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## Relationships Among Principal Authentic Leadership and Teacher Trust and Engagement Levels

**ABSTRACT:** This study examined the relationships among the authentic leadership style of school principals and the trust and engagement levels of their teachers in a county school district in a Southeastern state. The authenticity of the school principal was found to be significantly positively related to teacher trust and teacher engagement levels. The participant demographic measures held no relationships of significance with any of the components of the study. The results are discussed with regard to their implications for future research and the improvement of practice.

From the publication of *Nation at Risk* (U.S. Department of Education, 1967), through Kozol's observations in *Death at an Early Age* (Kozol & Coles, 1967) and *Savage Inequalities* (Kozol, 1991), to the present unfolding of *No Child Left Behind*, American education has been reeling from continuing accountability, credibility, and viability questions. Educational leaders struggle to maintain the trust of their communities amid cries for sustained and verifiable performance expressed through rising student test scores (Meier, 2002). A type of leadership style has emerged in the business administration literature centered on the authenticity of those in leadership positions (Avolio & Gardner, 2005; Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Begley, 2001; Endrissat, Muller, & Kaudela-Baum, 2007; Gardner & Schermerhorn, 2004; Hies, Morgeson, & Nahrgang, 2005; Michie & Gooty, 2005). These studies have found that the authenticity of

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the leader has a positive impact on one's followers, which in turn has a positive impact on organizational outcomes. Business leaders have opined that authentic leadership is advantageous for organizations (George, Sims, McLean, & Mayer, 2007; Goffee & Jones, 2005). In education, leadership behaviors of building principals, such as efficacy and relationship building, have a positive impact on student outcomes (Marzano, Waters, & McNulty, 2005). Is the business construct of authenticity, with its strong self-awareness and relational transparency, present in school principals, and does it affect teacher trust and engagement levels?

The purpose of this study was to examine the relationships among principal authenticity and teacher trust and engagement levels. DiPaola and Tschannen-Moran (2001) cited teacher behavior and principal leadership styles as factors "to examine in relationship to other identified variables common to effective schools" (p. 443). The intention of the study was to inform university professional preparation programs, administrator selection and assessment processes, practicing principals, and leadership development programs. If the antecedents of leadership style can be identified and their consequences upon followers understood, then intervention can proceed to create better course content, experiential contexts, and recruitment practices. Such interventions will improve the preparation of future leaders and aid in the further development of practicing administrators.

#### LEADERS AND FOLLOWERS: WORKPLACES AND CLASSROOMS

Leadership has been the subject of study throughout the ages. Much of the scholarly research on the structure of organizations and the functions performed by their employees resides in the private sector. The concept of studying the positive components of successful organizations (Cameron, Dutton, & Quinn, 2003a, 2003b) and their leaders (Avolio, 2007) undergirds this article. The following literature review focuses on the relevant topics of authentic leadership, trust, and engagement. Both the business and educational literatures are surveyed, and guidance is sought from researchers of private sector settings and school classrooms. The two sectors have the common phenomenon of leaders' trying to relate with followers to achieve positive outcomes for their respective organizations. The section ends with a conceptual framework that the literature review formulated.

#### AUTHENTIC LEADERSHIP

A special issue of *Leadership Quarterly* (June 2005) presented scholarly work on the concept of authentic leadership, offering definitions,

conceptual frameworks, and directions for future research. Avolio and colleagues (2004) saw authentic leaders as persons who "know who they are, what they believe and value, and they act upon those values and beliefs while transparently interacting with others" (p. 801). Luthans and Avolio (2003) described authentic leaders as confident, hopeful, optimistic, resilient, transparent, moral/ethical, future oriented, and interested in follower development. George and colleagues (2007), synthesizing data from 125 interviews of effective corporate leaders, tied theoretical ideas of authentic leaders to actual practitioners:

They frame their life stories in ways that allow them to see themselves not as passive observers of their lives but rather as individuals who can develop self-awareness from their experiences. Authentic leaders act on that awareness by practicing their values and principles, sometimes at substantial risk to themselves. They are careful to balance their motivations so they are driven by these inner values as much as by a desire for external rewards or recognition. Authentic leaders also keep a strong support team around them, ensuring that they live integrated, grounded lives. (pp. 131-132)

Luthans and Avolio (2003) further profiled authentic leaders:

