

# PERSON-ORGANIZATION VALUE CONGRUENCE: HOW TRANSFORMATIONAL LEADERS INFLUENCE WORK GROUP EFFECTIVENESS

BRIAN J. HOFFMAN  
University of Georgia

BETHANY H. BYNUM  
Human Resources Research Organization

RONALD F. PICCOLO  
Rollins College

ASHLEY W. SUTTON  
University of Georgia

**Using multilevel structural equations modeling, we examine the extent to which the influence of transformational leadership on work group effectiveness flows through follower perceptions of person-organization or person-supervisor value congruence. Results indicate that the group-level effect of transformational leadership on work group effectiveness was fully accounted for by the group-level impact of transformational leadership on follower perceptions of person-organization value congruence, not by its impact on follower perceptions of person-supervisor value congruence. These results are discussed in the context of leadership as a “sense-making” process and the practical barriers faced by transformational leaders in modern organizations.**

Despite clear support for the impact of “transformational leadership” on a host of organizational outcomes (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996), the “underlying influence processes for transformational leadership are still vague” (Yukl, 1999: 287). Several propositions have been forwarded to explain observed effects, most of which have focused on single, individual-level reactions to a leader (e.g., trust [Podsakoff, McKenzie, Moorman, & Fetter, 1990]; self-efficacy [Shea & Howell, 1999]) as explanations for individual outcomes (e.g., job satisfaction [Kirkpatrick & Locke, 1996]; job performance [Piccolo & Colquitt, 2006]). Among the most commonly proposed explanations of transformational leadership is *value congruence*, which characterizes the state of congruence between an individual’s values and those of his or her work environment (Burns, 1978; Jung

& Avolio, 2000; Shamir, 1991; Shamir, House, & Arthur, 1993; Weber, 1947).

Although value congruence is consistently proposed as a central explanatory variable in the leadership process, past theory differs with respect to the conceptualization of value congruence, with some authors proposing correspondence between followers and their direct supervisor (Burns, 1978; Jung & Avolio, 2000) and others proposing congruence with organizational values (van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). Despite differing theoretical predictions associated with each conceptualization of value congruence and prior empirical support for the distinctness of person-organization and person-supervisor value congruence (Kristof-Brown, Zimmerman, & Johnson, 2005), leadership research has not yet directly compared these two forms of value congruence as explanatory variables of transformational leadership.

Examinations of explanatory mechanisms of transformational leadership in general, and of value congruence in particular, have been conducted almost exclusively at the individual level and have included little consideration of how these mechanisms operate at the group level of analysis. However, given that transformational leadership

---

The authors are indebted to Tim Judge, Jason Colquitt, Peter Bamberger, and three anonymous reviewers for their insightful comments on earlier versions of this article.

*Editor’s note:* The manuscript for this article was accepted during the term of *AMJ*’s previous editor, Duane Ireland.

theory was originally proposed to capture effective leadership of group- and organization-level activity (Bass, 1985; Burns, 1978), and that the performance of a leader's work group is perhaps the most important conceptualization of leader effectiveness (Dionne, Yammarino, Atwater, & Spangler, 2004; Kaiser, Hogan, & Craig, 2008), additional study is needed that specifies the transformational leadership process at the group level while examining variation in work-unit-level outcomes.

Accordingly, the primary purpose of this study is to provide a direct comparison of the mediating roles of person-organization and person-supervisor value congruence in the relationship between transformational leadership and work unit effectiveness. In so doing, we answer calls from both the leadership (Yammarino, Dionne, Chum, & Danserau, 2005) and the person-environment (PE) fit literatures (Jansen & Kristof-Brown, 2006) by conceptualizing transformational leadership and follower value congruence at the group level of analysis. Figure 1 presents a model of proposed relationships among this study's primary variables.

## LITERATURE REVIEW

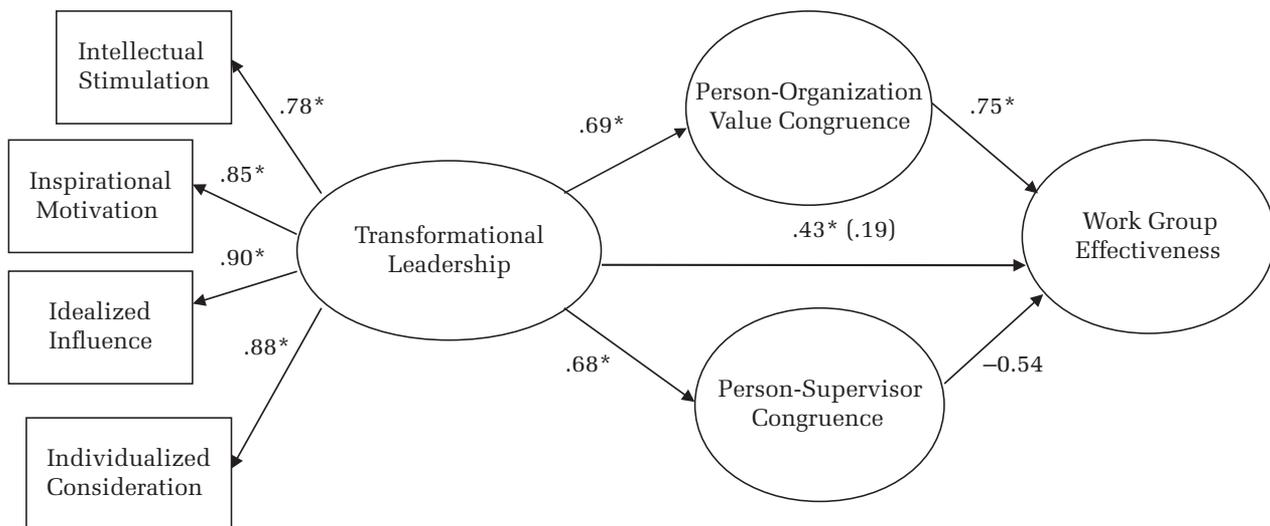
### Transformational Leadership and Unit Effectiveness

Transformational leaders are theorized to influence their followers by heightening followers' self-awareness, instilling a sense of purpose and mission in followers, and influencing them to tran-

scend lower-order needs and goals for the sake of the long-term benefit of the group to which they belong (Bass, 1985). Four ostensibly distinct dimensions of leader behavior are traditionally associated with transformational leadership: (1) *idealized influence/charisma* (more recently split into "idealized attributed" and "idealized" behaviors [Bass & Avolio, 1995]), whereby leaders influence followers by arousing strong emotions and loyalty from them; (2) *inspirational motivation*, whereby a leader communicates high expectations, uses symbols and imagery to focus effort, and expresses the importance of organizational purposes; (3) *intellectual stimulation*, whereby a leader increases followers' awareness of problems and encourages them to view problems from a new perspective; and (4) *individualized consideration*, whereby a leader provides support and encouragement by giving personal attention to and successfully advising followers.

