

Isopraxis Leadership: Leader Confidence, Managerial Strategy, and Organizational Performance

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Attention has been given to the notion that organizational leaders' expressed confidence and optimism regarding their organizations' performance can affect that performance by increasing the motivation and/or self-efficacy of subordinates. This idea, a part of various leadership theories, we call "isopraxis leadership." This paper examines the logic of the claim, reviews and critiques extant evidence, develops a measure of leader confidence (the starting point for isopraxis leadership), undertakes initial validation of the measure, and then tests for the link between leader confidence and performance among several hundred public organizations. Leader confidence is found to be largely unrelated to performance; some evidence indicates that it can help only for those organizations that are already doing well or have more resources than average – that is, where it is least needed.

Leadership is a central concern of public management (Morse, Buss, and Kinghorn 2007; Trottier, Van Wort, and Wang 2008; Rainey 2009; Fernández, Cho, and Perry 2010; Hansen and Villadsen 2010; Getha-Taylor et al. 2011) and may be all the more important under today's conditions of constrained resources and heightened concerns about governmental performance. How leaders lead, however, is perceived to be a highly complex process that contains numerous factors, contingencies, and considerations. The contributions of scholarship to clarifying the role and impact of leadership on organizational performance at the same time must be characterized as disappointing. In an extensive review of the literature some time ago Yukl (1989, p. 253) concluded that "several thousand empirical studies have been conducted on leadership effectiveness, but most of the results are contradictory and inconclusive." In the three decades since that assessment, studies of leadership have continued to proliferate, but consensus on key questions remains elusive (Fernández 2005; Van Slyke and Alexander 2006; Yukl 2010).

Still, progress on this issue would seem to be a central concern for the field. As Van Wart has observed,

"Although many types of leadership in the public sector have been discussed extensively, such as leadership by those in policy positions and working in community settings, administrative leadership within organizations has received scant attention and would benefit from a research agenda linking explicit and well-articulated models with concrete data in public-sector settings" (2003, p. 214).

Working toward this objective is the aim of this paper. The present analysis steps back from the complexity of existing work on leadership to focus on one aspect generally common to most leadership theories, particularly transformational leadership and charismatic leadership: the role of leader optimism and confidence regarding the leader's own organization, or a leader's efficacy regarding that organization. Leaders' sense of organizational efficacy is part of numerous approaches to leadership; while it is not a stand-alone, self-contained, and comprehensive theory of leadership, it is part of so many leadership theories that it merits study in its own right. This abridged leadership "theory" that is focused on confident leaders and high standards we term "isopraxis leadership." The basic idea is that the leader serves

as a role model and motivator for employees; that is, subordinates adopt the confidence, standards, and behaviors (mimetic isomorphism) of the leader. As a consequence, so the theoretical arguments indicate, others in the organization improve their individual and collective performance. As with other notions of how and why leadership might make a difference, of course, the key is whether isopraxis leadership actually works or, more directly, does leader optimism result in better organizational performance? Can such a hypothesis be validated?

The analysis proceeds in four parts. First, the existing leadership literature is briefly reviewed to outline the key aspects of isopraxis leadership and the role of leader optimism. Second, a measure of leader confidence/optimism is developed, one based on a leader's perceptions of organizational performance relative to actual performance. Third, this measure is validated by comparing it to key measures of management, particularly managerial strategy. Fourth, the heart of the paper examines whether organizations led by confident leaders have higher performance than those led by others. Finally, the article concludes with a discussion of the implications of these findings for theories of public management and for the training of public managers.

TRANSFORMATIONAL AND CHARISMATIC LEADERSHIP

The idea of isopraxis leadership and leader optimism is not a stand-alone theory, but rather a concept that has its roots in the extensive literatures on leadership, particularly transformational leadership and charismatic leadership (Burns 1978; Yukl 2010). Rather than attempting the daunting task of a full test of all aspects of leadership with the requisite myriad variables and multiple interactions, this analysis seeks to isolate a single component, common to many theories, and provide a systematic assessment of that component. In linking transformational leadership to charismatic leadership, Rainey (2009, p. 332) notes some commonalities, particularly that both notions hold that leaders “express confidence in followers, set high expectations for them, and empower them”

(see also Yukl 1989, p. 260; 2010; Shamir, House and Arthur 1993, p. 578). One can find such expressions for leader confidence in Conger and Kanungo's (1998) theory of charismatic leadership, Bass' (1998) theory of transformational leadership, and Warren Bennis' general theories of leadership (Bennis and Nanus 1985, p. 59).

This set of leadership ideas is related to but distinct from the work of psychologist Albert Bandura (1977) and his concept of self-efficacy as part of his development of social learning theory (see Rainey 2009, p. 323). We first characterize the literature on self-efficacy and then distinguish isopraxis leadership from this general line of work.

Self-efficacy is essentially a “person's estimate of his or her capacity to orchestrate performance on a specific task” (Gist and Mitchell 1992, p. 183). Self-efficacy is deemed important not only because it relates to the leader's confidence but also because it means that such leaders tend to set higher goals and communicate high expectations to their followers (see also the notion of “self-leadership” offered by Sims and Lorenzi (1992, p. 301-4). Bennis and Nanus (1985, p. 59), who use the term “positive self-regard” rather than self-efficacy, state about their sample of 90 leaders, “Like athletes, they regularly set higher goals and objectives for themselves.”

