MISSING=PAIRWISE.

## Nonparametric Correlations

Correlations

			About how many years have you been in your current position?	What is the highest level of school you have completed or the highest degree you have received?	Number of years in the field?	Number of years you worked for your company or district?
Spearman's rho	About how many years have you been in your current position?	Correlation Coefficient	1.000	-.076	.374**	.707**
		Sig. (2-tailed)	.	.450	.000	.000
		N	102	102	102	102
	What is the highest level of school you have completed or the highest degree you have received?	Correlation Coefficient	-.076	1.000	.075	.035
		Sig. (2-tailed)	.450	.	.455	.727
		N	102	102	102	102
	Number of years in the field?	Correlation Coefficient	.374**	.075	1.000	.314**
		Sig. (2-tailed)	.000	.455	.	.001
		N	102	102	102	102
	Number of years you worked for your company or district?	Correlation Coefficient	.707**	.035	.314**	1.000
		Sig. (2-tailed)	.000	.727	.001	.
		N	102	102	102	102

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* Perhaps just use Years in District .  
 \* It correlates very highly with Years in Position and  
 Years in Field  
 \* Education - I am not sure how to scale that and why it  
 might be related to these other variables .

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*****
* ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~ * ~
* ~ * ~ * ~ * ~ *
* Regressions with Adjustment variable of Years in
District.
```

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT OrgComm_MEAN
  /METHOD=ENTER YearsCompDistrict
  /METHOD=ENTER Leadership_Transformational_CENTER
  /METHOD=ENTER CollSE_MEMBERSHIP_CENTER
  /METHOD=ENTER LeadTransfxMembership
  /PARTIALPLOT ALL
  /SCATTERPLOT=( *ZRESID , *ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
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## Regression

Model Summary<sup>e</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.294 <sup>a</sup>	.087	.077	1.11956	.087	9.473	1	100	.003
2	.514 <sup>b</sup>	.264	.249	1.00976	.178	23.929	1	99	.000
3	.559 <sup>c</sup>	.312	.291	.98116	.048	6.855	1	98	.010
4	.572 <sup>d</sup>	.327	.299	.97563	.015	2.114	1	97	.149

a. Predictors: (Constant), Number of years you worked for your company or district?

- b. Predictors: (Constant), Number of years you worked for your company or district?, Leadership\_Transformational\_CENTER
- c. Predictors: (Constant), Number of years you worked for your company or district?, Leadership\_Transformational\_CENTER, CollISE\_MEMBERSHIP\_CENTER