In keeping with seminal conceptualizations of transformational leadership theory (Bass, 1985; Burns, 1978), empirical research has shown that transformational leaders lead more innovative teams (Keller, 1992, 2006), encourage behaviors that contribute positively to a team environment (e.g., "organizational citizenship" [Piccolo & Colquitt, 2006; Podsakoff & MacKenzie, 1997]), and ultimately, lead more effective work units (Judge & Piccolo, 2004). Given this theoretical and empirical support, we expect transformational leadership to be associated with work unit effectiveness.

FIGURE 1  
Between-Work Group Full Mediation Model with Fully Standardized Coefficients<sup>a</sup>



<sup>a</sup> Path weights are completely standardized path coefficients. The value in parentheses is the completely standardized path weight when person-organization and person-supervisor congruence are added to the model.

\*  $p < .05$

## Transformational Leadership and Value Congruence

In recent years, extensive research has been devoted to understanding the implications of congruence between an individual's preferences, motives, and values and characteristics of his or her work environment (Edwards & Cable, 2009; Hoffman & Woehr, 2006; Kristof-Brown et al., 2005). Although person-environment congruence can be conceptualized using a variety of different components (e.g., an individual's needs and an environment's abilities to meet those needs; goal congruence; and interest fulfillment), *value congruence*, or the extent to which an individual's values are consistent with those revealed in his or her organization, is perhaps the most frequently examined conceptualization, yielding significant effects on a variety of outcomes (e.g., Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Meglino & Ravlin, 1998).

In the leadership literature, value congruence provides an explanation for why followers relate to leaders and pledge their loyalty and support (Burns, 1978; Conger, 1999; Klein & House, 1995; Shamir et al., 1993; Weber, 1947). Transformational leaders articulate a vision that emphasizes the way in which collective goals are consonant with follower values, causing followers to regard organizational goals as their own and submit extra effort toward goals and accomplishments (Bono & Judge, 2003; Shamir et al., 1993). The followers of transformational leaders are proposed to view work as a reflection of deep underlying values. Exerting effort toward accomplishing these value-laden goals is intrinsically motivating because doing so (1) allows followers to behave in ways that reflect important values, (2) is consistent with followers' self-concepts, and (3) becomes equated with a moral statement by followers (Shamir et al., 1993; van Knippenberg et al., 2004). Similarly, it is possible that although transformational leaders do not directly alter follower values, they are effective in their ability to frame and link follower and work values so that they become more congruent in the eyes of the followers (Klein & House, 1995). In either case, the critical role of follower perceptions of value congruence to the leadership process is clear.

**Perceptions of person-supervisor value congruence.** In his seminal conception of transformational leadership, Burns noted, "The genius of leadership lies in the manner in which leaders see and act on their own and their follower's values" (1978: 19). The centrality of followers' consistency with leader values has been echoed in theoretical accounts of the transformational leadership process put forth over the past 30 years (Avolio & Bass, 1988; Burns,

1978; Conger & Kanungo, 1987; Klein & House, 1995). More generally, the typically "leader-centric" approach to the study of leadership goes hand-in-hand with research emphasizing the role of leaders' personal values.

If follower perceptions of consistency with leader values account for the influence of transformational leaders, one explanation may be followers' desire to maintain a high-quality relationship with an attractive leader (Howell, 1988; Kets de Vries, 1988; Shamir, 1991). A leader who exudes self-confidence and deep personal concern for the well-being of his or her employees is likely to engender a strong sense of pride, commitment (Dionne et al., 2004), and desire among followers to emulate the leader's attitude and behavior, fostering the perception that their personal values are congruent with those of the leader. A relationship of this type is akin to an influence relationship predicated on referent power (Kelman, 1958; Kudisch, Poteet, Dobbins, Rush, & Russell, 1995), a form of influence relationship typified by a follower's efforts to emulate his or her leader (Conger & Kanungo, 1987; Kark, Shamir, & Chen, 2003).

Empirical research has supported the notion that perceptions of person-supervisor value congruence account for the effectiveness of transformational leaders. In a laboratory study examining creativity, Jung and Avolio (2000) found that person-supervisor value congruence mediated the relationship between transformational leadership and the quality of follower performance, noting that a leader's effort to encourage followers to internalize a compelling vision resulted in a higher level of perceived value congruence. More recently, Brown and Treviño (2006) reported that person-supervisor value congruence, operationalized at the group level of analysis, fully mediated the effect of charismatic leadership on interpersonal deviance. We therefore hypothesize:

*Hypothesis 1. Transformational leadership is positively related to a follower's person-supervisor value congruence.*

*Hypothesis 2. Follower person-supervisor value congruence is positively related to the effectiveness of a leader's work group.*

**Perceptions of person-organization value congruence.** Although person-organization value congruence is proposed as a key proximal outcome of transformational leadership (Shamir et al., 1993; Weber, 1947), no empirical research has yet investigated the interplay between transformational leadership and person-organization value congruence. Instead, research has referred to "organiza-

tional identification" (Shamir et al., 1993; van Knippenberg et al., 2004), a similar concept, but one that is both theoretically and empirically distinct (Cable & De Rue, 2002; Kraimer, 1997; Kristof-Brown et al., 2005; Saks & Ashforth, 1997). A great number of factors influence the level of organizational identification, with person-organization value congruence being one (Kraimer, 1997; Saks & Ashforth, 1997). Prior research has supported weak (Saks & Ashforth, 1997) to moderate (Cable & De Rue, 2002) overlap between these constructs; thus, measuring person-organization value congruence directly reflects a more pointed investigation of explanatory mechanisms that is consistent with both historical (Burns, 1978) and modern (Klein & House, 1995) conceptions of the transformational leadership process.

