

CEO TRANSFORMATIONAL LEADERSHIP: THE ROLE OF GOAL IMPORTANCE CONGRUENCE IN TOP MANAGEMENT TEAMS

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Using data from 94 top management teams, we found that dyadic goal importance congruence between CEOs and vice presidents (VPs) partially mediated the relationship of CEO transformational leadership with individual VPs' attitudes, but not their performance. However, finer-grained analyses suggested it may be higher VP perceptions of goal importance, rather than the exact correspondence between CEO and VP goal importance ratings, that are associated with both CEO transformational leadership and VP attitudes. At the organizational level, CEO transformational leadership was positively related to within-team goal importance congruence, which in turn was positively related to organizational performance.

In his seminal book *Leadership*, Pulitzer Prize-winning author James McGregor Burns wrote, “The function of leadership is to engage followers, not merely to activate them, to commingle needs and aspirations and goals in a common enterprise, and in the process to make better citizens of both leaders and followers” (1978: 461). A large body of theoretical and empirical research emanating from Burns’s perspective has supported the relationship of such transformational leadership with follower attitudes, motivation, and individual, group, and organizational performance (Judge & Piccolo, 2004). Recently, empirical research has begun to identify intervening mechanisms that help explain the link between transformational leadership and these positive outcomes, especially at the individual level. For example, followers of transformational leaders have been found to have higher levels of trust in their leaders (Podsakoff, MacKenzie, Moorman, & Fetter, 1990) as well as higher levels of self-efficacy (Kirkpatrick & Locke, 1996). Yet, despite Burns’s emphasis on the “commingling” of aspirations and goals, there has been surprisingly little research on the relationship between transformational leadership and shared perspectives about organizational goals.

One study, however, provides preliminary evidence of a relationship between transformational leadership and shared perceptions about organizational goals. Berson and Avolio (2004) found that transformational leaders were rated by followers as

more effective at communicating organizational goals. Their exploratory analysis of 11 leader-follower dyads also showed that leaders’ and followers’ qualitative reports of organizational goals tended to be more similar when a leader was rated as more transformational. Thus, there is some evidence that transformational leadership and shared perceptions about organizational goals are positively related.

The purpose of the current research was to better understand this relationship between transformational leadership and shared perceptions about organizational goals, and its association with critical outcomes—including individual attitudes and performance, as well as organizational performance. By focusing on transformational leadership within top management teams (TMTs), we were able to examine CEO transformational leadership, the attitudes and performance of individual members of TMTs (typically vice presidents [VPs]), and organizational performance in the upper echelons of a multiorganization sample.

Thus, this study contributes to existing research in three key ways. First, we examine *dyadic goal importance congruence* between CEOs and VPs as an intervening mechanism by which CEO transformational leadership is related to VP attitudes and performance. We define dyadic goal importance congruence as the similarity between CEO and individual VP perceptions about the importance of specific goals to the organization. Unlike Berson

and Avolio (2004), who collected qualitative accounts of the goals of a small sample of leaders and followers, we quantitatively assessed dyadic goal importance congruence in multiple organizations. Specifically, we calculated dyadic goal importance congruence by comparing CEO and VP ratings of the importance of seven specific organizational goals, identified from a presurvey of CEOs as relevant for their industry. This approach is consistent with previous research on goal congruence (e.g., Vancouver & Schmitt, 1991; Witt, 1998), which has been described as an important type of person-organization fit (Kristof-Brown, Zimmerman, & Johnson, 2005). Thus, a second contribution of our research comes from investigating transformational leadership as a possible antecedent to goal congruence. As Kristof-Brown et al. (2005) noted, little is known about antecedents of person-organization fit in general. Our study is an attempt to fill this gap.

Finally, we extend previous research on transformational leadership to the organizational level of analysis. Although research has begun to examine a transformational leadership-organizational performance link (e.g., Waldman, Ramirez, House, & Puranam, 2001), little is known about the intervening mechanisms that help explain this relationship. To fill this gap, research must move beyond the dyadic leader-follower relationship to examine how transformational CEOs relate to their top management teams as collectives (Dess, 1987; Katzenbach, 1997). As such, in this study, we examine *within-team goal importance congruence* as a possible link between CEO transformational leadership and firm performance. We define within-team goal importance congruence as the similarity of perceptions about the importance of specific organizational goals among all members of a TMT (including the CEO). A combination of detailed survey data from upper echelon leaders and objective financial indicators of performance allowed us to better understand the relationship between transformational CEOs and firm performance.

TRANSFORMATIONAL LEADERSHIP AND INDIVIDUAL OUTCOMES

A key role of all business leaders is defining strategic goals for their organizations and aligning the efforts of all organization members with these goals (e.g., Messick, 2005). Strategic leadership theory suggests that the values, experiences, and knowledge of leaders in the upper echelons of organizations impact the strategic decisions made by these leaders, ultimately influencing organizational performance (Finkelstein & Hambrick, 1996). Recent reviews of the strategic leadership literature

suggest that theories of transformational leadership should be integrated with strategic leadership perspectives to increase understanding of the processes by which leaders communicate and implement organizational strategies (Boal & Hooijberg, 2001; Cannella & Monroe, 1997).

According to Bass (1985), transformational leadership comprises four primary behaviors. First, transformational leaders exhibit *idealized influence*, behaving consistently with their promises and gaining the trust of others. Second, transformational leaders communicate compelling visions of the future and emphasize to others how their work contributes to the achievement of the vision, a behavior referred to as *inspirational motivation*. Third, through the behavior of *intellectual stimulation*, transformational leaders provide a safe environment in which others can think creatively and challenge the status quo. Finally, transformational leaders exhibit the behavior of *individualized consideration* by recognizing the developmental needs of others and providing support to their followers.

We propose that CEO transformational leadership is associated with higher levels of dyadic goal importance congruence between CEOs and individual VPs. Several of the behaviors characteristic of transformational leaders support this association. First, as noted previously, a transformational leader communicates a vision of the future of an organization that may serve as the beginning of the goal-setting process, with the vision describing "a clear strategic direction in overarching terms for the organization" (Conger & Kanungo, 1998: 158). Thus, the transformational leader has a clear understanding of what goals are important to the organization, which he or she communicates through a vision for the organization's future.

Second, in communicating organizations' visions, transformational leaders use rhetorical strategies and modeling to ensure that followers attend to, understand, and remember the strategic directions embodied in the visions (Emrich, Brower, Feldman, & Garland, 2001). For example, transformational leaders' use of image-based rhetoric may be associated with higher levels of dyadic goal importance congruence because the images capture followers' attention and increase their comprehension of a leader's message (Emrich et al., 2001). Additionally, transformational leaders model behaviors that are consistent with organizational goals in their day-to-day activities (Bass, 1985; Shamir, House, & Arthur, 1993). Through the behavior of idealized influence, transformational leaders serve as influential role models, making decisions and exhibiting behaviors that support their words (Bass, 1985). Thus, goals communi-

cated and modeled by transformational leaders should be attended to, understood, and remembered more fully. Therefore, we hypothesize:

Hypothesis 1. CEO transformational leadership is positively related to dyadic goal importance congruence.