They are guided by end values of doing what is right for their constituency and trying to operate with no gaps between their espoused values and their actions. They are cognizant of their own vulnerabilities and openly discuss them with associates. This transparency turns the vulnerability into a strength. Authentic leaders lead from the front and take risks. This walking the talk inspires others to action better than coining and persuading. They believe accomplishing the task and developing followers to become leaders are equally important. Finally, authentic leaders develop the moral capacity to judge issues and dilemmas in the grey areas from all angles and seek alternative approaches without being perceived by followers as being disingenuous or shifting with popular opinion. (pp. 248-249)

Avolio and Gardner (2005) mapped several characteristics of leadership and differentiated authentic leadership from other leadership theories—transformational, charismatic, servant, and spiritual. They pointed out that authentic leaders are anchored by a deep sense of self that enables them to stay the course, whereas transformational leaders may rely on a powerful vision or idea. Although authentic leaders inspire followers by individual character or personal example, the charismatic leader uses rhetoric or dramatic presentations. When compared to authentic leadership, servant and spiritual leadership were atheoretical and not supported by empirical research.

Jensen and Luthans (2006) found that leader self-reports from 76 business founders and owners were positively related to optimism, resiliency,

hope, and overall measures of psychological capital. The researchers noted a positive link between authentic leadership and the work attitudes of employees.

Scholarly work is emerging in educational settings related to authentic leadership practices. Begley (2001) discussed the role of values in authentic leadership and argued that they "make the objectives of leadership more understandable, compelling, and achievable" (p. 35-4). Branson (2007) emphasized the worth of self-awareness for principals, arguing that they first need to know and then understand how values influence their leadership behavior. Once they have this understanding, they can look outward at others and develop relationships. Finally, the study touted the technique of structured self-reflection as an effective professional development tool.

While the merits of authentic leadership portend to predict enhanced leader effectiveness, these ideas need to be tested in the real world. The purpose of this study is to do just that. The key interests of this study are the extent to which school principals can incorporate authentic leadership style beliefs and behaviors into their lives and the effect that incorporation has on those whom they lead.

## TRUST

A workable definition of trust is

the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party. (Mayer, Davis, & Schoorman, 1995, p. 712)

The follower needs to decide to act in this interaction because "it is the willingness to engage in trusting behavior which defines trust" (Albrecht & Sevastos, 2000, p. 36). Connell, Ferris, and Travaglione (2003b) argued that interpersonal support from the leader must be demonstrated to engender trust from the follower. In another study, Connell and colleagues (2003a) found that managers can engender trust by practicing transformational leadership and adopting supportive and fair practices. They reported that more trust predicted decreased intention of turnover and greater levels of organizational commitment.

Ostren and Wheeler's (2006) work with servant leadership in higher education and health care organizations found significant predictive relationships between leadership behavior factors and three outcomes: engagement, trust in the organization, and trust in the immediate supervisor.

Tschannen-Moran and Hoy (2000) reviewed 4 decades of trust-in-schools literature and concluded that new governance forms (site-based management, shared decision making, parental involvement) increasingly require an atmosphere of trust. They called for principals to initiate behaviors that teachers will respond to, such as consistency, integrity, benevolence, communications, and distribution of control. The importance of trust in schools is summarized as such: "Trust makes a difference in student achievement, teachers' collective sense of efficacy, and overall school effectiveness" (p. 584). Goddard, Tschannen-Moran, and Hoy (2001) found that establishing teacher trust in students and parents in high-poverty schools is difficult, but when it occurs, "students have higher achievement in schools where teachers report greater trust" (p. 14).

Bryk and Schneider (2003) found that their measure of school trust proved a powerful discriminator between improving and nonimproving elementary schools in Chicago. They identified the building principal as a key player in establishing relational trust through acknowledging the vulnerabilities of others, actively listening to concerns, and eschewing arbitrary actions.

Changing economic realities and societal problems have led to increased expectations and media scrutiny for schools. New standards and measures of accountability have created a climate wherein "the nature and meaning of trust in schools has taken on added urgency and importance" (Tschannen-Moran & Hoy, 2000, p. 550). Thus, trust holds a pivotal position in the interrelationships of principals, teachers, and schools and is a key component of this study.