The link to athletics is important for two reasons. First, it generates a large number of metaphors that are often used as symbols in leadership and motivation seminars. Successful coaches and former athletes are often used as practical illustrations in leadership training. Second, it links the concept to an extensive body of research on elite athletes and performance that is presumed to be translatable to organizational performance. The basic literature on athletes, however, is fundamentally flawed. While numerous studies have demonstrated a positive relationship between self-efficacy (or confidence) and performance for athletes participating in team (Feltz and Lirgg 1998; Moritz, Feltz, Farhbach and Mack 2000; Taylor 2006) and individual sports (Gould, Weiss and Weinberg 1981; Highlen and Bennett 1983; Taylor 2006), none of the

studies control for the past performance of the athletes. So while there are positive correlations between self-efficacy and performance, this literature cannot determine if self-efficacy causes better performance or better performance causes self-efficacy.

Bandura's work and the empirical work on self-efficacy in athletics and other fields were introduced specifically to management by Marilyn Gist (1987; Gist and Mitchell 1992). The subsequent applications then distinguished between individual self-efficacy and group self-efficacy based on whether the efficacy measure is for individuals or for the entire work group (that is, whether the question is asked about confidence in the group or self-confidence, see Jung and Sosik 2003). The empirical literature is promising in that self-efficacy has shown a relationship to performance in a variety of areas ranging from life insurance sales (Barling and Beattie 1983) to faculty research productivity (Taylor, Locke, Lee, and Gist 1984). An extensive meta-analysis of self-efficacy (covering nearly 200 empirical studies) found a strong relationship between self-efficacy and a large number of dependent variables that were either measures of employee performance or could be linked to performance, such as absenteeism (see Judge, Jackson, Shaw, Scott and Rich 2007). Judge et al., however, criticize this literature for failing to control for a variety of other individual characteristics such as general mental ability, experience, conscientiousness, etc. that are correlated with both self-efficacy and organizational outcomes. When this is done in the meta-analysis, the impact of self-efficacy drops significantly and is rarely among the more important determinants of organizational performance. The same question might be raised about leader optimism and confidence and its possible relation to organizational performance.

Furthermore, what we are terming isopraxis leadership is not the same as individual self-efficacy on the part of leaders, because it does not refer to the individual leader's "self" or even to a work group's sense of its own efficacy, but to a leader's optimism about and confidence in the leader's organization. Most earlier attempts to develop a self-efficacy scale are based on

a concept of the individual self -- either generalized self-efficacy (e.g., Sherer et al. 1982; Chen, Gully, and Eden, 2001), or "particularized" judgments of individual capability for certain sorts of tasks (Pajares 2006). Some of the extant scales seek to tap managers' self-efficacy regarding the leadership of change (Paglis and Green, 2002) -- this is also clearly inapplicable. Our notion of isopraxis leadership refers to how leader optimism and confidence about how the whole organization contributes to organizational performance.

What is the microtheory behind the notion that isopraxis leadership and its core concept, leader optimism, will lead to higher levels of organizational performance? That is, how might the confidence and optimism of a leader affect the performance of the entire organization which relies on the actions of many individuals other than the leader? Two theoretical pathways are found in the literature: (1) that perceptions of such leadership lead to greater identification with the organization and higher levels of motivation on the part of organization members, and (2) that subordinates adopt similar attitudes (isomorphism or the role-model effect) and that the heightened subordinate sense of optimism and confidence leads directly to greater performance.

In terms of motivation Bennis and Nanus (1985, p. 32) state, "What we observed was that our 90 leaders induced (stemming from their own self-regard) positive other-regard in their employees." Bass (1998) specifically contends that the end result of transformational leadership is that followers trust and respect the leader and are then motivated to do more than they originally anticipated doing (see also Pillai and Williams 2004, p. 164). Some go so far as to contrast this leadership style with that assumed by economic models of organization. Such leaders "go beyond a simple performance-reward transaction by elevating their subordinates' self-image and self-confidence and by arousing subordinates' emotional attachment to the leader's espoused values and to the collective" (Javidan and Waldman 2003, p. 229). Phrased differently, Boal and Bryson (1988, p. 19) argue that "the primary impact of charismatic leadership is through facilitation of the creation of a

new or different world that is phenomenologically valid to the follower.”

Shamir, House, and Arthur (1993, p. 578) raise a key point when they stress that “new leadership theories emphasize symbolic leader behavior, visionary and inspirational messages . . . display of confidence in self and followers . . .” Shamir et al. (1993, p. 580) specifically note that this style of leadership stresses motivation “by faith, rather than rewards.” The point is worth emphasizing in that much of the literature has a messianic tone and that leadership training often takes on an explicitly religious overtone, sometimes with biblical quotations. (An unsystematic indicator of this point is that four of the ten paid links for a Google search of “leadership training” were also among the ten paid links found under “Christian leadership training.”)

This role-model effect might well be more prevalent in some types of organizations than others. Yukl (1989, p. 277) argues that when organizations are faced with vague goals and significant constraints, and when management does not have many direct ways to exert influence on organizational performance, “it is all the more important to maintain the impression that organizational leaders know what they are doing and are making good progress toward attaining organizational objectives.” Such a situation is likely very common in public organizations; thus, it is no surprise that Park and Rainey (2008) find that when federal employees perceive transformational leadership, they also express higher levels of commitment to the organization and greater job satisfaction.