One reason that dyadic goal importance congruence is important is its relationship with follower attitudes, such as job satisfaction, organizational commitment, and satisfaction with one's leader. Extensive research has supported the positive relationship between demographic similarity within leader-follower dyads and follower attitudes (e.g., Tsui, Xin, & Egan, 1996); however, Harrison, Price, and Bell (1998) emphasized the importance of "deep-level" similarity, including similarity in attitudes, beliefs, and values. Although judgments about similarity on surface-level demographic variables may be made more quickly, similarity on deep-level variables is argued to have a stronger impact over time. Similarly, in the TMT literature, Priem, Lyon, and Dess (1999) questioned the use of demographic variables as proxies for underlying attitudes and beliefs. Thus, research on deep-level similarity within leader-follower dyads is needed to supplement the current literature on demographic similarity. Because of the central importance of goals in organizations, and especially among members of TMTs, we suggest dyadic goal importance congruence as a key example of deep-level similarity between CEOs and their VPs.

Dyadic goal importance congruence may be associated with follower attitudes for at least two reasons. First, when leaders and followers have similar perceptions about the importance of specific organizational goals, the followers are likely to receive higher levels of positive reinforcement for their work (Boswell, 2000), because their efforts are directed toward organizationally endorsed goals, which may, in turn, be positively associated with their job satisfaction. Additionally, leaders may have higher-quality relationships with followers who share their perceptions about the importance of specific organizational goals (Vancouver & Schmitt, 1991). Research on leader-member exchange has shown that high-quality exchange relationships are positively associated with follower job satisfaction, organizational commitment, and satisfaction with one's leader (Gerstner & Day, 1997).

Past empirical research has supported the positive relationship of dyadic goal importance congruence with follower attitudes (Vancouver & Schmitt, 1991; Witt, 1998). For example, in their study of school principals and teachers, Vancouver and

Schmitt found that principal-teacher goal importance congruence was positively related to teachers' job satisfaction and organizational commitment and negatively related to their intent to quit their jobs. Similarly, in their meta-analysis of the person-environment fit literature, Kristof-Brown et al. (2005) found a corrected correlation between goal congruence and job satisfaction of .31 ($k = 3$). None of these studies investigated leadership style as an antecedent to goal congruence, however, or predicted follower performance as a possible outcome.

Given past research findings and the importance of goals within TMTs, we hypothesize:

Hypothesis 2. Dyadic goal importance congruence is positively related to individual VP attitudes (job satisfaction, organizational commitment, and satisfaction with leader).

Finally, we expect dyadic goal importance congruence to be positively associated with individual VPs' job performance. Goals are an important motivational construct that help employees choose the activities on which they should expend effort (Locke & Latham, 2002). As Jauch, Osborn, and Terpening noted, dyadic goal importance congruence improves the likelihood that employees "will direct their efforts toward those goals most highly prized by top management" (1980: 544). A shared understanding of the importance of specific goals by CEOs and their VPs reduces ambiguity about effort allocation and helps ensure that VPs' activities in their own divisions directly contribute to their organizations' overarching goals. These efforts, in turn, should be viewed positively by the CEOs and be associated with higher performance ratings for the VPs. Therefore, we hypothesize:

Hypothesis 3. Dyadic goal importance congruence is positively related to CEOs' ratings of individual VP performance.

As noted earlier, past research has demonstrated the relationship of transformational leadership with follower attitudes and performance (Judge & Piccolo, 2004). Given these findings and the preceding hypotheses, we propose that dyadic goal importance congruence provides one explanation for the relationship between CEO transformational leadership and VP attitudes and performance. However, other processes have also been shown to mediate the relationship of transformational leadership with follower attitudes and performance (e.g., trust in a leader [Podsakoff et al., 1990]; follower self-efficacy [Kirkpatrick & Locke, 1996]). Thus, we propose two partial mediation hypotheses:

Hypothesis 4. The relationship between CEO transformational leadership and VP attitudes is partially mediated by dyadic goal importance congruence.

Hypothesis 5. The relationship between CEO transformational leadership and VP performance is partially mediated by dyadic goal importance congruence.

TRANSFORMATIONAL LEADERSHIP AND ORGANIZATIONAL PERFORMANCE

We now move from a focus on leader-follower dyads and individual attitudes and performance to a focus on the relationship of CEO transformational leadership with a TMT as a whole and organizational performance. Theory suggests that within-team goal importance congruence, or the similarity of perceptions about the importance of specific goals to their organization among all members of a TMT (including the CEO), may help explain the relationship between CEO transformational leadership and organizational performance. As we noted above, transformational leaders communicate a consistent sense of their organizations' strategic goals through both words and actions (Bass, 1985; Shamir et al., 1993). As a result, followers of transformational leaders should have a common understanding of the importance of specific organizational goals and thus have higher levels of within-team goal importance congruence. Additionally, transformational leadership theory suggests that transformational leaders emphasize collective, rather than individual interests (Shamir et al., 1993; Waldman & Yammarino, 1999). Because of this collective focus, followers of transformational leaders are likely to view the goals of their organizations as their own. This heightened salience of organizational goals within a highly cohesive group is likely to be related to higher levels of within-team goal importance congruence. On the basis of these transformational leadership behaviors, we hypothesize:

Hypothesis 6. CEO transformational leadership is positively related to within-team goal importance congruence.

Furthermore, we propose that within-team goal importance congruence is positively related to organizational performance. As Dess noted, "a high level of consensus in strategy-making is considered to be critical in promoting a unified direction for the firm and enhancing the successful implementation of a given strategy" (1987: 260). The strategic management literature has long highlighted the im-

portance of agreement about an organization's goals or objectives (i.e., ends) and the methods by which these objectives are reached (i.e., means) as a part of strategy formulation (e.g., Ansoff, 1965; Bower & Doz, 1979). A shared understanding of the importance of specific organizational goals among TMT members is a likely first step toward successful organizational performance on those goals.

Empirical research has generally shown that within-team goal importance congruence is positively related to organizational performance. For example, in a study of 12 nondiversified public corporations (Bourgeois, 1980), the similarity of TMT member perceptions about the importance of specific corporate objectives and the means to accomplish them was positively related to a composite of objective economic performance indicators. In a similar study, Dess (1987) focused on the relationship between agreement about ends and means and organizational performance within a single industry. The similarity of TMT member perceptions about the importance of either specific overall organizational objectives or the methods for achieving those objectives was found to be positively related to organizational performance. Thus, we draw from the strategic management literature to hypothesize:

Hypothesis 7. Within-team goal importance congruence is positively related to organizational performance.

As noted earlier, past research has supported the relationship of transformational leadership with organizational performance (Judge & Piccolo, 2004; Waldman et al., 2001). Given these findings and the preceding hypotheses, we propose that one reason that transformational leadership is positively associated with organizational performance is its relationship with within-team goal importance congruence. However, because other mechanisms may also mediate the relationship of transformational leadership with organizational performance, we propose a partial mediation hypothesis:

Hypothesis 8. The relationship between CEO transformational leadership and organizational performance is partially mediated by within-team goal importance congruence.

METHODS

Participants and Procedures

We surveyed members of the top management teams of 96 credit unions across the United States, including each credit union's CEO and other mem-

bers identified by the CEO. Because only TMTs with at least 3 team members responding were included in our sample, data from 2 credit unions were dropped from the study. For the remaining 94 credit unions, TMT size ranged from 4 to 14 members and averaged 6.4 members. Of the 601 total team members surveyed, 517 provided usable responses, yielding a response rate of 86 percent. All of this information was included in our organizational level analyses (Hypotheses 6–8). Ratings of individual VP performance, provided by the CEOs, were available for only 323 VPs. Hence, complete data were available for 323 CEO-VP dyads and 94 credit unions. Of the 517 team members responding, 54 percent were male and 93 percent were Caucasian. Seventy percent of the sample held bachelor's or graduate degrees. The average team member had been with the current credit union for 11.5 years and had been a member of the TMT for 7.1 years.

