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## *The Relationship between Principal Leadership Behaviors and School Climate*

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The No Child Left Behind Act (2001) revised the Elementary and Secondary Education Act of 1965 by making substantial modifications in the major federal programs that support schools' efforts to educate all children (U.S. Department of Education, Office of the Deputy Secretary, 2004). Since the inception of this law, demand for greater accountability for student achievement from politicians and legislators has increased exponentially (Carnoy, Elmore, & Siskin, 2003). Strict accountability measures, developed and implemented with limited if any consent or involvement of educators, were imposed on students, teachers, schools, and school districts (Waite, Boone, & NcGgee, 2001). The increased emphasis on accountability heightened the demands on teachers and administrators more than ever before in the history of education in the United States (Carnoy et al., 2003). As increased accountability became the norm, school leadership became more challenging and demanding in order to achieve the newly stipulated accountability (Salazar, 2008).

Over the last 20 years, society has experienced vast technological, economic, and social changes that have impacted the way schools function and serve students (Johnson, Bush, & Robles-Pina, 2007a, 2007b). With increased accountability, the ability of the school principal to improve the effectiveness of the school can be a critical factor that can influence the impact a school will have on its students (Salazar, 2008). School principals can use their authority to impact academic performance by creating and sustaining a positive school climate (Kelley, Thornton, & Daugherty, 2005). Peterson and Deal (2002) recommended that administrators proactively shape climate by reinforcing positive features and working to change negative features. The school principal must adopt appropriate leadership skills and leadership behaviors to promote the improvement of school climate and culture (Peterson & Deal). Marzano, Waters, and McNulty (2005) found leadership responsibilities and behaviors of principals who were considered to be change agents were related to improved climate and culture and ultimately to improved student outcomes in school. Researchers have investigated the impact of behavior and leadership traits but have not adequately described the basic motivational behaviors and attributes that influence leadership behaviors (Johnson, Busch, & Robles-Pina, 2007b; Zaccaro, 2007).

Limited research is available that identifies relationships between the school principal's authority behaviors and school effectiveness. Few researchers have focused on explaining how school principals' behaviors impact school climate (Marzano et al., 2005). According to Johnson et al. (2007a), the covert behaviors of principals are believed to impact situations and decisions in schools, although those behaviors may not directly impact student achievement. Thus, the school principal's impact on student achievement is considered an indirect effect mediated through the climate of the school (Hallinger & Heck, 1998). According to Johnson et al. (2007a), the covert

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behaviors of principals are believed to impact situations and decisions in schools, but those behaviors do not directly impact student achievement. Furthermore, specific dimensions of school climate exist that significantly influence student achievement; these dimensions may also be influenced by the behaviors of the principal (Bush, 2003; Johnson et al., 2007b; McLean, Fairman, & Moore, 2006).

Researchers have tried to quantify the importance of leadership and explore the correlations among leadership, teacher effectiveness, school climate, and student achievement (Deal & Peterson, 1990; Kelly, et al. 2005; Maehr, 1990; Marzano, et al. 2005). Early researchers determined that correlates of effective schools included an expectant climate, strong leadership, structured environment, and efficient communication (Ruter, Mortimore, & Ouston (1979). These researchers suggested that the existence or non-existence of an effective educational leader, the school climate, and teachers' attitudes can directly influence student achievement (Kelly et al.). Hoy, Tarter, and Kottkamp (1991) found that school climate is a lasting characteristic of the environment of the school that is felt by members and impacts their choices. A positive school climate can improve staff performance, promote morale, and heighten student achievement (Freiberg, 1998). According to Hoyle, English, and Steffy (1985), school climate is a critical component of any effective educational system. However, Hoy et al. stated that a climate that supports a pleasant school environment and strong student is hard to achieve. Still, principal behavior has been directly related to school climate (Kelly et al. 2005). Sergiovanni and Starratt (1998) stated that the climate of a school can be directly changed, positively or negatively, by the principal's actions. In fact, several studies (Hallinger & Murphy, 1987; Hoy et al., 1991; Lane, 1992; Sergiovanni, 2001) have established the existence of relationships between leadership and school climate.