In terms of impacts on performance, Bandura’s work plays a key role. Bandura’s social learning theory holds that people “learn by watching others, through modeling and vicarious learning” (see Rainey 2009, p. 323). When leaders express confidence in the organization’s performance, they are also expressing confidence in the organization’s members. Subordinates who observe this confidence incorporate it into their own views of the organization and their role in that organization. An extensive literature in psychology deals with what is called the “Pygmalion

effect,” the idea that if role models establish high expectations for individuals, those individuals will perform better. The Pygmalion effect was first demonstrated with school children in Rosenthal and Jacobson (1968) and was applied to organizational settings by Eden (1984). Eden linked the Pygmalion effect to expectancy theory whereby the higher an individual’s level of expectancy, the greater the motivation to perform. “Conveying high expectations by a credible, authoritative source evidently motivates subordinates to mobilize more of their own resources to perform well” (Eden 1984, p. 66).

Recent research shows that the Pygmalion effect works not just for individuals but also for groups of individuals. Since Eden (1990) first proposed group-level efficacy as a concept and linked it to the performance of Israeli army platoons, several other studies have also been conducted with groups or teams as the units of analysis. A meta-analysis of 53 group perceived-efficacy studies found a strong relationship between self-perceived group efficacy and group performance (Gully, Incalcaterra, Joshi, Beaubien 2002). As with the individual level studies, however, these investigations do not control for past performance or similar measures of ability.

The literature suggests, in sum, that what we call isopraxis leadership starts with leader optimism and confidence in the organization’s performance, and that leader confidence might affect organizational performance through a couple of pathways – by either a) establishing a role model, b) motivating others, or both. Whether such a tendency is a fairly stable trait or a consciously adopted style is an open question at this point, and one not addressed or answered in the present study. Although the above discussion separates motivational and role model effects, in practice the two are likely to be conflated. Isopraxis leaders are unlikely to just become role models and not also seek to manage the organization. This combination is best summed up by Shamir, House, and Arthur (1993, p. 582): “Charismatic leaders increase effort-accomplishment expectancies by enhancing the followers’ self-esteem by expressing high expectations of the followers and confidence in

the followers' ability to meet such expectations. . . . By doing so, they enhance followers' perceived self-efficacy." Additional research shows that charismatic leaders then use different management practices because "high expectations among supervisors causes them to be both more supportive and more task oriented towards their subordinates, resulting in higher subordinate performance" (Eden 1984, p. 66). Management practices, thus, reinforce the role model effect.

The literature touching in one way or another on isopraxis leadership, efficacy, and organizational performance is impressive. There are several hundred studies in a wide range of organizations that show that the style of leadership we term isopraxis leads to increases in subordinate efficacy. Increased self-efficacy, then, leads directly to higher levels of performance. The two issues are rarely discussed but are important in terms of public management-causality and possible negative effects.

The causality question has been alluded to in the above discussion. Self-efficacy is related to performance, but quite clearly high levels of performance also lead to higher self-efficacy (Jung and Sosik 2003; Hannah, Avolio, Luthans, and Harms 2008) and vice versa (Campbell and Hackett 1986). Without recognizing this reciprocal relationship, one might be lulled into thinking that all it takes to be a more effective organization is to have a more confident cheerleader in charge. This is not as absurd as it sounds. Former Secretary of Education Margaret Spellings specifically described her contribution in these terms. Indeed, much of the training literature seems to imply that self-efficacy is exogenous to performance and that manipulating self-efficacy will generate better performance. Although a few studies recognize the reciprocal relationship between self-efficacy and organizational performance, there are no systematic investigations that incorporate this relationship in a rigorous statistical test.

The management literature that recognizes the reciprocal causation relies on techniques that have long been abandoned as inadequate in other parts

of the social science literature, such as cross-lagged correlations. Bandura has influenced the former literature to accept the notion of controlling for residualized past performance to determine causality (see Heggstad and Kanfer 2005, p. 90). This technique involves regressing past performance at time 1 on self-efficacy at time 1 and using these residuals as a control when linking self-efficacy at time 2 to performance at time 2. This technique essentially assigns all the common variance of the two concepts to self-efficacy and thus biases the results in favor of finding that self-efficacy matters.

The negative effects are also rarely discussed or studied. In a study of students, Vancouver and Kendall (2006) actually found that greater self-efficacy resulted in less effort, which in turn led to lower performance. In their theoretical work on management and self-efficacy, Gist and Mitchell (1992) noted that the emulation of leaders by followers could lead to groupthink and a resulting inability to react to change. Perhaps most directly on point, Romzek and Ingraham's (2000) examination of the air crash that killed Congressman Ron Brown found that the Air Force's "can do" orientation (very similar to self-efficacy) led to taking greater risks and was a factor contributing to the crash. An inflated view of organizational performance can also mean that the organization is not aware of performance gaps and does not address existing problems (see Downs 1967).