Survey data were collected at two points in time. An initial survey asked the CEO of each credit union to provide a written list of up to five goals that the credit union held in each of ten goal content categories identified by Bateman, O'Neill, and Kenworthy-U'Ren (2002). These categories included personal goals (not work-related, and therefore, not included in our analyses), financial goals, customer goals, market goals, operations goals, product goals, organizational goals, people goals, competitive goals, and strategy-making goals. The CEO was also asked to provide a list of all TMT members. Categorical coding of CEO responses generated a list of seven broad organizational goals endorsed in most credit unions: improving customer service, improving the credit union's image in the community, improving the efficiency of internal operations, improving relationships with employees, introducing new products and services, improving financial performance, and growing the number of members served. Approximately four months later, the CEO and all other TMT members completed an electronic survey. All TMT members provided ratings of their perceptions of the importance of these seven goals to their organization. VPs also provided ratings of the CEO's transformational leadership behaviors and of their own overall job satisfaction, satisfaction with the CEO, and organizational commitment. In a separate survey, the CEO rated the performance of each VP. Organizational performance, assessed as return on assets (ROA), was collected from the National Credit Union Administration's Web site (ncua.gov) approximately one year after all other data were collected.

Measures

Transformational leadership. We used the Multifactor Leadership Questionnaire (MLQ Form 5X; Bass & Avolio, 1995) to measure the four components of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The MLQ measures idealized influence with an eight-item scale and the remaining three behaviors with four-item scales. Respondents indicated the frequency with which each item described their CEO using a five-point Likert response scale (1 = "not at all," 5 = "frequently, if not always"). An average of 4.5 (s.d. = 1.9) TMT members rated each CEO. In our data set, confirmatory factor analysis revealed that a higher-order transformational leadership factor explained the common variance among the four leadership components ($\chi^2_{50} = 279.31$, $p < .01$; SRMR = .05, NNFI = .91, IFI = .93); therefore, we aggregated over dimensions ($\alpha = .94$). Moreover, following past research (e.g., Bono & Judge, 2003), we averaged over raters to obtain an aggregate leadership rating for each leader ($F_{95, 433} = 2.41$, $p < .01$; ICC[1] = .24; ICC[2] = .58; $r_{wg} = .85$, assuming a slight negative skew in the data).

Goal importance. We developed three-item scales to assess the importance of each of the seven CEO-identified credit union goals (21 items overall). Sample items included, "Improving customer service is an important goal to my credit union," "Improving the efficiency of internal operations is a goal that my credit union is actively pursuing," and "The CEO and senior management team spend a lot of time planning and setting objectives about improving relationships with employees." Each item was rated by all members of a TMT, including the CEO (1 = "strongly disagree," 5 = "strongly agree"). High ratings on the goal importance scales indicated that a respondent believed the specific goal was an important one to which the organization was devoting time and effort. We used a normative (i.e., rating), rather than an ipsative (i.e., ranking) format for evaluating goal importance for two reasons: (1) qualitative results from the preliminary CEO survey suggested that multiple goals may be viewed as equally important, and (2) ipsative measures provide no information regarding the magnitude of differences between goals, which is critical in congruence research (Edwards, 1993; Nunnally, 1978). Examining the mean level and standard deviation of goal importance ratings across all goals suggested that no single type of goal (e.g., financial) was consistently rated as most important. Thus, although some goals may have been pursued to help accomplish others, that did not

appear to unduly influence the magnitude of the importance ratings. Consistently with prior research on goal congruence, we did not ask TMT members to compare the relative importance of these seven goals or other potential organizational goals, or to evaluate the consistency of the organizational goals with their own goal priorities (Vancouver & Schmitt, 1991), but only asked them to rate the importance of each goal to the credit union. A confirmatory factor analysis of the 21 items showed that seven goal factors captured the variance among the items ($\chi^2_{168} = 775.20$, $p < .01$; SRMR = .04, NNFI = .89, IFI = .91).

Dyadic goal importance congruence. We calculated a dyadic goal importance congruence score for each CEO-VP dyad using the *D*-statistic (Cronbach & Gleser, 1953), computed as the square root of the sum of the squared differences between VP goal importance ratings and CEO goal importance ratings. The *D*-statistic was multiplied by -1 so that a high score indicates high levels of similarity about the importance of specific organizational goals between a CEO and an individual VP.

Within-team goal importance congruence. Following previous empirical research on strategic consensus (e.g., Bourgeois, 1980; Dess, 1987), we operationalized within-team goal importance congruence by first calculating a standard deviation from the goal importance ratings provided by all TMT members (including the CEO) for each of the seven goals. The standard deviations were then summed, and the sum was multiplied by -1 . A high score on this variable implies high goal importance congruence among all TMT members.

VP attitudes. We included measures of three VP attitudes in our survey. A five-item response scale (1 = "strongly disagree," 5 = "strongly agree") was used for all items. Overall job satisfaction was measured using Brayfield and Rothe's (1951) five-item measure (e.g., "I feel fairly satisfied with my present job"). Each VP also completed the nine-item short form of the Organizational Commitment Questionnaire (OCQ; Mowday, Porter, & Steers, 1979; e.g., "I am proud to tell others that I am part of this organization"). Finally, VPs completed three items from the Job Diagnostic Survey (JDS; Hackman & Oldham, 1980) that assessed their satisfaction with their CEO (e.g., "I am satisfied with the overall quality of supervision I receive in my work"). A confirmatory factor analysis of the three attitudes scales revealed that the corrected correlations among the three factors ranged from .61 to .70. A higher-order factor analysis showed that a general attitudes factor explained the variance among job satisfaction, organizational commitment, and satisfaction with leader ($\chi^2_{24} = 58.35$, $p < .01$;

SRMR = .03, NNFI = .97, IFI = .98). The composite attitudes scale exhibited high reliability ($\alpha = .94$).

VP performance. CEOs rated the performance of each VP using an 11-item scale adapted from existing measures by Barrick and colleagues (Barrick, Parks, & Mount, 2005; Barrick, Stewart, Neubert, & Mount, 1998) and following Campbell's (1990) performance taxonomy. Items assessed four primary aspects of performance: task performance, communication, teamwork, and leadership. These items are included in the Appendix. A higher-order factor analysis revealed that a single overall performance factor explained the variance among the four performance factors ($\chi^2_{40} = 207.80$, $p < .01$; SRMR = .04, NNFI = .91, IFI = .94). The overall performance scale exhibited high reliability ($\alpha = .93$).

Organizational performance. In the preliminary survey, the credit union CEOs identified ROA as the most commonly used measure of organizational performance in the industry. Archival measures of ROA for 2004 were collected from the National Credit Union Administration one year after the second survey administration.

Control variables. Because organizational size has been found to have a positive relationship with transformational leadership and performance (e.g., Waldman et al., 2001), credit union size (number of members of the credit union) was included as a control variable. In addition, in keeping with past research on TMTs and organizational performance (Simons, Pelled, & Smith, 1999), credit union age and TMT size were also included as control variables.