- d. Predictors: (Constant), Number of years you worked for your company or district?, Leadership\_Transformational\_CENTER, CollISE\_MEMBERSHIP\_CENTER, LeadTransfXMembership
- e. Dependent Variable: OrgComm\_MEAN

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.873	1	11.873	9.473	.003 <sup>b</sup>
	Residual	125.341	100	1.253		
	Total	137.214	101			
2	Regression	36.272	2	18.136	17.787	.000 <sup>c</sup>
	Residual	100.942	99	1.020		
	Total	137.214	101			
3	Regression	42.871	3	14.290	14.844	.000 <sup>d</sup>
	Residual	94.343	98	.963		
	Total	137.214	101			
4	Regression	44.883	4	11.221	11.788	.000 <sup>e</sup>
	Residual	92.331	97	.952		
	Total	137.214	101			

- a. Dependent Variable: OrgComm\_MEAN
- b. Predictors: (Constant), Number of years you worked for your company or district?
- c. Predictors: (Constant), Number of years you worked for your company or district?, Leadership\_Transformational\_CENTER

d. Predictors: (Constant), Number of years you worked for your company or district?, Leadership\_Transformational\_CENTER, ColISE\_MEMBERSHIP\_CENTER

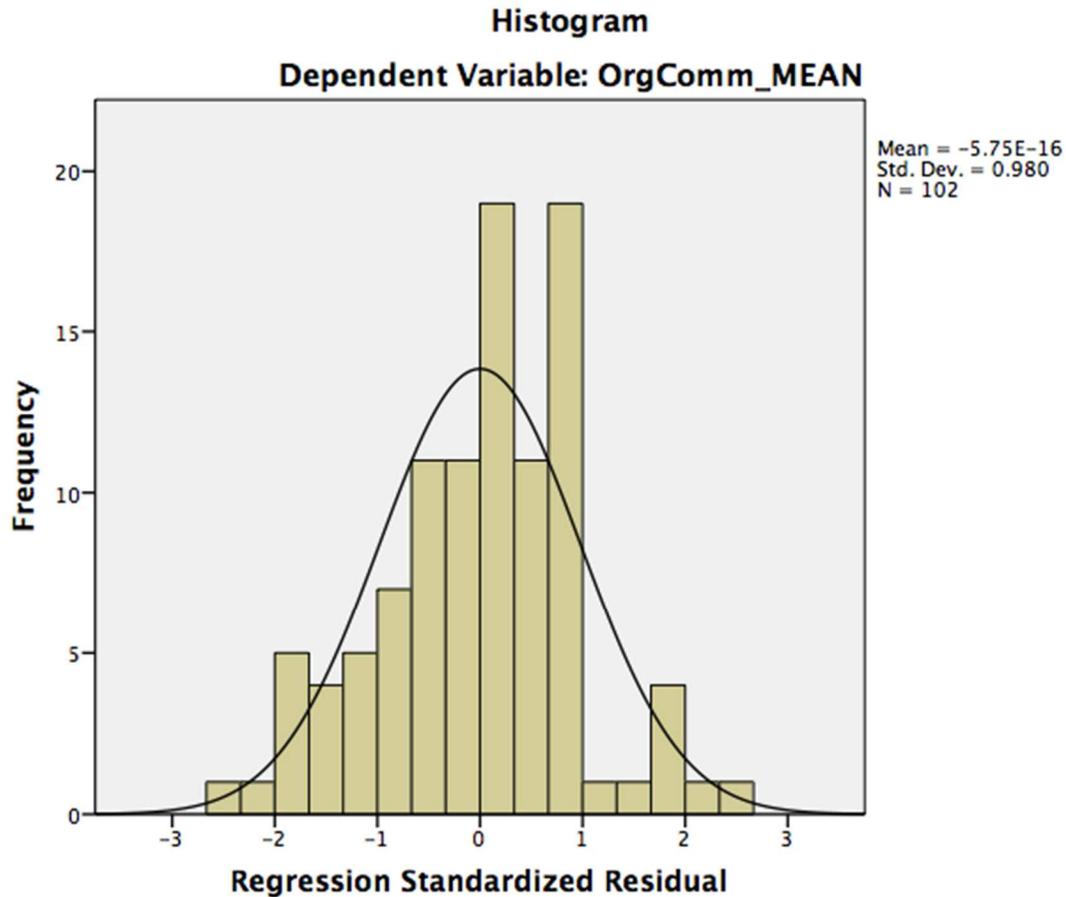
e. Predictors: (Constant), Number of years you worked for your company or district?, Leadership\_Transformational\_CENTER, ColISE\_MEMBERSHIP\_CENTER, LeadTransfXMembership

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		
	B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	3.776	.303		12.455	.000	3.174	4.377
	Number of years you worked for your company or district?	.242	.079	.294	3.078	.003	.086	.398
2	(Constant)	3.940	.275		14.303	.000	3.394	4.487
	Number of years you worked for your company or district?	.196	.072	.238	2.742	.007	.054	.338
	Leadership_Transformational_CENTER	.524	.107	.425	4.892	.000	.312	.737
3	(Constant)	3.934	.268		14.697	.000	3.403	4.465
	Number of years you worked for your company or district?	.198	.070	.241	2.846	.005	.060	.336
	Leadership_Transformational_CENTER	.528	.104	.428	5.065	.000	.321	.734
	ColISE_MEMBERSHIP_CENTER	.275	.105	.219	2.618	.010	.067	.483
4	(Constant)	3.922	.266		14.728	.000	3.394	4.451
	Number of years you worked for your company or district?	.202	.069	.245	2.916	.004	.064	.339
	Leadership_Transformational_CENTER	.511	.104	.415	4.907	.000	.305	.718
	ColISE_MEMBERSHIP_CENTER	.244	.106	.195	2.296	.024	.033	.456
	LeadTransfXMembership	.167	.115	.124	1.454	.149	-.061	.394

a. Dependent Variable: OrgComm\_MEAN

## Charts