MEASURING LEADER CONFIDENCE

Measuring isopraxis leadership would mean coming up with a measure of leader confidence, a measure of the role model effect, and a measure of group efficacy, as well as good indicators of organizational performance and the appropriate controls. That would be a highly ambitious project that is not possible in any existing public organization database. Our effort is more limited and focuses on measuring leaders' positive orientation and their confident assessment of their organization's performance. Established scales measuring such a concept are not available. Indeed, even for the different notion of self-efficacy there is no agreement on a standard measure. In considering this point, it is useful to start with Bandura himself,

who has indicated that “there is no all-purpose measure of perceived self-efficacy. The ‘one measure fits all’ approach usually has limited explanatory and predictive value” (2005, p. 307). It would seem that what is needed here is something like self-efficacy related to the tasks at hand, but (1) focused not on the individual manager but on the overall organization’s functioning, and (2) with past performance purged. This latter point is elaborated upon shortly, and we need to include such an adjustment in our development of a measure of leader confidence, even though that has not been done in the large literature on self-efficacy and related concepts. For the former point, we need items that tap how the manager sees the organization’s functioning, not the manager’s own functioning. So leader confidence has to do with managers’ performance-related confidence about or optimism in the organization. One scale offered to tap public managers’ organizational confidence has been offered by Feeney and Boardman (2011). Unfortunately, the three items comprising their scale are unrelated or, at best, distantly related to managers’ assessment of the organization’s performance in terms of actually delivering outcomes. Instead, their measure includes managers’ assessment of their organization’s ethical standards, the “overall quality of work” in their organization, and their sense of pride in working for their organization. We develop an alternative measure -- one tapping managers’ assessment of multiple measures of organizational performance in the public sector field of interest, and one which filters out past performance from the measure.

Such a measure needs convergent validity, but that is not all. Given the difficulties evident in earlier research that did not take care to separate out past performance from a sense of efficacy and positive assessment, an appropriate measure must also have discriminant validity. It is just as important to establish what isopraxis leadership is not and how it differs from other variables as it is to determine precisely what it is. In particular, without separating confidence and optimism from ability, a measure can offer little to the study of this aspect of leadership in public management. To the extent that confidence and optimism are nothing

more than a reflection of the talent and skills of the individual or the organization, the prescription to enhance confidence reduces to “improve the organization by improving the organization.” Dizzy Dean once stated, “It ain’t bragging if you can back it up”; similarly, leader confidence needs to mean something more than the prior performance of the organization (Baseball Almanac, n.d.) (The quote was first used by baseball pitcher Dean in 1934 concerning how many wins his brother Paul and he would win in the 1934 season – he told the reporter they’d win 45. The quote is also attributed later to Muhammad Ali in regard to his fight with Sonny Liston). Without this distinction, isopraxis management suffers from the same flaw as self-efficacy research in sports and private sector organizations. In short, we might say “It ain’t isopraxis leadership if you’re already doing very well.”

A measure of leader confidence, therefore, needs to purge prior performance out of any assessments of organizational efficacy. In the present paper, this is done by using a unique data set that combines both surveys of top-level managers and an elaborate performance appraisal system.

Data for this analysis come from two sources, the Academic Excellence Indicator System of the Texas Education Agency (TEA) and an original survey of Texas school superintendents. The state of Texas operates an elaborate accountability system for Texas schools that collects information on a variety of performance indicators as well as data on students and finances. All data other than administrators’ perceptions of performance and management style are taken from this source for the academic years 2008-2009 and 2009-2010, the year immediately preceding and the year immediately following the gathering of the perceptual data. For the perceptual data, school system superintendents were surveyed via a four-wave mail survey between July 2009 and November 2009. The response rate for public school superintendents was 58%; the survey also included some charter school superintendents for a total of 642 respondents. (The survey contains responses from

595 public superintendents and 47 charter school superintendents. The response rate for charter schools is difficult to determine since each charter school is treated by the state as a separate district; but if two or more schools are operated by the same organization, they would have the same superintendent. Inclusion of the charter school superintendents had no impact on any of the results presented in this paper.) The sample is representative of the entire population with no apparent biases. There were no statistically significant differences between the respondents and the non-respondents in terms of the Texas Assessment of Knowledge and Skills (TAKS, the highly salient statewide standardized examination, explained further below) scores, college-bound scores, the racial and income distribution of students, and instructional expenditures. Respondents did receive \$480 less in per pupil revenue than non-respondents even though educational expenditures were similar.

The measure of leader confidence in public education that is adopted here begins by asking managers to evaluate the quality of their own organization's performance compared to similar districts. Superintendents were asked "compared to similar districts, my assessment of our ____ performance is" They were asked to rate their district on a five-point scale using the categories "excellent," "above average," "average," "below average," and "inadequate." (The phrase "similar districts" was used to allow the manager to adjust for context – that is, to give the organization more credit for more difficult tasks or less credit if resources are ample. Analysis not shown indicates that the respondents did not make any adjustments based on the race, ethnicity, or poverty level of the students or for the resources of the district, teacher experience, and a wide variety of other factors.) Three different stimulus items were used: "TAKS performance," "college-bound performance," and "overall quality of education in the district." Such perceptual measures as these are commonly used in a variety of management surveys, including the Federal Human Capital Survey and the Merit Principles Survey, among others. These measures are frequently used as actual performance measures without any attempt to determine if the measures are objectively related to performance. Such