Analysis

To test the individual-level hypotheses (Hypotheses 1–5), we estimated structural equation models using LISREL 8 (Jöreskog & Sörbom, 1996). For transformational leadership, VP attitudes, and VP performance, the lower-order factors served as indicators of the higher-order latent variables. Because there is debate in the literature regarding the causal direction of relationships between attitudes and performance (Judge, Thoresen, Bono, & Patton, 2001), we tested these outcomes in two separate models, to avoid the possible confound of an attitudes-performance relationship. Criteria articulated in James, Mulaik, and Brett (2006) suggested that support for the partial mediation hypotheses required that (1) CEO transformational leadership be related to dyadic goal importance congruence, (2) CEO transformational leadership be related to VP attitudes or performance, with dyadic goal importance congruence controlled for, and (3) dyadic goal importance congruence be related to VP atti-

tudes or performance, with CEO transformational leadership controlled.

As noted above, we used a *D*-statistic to assess dyadic goal importance congruence. This approach allowed us to test the mediation hypotheses using structural equation modeling. However, the *D*-statistic is prone to overly restrictive constraints and may disguise deviations from a relationship of “exact correspondence,” which is what is traditionally assumed when the term “congruence” is used (Edwards, Cable, Williamson, Lambert, & Shipp, 2006). Specifically, the statistical significance of a *D*-statistic may be due primarily to a strong main effect of one of the predictors. Moreover, there may be mean-level differences when congruence occurs on a high level of the predictor (versus a low level), or the incongruence in one direction (i.e., predictor $X >$ predictor Y) may have different effects than incongruence in the opposite direction ($X <$ Y) (Edwards et al., 2006). Therefore, to more precisely examine the exact nature of dyadic goal importance congruence on specific goals, we used techniques recommended by Edwards (1993, 1995).

First, to examine dyadic goal importance congruence as a dependent variable, we conducted two regression analyses for each of the seven goals (Edwards, 1995). We regressed CEO ratings of goal importance on CEO transformational leadership, and VP ratings of goal importance on CEO transformational leadership. Both regression lines were graphed together and the pattern of convergence of the two lines was examined. Second, we used polynomial regression analysis and three-dimensional surface plots to determine the precise nature of the relationship between CEO and VP ratings of the importance of the seven goals and VP attitudes and performance (Edwards, 1993). Five terms were used to represent the relationship between a CEO's and a VP's goal importance ratings: the CEO's rating of the importance of a goal (X), the VP's rating of the importance of that same goal (Y), the CEO's importance rating squared (X^2), the interaction between the CEO's and VP's ratings (XY), and the VP's importance rating squared (Y^2). To reduce multicollinearity and facilitate interpretation of the graphs, all predictor variables were scale-centered. A separate polynomial regression was run for each of the seven goals and each of the two dependent variables (attitudes and performance).

To test the organization-level hypotheses (Hypotheses 6–8), we again used LISREL 8 (Jöreskog & Sörbom, 1996), with the covariance matrix as input and procedures for testing partial mediation suggested by James et al. (2006). Polynomial regression analyses were not necessary at the organizational level of analysis, because the standard deviation in

goal importance ratings, rather than a difference score, was used to assess the overall level of within-team goal importance congruence.

The direction of the relationships in all of our structural equation models is based on transformational leadership theory. However, as we describe more fully in our discussion, our data did not allow us to firmly establish the causal direction of the relationships we tested. Equivalent models with a reverse causal direction could be posited that would yield equivalent fit indexes (Henley, Shook, & Peterson, 2006). Nevertheless, we tested the direction of relationships most consistent with transformational leadership theory and supported by experimental research on transformational leadership (e.g., Bono & Judge, 2003).

For all analyses, we screened the data for outliers using leverage, studentized residuals, and Cook's *D*-statistic (Belsley, Kuh, & Welsch, 1980; Fox, 1991). In only one of the analyses did observations exceed the minimum cutoff for all three criteria (Bollen & Jackman, 1990) and impact the interpretation of the results. In this analysis (the polynomial regression relating financial goal importance ratings and VP attitudes), the three outlying cases were removed from further analysis.

RESULTS

Individual Analysis

Table 1 shows descriptive statistics for the variables at the individual level of analysis.

To test the hypotheses regarding the relationships between CEO transformational leadership, dyadic goal importance congruence, and VP attitudes, we estimated a partially mediated model with dyadic goal importance congruence as the mediator. Table 2 includes the path coefficients for this model, which was a good fit to the data. Supporting Hypothesis 1, these results showed that VPs who worked with transformational CEOs had higher levels of dyadic goal importance congruence than VPs who worked with less transformational CEOs. Supporting Hypothesis 2, dyadic goal importance congruence was positively related to individual VP attitudes. Consistently with partial mediation (Hypothesis 4), CEO transformational leadership was positively related to VP attitudes even when the mediator variable was included.

For VP performance, the partially mediated model also provided a good overall fit to the data; however, testing the hypotheses required examining specific parameter estimates. In keeping with Hypothesis 1, CEO transformational leadership was positively related to dyadic goal importance con-

TABLE 1
Means, Standard Deviations, and Correlations of Individual-Level Variables^a

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. CEO transformational leadership	3.91	.40	.94																	
2. CEO goal importance—Customer service	4.49	.54	-.18**	.76																
3. CEO goal importance—Improving image	3.73	.88	.10	.23**	.90															
4. CEO goal importance—Efficient operations	4.17	.71	-.04	.27**	.04	.90														
5. CEO goal importance—Employee relations	3.82	.78	-.02	.41**	.50**	.41**	.84													
6. CEO goal importance—New products	4.12	.72	.12*	.26**	.42**	.02	.32**	.86												
7. CEO goal importance—Financial	4.32	.58	-.22**	.08	.02	.28**	.29**	-.06	.85											
8. CEO goal importance—Growing members	4.17	.66	.09	.24**	.10	.14*	.17**	.11*	.13*	.89										
9. VP goal importance—Customer service	4.28	.66	.21**	.08	.07	.01	.07	-.05	-.06	.03	.77									
10. VP goal importance—Improving image	3.53	.88	.28**	-.13*	.33*	-.08	-.01	.05	-.08	-.02	.38**	.90								
11. VP goal importance—Efficient operations	3.95	.68	.12*	.02	.01	.17**	.10	-.07	.08	.01	.32**	.20**	.85							
12. VP goal importance—Employee relations	3.62	.86	.16**	.04	.07	.04	.28**	.04	.07	.05	.45**	.29**	.30**	.91						
13. VP goal importance—New products	3.95	.73	.26**	.00	.14*	-.02	.05	.16**	-.17**	.08	.35**	.23**	.23**	.28**	.87					
14. VP goal importance—Financial	4.39	.62	.03	-.09	.00	.04	.02	-.13*	.15**	.04	.32**	.25**	.36**	.14*	.18**	.89				
15. VP goal importance—Growing members	3.93	.90	.20**	-.05	.03	.02	-.06	-.01	-.08	.33	.30**	.37**	.12*	.14*	.30**	.20**	.92			
16. Dyadic goal importance congruence	-2.30	.88	.15**	-.04	.05	.03	.14*	-.04	.04	.01	.32**	.25**	.28**	.33**	.21**	.14*	.33**			
17. VP attitudes	4.19	.54	.35**	-.02	.06	-.02	.33**	.00	-.06	.09	.26**	.24**	.33**	.31**	.29**	.19**	.22**	.22**	.94	
18. VP performance	3.62	.76	.12*	.04	-.10	.10	.05	-.08	.11	.05	.05	-.03	.18**	.15**	.05	.07	.04	.09	.37**	.93

^a $n = 323$. Values in bold on the diagonal are alpha reliability coefficients.