Certain dimensions of climate significantly influence student achievement in schools and are influenced by the principal's behavior (Bush, 2003; Johnson et al., 2007a, 2007b; McLean, Fairman, & Moore, 2006). Identifying the relationship between the principal's authority, as measured by the Leadership Profile (based on The Birkman® instrument developed by Birkman, Elizondo, Lee, Wadlington, Zamzow, 2008), and specific dimensions of school climate, as measured by the Organizational Health Inventory (Fairman & McLean, 2003) allows for the development of specific approaches and initiatives to be used by principals to improve school climate and ultimately student achievement at their schools.

## **Research Questions**

The following research questions were addressed in this study:

1. What is the relationship between Authority Usual, as assessed by the Leadership Profile (Johnson, 2003a, 2003b), and climate, as measured by four dimensions of the Organizational Health Inventory (Fairman, 1979): (1) Optimal Power Equalization; (2) Innovativeness; (3) Autonomy; and (4) Communication Adequacy?
2. What is the relationship between Authority Needs, as assessed by the Leadership Profile (Johnson, 2003a, 2003b), and climate, as measured by four dimensions of the Organizational Health Inventory (Fairman, 1979): (1) Optimal Power Equalization; (2)

Innovativeness; (3) Autonomy; and (4) Communication Adequacy?

3. What is the relationship between Authority Stress, as assessed by the Leadership Profile (Johnson, 2003a, 2003b), and climate, as measured by four dimensions of the Organizational Health Inventory (Fairman, 1979): (1) Optimal Power Equalization; (2) Innovativeness; (3) Autonomy; and (4) Communication Adequacy?

### Selection of Participants

A sample was drawn from the population of 80 schools within a large urban school district and a large suburban school district in Southeast Texas. The sample consisted of 61 elementary campuses and 19 secondary campuses between both school districts. A truly random sample was not a viable possibility, as participation in this study was limited to archived records from two large school districts in Texas that had used both the Organizational Health Inventory and the Leadership Profile. Participants included all school principals and school teachers in those two Texas school districts. Principals completed the Leadership Profile, and teachers completed the Organizational Health Inventory. Demographic data for student populations for districts A and B are depicted in Tables 1 and 2, respectively.

*Table 1*  
*Student Demographic Data for District A*

District A Sub-Groups	Student Count	Percent
African American	18,673	32.2%
Hispanic	35,223	60.8%
White	2,763	4.8%
Native American	48	.1%
Asian Pacific Islander	1,224	2.1%
Economically Disadvantaged	45,342	78.3%
Limited English Proficient	15,744	27.2%
Total Student Population	57,931	n/a

*Table 2*  
*Student Demographic Data for District B*

District B Sub-Groups	Student Count	Percent
African American	2,778	6.5%
Hispanic	9,892	23.3%
White	28,454	67.1%
Native American	203	0.5%
Asian Pacific Islander	1,104	2.6%
Economically Disadvantaged	14,014	33.0%
Limited English Proficient	4,370	10.3%
Total Student Population	42,431	n/a

## **Instrumentation**

The Leadership Profile (Johnson, 2003a, 2003b) and the Organizational Health Inventory (Fairman, 1979) were administered to all principals and teachers, respectively, of two large Texas school districts, and the resulting data were archived. Archived data from the 2008 administration of these instruments were used for this study.

### **The Leadership Profile**

To determine leadership behaviors, each principal of the participating schools was given the Leadership Profile (Johnson, 2003a, 2003b). The Leadership Profile is a questionnaire derived from The Birkman Method® (Birkman et al., 2008) that provides responses appropriate for individuals in the educational field. The Birkman Method® is a valid and reliable assessment that aligns with personality and assesses key social interactions based on the self and other perceptions as well as general interests.

The Birkman Method® was created by the Birkman Institute in the 1950s and was subsequently developed into the Leadership Profile by Johnson (2003a). Johnson rewrote the Leadership Profile's feedback so that it may be utilized to match leadership behaviors in educational settings. The results of the questionnaire are applicable to leaders in both education and business (Johnson, 2003a). According to Johnson et al. (2007a), The Birkman Method® was selected as the core of the Leadership Profile because of its more than 50 years of statistical stability and its 40-plus years of use in the business community (Birkman et al., 2008). The questionnaire results provide insight and motivational qualities that affect success in personal and professional aspects (Birkman et al.). The Leadership Profile is a confidential electronic questionnaire that provides results intended to assist educational administrators identify their strengths and to help them understand how they can work best with others. The instrument does not provide pass/fail results, and there are no right or wrong answers.