an approach fails to distinguish between how well the organization does and the manager's confidence in the organization's performance (see Andrews, Boyne, and Walker 2006). In the case of these top managers, there is no question that they are interested in performance measures (the great majority of them indicate by survey responses that scoring well on the TAKS is their organization's most important goal; college-bound performance is also highly ranked as an organizational goal) and that they have ready access to detailed performance information on their own and all other districts and are updated on an annual basis by the TEA. To convert these responses into a pure measure of confidence in the organization and thus tap a portion of isopraxis leadership, actual performance is purged from the measures. That is, for the perceived TAKS performance measure, one can predict that measure with the district's actual TAKS performance for the previous year (2009) via regression and take the residual of this regression as the indicator of self-efficacy. Positive residuals reflect a higher perception of performance than would be expected from objective measures. For the college-bound performance indicator, a similar regression is performed by using as the independent variable the percentage of students who score above 1110 on the SAT or its ACT equivalent (equal to the top 20% nationwide), a standard that is defined by the state of Texas as an indicator of college readiness. (Regression residuals are used in a wide range of policy research from economic crises (Rattsø 1999) to public attitudes (de Boef and Kellstedt 2004). These regression residuals are normally distributed (Martinez-Iglewicz test) and meet the assumptions required for factor analysis (Thompson 2004; Yates 1987).) For the overall quality of education measure, both TAKS performance and the 1110 indicator are used as independent variables. These residual measures are uncorrelated with student characteristics (race, income), teacher experience and turnover, and revenues per student (see below). They are positively correlated with superintendent experience (+.21), weakly correlated with class size and, by definition, uncorrelated with the previous year's performance score. The residuals from each of these three equations are then factor analyzed to get the common variance. The results of the factor

analysis are presented in table 1, which shows a concept with a high degree of reliability; the loadings range from .78 to .89, accounting for 70% of the total individual item variance (the Cronbach’s alpha is .78). The factor scores are used here as the measure of leader confidence.

Table 1. Measuring Leader Confidence: The Factor Analysis

Measure	Loading
Residual TAKS Performance	.83
Residual College-bound Performance	.78
Residual Overall Quality of Education	.89

Eigenvalue 2.10

Percentage of the variance 70.0

Although the factor measure has face validity as a measure of leader confidence, additional information can be provided concerning the concept’s convergent and discriminant validity (Zeller and Carmines 1980) by correlating it with other measures of management, particularly management strategy. This is especially important for a new measure of organizational behavior to ensure that a new and distinct element of management is being tapped. In particular, one would expect the confident leaders to engage in what Miles and Snow (1978) term “prospecting” – the search for new ideas and new strategies to implement in and through the organization. Table 2 shows that the measure of isopraxis leadership is positively correlated with two common measures of prospecting – agreement with statements about being among the first organizations to adopt new ideas and about continually searching for new opportunities to provide services to clientele.

This prospecting strategy of leadership, however, should not be taken to indicate that the confident leader is excessively focused on the external environment of the organization. Further analyses reported in table 2 determine that there is no relationship between the confident leader measure and some other survey items, including a factor score of networking with environmental actors or with initiating those

Table 2. How Do Confident Leaders Manage?

Correlations with Other Management Measures

Measure	Correlation	Probability
Managerial Prospecting		
First to adopt new ideas	.21	<.0001
Search for new opportunities to provide	.18	<.0001
Buffering		
Control outside factors that affect district	.10	.01
Try to limit external events impact	.02	ns
Managerial Networking	-.01	ns
Network Initiating	.01	ns
Managerial Stability	.15	.001
Internal Management/ Human Resources (Quality of teachers, principals, etc.)	.41	<.0001
Employee Stability	.05	ns
Teacher experience (years)	-.11	.01
Delegate Authority (principal’s discretion)	.11	.01

Organizational Correlates of Leader Confidence

Measure	Correlation	Probability
Size (enrollment)	.01	ns
Centralization (percent central administration)	.16	<.0001
Revenue per student	.04	ns
Instructional expenditures per student	.05	ns
Low income students (percent)	-.03	ns
African American students	.03	ns
Latino students	.00	ns
Charter school	.19	<.0001

interactions. (The networking measure is a factor score of the frequency of contact from daily to never with eleven actors in the environment. The single general factor generates an eigenvalue of 3.48. The initiation measure is simply a count of which of these interactions were initiated by the superintendent.) This conclusion generally extends to efforts to buffer the organization from the environment. Although the response to trying to “control outside factors that affect the district” has a significant positive relationship, the correlation is weaker; and there is no relationship with a desire to limit the impact of external events. Confident leaders are more likely to have served in the organization a longer time (see Gist and Mitchell 1992, p. 191), albeit modestly, and are slightly more likely to endorse delegating authority to mid-level managers. The latter is consistent with the role model/isomorphic aspects of charismatic leadership. To the extent that subordinates adopt the isopraxis leader as a role model, the leader can be more generous in delegating authority.

The strongest relationship in table 2 is a positive one with an internal management or human resources factor at .45, thereby suggesting that the impact of confident leadership could well be through the process of either developing quality employees or motivating others in the organization. (This factor (eigenvalue 2.18) combines an assessment of the quality of teachers, the quality of principal’s management skills, the quality of professional development programs, and agreement with the statement that “with people in this organization, we can make any program work,” and the willingness to recommend a subordinate for a superintendent position in another organization.) This measure has a strong evaluative component zeroing in on the perceived quality of subordinate managers and line personnel. This pattern clearly reflects a leader’s confidence in organizational personnel. If this relationship reflects motivation, however, one would expect a strong relationship with employee stability (100 minus the turnover percent); but that correlation is statistically insignificant. More strikingly, confident leadership is associated with less teacher experience, a relationship that is inconsistent with the idea that this management approach works via motivation.