* $p < .05$

** $p < .01$

TABLE 2
Fit Indexes and Standardized Path Coefficients for Structural Equation Models

Model	χ^2 (df)	SRMR	NNFI	IFI	Transformational Leadership → Goal Importance Congruence	Goal Importance Congruence → Outcome	Transformational Leadership → Outcome
VP attitudes: Partially mediated (H4)	70.32 (18)*	.03	.94	.96	.15* (H1)	.19* (H2)	.37*
VP performance: Partially mediated (H5)	92.00 (25)*	.04	.94	.96	.15* (H1)	.08 (H3)	.12*
Organizational performance: Partially mediated (H8)	44.82 (20)*	.05	.86	.93	.19* (H6)	.20* (H7)	.09

* $p < .05$

gruence. However, contrary to Hypothesis 3, dyadic goal importance congruence was not related to VP performance. Thus, the results were not consistent with partial mediation (Hypothesis 5). Rather, CEO transformational leadership was directly related to both dyadic goal importance congruence and VP performance. As we would expect from these parameter estimates, the fit of an alternative model, with no link between dyadic goal importance congruence and performance, was not significantly different from the fit of the partially mediated model in terms of the chi-square test of differences ($\chi^2_{26} = 94.00$, $p < .05$; SRMR = .04; NNFI = .94; IFI = .96; $\Delta\chi^2 = 2.00$, $p > .05$).

To better understand the precise relationship between transformational leadership and dyadic goal importance congruence, we followed Edwards's (1995) procedures and regressed CEO and VP ratings of goal importance on CEO transformational

leadership. For all goals except financial, the two lines converged at higher levels of CEO transformational leadership (one standard deviation above the mean). An example of this pattern of results is shown in Figure 1 for the goal of growing the number of members served. The graph demonstrates that this convergence occurred primarily because of the positive relationship between CEO transformational leadership and VP ratings of goal importance.

We next used polynomial regression analysis and three-dimensional surface plots to determine the precise relationship between CEO and VP importance ratings for the seven goals and VP attitudes and performance. Table 3 presents the results of the polynomial regression analyses, and Figure 2 shows selected surface plots. For all seven goals, the amount of variance explained in VP attitudes by the combination of five goal importance terms

FIGURE 1
Relationship of CEO Transformational Leadership with CEO and VP Importance Ratings of Growing the Number of Members Served

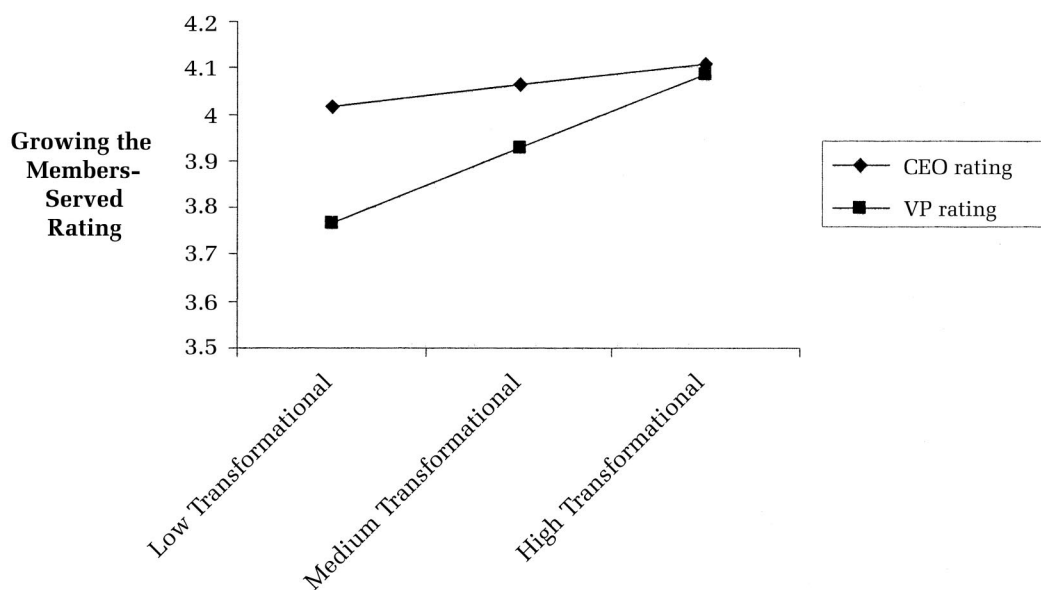


TABLE 3
Results of Polynomial Regression Analyses for
Vice Presidents' and CEOs' Ratings of Goal
Importance^a

Variables	X _(b1)	Y _(b2)	X ² _(b3)	XY _(b4)	Y ² _(b5)	R ²
<i>VP attitudes</i>						
Goal 1	-.20	.08	.04	.07	.02	.07*
Goal 2	-.01	.11*	-.01	.01	.05	.06*
Goal 3	-.15	.09	-.04	.21*	-.05	.14*
Goal 4	-.08	.15*	-.02	.07	.01	.11*
Goal 5	-.06	.19*	-.04	.08	-.03	.10*
Goal 6	.18	.16	-.06	-.11	.05	.05*
Goal 7	.00	.02	-.01	.04	.07*	.08*
<i>VP performance</i>						
Goal 1	-.19	-.30	.03	.13	.09	.02
Goal 2	-.13*	-.01	.03	.04	-.02	.01
Goal 3	-.10	-.19	-.04	.30*	.01	.06*
Goal 4	-.06	.12	.08	.00	.01	.03*
Goal 5	-.25*	-.05	.03	.13	-.01	.02
Goal 6	.33	-.16	-.15	.10	.05	.03
Goal 7	-.06	-.12	.01	.10	.03	.02

^a Values are unstandardized regression coefficients. X = CEO goal importance rating; Y = VP goal importance rating; goal 1 = improving customer service; goal 2 = improving image in the community; goal 3 = improving efficiency of internal operations; goal 4 = improving employee relationships; goal 5 = introducing new products and services; goal 6 = improving financial performance; goal 7 = growing number of members served.

**p* < .05

was statistically significant ($R^2 = .05-.14$). For VP performance, the combination of goal terms was only significant for two of the seven goals (efficiency and relationships with employees). Examining the surface plots for VP attitudes, we found that VP attitudes were highest when VPs and CEOs both rated a goal as highly important to the credit union for five of the seven goals (shown by the highest point in the far back corner of Figure 2a). For six of the seven goals, attitudes were lowest when the CEO rated a goal as highly important, but the VP rated the goal as not important (shown in the far right corner of Figure 2a). However, when the VP rated a goal as important and the CEO rated it as less important, attitudes were still high (see the far left corner of Figure 2a). This pattern of relationships suggests that “exact correspondence” between CEO and VP goals is *not* necessary for positive VP attitudes for six of the seven goals examined.

The relationship between CEO and VP ratings of financial goals and VP attitudes showed a different pattern (Figure 2b). For financial goals, attitudes were highest when *either* the VP or the CEO (or both) reported financial goals as important. If both reported that financial goals were unimportant, attitudes were at their lowest point. Again, these results do *not* suggest that exact correspondence in

CEO and VP goals is associated with the highest VP attitudes. However, because there may be problems with extrapolating response surface graphs to points where few or no data occur (Atkins & Wood, 2002), caution needs to be taken in interpreting points on the financial goals graph below the midpoint of the importance scale. Only 1.8 percent of VP ratings and 2.8 percent of CEO ratings of financial goals fell below the midpoint of the scale.

Only for the goal of efficient operations was there support for exact correspondence. For efficiency goals, the interaction between CEO and VP goal importance ratings was statistically significant, and the graph demonstrates that *any* incongruence on the importance of this goal was associated with lower attitudes (see the low points on the left and right sides of Figure 2c). The same relationship was exhibited for efficiency goals and VP performance.