By articulating a compelling vision that emphasizes shared values, a transformational leader instills in followers a sense of the collective and pride associated with being members of their organizations (Shamir et al., 1993). Consequently, followers are likely to perceive an alignment with the values of their larger organization, not just their individual leaders. Followers with high levels of person-organization congruence perceive that they are a part of something bigger than themselves and are more likely to engage in behaviors that facilitate group productivity (Podsakoff & MacKenzie, 1997). Consequently, transformational leaders "provide a strong link between organizational goals and member commitment to such goals" (Shamir et al., 1993: 584) and convince followers to see their own personal goals as consistent with those of their organization (Bono & Judge, 2003). These conditions encourage teams to work cohesively toward goal accomplishment (Marks, Mathieu, & Zaccaro, 2001). We therefore hypothesize:

*Hypothesis 3. Transformational leadership is positively related to a follower's person-organization value congruence.*

*Hypothesis 4. Follower person-organization value congruence is positively related to the effectiveness of a leader's work group.*

Although value congruence in general is among the most enduring attributes of the transformational leader-follower relationship (Weber, 1947), and preliminary research has provided empirical support for the concept's validity (Bono & Judge, 2003; van Knippenberg et al., 2004), a conflict born out of the potentially divergent referents for estimating congruence arises when one examines transformational (charismatic) leadership and values. Shamir et al. described this conflict as follows:

"To the extent that . . . values . . . are congruent with the . . . organization, charismatic leadership is likely to provide a strong link between organizational goals and member commitment. . . . To the extent that the leader's . . . values . . . are in conflict with those of the organization, such as when a leader represents a challenge to the status quo, charismatic leadership is likely to induce . . . resistance to directives from management. . . . Thus, charismatic leadership represents a strong force for *or against* member commitment to organizational goals" (1993: 584; emphasis in original).

Through role modeling attractive behavior and exhibiting idealized influence, a transformational leader arouses perceptions among followers of value congruence with the leader. At the same time, while emphasizing a collective mission and organizational values, these same leaders encourage a sense of congruence with the organization to which he or she and the followers belong. In keeping with the vast literature on "leader-member exchange" (Graen & Uhl-Bien, 1995), a great deal of research on transformational leadership has emphasized the central role played by leader-follower value alignment (e.g., Burns, 1978; Conger & Kanungo, 1987; Jung & Avolio, 2000; Klein & House, 1995; Weber, 1947). However, similar but conflicting research has instead suggested that the best effects are realized when followers' values align with those of their organization (e.g., Shamir et al., 1993; van Dick, Hirst, & Grojean, 2007). The referent for one's assessment of congruence is likely to moderate the strength of an observed effect (Kristof-Brown et al., 2005), but prior findings about value congruence seem to be inconsistent, providing little guidance as to whether these two conceptions of congruence (person-organization and person-supervisor) are conflicting or complementary.

At central issue here are the allegiances of followers, the influence that leaders have on those allegiances, and the effect that those allegiances have on organizational effectiveness. Although the potential disconnect between these mechanisms was recognized over 50 years ago (Weber, 1947) and has since been reintroduced (Shamir et al., 1993), empirical research on leadership has not directly compared these forms of value congruence as explanatory mechanisms underlying the impact of transformational leaders on work group effectiveness. Thus, the extent to which follower consistency with leader or organizational values explains the effectiveness of transformational leaders remains unclear.

**Perceptions of value congruence.** Although objective person-environment congruence is a function of the "actual" match between employees' val-

ues and the values revealed in their work environments, the leadership literature has most often examined follower perceptions of congruence (e.g., Erdogan, Kraimer, & Liden, 2007; Jung & Avolio, 2000; Van Knippenberg, van Knippenberg, & Geissner, 2007; Weber, 1947). As well as controlling tangible aspects of the work experience, transformational leaders influence their followers by “mobilizing meaning, articulating and defining what has previously remained implicit or unsaid, [and] by inventing images and meanings that provide a focus of attention” (Smircich & Morgan, 1982: 258).

From a social information perspective (Salancik & Pfeffer, 1978), perceptions of supervisor and organizational congruence are social constructions of information available at the time judgments are made. In this sense, leaders are key catalysts in the sense-making process and instrumental in framing their employees’ environment and work experience (Piccolo & Colquitt, 2006). As van Knippenberg et al. noted, “People typically rely on others to make sense of . . . issues where no ‘objective’ referent point exists for such norms and values” (2007: 55). Following this conception, we focus on follower perceptions of value congruence as focal explanatory mechanisms in the transformational leadership process. However, we diverge from previous research by investigating follower value congruence as a group-level construct.

### Group-Level Effects

Transformational leaders are proposed to direct many of their behaviors toward their entire group of followers (Bass, 1985), and empirical work has increasingly operationalized transformational leadership as a group-level phenomenon (Bono & Judge, 2003; Brown & Treviño, 2006; Kark et al., 2003). In contrast, the vast majority of research has examined individual-level effects of value congruence on outcomes despite the importance of investigating the degree to which value congruence operates at the group level of analysis (Jansen & Kristof-Brown, 2006). However, preliminary evidence supports the conceptualization of person-environment fit as a group-level phenomenon. For instance, Colbert, Kristof-Brown, Bradley, and Barrick (2008) found that goal importance congruence among top management team members was related to organizational performance, and Ostroff and Rothausen (1997) found that tenure was related to organization-level person-organization congruence.

Despite recent work investigating transformational leadership and, to a lesser extent, PE fit as group-level constructs, this research has typically

aggregated ratings from multiple respondents to form a group-level construct. In doing so, this research confounds group-level and individual-level effects (Bickel, 2007; Hofmann, 2007; Raudenbush & Bryk, 2002). Instead, this study uses multilevel techniques to estimate the relationship between group-level perceptions of transformational leadership and group-level perceptions of value congruence. Thus, a primary goal of this study is to provide the first examination of the effects of transformational leadership on group-level person-organization and person-supervisor value congruence and the corresponding effects of group-level value congruence on work group effectiveness.

The potential for the emergence of group-level PE value congruence is apparent in theoretical conceptions of transformational leadership (Bass, 1985; Klein & House, 1995; Meindl & Ehrlich, 1987; Weierter, 1997). Transformational leaders articulate a value-based vision consistently among followers, and as a result it is possible that followers share common value orientations and goals. Indeed, the presence of a polarizing figure fosters a “strong situation” (Mischel, 1977), as is the often the case with charismatic leaders. Those who are not “on board” with the direction of the leader are likely to seek other employment, resulting in even greater levels of perceived value congruence within the group (Schneider, Goldstein, & Smith, 1995). Drawing an analogy between the charismatic effect and fire, Klein and House characterized homogeneity (group-level effects) in follower value congruence as the “flammable material” necessary to light the charismatic fire. These authors further proposed that group-level value congruence results “in an escalating sense (and homogeneity) of missionary zeal, dedication, and charisma among followers of a leader” (1995: 189).