The bottom portion of Table 2 examines a set of organizational-level correlates with the measure of leader confidence. Gist and Mitchell (1992, p. 194) hypothesize, for example, that self-efficacy is associated with task difficulty. The short story is that with the exception of administrative centralization and charter schools, there are no organizational-level correlates of the leadership confidence, including size (enrollment), resources (revenues per student and instructional expenditures per student), or task difficulty (the percentage of black, Latino and low-income students). Confident leaders are found in more centralized organizations, in this case measured as the percentage of the total number of employees located in central administration. This behavioral centralization should be contrasted with the above correlation with delegation.

The charter schools correlation is quite consistent with what is known about leadership and charter schools. Charter schools are started by entrepreneurs who perceive that they can educate children better than existing public schools. Charter school leaders need to recruit parents and students, find additional sources of funds, and build a coherent educational system. Generally, this process relies on identification with a specific philosophy of education (e.g., Montessori or “back to basics”). Because charters often have lower financial resources per student than public schools, they need to rely on more normative forms of motivation, something that confident isopraxis leaders are more likely to provide.

This set of validation efforts, in short, indicates that the measure of leader confidence is a reasonable one. The article next turns to the performance-related hypothesis: does leader confidence boost organizational performance?

THE IMPACT OF LEADER CONFIDENCE ON PERFORMANCE

To determine if leader confidence has an impact on the performance of public organizations, analysis focuses on three key output indicators for Texas public education – performance on the statewide exam, daily

student attendance, and a measure of college-bound performance.

The Texas Assessment of Knowledge and Skills (TAKS) is a statewide, high-stakes test that all students in grades 3 through 11 must take. The exams cover established learning criteria for individual grades and in some cases for specific classes. The measure is the percentage of students who passed all exams that they took for the 2009-2010 academic year (the year after the survey). This score is a central part of the state accountability system – schools receive performance ratings based on these test scores. The results are highly salient both to the public (the release of the results is front page news) and the superintendents, who often have performance clauses in their contracts. The mean TAKS pass rate was 75 with a standard deviation of 12 and a normal distribution.

Student attendance is a basic-level performance indicator, but one crucial for the organization, since state funding is based on the number of students attending classes. The mean is 95.8% with a standard deviation of 1.6, with a modest negative skew.

The final measure is the percentage of students who score above 1110 on the SAT or its ACT equivalent, an official state definition of a “college ready” student. For Texas districts the mean is 21.3 with a standard deviation of 13.7; the distribution is truncated at the low end and has a relatively long positive tail representing the state’s wealthy districts.

Leader confidence will be used to predict these three performance indicators for the year following the survey that tapped managers’ perceptual data. In addition, standard practice in education production functions is to control for resources and task difficulty (Finn and Achilles 1999; Hanushek 1996; Hedges and Greenwald 1996; Nye, Hedges, and Konstanopoulos 1999; Wenglinsky 1997). Four measures of resources will be included – average teacher salary, class size, teacher stability (100 minus the turnover rate), and per pupil instructional spending. Three measures of task difficulty focus on groups of students with additional educational needs that are likely to be reflected in

overall test scores – the percentages of black, Latino, and low-income students.

Before proceeding to the analysis, one might question if the top manager of a school district would be able to influence these performance indicators given that there are a large number of factors that influence student performance. The education literature strongly endorses the belief that superintendent leadership matters both from the perspective of policy makers (Hess 1999) and on the basis of managerial theory (Ouchi and Segal 2003). A systematic quantitative study of the management of school districts, in fact, attributed 20 percent of the cross-district variation to top-level management (see O’Toole and Meier 2011).

Table 3 presents two regressions involving TAKS scores. The first replicates the type of analysis generally done in the self-efficacy literature – that is, it does not control for the previous level of performance (the latter variable would be the functional equivalent of talent levels in regard to athletes). This equation shows a positive relationship for leader confidence (significant at the .05 level with a one-tailed test). Because the confidence measure is a factor score, it has an effective range of -3 to +3. This means that the maximum effect size of confident leadership on TAKS performance in this under-specified equation could be as high as 3.7 percentage points. While that might not at first glance appear to be a large impact, such an increase would be highly valued in the Texas high-stakes performance system. Unfortunately, as the second regression demonstrates, this impact is spurious. When one controls for prior performance, the impact of leader confidence is effectively zero. Confident leaders appear to be echoing performance rather than influencing it.