Organizational Analysis

Table 4 shows descriptive statistics for the variables at the organizational level.

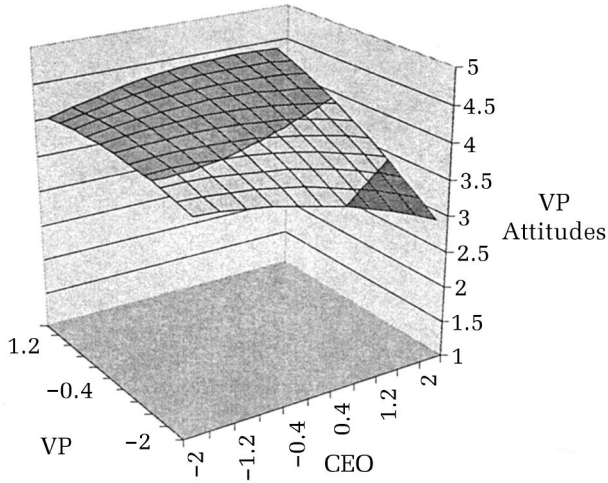
To examine the relationships of CEO transformational leadership, within-team goal importance congruence, and organizational performance, we estimated a partially mediated model. In this model, which was an overall good fit to the data (see Table 2), credit union size was the only control variable that was positively related to organizational performance ($\gamma = .24$). CEO transformational leadership was positively related to within-team goal importance congruence, supporting Hypothesis 6. Further, as predicted in Hypothesis 7, higher levels of within-team goal importance congruence were positively related to organizational performance, as assessed by ROA. Because CEO transformational leadership and organizational performance were not significantly related, even when within-team goal importance congruence was excluded from the model, the results were inconsistent with a partially mediated relationship as predicted in Hypothesis 8. Instead, the results were consistent with an indirect relationship between the variables (Mathieu & Taylor, 2006). As we expected in view of the parameter estimates, a chi-square test of difference showed that the fit of a model with no direct link between CEO transformational leadership and organizational performance was not significantly different from the fit of the partially mediated model ($\chi^2_{21} = 45.46, p < .05$; SRMR = .05, NNFI = .87, IFI = .93; $\Delta\chi^2 = 0.64, p > .05$).

DISCUSSION

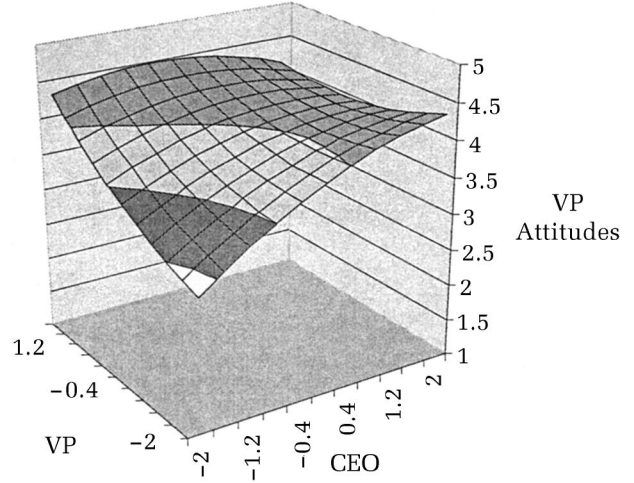
This study adds to the growing body of research that examines the relationship of transformational

FIGURE 2
Surface Graphs of the Relationship of CEO and VP Goal Importance Ratings with VP Attitudes

(2a) New Product Goals (Representative)



(2b) Financial Goals



(2c) Efficiency Goals

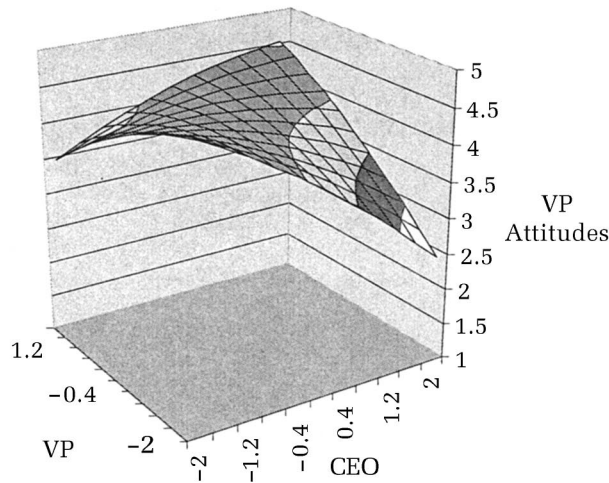


TABLE 4
Means, Standard Deviations, and Correlations of Organization-Level Variables^a

Variable	Mean	s.d.	1	2	3	4	5	6
1. Credit union size	50.01	49.50						
2. Credit union age	51.63	18.34	-.21*					
3. TMT size	6.37	1.90	.30**	-.08				
4. CEO transformational leadership	3.88	0.45	.20	-.01	.09	.94		
5. Within-team goal importance congruence	-5.20	1.17	.08	-.13	-.15	.23*		
6. Credit union financial performance	0.88	0.42	.27**	-.14	.10	.16	.22*	

^a *n* = 94; credit union size is in thousands of members. Bold value is an alpha reliability coefficient.

* *p* < .05

** *p* < .01

leadership with follower attitudes, follower performance, and organizational performance, and makes a unique contribution to the literature by examining goal importance congruence as one mechanism

that helps explain these relationships. Within top management teams, we used survey data and objective indicators of organizational performance to explore dyadic goal importance congruence as a

mediator of the relationship of CEO transformational leadership with vice presidents' attitudes and performance, and within-team goal importance congruence as a mediator of the CEO transformational leadership and organizational performance relationship. Results from structural equation models suggested that CEO transformational leadership was related to both dyadic and within-team goal importance congruence, which in turn were related to individual VP attitudes and organizational performance, respectively. However, finer-grained analysis at the individual level suggested a more complex pattern of results.

Theoretical Implications

First, our results have implications for both transformational leadership theory and person-environment fit research. Our structural equation models supported the hypothesis that transformational leadership is associated with higher dyadic goal importance congruence; however, follow-up analyses showed a convergence of CEO and VP ratings of goal importance occurred when CEOs were more transformational primarily because VPs who worked with transformational CEOs rated goals as more important than did VPs who did not work with such CEOs. Further, polynomial regression results showed that exact correspondence between CEO and VP goal importance ratings was associated with the highest VP attitude levels only in the case of efficiency goals. For most goals, lower VP attitudes appeared only when the VPs rated the goals as less important than did their CEOs, but not when both CEOs and VPs rated goals as highly important or when the CEOs rated them as less important than did the VPs.

Taken together, these individual-level results suggest it may be higher goal importance perceptions among VPs, rather than the exact correspondence between CEO and VP goal importance ratings, that are associated with both higher levels of CEO transformational leadership and more positive VP attitudes. For all the sampled CEOs, the mean goal importance level is higher than the mean goal importance level as rated by the VPs for six of the seven specific goals (excluding financial goals). However, in transformational CEO-VP dyads, this difference is smaller because mean VP goal importance perceptions are higher than the mean in dyads with less transformational CEOs. It is possible that transformational CEOs communicate such a broad and compelling vision for their organizations that VPs perceive all organizational goals as being of high importance. Alternatively, it is possible that in transformational CEO-VP dyads, empowered

VPs had more voice in determining the direction of their credit unions and, through their increased involvement, perceived all of the specific goals as highly important. Future research is needed to explore these possibilities, yet it is clear that goal importance perceptions play an important role in the story told by our individual-level results. These results and the unique pattern of findings for different goals would have been masked if we had only used the *D*-statistic (Cronbach & Gleser, 1953) to operationalize dyadic goal importance congruence.