```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT OrgComm_MEAN
  /METHOD=ENTER YearsCompDistrict
  /METHOD=ENTER SchoolCulture_CENTER
  /METHOD=ENTER CollSE_MEMBERSHIP_CENTER
  /METHOD=ENTER SchoolCultureXMembership
  /PARTIALPLOT ALL
  /SCATTERPLOT=( *ZRESID , *ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID) .
```

## Regression

Model Summary<sup>e</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.294 <sup>a</sup>	.087	.077	1.11956	.087	9.473	1	100	.003
2	.512 <sup>b</sup>	.262	.247	1.01118	.176	23.585	1	99	.000
3	.537 <sup>c</sup>	.288	.267	.99810	.026	3.610	1	98	.060
4	.558 <sup>d</sup>	.311	.283	.98722	.023	3.174	1	97	.078

a. Predictors: (Constant), Number of years you worked for your company or district?

b. Predictors: (Constant), Number of years you worked for your company or district?, SchoolCulture\_CENTER

c. Predictors: (Constant), Number of years you worked for your company or district?, SchoolCulture\_CENTER, CoIISE\_MEMBERSHIP\_CENTER

d. Predictors: (Constant), Number of years you worked for your company or district?, SchoolCulture\_CENTER, CoIISE\_MEMBERSHIP\_CENTER, SchoolCultureXMembership

e. Dependent Variable: OrgComm\_MEAN

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.873	1	11.873	9.473	.003 <sup>b</sup>
	Residual	125.341	100	1.253		
	Total	137.214	101			
2	Regression	35.989	2	17.994	17.599	.000 <sup>c</sup>
	Residual	101.226	99	1.022		
	Total	137.214	101			
3	Regression	39.585	3	13.195	13.245	.000 <sup>d</sup>
	Residual	97.629	98	.996		
	Total	137.214	101			
4	Regression	42.678	4	10.670	10.948	.000 <sup>e</sup>
	Residual	94.536	97	.975		
	Total	137.214	101			

a. Dependent Variable: OrgComm\_MEAN

b. Predictors: (Constant), Number of years you worked for your company or district?

- c. Predictors: (Constant), Number of years you worked for your company or district?, SchoolCulture\_CENTER
- d. Predictors: (Constant), Number of years you worked for your company or district?, SchoolCulture\_CENTER, CoIISE\_MEMBERSHIP\_CENTER
- e. Predictors: (Constant), Number of years you worked for your company or district?, SchoolCulture\_CENTER, CoIISE\_MEMBERSHIP\_CENTER, SchoolCultureXMembership

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		
	B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	3.776	.303		12.455	.000	3.174	4.377
	Number of years you worked for your company or district?	.242	.079	.294	3.078	.003	.086	.398
2	(Constant)	3.971	.277		14.348	.000	3.422	4.520
	Number of years you worked for your company or district?	.188	.072	.228	2.611	.010	.045	.330
	SchoolCulture_CENTER	.605	.125	.424	4.856	.000	.358	.853
3	(Constant)	3.956	.273		14.476	.000	3.413	4.498
	Number of years you worked for your company or district?	.192	.071	.233	2.703	.008	.051	.333
	SchoolCulture_CENTER	.575	.124	.403	4.636	.000	.329	.821
	CoIISE_MEMBERSHIP_CENTER	.204	.108	.163	1.900	.060	-.009	.418
4	(Constant)	3.913	.271		14.424	.000	3.375	4.452
	Number of years you worked for your company or district?	.198	.070	.241	2.816	.006	.058	.338
	SchoolCulture_CENTER	.580	.123	.407	4.725	.000	.336	.824
	CoIISE_MEMBERSHIP_CENTER	.184	.107	.147	1.721	.088	-.028	.397
	SchoolCultureXMembership	.217	.122	.151	1.782	.078	-.025	.459

a. Dependent Variable: OrgComm\_MEAN

## Charts