## ENGAGEMENT

Ostren and Wheeler (2006) defined the concept of engagement as the commitment of employees and the positive emotions they experience. Kahn (1990) suggested that when basic needs are met, employee levels of engagement increase, resulting in enhanced organizational goals. Fredrickson (1998) pointed to positive emotions and their building bonds throughout the workforce and strengthening physical, intellectual, and social resources. Buckingham and Coffman (1998) cite meta-analysis and utility analysis studies using the Gallup Organization's Q12 questionnaire (Harter & Creglow, 1999). They found that engaged workers know what is expected of them, have the necessary materials and equipment to get their jobs done, have a sense of belonging with coworkers and superiors, and are committed to their organizations' success.

As mentioned in the trust section, Ostren and Wheeler (2006) found positive relationships between leadership behavior and worker engagement

and trust levels. Evidence of such relationships is also supported by Avolio and colleagues (2004) and Jensen and Luthans (2006).

Although all teachers in a given school district have the same job description, teacher performance varies across the staff roster. DiPaola and Tschannen-Moran (2001) stated,

Teachers in well-functioning schools go well beyond the minimum expectations of formal job descriptions every day. School organizations count on teachers doing so and could not achieve their goals if teachers limited their contributions only to those specified in their job descriptions. (p. 433)

After surveying 15 studies in the private sector on worker organizational citizenship behavior, they related such behavior to teachers in school settings. They found a strong positive relationship between the organizational citizenship behavior of teachers and school climate. Finally, they linked principal behavior to teacher behavior: "When the principal had a more collegial leadership style, teacher [organizational citizenship behaviors] were more evident" (p. 441).

Bogler and Somech (2004) studied engagement issues affecting teachers' organizational commitment, professional commitment, and organizational citizenship behavior in schools. Teachers' self-efficacy and sense of status were crucial predictors of organizational outcomes that building principals need to acknowledge. Furthermore, the study found teachers' participation in decision making to be predictive of positive organizational citizen behavior.

Hoy, Hoy, and Kurz (2008) explored teachers' dispositional optimism, humanistic classroom management, student-centered teaching, and teacher citizenship behaviors and found that all were significant predictors of teacher academic optimism. These elements contribute to the context of teacher engagement and aid in understanding the factors that are important to teachers and the strength of their commitment to their jobs.

Teachers' effectiveness improves if teachers bring positive emotions, a sense of belonging, and a deep commitment to their schools' success; if they display positive organizational behavior, self-efficacy, and optimism; and if they are strongly engaged in the practice of their profession. As such, teacher engagement is another key component to this study.

## CONCEPTUAL FRAMEWORK

The business literature lays out the conceptual framework of leader authenticity and its positive affect on followers. Several scholars have provided the foundation for the development of leader authenticity (Cooper, Scandura, & Schries, 2005; Eagly, 2005; Gardner, Avolio, Luthans,

May, & Walumbwa, 2005; May, Chan, Hodges, & Avolio, 2003; Palmer & Fleig-Palmer, 2006; Shamir & Eitam, 2005; Sparrowe, 2005; Spritzer, 2006). Although these ideas have started to find their way into the literature of educational administration and educational leadership, there remains much to explore. The merits of authentic leadership need to be tested through empirical research in real-world settings. The aim of this study is to combine the efforts of researchers and apply their findings to an educational setting. Its fundamental research question is as follows: Is principal authenticity related to teacher levels of trust and engagement?

As such, the dependent variables are teacher levels of trust and engagement. The independent variable is the level of principal authenticity. The two null hypotheses to be examined are as follows:

*Hypothesis 1:* There is no relationship between the degree to which principals display authentic leadership and their teachers' levels of trust.

*Hypothesis 2:* There is no relationship between the degree to which principals display authentic leadership and their teachers' levels of engagement.

## METHOD

This study is explorative and descriptive with a survey design. It used convenience sampling because the third author had access, via a previous working relationship with a superintendent, to a county school district within a metropolitan statistical area in the Southeastern United States. All principals in the school district were invited to participate at a principals' meeting. The district has 50 K-12 public schools. Teachers of those schools whose principals voluntarily participated in the study were then asked to join. Completed surveys were collected from 39 building principals, and 156 usable teacher surveys were returned from 22 of those schools. The response rate was 78% for principals and 30% for teachers. The principals completed the survey at the aforementioned meeting, and the teachers responded to the surveys online. All participation was voluntary on behalf of all respondents.

## PARTICIPANTS

Participants were 156 teachers and 22 principals from 22 K-12 public schools of a county school district within a metropolitan statistical area in the Southeastern United States. Of the 155 teachers who reported demographic information, 144 were female (93%) and 11 were male (7%).