In our organization-level analysis, the structural equation modeling results showed an indirect relationship between CEO transformational leadership and organizational performance, with within-team goal importance congruence as an intervening variable. These results suggest the utility of combining transformational leadership and strategic leadership perspectives to understand the relationship between leadership at the upper echelons and organizational performance. Although in strategic leadership theory (Finkelstein & Hambrick, 1996) leader values, experiences, and knowledge are proposed as impacting strategic choices and ultimately organizational performance, our results suggested that goal importance congruence among TMT members also impacts the relationship between CEO leadership and organizational performance.

Managerial Implications

Combining our results with conclusions from previous research on goal congruence, goal setting, and transformational leadership offers some compelling implications for leaders and organizations. First, although our findings supported a positive relationship between dyadic goal importance congruence and VP attitudes, they also suggested that attitudes were lowest when a leader rated a goal as highly important and followers rated it as low in importance for six of the seven goals. Thus, organizations should focus on reducing this type of disagreement. If a goal is indeed an important part of an organization's overall strategy, the leader may need to use multiple techniques to persuade followers of the importance of the goal. Given the positive relationship between transformational leadership and VP goal importance ratings found in our study, transformational leadership behaviors—such as communicating a compelling vision of the future—may prove to be effective for increasing follower goal importance ratings. However, it is also important to note that for efficiency goals, VP attitudes were at their highest levels only when CEO and VP goal importance ratings showed exact

correspondence. Thus, our results suggested that organizations must focus on reducing all types of disagreement for this type of goal.

Our study also highlights an association between within-team goal importance congruence and organizational performance. Despite the often criticized lack of teamwork at the top levels in organizations (Katzenbach, 1997), our results suggest an association between higher agreement about the importance of specific organizational goals among TMT members and organizational performance. Although other research has suggested that TMTs can function effectively even as loosely coupled working groups (Barrick, Bradley, Kristof-Brown, & Colbert, 2007; Katzenbach, 1997), our current results underscore the importance of shared objectives. Organizations are encouraged to devote time and resources to actively promoting a shared understanding of the importance of specific organizational goals within their TMTs. Although our study suggests that CEO leadership behaviors may help achieve this objective, within-team goal importance congruence may ultimately be influenced by all team members.

Strengths and Limitations

As do all studies, this one has strengths and limitations. First, because the majority of the variables were collected simultaneously, we were not able to unambiguously specify the causal direction of the relationships in our models. The posited causal direction from transformational leadership through goal importance congruence to individual and organizational outcomes is based on transformational leadership theory and past experimental research (e.g., Kirkpatrick & Locke, 1996); however, equivalent models with reverse causal directions are also plausible (Agle, Nagarajan, Sonnenfeld, & Srinivasan, 2006). When followers share perceptions about the importance of specific organizational goals with their leader, they may assess leadership behaviors positively, irrespective of actual leader behavior. We attempted to minimize this bias by aggregating follower ratings of leadership. However, future research should utilize experimental and longitudinal designs to empirically test causal ordering among these variables.

Second, although the collection of survey data from all TMT members is a strength of the study, the use of survey measures does present some limitations. For example, the goal importance scale asked TMT members to assess the importance of seven goals to their organization. These goals were based on qualitative data collected from CEOs; however, this list may have omitted some goals that

specific credit unions were pursuing. Additionally, CEOs provided ratings of VP performance, which could have been influenced by a “similar-to-me” bias.

Third, although our model includes goal importance congruence as a mediator of the relationship between transformational leadership and outcomes, we did not measure additional mechanisms, such as social identification, that would help explain why transformational leadership is related to goal importance congruence. Future research that explicitly measures these mechanisms will further understanding of the relationship of transformational leadership with dyadic and within-team goal importance congruence. Such research should also address the possibility that goal importance congruence is influenced not only by leader behaviors, but also by follower proactivity in influencing goal direction and seeking information.

Future Research

Taken as a whole, these results provide compelling evidence of important links between leadership, goal importance congruence, and outcomes. However, this is only a first step. David McClelland wrote, “Whatever the source of a leader’s ideas, he cannot inspire his people unless he expresses vivid goals which in some sense they want” (1975: 260). Yet most research on goal importance congruence, including the current study, focuses on whether people have similar perceptions about the importance of specific goals to an organization, rather than whether these goals are congruent with their personal goals and values. It is likely that organizational goals have an even stronger association with individual and organizational outcomes when they are not only commonly held, but also are viewed as motivating and are influences on more specific individual goals. The ability of TMT members to implement an organization’s goals, the effort expended to do so, and the appropriateness of these goals to the organization’s environment also likely influence performance. Thus, future research efforts incorporating ability, goal striving (Locke & Latham, 2002), and goal appropriateness would be important extensions of this research. Additionally, given the differences in the patterns of results among the different goal types, future research should continue to explore how and why different goal types differentially impact important individual and organizational outcomes.

REFERENCES

- Agle, B. R., Nagarajan, N. J., Sonnenfeld, J. A., & Srinivasan, D. 2006. Does CEO charisma matter? An empir-