We do not discuss in any detail here the relationships for the control variables. All are significant and, except for instructional spending, are in the correct direction. Care should be taken in any implication that more funds spent on instruction are associated with lower performance. This apparent relationship is the impact of instructional funds after controlling for teacher salary and class size, two factors that make up the bulk

Table 3. Leader Confidence and TAKS Performance

Dependent Variable = Pass rate on state standardized test (TAKS) in 2010

Variable	Without Past Performance		With Past Performance	
	Slope	t-score	Slope	t-score
Leader Confidence	.616	1.84	-.023	0.12
2009 TAKS Pass Rate	—	—	.797	37.24
% Black Students	-.069	2.15	-.003	0.12
% Latino Students	-.049	2.39	.009	0.66
% Low Income Students	-.239	8.32	-.048	2.86
Teachers Salary (000s)	.522	4.61	.125	1.97
Class Size	-.501	2.69	-.107	1.03
Teacher Stability	.239	6.23	.017	0.77
Instruction Spending (000)	-1.204	3.17	-.208	0.98
Standard error	8.21		4.55	
R-square	.49		8.44	
F	72.81		364.94	
N	622		622	

Table 4. Leader Confidence and Student Attendance

Dependent Variable = Average daily attendance in 2010

Variable	Without Past Performance		With Past Performance	
	Slope	t-score	Slope	t-score
Leader Confidence	.007	0.11	-.031	1.51
2009 Attendance Rate	—	—	.758	66.23
% Black Students	-.001	0.10	-.001	0.46
% Latino Students	-.006	1.68	.000	0.12
% Low Income Students	-.002	0.49	-.005	2.64
Teachers Salary (000s)	.069	3.52	.009	1.24
Class Size	-.244	7.55	-.023	1.91
Teacher Stability	.031	4.83	.003	1.14
Instruction Spending (000)	-1.46	2.20	-.001	0.04
Standard error	1.43		0.50	
R-square	.24		.91	
F	24.43		663.36	
N	625		625	

Table 5. Leader Confidence and College-bound Performance

Dependent Variable = Students Above 1110 on SAT in 2010

Variable	Without Past Performance		With Past Performance	
	Slope	t-score	Slope	t-score
Leader Confidence	.656	1.43	.930	2.20
2009 College Boards	—	—	.450	10.07
% Black Students	-.060	1.24	-.055	1.27
% Latino Students	-.016	0.54	-.023	0.85
% Low Income Students	-.401	9.49	-.208	4.87
Teachers Salary (000s)	.407	2.40	.209	1.31
Class Size	-.190	0.66	-.083	0.29
Teacher Stability	.069	1.13	-.053	0.92
Instruction Spending (000)	-.663	1.00	-.591	0.09
Standard error	10.63		9.47	
R-square	.41		.52	
F	47.42		63.04	
N	557		541	

of instructional funding.

Table 4 examines the impact of leader confidence on student attendance, a rather different performance metric. If the motivational aspects of isopraxis leadership are effective, then this positive school atmosphere could well make school more interesting for students and, at the margins, play a role in enticing more students to attend classes. While there is not much variation in student attendance, even modest changes in the rate affect the level of state funding and overall performance and, thus, are well worth pursuing. Leader confidence, however, is unrelated to student attendance in the first regression and actually negatively linked (albeit at the .10 level with one tail) in the autoregressive equation. The clear conclusion is that leader confidence has no impact on student attendance.

The impact of leaders' confidence on high-end college prep performance is examined in table 5. For the first time, it can be seen that confidence matters after

one controls for past performance. A one standard deviation increase in confidence is associated with a .93 percentage point increase in students scoring above the 1110 mark on the SAT. Across the full range of the variable, isopraxis leadership could have an impact as large as 5.6 percentage points. This is a substantial impact, a 26% increase over the average for all districts (21.3). Regression diagnostics confirm the robustness of the finding; it is not affected by extreme values, the size of the district, or the exclusion of any of the control variables. What is puzzling about this relationship, however, is that it is not reflected in the component parts. That is, when one examines average SAT scores and average ACT scores (detailed results not shown), neither is affected by leader confidence. The impact of leadership appears only to affect the highest set of scores but does not change the average at all.

Given the size of the impact, it is important to probe whether or not leader confidence could be expected to benefit all types of organizations on such a performance criterion or, alternatively, whether it might be

applicable only to certain types of organizations. One possibility might be the Dizzy Dean hypothesis, that only organizations that are already talented have the ability to use isopraxis leadership to improve further. This notion essentially suggests an interaction between past performance and leader confidence. The clearest way to show such a relationship is to simply divide the sample into two groups – those above the mean in terms of 2009 college board performance and those below the mean. If the Dean hypothesis is correct, leader confidence should be strongly correlated with performance for those with high levels of past performance and unrelated for those with low performance. Table 6 reports the coefficients for these regressions and shows exactly that pattern. For districts above the mean in 2009, the coefficient for leader confidence jumps to 1.665 and is statistically significant; for the districts below the mean, there is no relationship between confidence and performance.

Table 6. Leader Confidence and College Performance: The Need for Positive Past Performance and Resources

Dependent Variable = Students above 1110 on SAT

Variable	Slope	t-score
Poor Past Performance		
Impact of Leader Confidence	-.021	0.04
Good Past Performance*		
Impact of Leader Confidence	1.665	2.68
Below Average Resources		
Impact of Leader Confidence	.171	0.34
Above Average Resources**		
Impact of Leader Confidence	1.705	2.55

Note: All equations control for 2009 college boards, percent black students, percent Latino students, percent low income students, teachers' salary, class size, teacher stability, and instructional spending.