The Leadership Profile (Birkman et al., 2008; Johnson, 2003a) determines numerical scores based on usual, needs, and stress behaviors. The usual scales refer to the usual productive behaviors expressed in various situations that are easily observed by others. Usual scales describe an individual's effective way of dealing with duties and relationships. These behaviors are positive, even when goals are not attained. Low scale values refer to approaching duties and relationships in one manner, and high scale value refer to dealing with them in a opposite but equally efficient manner. Need scales indicate that when a person is in a relationship or a situation that happens in a manner consistent with their expectations (i.e., needs), the individual feels good about self, exhibits productive behavior, and is adaptable. When the situation is consistent with the individual's expectations, he behaves in a productive manner. When these expectations are not met, individuals exhibit non-effective behaviors, indicated by the stress scale. Stress scale values refer to an individual's ineffective manner of managing relationships or tasks. These behaviors are described as how he behaves when under stress, or how she acts when frustrated.

Social environment and anchored scales of the Leadership Profile have the following 11 component scales: (1) Empathy; (2) Thought; (3) Activity; (4) Esteem or Communication; (5)

Acceptance or Interaction; (6) Structure; (7) Authority; (8) Advantage or Incentive; (9) Change; (10) Freedom; and (11) Challenge. This study sought to identify correlations involving the Authority scale with dimensions of the Organizational Health Inventory. Authority scales address approaches to directing and influencing or persuading others in verbal exchanges. This construct describes a dominance-based construct that includes the degree to which an individual wants to persuade, speak up, express opinions openly and forcefully, and argue. Low scores reflect agreeable, easy going, low-key behavior. High scores reflect persuasive, competitive, forceful behavior, a preference for strong give and take about issues, and a tendency to become argumentative and domineering (Birkman et al., 2008).

### **The Organizational Health Inventory**

According to Johnstone (1988), organizational health is a concept introduced by Miles (1971) to account for an organization's ability to function effectively and to develop and grow into a more fully functioning system. The Organizational Health Inventory consists of 80 items that were selected after a three year, three-phase research process. This process firmly established reliability and validity including predictability of student performance. There are eight questions for each of the 10 dimensions of the Organizational Health Inventory. Questions in the Organizational Health Inventory are randomly placed. Individuals can respond to each of these questions with a "Strongly Agree," "Agree," "Undecided," "Disagree," or "Strongly Disagree" response (Johnstone, 1988). A description of the four dimensions used in the Organizational Health Inventory follows:

1. Optimal Power Equalization (OPE) refers to the distribution of influence between subordinates and superiors within the workgroup (Johnstone, 1988). Also referred to as empowering individuals or groups, OPE is the ability to maintain an equitable distribution of influence between team members and their leader. Administrators need to understand the relationship between an equitable distribution of power across the organization and the impact that it has on teacher satisfaction and student achievement. Pearson and Moomaw (2005) provided evidence that teachers who feel empowered to make decisions in regard to instructional and managerial issues were likely to have higher job satisfaction and perceived to have a higher degree of professionalism.
2. Innovativeness refers to the extent to which members of the workgroup believe the organization to be inventive, diverse, creative, and risk-taking (Johnstone, 1988). Bogler (2001) related Innovativeness to the ability of an administrator to provide intellectual stimulation to individuals, teachers, and work groups. When teachers are not allowed the time to reflect, be creative, take risks, and be inventive, new ideas will not be created, and student achievement will ultimately suffer.
3. Autonomy refers to the ability of the organization to deal with external pressures while maintaining its ideals and its goals (Johnstone, 1988). Autonomy is the state in which a person, group, or organization has the freedom to manage those things that should be within their sphere of influence. Teacher motivation, job satisfaction and morale, professionalism, and empowerment have been linked to autonomy (Brunetti, 2001; Kim & Loadman, 1994; Ponticell, 2003; Ulriksen, 1996). Natale (1993) reported teachers

most often leave the profession because of a lack of professionalism, lack of recognition, and lack of autonomy. Pearson and Moomaw (2005) recognized the importance of autonomy, treating teachers as professionals, and empowering teachers to make decisions that affect the outcomes of their students.