Thus, the group-level effect of value congruence and the accompanying social contagion is expected to have a substantial and pervasive impact on the effectiveness of a leader’s work group; transformational leaders are at their most effective when they are able to foster group-level value congruence (Klein & House, 1995). Until now, the extent to which transformational leadership impacts follower group-level perceptions of person-organization and person-supervisor value congruence has not been subject to empirical examination. On the basis of the preceding discussion of the relationships represented in Figure 1, we hypothesize:

*Hypothesis 5. Group-level person-supervisor value congruence mediates the relationship between transformational leadership and work group effectiveness.*

*Hypothesis 6. Group-level person-organization value congruence mediates the relationship between transformational leadership and work group effectiveness.*

### **Tenure with Leader**

To foster perceptions of shared values, transformational leaders need sufficient time with followers to influence their value judgments. Indeed, leaders and followers tend to share trust, responsibilities (leaders' delegation), and affective expressions as relationships develop over time (Bauer & Green, 1996). Too little time with followers, on the other hand, is likely to compromise a leader's ability to develop trust and shape perceptions of shared meaning and value congruence. Accordingly, we presume that tenure with one's leader will play an<sup>1</sup> important moderating role in the relationship between transformational leadership and value congruence that is such that transformational leadership is related to increased levels of value congruence as a function of time shared between leaders and their followers.

*Hypothesis 7. Tenure with a leader moderates the relationship between transformational leadership and a follower's person-organization and person-supervisor value congruence: the relationships are stronger with longer tenure.*

## **METHODS**

### **Participants and Procedure**

Participants included 140 target managers enrolled in an executive MBA (EMBA) program at a large southeastern university, 420 of their direct reports (mean subordinate respondents = 3) and 140 higher-level managers. While enrolled in the EMBA program, the participants concurrently worked as managers in a diverse range of organizations and industries. The participants were largely Caucasian (79%) males (68%) with a mean age of 41, an average of 9 years of managerial experience, and 12 direct reports on average.

To obtain ratings of transformational leadership and perceptions of person-organization and person-supervisor value congruence, we asked the EMBA participants to provide e-mail addresses for up to ten of their direct reports as well as their immediate supervisors. The researchers then con-

tacted respondents via e-mail with a link to an online survey. Direct reports of the 140 target managers were asked to complete an abbreviated form of Bass and Avolio's (1995) Multifactor Leadership Questionnaire (MLQ) along with value congruence items adapted from Cable and DeRue's (2002) subjective fit measure and to report on the amount of time they had worked with their leaders and for their organizations. We measured idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation using 16 items from the MLQ, the most frequently used measure of transformational leadership. The subjective fit measure was adapted to reflect person-supervisor as well as person-organization value congruence (e.g., "My personal values match my supervisor's (organization's) values and ideals"; "The things that I value in life are similar to the things my supervisor (organization) values"; "My supervisor's (organization's) values provide a good fit with the things I value"). Finally, the target leaders' higher-level managers were asked to complete a 5-item measure of work group effectiveness (e.g., "Rate the overall effectiveness of his/her workgroup"). The coefficient alpha reliabilities are presented in Table 1.

### **Multilevel Analyses**

We used multilevel structural equation modeling (ML-SEM) using Mplus version 4.2 (Muthén & Muthén, 2004) to examine the effect of transformational leadership on follower value congruence at the individual and group levels. ML-SEM partitions variance that is due to individual effects (within-level) from variance due to group differences (between-level) for each variable and forms separate variance-covariance matrices corresponding to each level of analysis. Multilevel techniques are preferable to aggregate approaches for investigating group-level effects because they allow for this separation of sources of variance. Aggregating variables to form group-level constructs confounds individual and group effects and results in the loss of potentially important individual-level information. In contrast, multilevel techniques separate individual effects from group effects (and vice versa), allowing for a clear depiction of the degree to which given relationships are due to individual or group-level effects. The structural equation modeling method of multilevel modeling is superior to other available methods (e.g., hierarchical linear modeling) because it allows for the specification of multivariate latent models (Stapleton, 2006). In the present study, we modeled transformational leadership at the latent level by including the measure-

<sup>1</sup> We would like to thank an anonymous reviewer for making this suggestion.

**TABLE 1**  
**Correlations among Study Variables<sup>a</sup>**

Variables	1	2	3	4	5	6	7
Individual level ( <i>n</i> = 420)							
1. Work group effectiveness							
2. Charisma	.00	(.84)					
3. Individualized consideration	.00	.56*	(.92)				
4. Intellectual stimulation	.00	.55*	.51*	(.84)			
5. Inspirational motivation	.00	.62*	.59*	.59*	(.73)		
6. Person-organization value congruence	.00	.34*	.36*	.38*	.39*	(.93)	
7. Person-supervisor value congruence	.00	.35*	.38*	.39*	.40*	.59*	(.93)
Work group level ( <i>n</i> = 140)							
1. Work group effectiveness	(.93)						
2. Charisma	.21*	[.73]					
3. Individualized consideration	.29*	.70*	[.80]				
4. Intellectual stimulation	.19*	.66*	.57*	[.77]			
5. Inspirational motivation	.27*	.71*	.67*	.61*	[.64]		
6. Person-organization value congruence	.33*	.49*	.51*	.46*	.52*	[.80]	
7. Person-supervisor value congruence	.18*	.45*	.55*	.47*	.46*	.69*	[.67]

<sup>a</sup> Coefficient alpha reliability estimates are in parentheses. Median  $r_{wg(j)}$  values are in brackets.

\*  $p < .05$

ment model for transformational leadership while concurrently testing the within-work-group-level (e.g., individual-level effect) effect of transformational leadership on follower value congruence and the full mediation model at the between-work-group level (e.g., group-level effect).

Two primary steps are associated with multilevel modeling (Hox, 2002; Stapleton, 2006). The first is a preliminary stage in which the presence of a group effect is confirmed. The second stage is similar to traditional SEM, in which multiple competing structural models are compared. Per the recommendations of Hox (2002), the first step involves testing a series of nested models to determine if the theoretical individual-level model holds at the group level. First, we tested a model that specified the variance and covariance of the within-group and between-group levels only. No theoretical structure was included for the step 1 model. This model was used as a baseline to determine the proportion of variance attributable to individual-versus group-level effects using intraclass correlations (ICCs; Stapleton, 2006). ICCs provide an estimate of the percentage of variance that is associated with group variation. If there is little variance to be explained at the group level, group-level analyses are unnecessary, and relationships should be viewed at the individual level of analysis. Specifically, ICC estimates are examined to determine the proportion of variance attributable to the group level. An ICC of .20 is considered moderate, and ICCs of .30–.40 are considered high (Muthén, 1997; Kreft & de Leeuw, 1998; Stapleton, 2006). Because

this step does not specify any relationships among variables at the within- or between-group levels, the fit is expected to be poor; however, this model provides a useful first step in justifying further exploration at the group level of analyses.