*Good past performance = greater than 19.5% above 1110

**Above average resources = more than \$10,000 in revenue per pupil

The issue can be pursued still further. If sports are a source of inspiration for management research, then perhaps it might be worth testing the New York Yankees' hypothesis – that is, that some districts simply have a lot more resources and thus can throw money at any problem that arises. Again, this suggests that confidence is more likely to pay off when accompanied by ample resources – once again, a hypothesis about an interaction. To investigate this possibility, an analysis is performed by splitting the sample at the mean in terms of revenues per student. The lower portion of Table 6 shows the confirming results. For those districts with more plentiful resources, confidence has a strong positive benefit (a significant coefficient of 1.70), but for those with below average resources, such a leadership style has no impact on student performance on the college board exams.

Table 6 raises the question as to whether talent and resources are essentially the same thing or substitutes for each other in terms of allowing confidence to work its magic. If one examines the 112 districts that are above the mean in terms of past performance and above the mean in terms of resources, one finds that the effect is additive rather than substitutive. The slope within this subsample (regression not shown) jumps dramatically to 3.41 and is strongly significant. For the other 428 districts, there is no relationship between leader confidence and performance on the college boards. This pattern of relationships holds only for the college board indicator. Similar regressions with TAKS rates and attendance did not find any subgroups where isopraxis leadership was positively associated with greater performance.

IMPLICATIONS

The strategy of analysis here was to step back from the complexity of current leadership theories and focus on one element common to many theories, the idea that managers need to be self-confident, optimistic individuals who serve as role models to subordinates. While this valued trait is found in charismatic leadership, transformational leadership and other leadership theories, it is only one aspect of theories that specify numerous various and complex

interrelationships. The present analysis starts with the idea of isopraxis leadership – the process by which leader confidence might affect organizational performance through role modeling and building the confidence of subordinates – and then examines the key concept of leader confidence and its relationship to three measures of organizational performance.

The overall results, as sketched in the preceding section, present a rather negative assessment of leader confidence. For some important performance measures, this leadership style has no influence on results. This is even the case for student attendance as a measure, although this one in particular would seem to be especially amenable to influence by a confident and possibly motivating top manager. Further, although this leadership approach does seem to matter for college-bound performance, it does so only for organizations that are already performing well and/or lucky enough to have better than average resources. The rich (in funds or achievement) get richer. For this performance criterion, additionally, the subsequent performance effects are additive. Confidence by organizational leaders seems to do nothing for those school districts that most need improvement. This finding is a particularly perverse one. The Dizzy Dean hypothesis and the New York Yankees hypothesis find some support, it is true; but even if there is no crying in baseball, one can be saddened to discover such a pattern.

These results pertain directly only to the several hundred public organizations that are included in this sample and for the time period under investigation here. The findings, furthermore, derive from using a new measure of the concept of leader confidence. The measure has some obvious strengths, especially the purging of prior performance, but it is still relatively untested. Further validation is warranted. The results here are most likely to be valid for those other public organizations that share key characteristics – those that are highly professionalized with substantial discretion lodged at the street/classroom level. It could be the case that performance in other types of organizations responds to leader confidence more (or perhaps less) favorably than in the sample analyzed here. It will

therefore be important to replicate this investigation in other empirical settings.

Of course, doing so in an appropriate way will require data in time series that include sensible measures of archival performance and also perceptual assessments of performance by leaders to tap the degree of confidence and optimism that is present. Purging already-established levels of performance must be an essential part of such studies, even though – and especially because – taking this step has not been part of any earlier studies of self-efficacy in leadership and individual (e.g., athletic) or organizational performance. The present study shows that omitting the control for established performance biases results toward positive findings regarding confidence.

The implications of the study reported here certainly have the potential reach to additional public management settings and also – because of the failure until now of researchers in many other fields to purge past performance – into a number of other realms, from the determinants of athletic performance to the practice of leadership in large organizations to the content of motivational/leadership training seminars for public, private, and nonprofit managers. This point does not entail any sort of overall indictment of training and development initiatives. But while it is undoubtedly true that investments in leadership development and training can bear substantial dividends, it seems equally likely that some much-touted versions of such training produce little in terms of overall performance. The trick will be in separating the wheat from the chaff.

Much has been said about the value of connecting the research agendas and findings of public management scholars to the pressing needs of public managers and public organizations. This study, while representing a preliminary investigation, underscores that point. Large amounts of time and financial resources are currently being expended on behalf of training programs and efficacy initiatives that are sold to clients on the basis of virtually no systematic empirical evidence aside from anecdotes and testimonials. One should be appropriately suspicious of such claims when they

appear in other fields of knowledge, such as medical practice, where the evidence-based movement has made important strides toward performance improvements. One should also be cautious in accepting such claims on behalf of isopraxis leadership, an approach to management with many adherents, an industry of trainers and consultants, but essentially no properly validated results.

This is one of those topics on which one should be skeptical of the findings of interpretive research. Most people would prefer that isopraxis leadership works. Many people believe that it should. Those trained in the value of confidence and optimism for meeting public objectives may carry understandable, implicit biases about its influence in terms of their own experience. They may even note an association between efficacy and performance on the basis of their and others' experiences. The role of systematic research in such a circumstance can be to examine the data, conduct research that can get past the danger of spurious findings – thus distinguishing association from causality, and thereby assist the world of practice.

The credibility of academics and their research, not to mention the social value of their findings, is likely to be considerably enhanced by conducting research that bears direct relevance to, and actually assists, some of the key decisions that public managers must make. How to prepare such managers to lead, and how to expend public funds on behalf of this objective, are certainly among these key decisions.

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