Teacher participants were predominantly Caucasian ( $n = 146$ , 94%), with the remaining being African American ( $n = 7$ , 5%), Hispanic ( $n = 1$ ), and other ( $n = 1$ ). Of the 154 teachers who reported their highest education level achieved, 96 (62%) had bachelor's degrees, 56 (36%) had master's degrees, and 2 had doctorates. Their teaching experience ranged from 1 to 41 years ( $M = 13.86$ ,  $SD = 9.01$ ); their number of years working in the current school ranged from 1 to 31 years ( $M = 8.05$ ,  $SD = 6.59$ ); and their number of years working under the current principal ranged from 1 to 17 years ( $M = 4.56$ ,  $SD = 2.74$ ).

Of the 22 school principals, there were 16 females (73%) and 6 males (27%). The principal participants were also predominantly Caucasian ( $n = 19$ , 86%), with 3 being African American (14%). The distribution of these principals' highest education level was as follows: 16 master's degrees (73%) and 6 educational specialist degrees (27%). Two principals were from high schools (9%), 7 from middle schools (32%), and 13 from elementary schools (59%). Their teaching experience ranged from 3 to 28 years ( $M = 12.39$ ,  $SD = 6.57$ ); number of years in administration, 5 to 30 years ( $M = 12.77$ ,  $SD = 6.91$ ); and number of years working as the principal at the current school, 1 to 19 years ( $M = 5.23$ ,  $SD = 4.37$ ).

## INSTRUMENTS

The survey instruments used in this study are described as follows. Whereas measures of trust and engagement exist in the business and educational literatures, the leader authenticity measure has roots on the business side. To maintain consistency across all three measures, we chose each of the following instruments from the business literature.

*Authentic Leadership Questionnaire.* Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) developed a theory-driven 16-item questionnaire to measure authenticity. Their instrument has four subscales: Self-Awareness, which refers to the extent to which leaders are aware of their strengths and limitations and how others perceive them; Relational Transparency, which refers to the extent to which leaders reinforce a level of openness with others; Internalized Moral Reasoning, which refers to the extent to which leaders set high standards for moral and ethical conduct; and Balanced Processing, which refers to the extent to which leaders solicit sufficient opinions and viewpoints of others before making important decisions. There are two versions of this questionnaire: one for the leaders to self-report and one for raters to assess the leaders. The internal reliability for each subscale is as follows: Self-Awareness, .73; Relational Transparency, .77; Internalized Moral Perspective, .73; and

Balanced Processing, .70 (Walumbwa et al., 2008). Principal participants in this study completed the self-report version of this questionnaire at the end of the principals' meeting, whereas teachers completed the rater version online. Participants rated each statement as it fit the leadership style in terms of frequency, using a 5-point scale ranging from 1 (*not at all*) to 5 (*frequently, if not always*).

*Workplace Trust Survey.* Ferrer and Trivaglione (2003) developed and validated a 32-item survey to measure trust in supervisor (9 items), coworkers (12 items), and the organization (14 items). The reliability for trust in the organization is .96 and for trust in the immediate supervisor, .96. Teacher participants completed this survey online to report their trust in their principals, colleagues, and schools of employment. The survey uses a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

*Gallup Organization's Q12 Survey.* This 12-question instrument measures employee engagement. Buckingham and Coffman (1999) described its background development. The reliability for engagement is .88. No subscales were used. Teacher participants completed the survey online to report their engagement levels. It is based on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

We secured permission to use the authenticity survey through a letter to the authors. We sought permissions to use the trust and engagement surveys, but there has been no response. The surveys are considered to be in the public domain.

## PROCEDURES

We analyzed the data at the school level, with principals and teachers linked to their respective buildings. Because the data are in a nested structure (i.e., teachers nested within schools/principals), we used intraclass correlation coefficient (ICC) to explore between-school variances in comparison to within-school variances. Descriptive statistics and internal consistency of the instruments helped us to determine the best indicator of the constructs measured before inferential statistical procedures. After checking the assumptions of multivariate analysis of variance (MANOVA)—such as independent observation, normal distribution of the dependent variables, homogeneity of variance, and the internal or ratio scale of measurement for the dependent variables—we employed this test to examine possible differences of teachers' ratings of authentic leadership, trust, and engagement among groups classified by demographic information (such as gender and ethnicity) and school level (elementary or middle school). Box's M test of equality of covariance matrices indicated

that this assumption for MANOVA held,  $F(18, 496) = 0.72, p = .80$ . The use of MANOVA, instead of multiple analyses of variance or  $t$  tests, reduces the chance of making a type I error. Pearson correlation test requires that the variables be normally distributed and that there not be influencing outliers. Our data met these assumptions. In addition, a scatter plot showed that the variables investigated in this study had linear relationships. As a result, we used Pearson correlation coefficients to examine the relationships among principal authentic leadership, teacher trust, and engagement levels.