4. Communication adequacy is that state when information is relatively distortion-free and travels both vertically and horizontally across the boundaries of an organization.

### Analysis of Data

Two continuous set of variables were examined in this study. The first continuous set came from the Authority scales of the Leadership Profile, representing principals' authority behaviors: (1) Authority Usual; (2) Authority Needs; and (3) Authority Stress. The second continuous set of variables came from the four dimensions of Organizational Health Inventory: (1) Optimal Power Equalization; (2) Innovativeness; (3) Autonomy; and (4) Communication Adequacy.

Correlation coefficients along with the related effect size were calculated using a Pearson Product Moment Correlation. Related effect size determined the significance of the correlations between the results of the Leadership Profile authority components and the Organization Health Inventory's dimensions. The Pearson correlation coefficient was calculated to determine the relationship between the principals' authority components of the Leadership Profile and four dimensions of the Organizational Health Inventory. Descriptive statistics were used to report demographic data for each of the two school districts studied.

For each statistical analysis, the alpha level of statistical significance was set at .05. When statistically significant findings were yielded, a determination of the effect size or practical importance of the finding was performed using Cohen's (1988) guidelines. The overall results of these analyses appear in Table 3.

*Table 3*  
*Correlation Coefficients between Leadership Profile Authority Scales and OHI*

Dimensions	Authority Usual	Authority Needs	Authority Stress
Optimal Power Equalization	-.15	-.13	-.13
Innovativeness	-.11	-.17	-.17
Autonomy	-.13	-.14	-.14
Communication Adequacy	-.19*	-.14	-.14

*Note.* \* $p \leq .05$

## Conclusions

Analysis of data revealed only one statistically significant correlation of the possible 12 relationships that were analyzed as statistically significant. All relationships were represented by small negative correlations, indicating consistently inverse relationships between principals' authority scales and organizational health constructs. The significant correlation emerged from the Authority Usual component of the Leadership Profile with the Organizational Health Inventory's dimension Communication Adequacy ( $r(80) = -0.19, p \leq .05$ ). This statistically significant correlation indicated that the principal's usual authority behaviors and the level of accurate and adequate communication with his/her faculty and staff shares a statistically significant relationship with the climate of his/her school and consequently a potentially indirect but significant impact on student achievement.

In discussing these results with Fairman (personal communication, January 5, 2011), he described the importance of Communication Adequacy by citing the significant correlation coefficient of Communication Adequacy with student performance. Fairman's studies have consistently correlated Communication Adequacy with student performance at the .01 level of significance. He described Communication Adequacy as the glue that holds organizations together, and the catalyst that enables individuals and teams to move from dependence to independence to interdependence. Fairman also described Communication Adequacy as the bridge over which all technical knowledge and human relationships must travel, much like the central nervous system required for healthy organizations. Fairman also indicated that many key individuals are instrumental in assisting the school principal in having effective communication. These key individuals, such as office staff, the administrative team, department heads, and other key leaders, share and filter information that is sent to them and the information that they then forward to others. When the school principal's Authority Usual behaviors include sharing a common set of leadership beliefs and values with these key individuals, the potential for distortion-free information is greatly increased (M. Fairman, personal communication, January 5, 2011).

These research results indicated that when the school principal's Authority Usual behaviors are consistent in ensuring optimal adequacy of communication, the impact on creating and sustaining a positive school climate is significant. Conversely, when the principal usual authority behaviors do not give the appropriate level of importance to ensuring adequate communication, when the school principal's Authority Usual behaviors do not include sharing a common set of leadership beliefs and values, distortion and poor communication can be expected. When the school principal's Authority Usual behaviors do not demonstrate consistent optimal Communication Adequacy, the climate of the school suffers and ultimately so does student academic performance.