The second, step 2, model tests a theoretical structure for the within-group level model only. Model fit should improve over the baseline, since a theoretical structure is added; however, the critical question for multilevel modeling is whether fit is improved when the model also specifies theoretical relationships at the group level. The final, step 3, model amends model 2 by adding the theoretical structure to the between-group level. Improvement in model fit from step 2 to step 3 would suggest that the theoretical structure is relevant at both the within-group and between-group levels. In the context of the present study, this would mean that individual and work group differences are needed to explain the relationships between transformational leadership, value congruence, and work group effectiveness and that further theoretical model comparisons should include both the within- and between-group levels of analysis. We examined these three initial models to justify the use of multilevel modeling. The hypotheses of interest were then examined in a separate series of model tests.

In the present study, the individual, or within-level, components of transformational leadership represent differences in ratings of transformational leadership that are unique to individual raters. The group-level variance components represent the shared perceptions of transformational leadership

within a work group and the divergent perceptions of transformational leadership in different work groups. Similarly, the within-level components of value congruence represent the individual differences in perceptions of fit with supervisor or fit with organization. As with transformational leadership, the group-level variance component of value congruence represents the shared perceptions of person-supervisor congruence and person-organization congruence for individuals in the same work group, net the effects of individual rater perceptions. In ML-SEM, within-level effects are used to test individual-level relationships, and between-level variance components are used to test group-level relationships (Kline, 2005); this procedure allows for the separation of group and individual effects.

## RESULTS

### Confirmatory Factor Analysis

We assessed the structure of the study variables using LISREL version 8.5. Because previous research has consistently supported a single-factor structure of transformational leadership (Judge & Piccolo, 2004), each of the transformational scales was set to load on a single latent transformational factor. Next, each of the six value congruence items was set to load on the two corresponding value congruence factors, and work group effectiveness was specified as a single factor. The results suggest that this model provides an adequate fit to the data ( $\chi^2[84] = 166.58$ ; RMSEA = .08; TLI = .95; CFI = .96). We then tested a second structure, which was the same as the first model, except that the value congruence items were set to load on a single factor. Support for this model would indicate that person-supervisor and person-organization value congruence were not distinct constructs. This model indicated poor fit ( $\chi^2[87] = 394.27$ ; RMSEA = .16; TLI = .89; CFI = .91), supporting the distinctiveness of person-organization and person-supervisor congruence.

### Multilevel Analyses

As described above, we first tested a series of three models to determine if proceeding with group-level analyses was appropriate. Table 2 presents these results. First, the step 1 model was used to estimate the covariance matrices for the within-group and between-group levels and to obtain ICCs. As expected, because no theoretical structure was specified, the model fit poorly. The ICCs indicated that 22 percent of the variance of person-supervisor value congruence, 27 percent of the variance of person-organization value congruence, and 27 percent of the variance of transformational leadership were due to group variation. The remaining variance for each was associated with individual variation. The group-level ICCs are sufficiently large to suggest that it is both appropriate and important to examine group-level effects among these variables. We also calculated  $r_{wg(j)}$  (Lindell & Brandt, 1999) to further investigate the level of within-group agreement. Median  $r_{wg(j)}$  values, which are presented in Table 1, also support the presence of within-group agreement.

Next we examined the step 2 model by adding the theoretical structure at the within-group level. This model included the four dimensions of transformational leadership as manifest indicators of a latent construct of transformational leadership, and person-organization and person-supervisor value congruence were specified as criteria of the latent transformational construct. This model fit the data reasonably well, more closely than did the baseline model ( $\Delta\chi^2 = 1,181.78$ ,  $\Delta df = 7$ ,  $p < .001$ ), providing preliminary support for the a priori model. However, as expected, the between-level portion of the model fit poorly ( $SRMR_{\text{between}} = .21$ ), as no theoretical structure was specified to account for group-level variation.

In the step 3 model, we added the between-group-level theoretical model, in which we modeled the group-level variance associated with transformational leadership and modeled value congruence using the same theoretical structure specified in the within-group model. The step 3 model fit substantially better than model 2 ( $\Delta\chi^2 =$

TABLE 2  
Preliminary Models to Test Presence of Individual and Group Effects

Models	$\chi^2$	<i>df</i>	TLI	CFI	SRMSR (between)	RMSEA
Step 1: No theoretical structure	1,272.91	36			.35 (.43)	.27
Step 2: Within structure only	95.14	29	.95	.93	.12 (.21)	.07
Step 3: Within and between structure	39.45	22	.99	.98	.01 (.12)	.04

55.69,  $\Delta df = 7$ ,  $p < .001$ ;  $\Delta CFI = .04$ ). In addition, the fit of the between-level model also improved ( $SRMR_{\text{between}} = .12$ ). In conjunction with the ICCs, the improvement of fit when the both the within-group and between-group theoretical structures were included suggests that group-level variance characterizes the relationships of interest, justifying further examination of the substantive hypotheses at the group level.

### Hypothesis Tests

Given support for an examination of the relationships of interest at the group level of analysis, we proceeded with testing the primary hypotheses. Table 3 presents the results of the models used to test the hypothesized relationships. Since work group effectiveness was measured at the group level, there is only a single indicator of group effectiveness for each group. Thus, the only possible source of variance for work group effectiveness resides between groups. Accordingly, the relationships between work group effectiveness and the remaining variables in the model were only modeled at the between-group level. To investigate the first step of mediation, we specified a model that included only a direct effect from transformational leadership to work unit effectiveness. This model (Table 3, model 1) fit the data well. As in prior research, transformational leadership emerged as a significant predictor of work group effectiveness ( $\beta = 0.43$ ,  $p < .01$ ; see Figure 1), with group-level transformational leadership explaining 14 percent of the variance in work group effectiveness.

To test Hypotheses 1 and 3, we included person-supervisor and person-organization value congruence as criteria of transformational leadership. These relationships were examined at both the

within- and between-group levels. The model (Table 3, model 2) fit the data well and was a significant improvement over model 1 ( $\Delta\chi^2 = 38.51$ ,  $\Delta df = 3$ ,  $p < .01$ ). The relationship between person-organization congruence and transformational leadership was significant at the within-group ( $\beta = 0.49$ ,  $p < .01$ ) and between-group ( $\beta = 0.69$ ,  $p < .01$ ) levels. Similarly, the relationship between person-supervisor value congruence and transformational leadership was significant at both the within-group ( $\beta = 0.50$ ,  $p < .01$ ) and between-group ( $\beta = 0.68$ ,  $p < .01$ ) levels, providing strong support for Hypotheses 1 and 3.