## RESULTS

Table 1 reports descriptive statistics (means and standard deviations) and internal consistency of the Authentic Leadership Questionnaire results (Cronbach alpha) for the total and subtotal scales. Three themes emerge from the table: The principals' self-report of authentic leadership is not related to their teachers' ratings; the authentic leadership scale is more reliable for teachers' ratings than for principals' self-report as reflected by Cronbach alpha; all subscales are strongly related to the total scores (the principals' self-report ranges from .59 to .88; the teachers' ratings, from .93 to .96). As a result, we used the total score from teachers' ratings to represent principals' authentic leadership in the following analyses.

Our data have two levels, school and teacher, in which teachers are nested within schools. Two important determinants of the power of a multilevel analysis are (1) sample size at each level and (2) the ICC, a ratio of between-group variance over the total variance (Kaplan, 1995). As the ICC increases, the power to detect Level 2 effects increases, and that to detect Level 1 effects decreases, holding the sample size constant at both levels (Muthen & Satorra, 1995). We used ICC to examine the percentage of variance explained by each level of teacher and school (Stapleton, 2006), where

$$ICC = \frac{MS_B - MS_W}{MS_B + (n_s - 1)MS_W}$$

For the school level, teachers were clustered within schools, but the clusters did not contain equal numbers of participants. Therefore, the sample size per group if the clusters were balanced was calculated using the following formula provided by Kenny and Judd (1986):

$$n_s = \frac{N^2 - \sum_{g=1}^G n_g^2}{N(G-1)} = \frac{156^2 - \sum_{g=1}^{16} n_g^2}{156(22-1)} \approx 7.25$$

Table 1. Means, Standard Deviations, Intercorrelations, and Internal Consistencies for Authentic Leadership Questionnaire

	1	2	3	4	5	6	7	8	9	10	Alpha
<i>Principal's self-report</i>											
1: Total score	—	.83**	.76**	.88**	.59**	.06	.04	.01	.12	.08	.79
2: Self-awareness			.45*	.65**	.44*	.06	.03	-.02	.09	.14	.68
3: Transparency				.60**	.21	-.09	-.10	-.09	-.02	-.13	.35
4: Ethical/moral					.35	.12	.11	.09	.17	.08	.70
5: Balanced processing						.11	.08	.06	.11	.21	.55
<i>Teachers' ratings</i>											
6: Total score							.95**	.93**	.95**	.96**	.95
7: Self-awareness								.79**	.89**	.89**	.88
8: Transparency									.84**	.88**	.80
9: Ethical/moral										.88**	.84
10: Balanced processing											.81
<i>M</i>	3.27	3.17	3.24	3.41	3.23	3.84	3.71	3.83	4.08	3.70	
<i>SD</i>	0.38	0.48	0.41	0.56	0.50	0.50	0.61	0.47	0.52	0.54	

\* $p < .05$ . \*\* $p < .01$ .

The average cluster size for the whole sample was 6.78 with a standard deviation of 5.77 (min = 2, max = 19). So the calculated sample size per group if the sample size was balanced across groups ( $n_i$ ) was quite close to the average cluster size. We used MANOVA (treating school as the grouping variable) to get values for mean square within ( $MS_w$ ) and mean square between ( $MS_b$ ). The average ICC calculated for the school level was .04, which is small (Kreft & de Leeuw, 1998), indicating that 4% of the variance in teachers' ratings can be attributed to school-level differences. That is, the within-group variance is 96% for authentic leadership. As a result, the nested feature of the data was not considered in the following procedures.