## Discussion

Only one domain of school climate was identified as having a statistically significant correlation with principals' usual authority behaviors. This finding is consistent with Fairman's conclusion that communication adequacy has a statistically significant correlation with student performance at the .01 level of significance (M. Fairman, personal communication, January 5, 2011). A great



deal of attention must be given to ensure that principal preparation programs, and staff development for seasoned principals, dedicate a significant amount of attention to creating systems that will facilitate adequacy of communication from the principal to faculty members. Principal preparation programs and staff development should also focus on helping principals create school-wide systems that will facilitate distortion-free communication to and from all levels within the schools.

Communication adequacy refers to the extent to which there is open, honest, two-way communications both vertically and horizontally throughout the school and the extent to which information flows freely without distortion (Fairman, personal communication, January 5, 2011). Implied within this definition is the realization that many key individuals are instrumental in helping the school leader establish effective communication. Principals' usual authority behaviors must ensure that communication adequacy is enhanced by seeing that individuals and teams: (1) perceive him/her as being accessible and approachable; (2) receive information in a timely fashion; (3) understand the communication and decision-making structures; (4) understand the roles and responsibilities of the various leadership positions; (5) know how to navigate the system in order receive and send information (Fairman, 2010).

The development of the position of the school principal over the past 100 years depicts the growing position of authority that school principals have in their schools and communities. Educational researchers have identified empirical data that depicted principal leadership behaviors as having an indirect influence on student academic achievement (Hallinger & Heck, 1998). Leadership behaviors influence school climate, and school climate has strong correlations with student academic achievement (Marzano et al., 2005). As such, principals' authority behaviors can potentially have a profound impact on school climate and ultimately on student achievement.

Principals have the power, authority, and position to impact school improvement through the development of a climate of integrity and respect. According to previous research, principals of effective schools have focused on attaining high academic achievement and increased teacher retention by providing superior staff development (Deal & Peterson, 1990; Sergiovanni, 2001). These principals fostered a safe, cohesive, positive, caring, and supportive school climate while developing feelings of trust, open communications, collegiality, and promoting effective feedback. Teachers at successful schools developed personally and professionally and became the foundation for superior instruction as they built their pedagogical knowledge and successfully guided their students to achieve academically. Climate sets the tone for students to respond positively to the demands of high academic standards and ultimately provides the foundation for the attainment of superior student academic achievement (Fairman & McLean, 2003). Climate ranks high among factors that fundamentally influence the effectiveness of schools at maximizing student academic achievement.

Accordingly, school principals' authority behaviors were found in this study to share positive relationships with the school climate and, ultimately, the health of their organizations. School principals can benefit from knowing how and when to modify and adapt their authority behaviors and leadership styles in order to use effective leadership behaviors that will impact their campus in the most positive way. To this end, school leaders, under pressure to improve academic

performance, can use data related to their own leadership styles and organizational health to meet the needs of educational units in the most effective manner possible. Principals who understand and value the importance of maintaining a positive school climate and culture can effectively modify their leadership styles to incorporate leadership behaviors that positively influence academic success.

## References

- Birkman, W. R., Elizondo, F., Lee, L. G., Wadlington, P. L., & Zamzow, M. W. (2008). *The Birkman Method*®. Houston, TX: Birkman International Inc.
- Bogler, R. (2001, December). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly*, 37(5), 662-683.
- Brunetti, G. J. (2001). Why do they teach? A study of job satisfaction among long-term high school teachers. *Teacher Education Quarterly*, 28(3), 49-74.
- Bush, S. D. (2003). A comparison of exemplary, recognized, and acceptable schools as rated on the Texas Assessment of Academic Skills and school climate. (Doctoral dissertation, The University of Houston, 2003) . Dissertation Abstracts International, AAT 3008 148 1).
- Carnoy, M., Elmore, R., & Siskin, L. S. (2003). *The new accountability: High schools and high stakes testing*. New York, NY: RoutledgeFalmer. Questia database: <http://www.questia.com/PM.qst?a=o&d=108631589>
- Deal, T., & Peterson, K. (1990). *The principal's role in shaping school culture*. Washington, D.D.: U.S. Department of Education.
- Fairman, M. (1979). *Organizational Health Inventory*. Dallas, TX: Organizational Health: Diagnostic and Development Corporation.
- Fairman, M., & McLean, L. (2003). *Enhancing leadership effectiveness*. Lenexa, KS: Joshua Publishing.
- Freiberg, H. J. (1998). Measuring school climate: Let me count the ways. *Educational Leadership*, 56(1), 22-26.
- Hallinger, P., & Heck, R. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*. 9(2), 157-191.
- Hallinger, P., & Murphy, J. (1987). Assessing and developing principal instructional leadership. *Educational Leadership*, 45(1), 54-61.
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. (1991). *Open schools/healthy schools*. London: Sage Publications.
- Hoyle, J., English, F., & Steffy, B. (1985). *Skills for successful leaders*. Arlington, VA: American Association of School Administrators.
- Johnson, S. (2003a). *The leadership profile*. Houston, Texas: Birkman International, Inc.
- Johnson, S. (2003b). *The leadership profile: Certification training manual*. Montgomery, Texas: Texas Coalition of Essential Schools.
- Johnson, S., Busch, S., & Robles-Pina, R. (2007a). *Principals' response to change in schools and its effect on school climate*. Unpublished manuscript.
- Johnson, S., Busch, S., & Robles-Pina, R. (2007b). *The impact of school principals' deliberate emphasis on improving school climate*. Unpublished manuscript.
- Johnstone, W. (1988). *Organizational Health Inventory: Technical manual*. Organizational Health: Diagnostic and Development Corporation.