We next used model 2 to examine the amount of variance that individual- and group-level transformational leadership accounted for in person-organization and person-supervisor value congruence. Individual-level transformational leadership accounted for 19.5 percent of the variance in person-supervisor value congruence, and group-level transformational leadership accounted for 10 percent of the variance in person-supervisor value congruence. Alternately, individual-level variation in transformational leadership accounted for 16 percent of the variance in person-organization value congruence, and group-level transformational leadership accounted for 13 percent of the variance in person-organization value congruence. Overall, these results suggest that transformational leadership accounts for a meaningful proportion of variance in person-organization and person-supervisor value congruence at both the individual and group levels of analysis.

Hypotheses 2 and 4 propose that person-organization and person-supervisor value congruence are antecedents of work group effectiveness. To test these hypotheses, we added both forms of value congruence as predictors of work group effective-

TABLE 3  
Hypothesis Tests and Model Comparisons<sup>a</sup>

Models	$\chi^2$	<i>df</i>	TLI	CFI	SRMSR (between)	RMSEA	$\Delta\chi^2$	$\Delta df$
Model 1	52.68	22	0.96	0.98	.05 (.12)	.05		
1 vs. 2							38.51*	3
Model 2 (Hypotheses 1 and 2)	14.17	19	1.00	1.00	.01 (.02)	.00		
2 vs. 3							0	0
Model 3 (Hypotheses 2 and 4)	14.17	19	1.00	1.00	.01 (.02)	.00		
3 vs. 4							1.23	1
Model 4—Full mediation (Hypotheses 5 and 6)	15.40	20	1.00	1.00	.01 (.02)	.00		

<sup>a</sup> Model 1 = between-group direct effect of transformational leadership on work group effectiveness; model 2 = within- and between-group direct effect of transformational leadership on person-organization and person-supervisor value congruence; model 3 = between-group direct effect of person-organization and person-supervisor value congruence on work group effectiveness; model 4 = full mediation.

\* $p < .05$

ness at the group level. The model (Table 3, model 3) fit the data well. However, in this particular model, group-level person-supervisor value congruence was not a significant predictor of work group effectiveness ( $\beta = -0.55, p = .08$ ), disconfirming Hypothesis 2. Contrary to predictions, when person-organization congruence was included in the model, the relationship between person-supervisor value congruence and work group effectiveness became nonsignificant. In support of Hypothesis 4, group-level person-organization value congruence was a significant predictor of work group effectiveness ( $\beta = 0.75, p = .01$ ), indicating that as a work group's collective person-organization value congruence increased, the performance of the work group also increased. With the addition of person-supervisor and person-organization value congruence to the model, the percentage of variance explained in work group effectiveness increased from 13 to 34 percent.

Finally, when all paths were included in the model, the effect of transformational leadership on work group effectiveness decreased to nonsignificance ( $\beta = 0.19, n.s.$ ), suggesting that person-organization value congruence fully mediated the relationship between transformational leadership and work group effectiveness, supporting Hypothesis 5. Owing to the nonsignificant effect of person-supervisor congruence in the full model, it was not supported as a mediator of transformational leadership-work unit effectiveness. Thus, Hypothesis 6 was rejected. Figure 1 presents the standardized weights associated with this model.

We tested a final full mediation model (Table 3, model 4), in which we removed the direct path from transformational leadership to work group effectiveness. This model fit the data well. There was no significant difference between the full mediation and the prior partial mediation models; however, the full mediation model was more parsimonious. When the

direct path between work group effectiveness and transformational leadership was dropped, the variance explained in work group effectiveness stayed nearly constant at 34 percent. No explainable variance was lost in dropping the direct path between work group effectiveness and transformational leadership, further supporting full mediation.

### Moderating Role of Tenure with Leader

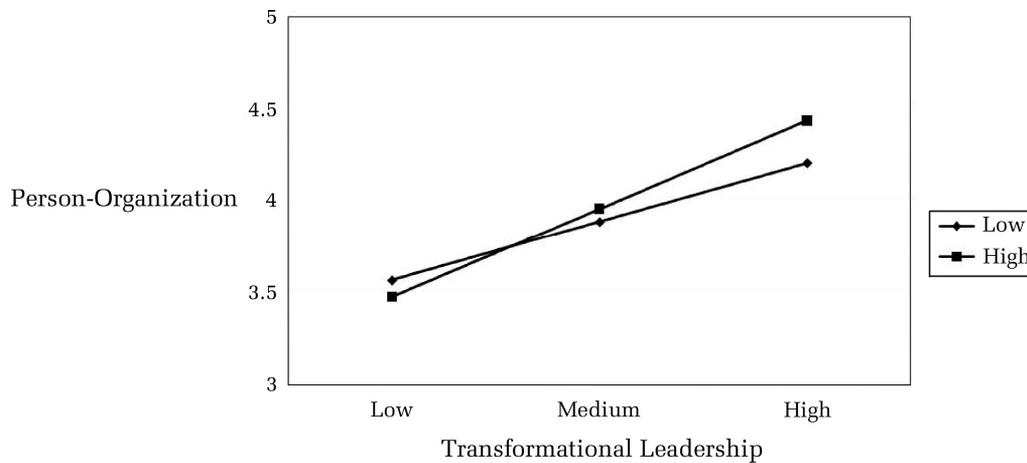
We investigated the moderating role of tenure using a moderated mediation framework. According to Bauer, Preacher, and Gil (2006), multilevel moderated mediation is not well suited for analysis with SEM. Consequently, we followed Edwards and Lambert's (2007) steps for testing moderated mediation in a regression framework, in which the interaction between transformational leadership and tenure influences the mediator (person-organization value congruence), and person-organization congruence influences unit effectiveness. To determine the moderating effect of tenure with leader on the relationship between transformational leadership and value congruence, we conducted two moderated multiple regression analyses with person-organization congruence and person-supervisor congruence as the dependent variables (Table 4). These analyses were conducted for individual respondents, rather than at the group level, as there was no evidence of a group-level effect for tenure with leader. Following the recommendations of Aiken and West (1991), we centered transformational leadership and tenure prior to running analyses. The results show that tenure with leader moderated the relationship between transformational leadership and person-organization value congruence: transformational leadership has a stronger effect on person-organization value congruence when followers have a longer working relationship with their leader. Figure 2 graphically depicts this rela-

TABLE 4  
Moderating Effect of Tenure with Leader

Models	Person-Organization Congruence			Person-Supervisor Congruence		
	$\beta$	<i>R</i>	$\Delta R^2$	$\beta$	<i>R</i>	$\Delta R^2$
Step 1 (constant)	3.93	.51**	.26**	3.92	.51**	.26**
Transformational	0.51**			0.49**		
Time with leader	0.04			0.13**		
Step 3 (constant)	3.92	.52**	.01**	3.92	.51**	.00
Transformational	0.51**			0.49**		
Time with leader	0.04			0.13**		
Transformational $\times$ time	0.10**			-0.01		

\*\*  $p < .01$

**FIGURE 2**  
**Interaction between Transformational Leadership and Tenure with Leader**



tionship. The simple slope was significant for both employees with less experience with their leader ( $b = 0.57$ ; 95% CI, 0.44 to 0.73) and for employees with more experience with their leader ( $b = 0.87$ ; 95% CI, 0.71 to 1.04). Although the interaction effect was supported, the confidence intervals slightly overlapped. Thus, Hypothesis 7 was partially supported. Given that the results of this step failed to support the moderating role of tenure in the relationship between transformational leadership and person-supervisor congruence, our remaining moderated mediation analyses focused on person-organization congruence only.