We compared teachers' reports of their principals' authentic leadership and their own trust and engagement, between elementary schools and middle schools, with independent-sample *t* tests. We did not use high school teacher data for this analysis, because of the small sample size ( $n = 2$ ). Elementary school teachers' ratings of their principals' authentic leadership ( $M = 3.85$ ,  $SD = 0.59$ ) are not statistically different from middle school teachers' ratings ( $M = 3.82$ ,  $SD = 0.35$ ),  $t(18) = 0.14$ ,  $p = .89$ . Similarly, elementary school teachers' engagement ratings ( $M = 4.13$ ,  $SD = 0.23$ ) are not statistically different from middle school teachers' engagement ratings ( $M = 3.93$ ,  $SD = 0.23$ ),  $t(18) = 1.82$ ,  $p = .09$ . Elementary school teachers' trust ( $M = 3.89$ ,  $SD = 0.32$ ) is likewise not statistically different from middle school teachers' trust ( $M = 3.78$ ,  $SD = 0.33$ ),  $t(18) = 0.72$ ,  $p = .48$ . As a result, we merged elementary, middle, and high school teachers' reports of these constructs for the following analyses.

We used MANOVA to examine possible differences of teachers' ratings of their principals' authentic leadership, their own engagement, and their own trust, among the groups as classified by gender, ethnicity, and highest education level achieved. No statistically significant differences were noted for any comparisons: *F* values ranged from 0.51 to 0.10; *p* values ranged from .67 to .96; effect size (as measured by partial eta squared) ranged from .002 to .011. As a result, we considered no group differences for the following analyses.

Table 2 presents teachers' self-reports of trust and engagement levels and shows that teachers' report of engagement is strongly related to their report of trust in the school ( $r = .61$ ,  $p < .01$ ), their colleagues ( $r = .47$ ,  $p < .05$ ), and their principals ( $r = .61$ ,  $p < .01$ ) and the total score of their trust ( $r = .66$ ,  $p < .01$ ). The reliabilities of the total and subscale scores of the trust and engagement measures are satisfactory (minimum Cronbach alpha = .84), and all subscale scores of the trust instrument are strongly correlated to the total score. Therefore, we used the total scores of teachers' trust and engagement to correlate with leader authenticity.

Table 2. Means, Standard Deviations, Intercorrelations, and Internal Consistencies for Engagement and Trust ( $n = 156$ )

	1	2	3	4	5
1: Engagement	—	.66**	.61**	.47*	.61**
2: Trust-total			.95*	.64**	.95**
3: Trust-school				.39	.93**
4: Trust-colleagues					.41
5: Trust-principal					
<i>M</i>	4.06	3.85	3.68	3.83	4.05
<i>SD</i>	0.24	0.33	0.46	0.27	0.39
Alpha	.84	.96	.93	.92	.92

\* $p < .05$ . \*\* $p < .01$ .

The first null hypothesis is rejected: Teachers' reports of trust are significantly related to their ratings of principals' authentic leadership ( $r = .74$ ,  $p < .01$ ). The second null hypothesis is rejected: Teacher reports of engagement are significantly related to their ratings of principals' authentic leadership ( $r = .56$ ,  $p < .01$ ).

## DISCUSSION

The focus of this research was to study the relationships among three interacting components: the authentic leadership style of principals and the trust and engagement levels of their teachers. Principals and teachers responded to the authenticity measure. Their responses were different from each other in that the teachers' responses were much more internally consistent than the principals' responses were. The teachers were answering the questions about their principals, and the principals were answering the questions about themselves. Authenticity is not a self-proclaimed artifact; rather, it is attributed to a person by others. Therefore, we decided to concentrate on the teachers' measure of their principals' authenticity, instead of the principals' measure of their own authenticity. Perhaps the principals, who have studied leadership concepts in their professional preparation programs, responded to the questionnaire with what they thought were the correct answers, instead of what their behavior actually reflects. At any rate, researchers seem well advised to seek authenticity measures from subordinates and not to rely solely on self-reports of leaders when studying the construct of authenticity.

The positive relationship revealed between the principals' authenticity and the teachers' levels of trust supports similar findings by Mayer