- Kelley, R. C., Thornton, B., & Daugherty, R. (2005). Relationships between measures of leadership and school climate. *Education*, 126(1), 17. Retrieved July 10, 2006, from Questia database: <http://www.questia.com/PM.qst?a=o&d=5011211294>
- Kim, L., & Loadman, W. (1994). *Predicting teacher job satisfaction*. ERIC Document Reproduction Service No. ED 383 707. Retrieved July 14, 2006, from ERIC database.
- Lane, B. (1992). Cultural leaders in effective schools: the builders and brokers of excellence. *NASSP Bulletin*, 76, 85-96.
- Maehr, M. (1990). *The "psychological environment" of the school: A focus for school leadership*. (Project report). Champaign, IL: National Center for School Leadership.
- Marzano, R. J., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results*. Aurora, CO: ASCD
- McLean, L., Fairman, M., & Moore, B. (2006). *A system approach to charting a path to quality and achievement*. (Report No. 1). The Council of Chief School Officers: Successful Practices Series.
- Miles, M. B. (1971). Planned change and organizational health: Figure and ground. *Administering human resources*. Berkly, CA: McCutcheon Publishing Corporation.
- Natale, J. A. (1993, July). Why teachers leave. *The Executive Educator*, 14-18.
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, 115 Stat. 1425 (2002)
- Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29(1), 37-53.
- Peterson, K., & Deal, T. (2002). *The shaping school: Culture field book*. San Francisco, CA: Jossey-Bass.
- Ponticell, J. A. (2003). Enhancers and inhibitors of teacher risk taking: A case study. *Peabody Journal of Education*, 78(3), 5-24.
- Rutter, M., Maughan, B., Mortimore, P., Ouston, J., & Smith, A. (1979). *Fifteen Thousand Hours: Secondary schools and their effects on children*. Cambridge, MA: Harvard University Press.
- Salazar, P. (2008). *High impact leadership for high impact schools*. Larchmont, NY: Eye on Education Inc.
- Sergiovanni, T. J. (2001). *The principalship: A reflective practice perspective (4<sup>th</sup> ed)*. Needham Heights, Maryland: Allyn and Bacon.
- Sergiovanni, T. J., & Starratt, R. (1998). *Supervision: A redefinition*. Boston, MA: McGraw-Hill.
- Ulriksen, J. J. (1996). *Perceptions of secondary school teachers and principals concerning factors related to job satisfaction and job dissatisfaction*. ERIC Document reproduction Service No. ED 424 684. Retrieved July 14, 2006, from ERIC database.
- U.S. Department of Education, Office of the Deputy Secretary. (2004). *No child left behind: A toolkit for teachers*. Washington, DC.
- Waite, D., Boone, M. & McGhee, M. (2001). A critical sociocultural view of accountability. *Journal of School Leadership*, 11, 182-201. Langham, MD: Scarrow Press.
- Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychologist*. 62(1), 6.