Having supported the moderating role of tenure, we proceeded to test for moderated mediation. When person-organization congruence was added to the model, the interaction between transformational leadership and tenure dropped to nonsignifi-

cance, supporting moderated mediation (Table 5). We further sought to clarify this effect by comparing the total indirect effect of high and low tenure using the bootstrap procedure provided by Edwards and Lambert to construct bias-corrected confidence intervals (CIs) based on 1,000 random samples. A full list of the simple effects can be found in Table 6. The 95% confidence interval of the difference in the first stage of the indirect effect excluded zero (95% CI = 0.07 to 0.56), indicating that the first-stage indirect effect was stronger for high tenure (.87; 95% CI = 0.71 to 1.04) than for low tenure (.57; 95% CI = 0.44 to 0.73). However, the 95% confidence interval of the difference in the second stage of the indirect effect included zero (95% CI = -0.15 to 0.23), indicating there was no difference between high tenure and low tenure for the relationship between person-organization and work group congruence. Finally, the 95% confidence interval for the difference between the total indirect interaction effects included zero (95% CI = -0.13 to 0.16), indicating that the overall indirect effect was not significantly different for high tenure and

**TABLE 5**  
**Moderated Mediation of Unit Effectiveness<sup>a</sup>**

Steps	$\beta$	$R^2$
Step 1		
Constant	-.002	.22**
Transformational	.19**	
Time with leader	.05	
Transformational $\times$ tenure	.09*	
Step 2		
Constant	-.001	.27**
Transformational	.09	
Time with leader	.04	
Transformational $\times$ tenure	.07	
Person-organization congruence	.20**	

<sup>a</sup> All variables were centered prior to analysis (Edwards & Lambert, 2007).

\*  $p < .05$

\*\*  $p < .01$

**TABLE 6**  
**Direct and Indirect Effects of Moderated Mediation of Unit Effectiveness<sup>a</sup>**

Variable	Stage		Effect		
	First	Second	Direct	Indirect	Total
Tenure					
High	.87*	.16*	.27*	.14*	.41*
Low	.57*	.23*	.01	.13*	.14
Differences	.30*	.07	.26*	.01	.27*

<sup>a</sup> 95% confidence interval excludes zero.

\*  $p < .05$

low tenure. These results show that although tenure moderated the person-organization congruence–mediated relationship between transformational leadership and effectiveness, the distinction between high and low tenure was in the influence of transformational leadership on person-organization congruence (stage 1 of the mediation) rather than differences in the influence of person-organization congruence on effectiveness (stage 2 of the mediation).

## DISCUSSION

This study directly compared the explanatory roles of person-organization and person-supervisor value congruence in the relationship between transformational leadership and work unit effectiveness. Our results demonstrate that the effect of transformational leadership on group-level effectiveness is mediated by group-level person-organization value congruence, and that despite its otherwise important role in leadership processes, person-supervisor value congruence is not a significant mediator when person-organization congruence is included in an analytic model.

At first glance, these results contrast with those of prior theoretical (Burns, 1978; Conger & Kanungo, 1998; Klein & House, 1995; Weber, 1947) and empirical (Brown & Treviño, 2006; Jung & Avolio, 2000) research that has emphasized the centrality of person-supervisor congruence in leadership. Specifically, our results showed that when the effects of person-supervisor and person-organization value congruence were examined simultaneously, person-organization congruence explained observed leadership effects and person-supervisor value congruence became nonsignificant. Although these findings are inconsistent with prior research, there are several plausible explanations for this discrepancy.

First, prior research on leadership has focused almost exclusively on person-supervisor value congruence, giving little attention to person-organization congruence, much less comparing the impacts of the two. In this study, both concepts were examined simultaneously in the framework of multilevel SEM. Our estimates of mediation, therefore, capture the effect of person-organization congruence on work group effectiveness with the effect of person-supervisor congruence removed (and vice versa). Because person-supervisor congruence drops to nonsignificance when person-organization congruence is included, our results indicate the prior support for the mediating role of person-supervisor congruence may be spurious. As Shamir et al. (1993) suggested, transformational leadership

can yield follower commitment to or against organizational goals and values. But our findings reveal that when followers espouse values consistent with their leader's values and not their organization's, organizational leaders will evaluate unit performance less favorably.

Next, whereas the outcome in our study (i.e., work group effectiveness) was assessed at the group level of analysis, prior value congruence research has focused on individual-level outcomes such as job satisfaction, interpersonal deviance, and quality of performance (e.g., Brown & Treviño, 2006; Jung & Avolio, 2000). Perhaps perceiving values consistent with one's leader's is important for enhancing individual outcomes, but in our examination of effectiveness at the group level, perceiving congruence with broader organizational values plays a more important role. Interestingly, Vancouver and Schmitt (1991) found that although congruence with one's work group and congruence with one's supervisor were both related to group effectiveness, when both were considered together, as in the current study, congruence with supervisor values dropped to nonsignificance. Although Vancouver and Schmidt did not consider the role of leadership in the relationship between value congruence and outcomes, the consistency with the results of the present study suggests a generalizable effect.

An additional difference between our study and existing research is the source from which the outcome measures were obtained. In the present study, the criterion variable (work group effectiveness) was assessed by the focal leaders' immediate supervisors, as opposed to rated by research assistants (Jung & Avolio, 2000) or peers (Brown & Treviño, 2006). In keeping with the literature on "360 degree feedback," it is possible that different levels of raters capture unique aspects of performance (Hoffman, Lance, Bynum, & Gentry, 2010); for example, peers may provide particularly accurate ratings of interpersonal job behaviors (Hoffman & Woehr, 2009). In that managers are a conduit of the organization for which they work, it is likely that higher-level managers (such as those used in this study) prefer that a work group focus its energy on working toward organizational values rather than toward its leader's own personal values (Shamir et al., 1993; Weber, 1947).