and colleagues (1995) and Tschannen-Moran and Hoy (2000) concerning the expectation of consistent leader action; by Connell and colleagues (2003a, 2003b) concerning supportive leader behavior; and by Connell and colleagues (2003a) and Bryk and Schneider (2003) concerning fair and nonarbitrary leader decision making. A teacher's trust in the principal is enhanced when the principal consistently performs to the expectation of the teacher, as seen through the lens of the authenticity survey questions about displaying emotions in line with feelings, demonstrating beliefs consistent with actions, and making decisions based on core values. Likewise, teacher trust increases when the principal acts in a supportive manner as portrayed by the authenticity survey questions about encouraging everyone to speak their mind; asking staff to take positions that support their core values; and, soliciting views that challenge the leader's deeply held positions. Finally, trust is furthered by principals displaying unbiased decision making as reflected by the authenticity survey questions about analyzing relevant data before making a decision, listening carefully to different points of view before coming to conclusions, and admitting mistakes. Principals engender the trust of staff by appropriately responding to them, as seen through the authenticity survey questions of accurately describing how others view their capabilities, knowing when it is time to reevaluate their positions on important issues, and showing that they understand how actions affect others. Note that teachers' trust in their colleagues is not significantly related to their trust in their principals ( $r = .41$ ) or in their schools ( $r = .39$ ); however, trust in their schools is strongly related to their trust in their principals ( $r = .93$ ). The positive relationship revealed between the principals' authenticity and the teachers' levels of engagement supports similar findings by Bogler and Somech (2004), Buckingham and Coffman (1999), Hoy and colleagues (2008), and Ostren and Wheeler (2006) concerning commitment and by Fredrickson (1998), Hoy and colleagues (2008), and Ostren and Wheeler (2006) concerning positive emotions. Teachers' engagement levels reflect the connectedness they feel toward their work and the degree to which they are passionate about their work. The authenticity leadership survey includes principals' behaviors of listening carefully to different points of view, knowing when to reevaluate their positions on important matters, and understanding how specific actions affect others. These behaviors align with teachers' levels of connectedness. Principals' behaviors of encouraging all to speak their minds, displaying emotions in line with feelings, and soliciting views that challenge their deeply held positions seem to align with teachers' passions. The core elements that attract, focus, and retain the most talented employees are measured by Harter and Creglow's (1999) engagement scale and are reported to be related to retention and linked

to outcomes by Buckingham and Coffman (1999). Engaged workers know what is expected of them, and they have the necessary materials and equipment to get their jobs done. They have a sense of belonging with coworkers and superiors. They are committed to their organizations' success. These findings suggest that similar phenomena may be taking place in the school setting. Thus, school leaders need to give careful and purposeful attention to how they provide support through clear expectations and directions, how they provide the necessary materials and equipment, how they create a sense of belonging within the teaching staff, and how they nurture growth through recognition and praise.

In conclusion, the business literature concept of authentic leadership seems to have applicability to educational settings. Measuring the authentic leadership construct requires participation from the leader's subordinates. The authenticity of the school principal is positively related to teachers' trust and engagement levels. The participants' demographic measures hold no relationships of significance with any of the components of the study.

#### IMPLICATIONS FOR PRACTICE

The intention of the study was to inform university professional preparation programs, administrator selection and assessment processes, practicing principals, and leadership development programs. The concept of leader authenticity should be taught in university preparation courses, such as fundamentals of leadership, the principalship, and organizational theory and behavior. George and colleagues' (2007) and Goffee and Jones's (2005) articles are excellent resources to summarize the authenticity concepts for executives as well as stimulate discussions concerning applicability to effective leadership practices. The attribute of authenticity should be sought and rewarded in administrator selection and assessment processes. Examples of such activities can be drawn from the work of Buckingham and Coffman (1999), who detailed behavior patterns of effective leaders. Practicing principals would do well to incorporate checks for authenticity in seeking feedback from their staffs concerning their leadership style effectiveness. Finally, leadership professional development programs should include coverage on the merits of leader authenticity and its impact on followers' trust and engagement.

#### LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study took place in one school district and needs to be replicated in other settings to explore its representativeness. Better data-gathering



techniques are needed to secure greater teacher participation. The study's methods were cumbersome and may have led to atrophy of teacher participation. With larger teacher participation, researchers could explore an additional level of inquiry: student academic achievement and its relationship to principal authenticity and teacher trust and engagement. Such an exploration would reveal important considerations for policymakers. Although we set aside the principals' data on their own authenticity measures, they may contain interesting patterns when compared to teachers' perceptions of principals' authenticity. Could concordance or discordance about authenticity between principals and their staffs lead to stronger trust, engagement, and outcomes? Other combinations of variables in educational settings come to mind. Is there a relationship between principals' authenticity and teachers' retention? Is there a relationship between principals' authenticity and school district principals' evaluation measures? These questions are salient, and their answers could provide valuable information to practicing principals, district administrators, university preparation programs, and professional development efforts.

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