- ical analysis of the relationships among organizational performance, environmental uncertainty, and top management team perceptions of CEO charisma. *Academy of Management Journal*, 49: 161–174.
- Ansoff, H. I. 1965. *Corporate strategy: An analytical approach to business policy for growth and expansion*. New York: McGraw-Hill.
- Atkins, P. W. B., & Wood, R. E. 2002. Self- versus others' ratings as predictors of assessment center ratings: Validation evidence for 360-degree feedback programs. *Personnel Psychology*, 55: 871–904.
- Barrick, M. R., Bradley, B. H., Kristof-Brown, A. L., & Colbert, A. E. 2007. The moderating role of top management team interdependence: Implications for real teams and working groups. *Academy of Management Journal*, 50: 544–577.
- Barrick, M. R., Parks, L., & Mount, M. K. 2005. Self-monitoring as a moderator of the relationships between personality traits and performance. *Personnel Psychology*, 58: 745–768.
- Barrick, M. R., Stewart, G. L., Neubert, M., & Mount, M. K. 1998. Relating member ability and personality to work team processes and team effectiveness. *Journal of Applied Psychology*, 83: 377–391.
- Bass, B. M. 1985. *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M., & Avolio, B. J. 1995. *Multifactor leadership questionnaire* (2nd ed.). Redwood City, CA: Mind Garden.
- Bateman, T. S., O'Neill, H., & Kenworthy-U'Ren, A. 2002. A hierarchical taxonomy of top managers' goals. *Journal of Applied Psychology*, 87: 1134–1148.
- Belsley, D. A., Kuh, E., & Welsch, R. E. 1980. *Regression diagnostics: Identifying influential data and sources of collinearity*. New York: Wiley.
- Berson, Y., & Avolio, B. J. 2004. Transformational leadership and the dissemination of organizational goals: A case study of a telecommunication firm. *Leadership Quarterly*, 15: 625–646.
- Boal, K. B., & Hooijberg, R. 2001. Strategic leadership research: Moving on. *Leadership Quarterly*, 11: 515–549.
- Bollen, K. A., & Jackman, R. W. 1990. Regression diagnostics: An expository treatment of outliers and influential cases. In J. Fox & J. S. Long (Eds.), *Modern methods of data analysis*: 257–291. Newbury Park, CA: Sage.
- Bono, J. E., & Judge, T. A. 2003. Self-concordance at work: Toward understanding the motivational effects of transformational leaders. *Academy of Management Journal*, 46: 554–571.
- Boswell, W. R. 2000. Employee alignment and the role of "line of sight." *Human Resource Planning*, 23(4): 48–49.
- Bourgeois, L. J. 1980. Performance and consensus. *Strategic Management Journal*, 1: 227–248.
- Bower, J., & Doz, Y. 1979. Strategy formulation: A social and political process. In D. Schendel & C. Hofer (Eds.), *Strategic management*: 152–166. Boston: Little, Brown.
- Brayfield, A. H., & Rothe, H. F. 1951. An index of job satisfaction. *Journal of Applied Psychology*, 35: 307–311.
- Burns, J. M. 1978. *Leadership*. New York: Harper & Row.
- Campbell, J. P. 1990. Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology*, vol. 2: 687–732. Palo Alto, CA: Consulting Psychologists Press.
- Cannella, A. A., Jr., & Monroe, M. J. 1997. Contrasting perspectives on strategic leaders: Toward a more realistic view of top managers. *Journal of Management*, 23: 213–237.
- Conger, J. A., & Kanungo, R. N. 1998. *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Cronbach, L. J., & Gleser, G. C. 1953. Assessing similarity between profiles. *Psychological Bulletin*, 50: 456–473.
- Dess, G. G. 1987. Consensus on strategy formulation and organizational performance: Competitors in a fragmented industry. *Strategic Management Journal*, 8: 259–277.
- Edwards, J. R. 1993. Problems with the use of profile similarity indices in the study of congruence in organizational research. *Personnel Psychology*, 46: 641–665.
- Edwards, J. R. 1995. Alternatives to difference scores as dependent variables in the study of congruence in organizational research. *Organizational Behavior and Human Decision Processes*, 64: 307–324.
- Edwards, J. R., Cable, D. M., Williamson, I. O., Lambert, L. S., & Shipp, A. J. 2006. The phenomenology of fit: Linking the person and environment to the subjective experience of person-environment fit. *Journal of Applied Psychology*, 91: 802–827.
- Emrich, C. G., Brower, H. H., Feldman, J. M., & Garland, H. 2001. Images in words: Presidential rhetoric, charisma, and greatness. *Administrative Science Quarterly*, 46: 527–557.
- Finkelstein, S., & Hambrick, D. C. 1996. *Strategic leadership: Top executives and their effects on organizations*. St. Paul: West.
- Fox, J. 1991. *Regression diagnostics: An introduction*. Newbury Park, CA: Sage.
- Gerstner, C. R., & Day, D. V. 1997. Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82: 827–844.

- Hackman, J. R., & Oldham, G. R. 1980. *Work redesign*. Reading, MA: Addison-Wesley.
- Harrison, D. A., Price, K. H., & Bell, M. P. 1998. Beyond relational demography: Time and the effects of surface- and deep-level diversity on work group cohesion. *Academy of Management Journal*, 41: 96–107.
- Henley, A. B., Shook, C. L., & Peterson, M. 2006. The presence of equivalent models in strategic management research using structural equation modeling. *Organizational Research Methods*, 9: 516–535.
- James, L. R., Mulaik, S. A., & Brett, J. M. 2006. A tale of two methods. *Organizational Research Methods*, 9: 233–245.
- Jauch, L. R., Osborn, R. N., & Terpening, W. D. 1980. Goal congruence and employee orientations: The substitution effect. *Academy of Management Journal*, 23: 544–550.
- Jöreskog, K. G., & Sörbom, D. 1996. *LISREL 8: User's reference guide*. Chicago: Scientific Software International.
- Judge, T. A., & Piccolo, R. F. 2004. Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89: 755–768.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. 2001. The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127: 376–407.
- Katzenbach, J. R. 1997. *Teams at the top: Unleashing the potential of both teams and individual leaders*. Boston: Harvard Business School Press.
- Kirkpatrick, S. A., & Locke, E. A. 1996. Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81: 36–51.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. 2005. Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58: 281–342.
- Locke, E. A., & Latham, G. P. 2002. Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57: 705–717.
- Mathieu, J. E., & Taylor, S. R. 2006. Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior*, 27: 1031–1056.
- McClelland, D. C. 1975. *The achievement motive*. New York: Irvington Publishers.
- Messick, D. M. 2005. On the psychological exchange between leaders and followers. In D. M. Messick & R. M. Kramer (Eds.), *The psychology of leadership: New perspectives and research*: 81–96. Mahwah, NJ: Erlbaum.
- Mowday, R., Porter, L., & Steers, R. 1979. The measurement of organizational commitment. *Journal of Vocational Behavior*, 14: 224–247.
- Nunnally, J. C. 1978. *Psychometric theory*. New York: McGraw-Hill.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1: 107–142.
- Priem, R. L., Lyon, D. W., & Dess, G. G. 1999. Inherent limitations of demographic proxies in top management team heterogeneity research. *Journal of Management*, 25: 935–953.
- Shamir, B., House, R. J., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4: 577–594.
- Simons, T., Pelled, L. H., & Smith, K. A. 1999. Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams. *Academy of Management Journal*, 42: 662–673.
- Tsui, A. S., Xin, K. R., & Egan, T. D. 1996. Relational demography: The missing link in vertical dyad linkage. In S. E. Jackson & M. N. Ruderman (Eds.), *Diversity in work teams*: 97–129. Washington, D.C.: American Psychological Association.
- Vancouver, J. B., & Schmitt, N. W. 1991. An exploratory examination of person-organization fit: Organizational goal congruence. *Personnel Psychology*, 44: 333–352.
- Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. 2001. Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44: 134–143.
- Waldman, D. A., & Yammarino, F. J. 1999. CEO charismatic leadership: Levels-of-management and levels-of-analysis effects. *Academy of Management Review*, 24: 266–285.
- Witt, L. A. 1998. Enhancing goal congruence: A solution of organizational politics. *Journal of Applied Psychology*, 83: 666–674.

APPENDIX

Performance Items

Task Performance

1. Job knowledge: Understands work responsibilities, scope of job tasks, and routines to be performed.
2. Quality of work: Completes work thoroughly, accurately, and according to specifications.
3. Adherence to rules: Acts with integrity; avoids law or rules infractions, excessive absenteeism, or other behaviors that may have a negative impact on the organization or other employees.

Communication

4. Written communication: Clearly and appropriately communicates information in writing.
5. Oral communication: Clearly and appropriately communicates information orally.

Teamwork

6. Teamwork: Contributes to the top management team by supporting other team members, resolving conflict between members, and contributing to general team functioning.
7. Helping others: Supports peers and performs cooperative, considerate, and helpful acts that assist co-workers' performance.

Leadership

8. Management and administration: Forms goals, allocates resources to meet them, and monitors progress toward them.
9. Supervision and leadership: Influences the performance of others in achieving the goals of the organization. Includes communicating goals to others, modeling appropriate behaviors, coaching others to help them attain goals, and providing reinforcement upon the attainment of goals.
10. Adapting to change: Overcomes natural resistance to organizational change; strives to behave in ways that are consistent with the change goals and corporate strategy.
11. Managing change: Effectively manages the transition period while organizational changes are being implemented. This involves dealing with the rate at which change is introduced and the processes used to introduce change.



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