Although we believe that our focus on a broader and arguably closer approximation of the ultimate leadership criterion (Kaiser et al., 2008) represents an important contribution of this study, future research replicating our findings using alternative criteria variables such as group dynamics or individual-level outcomes (e.g., organizational commit-

ment) will further elucidate the motivational mechanisms of transformational leadership. For instance, perhaps organizational values, as opposed to the personal values of a leader, are more oriented toward collaboration, citizenship, proactivity, or customer service, which, in turn, may enhance work group effectiveness.

Finally, conceptualizing the mediating roles of person-organization and person-supervisor value congruence at the group level of analysis using multilevel SEM represents an additional divergence from prior research and an important contribution of our study. Although Brown and Treviño (2006) conceptualized person-supervisor value congruence as a group-level phenomenon, these authors aggregated across individuals as opposed to directly investigating the role of group-level congruence using more informative multilevel techniques. Doing so may lead to a confounding of individual and group effects, which can ultimately result in misleading findings (Bickel, 2007; Raudenbush & Bryk, 2002). The multilevel techniques used in these analyses, however, “partialed” individual from group-level effects, thus allowing for an unbiased estimate of observed effects at the group level. In isolation of the implications for leadership research, these findings contribute to the broader organizational literature by providing preliminary evidence for person-organization and person-supervisor value congruence as group-level constructs.

### Implications and Directions for Future Research

So, what do these results mean? First, they suggest that although transformational leaders encourage their followers to perceive higher levels of both person-organization and person-supervisor congruence, when both are considered simultaneously, perceptions of congruence with *organizational* values, rather than perceptions of congruence with *leader* values, ultimately facilitate work unit effectiveness. Interestingly, a variant of this concept is implicit in discussions of “personalized” versus “socialized” influence tactics used by transformational leaders (Howell, 1988) as well as conceptualizations of internalization and personal identification in early thinking on influence (Kelman, 1958). Although many prior researchers have argued that transformational leaders rely primarily on socialized tactics to influence followers (Bass, 1985), others have suggested that transformational/charismatic leaders also rely on personalized influence tactics (Conger & Kanungo, 1987), and others have proposed that charismatic leaders can use either type of influence (Howell, 1988). Assuming

that the use of personalized power results in higher levels of person-supervisor congruence and that the use of socialized power is more indicative of person-organization congruence (Howell, 1988; Howell & Shamir, 2005), our results support the suggestion that transformational leaders can rely on either mode of influence.

For modern organizations, a crucial implication here is that managers must buy into organizational values and goals to facilitate group productivity. Indeed, this is perhaps more critical than managers creating alignment with their own value sets among followers. An individual’s immediate supervisor is typically a crucial source of organizationally relevant information and influences employees by interpreting and framing this information (Mintzberg, 1975; Piccolo & Colquitt, 2006). If a leader’s values and those of his/her organization are not aligned, mixed messages result and can leave organizational members confused about their roles or disillusioned with their organization. These findings also underscore the importance of gaining manager support when implementing a change initiative. Thus, it is crucial that organizations select, socialize, and retain managers who are “on the same page” as their the organizations. Providing managers input into organizational decisions will foster support of organizational values and goals (Burke, Stagl, & Klein, 2006) that will trickle down to followers and ultimately translate to more effective work groups.

In addition, the mediating role of person-organization congruence has important implications for leading work groups. Specifically, leaders who effectively communicate and role model organizational values while highlighting consistencies between the single group’s work and the broader organization should enhance follower perceptions of person-organization congruence and in turn, improve work unit effectiveness. Leaders whose values are not compatible with their organizations’ and who voice incongruence to followers will likely encounter difficult relations with higher-level management and be viewed as less effective by their immediate supervisors. Although dissent is inarguably a critical component of effective organizational functioning, organizational leaders are advised to raise dissenting opinions in constructive ways to their supervisor or peers, as opposed to their subordinates. Criticizing an organization to subordinates may undermine follower confidence in the organization and, ultimately, adversely affect follower and work group effectiveness.

The preceding discussion reveals an interesting paradox between the results of this study and typical conceptions of transformational leadership. In particular, transformational leaders are viewed as

individuals who initiate substantial change to “transform” their organizations rather than act in conservative ways that simply maintain the status quo (Bass, 1985). However, the present study suggests that the impact of transformational leadership on work group performance is contingent upon a leader’s work group espousing organizational values, rather than trying to change them. Interestingly, it is possible that the very leaders who are theoretically the most “transformational” in their defiance of the status quo and blazing of new ground are simultaneously viewed as ineffective (and perhaps stifled) by their immediate supervisors. Although recent research has not addressed this possibility, the potential conflict between change-oriented charismatic leaders operating in a bureaucratic organization was recognized in the earliest formulation of charisma, when Weber (1947) noted that one of the most significant challenges facing a charismatic leader is operating effectively in a bureaucratic and rational administration. As noted above, Shamir et al. (1993) pointed to a similar conflict. Our results indirectly support these insights and underscore the need for future research investigating the practical constraints faced by transformational leaders in modern organizations.

Next, research investigating the situational contingencies moderating these relationships could be fruitful. For instance, it is possible that in noncrisis situations in which no radical change to operations is needed or expected, a leader will be more effective when his or her behavior is consistent with existing organizational norms, goals, and values. However, in the face of a crisis, an effective leader may be one who initiates significant change that is based upon his or her personal values and beliefs. Importantly, in either of these cases, followers might rate the leaders as transformational; however, their ultimate level of effectiveness would vary with situational contingences. Similarly, it is possible that the effects observed in this study will vary with organizational structure as well as the extent to which employees’ work is interdependent. The powerful role of person-organization congruence, for example, might be reduced in organizations with highly organic structures wherein employees are not as strongly bound by pervasive norms and values. Further, employees who work independently are less inclined to share “mental models” with coworkers (DeChurch & Mesmer-Magnus, 2010) and are not as strongly drawn to the values of the collective.

### Limitations

As always, these insights must be discussed in light of our study’s limitations. First, these data were cross-sectional, precluding causal inference.

It is possible that followers with similar values are initially attracted to a leader (Schneider et al., 1995) and that because of the degree of value similarity, these followers view their leaders as more transformational. However, the lab study by Jung and Avolio (2000) supported the causal direction proposed in the present study, as do prior theoretical suggestions.

We found that tenure with leader was a marginally significant moderator of the relationship between transformational leadership and person-organization congruence and that tenure moderated the person-organization congruence–mediated relationship between transformational leadership and work unit effectiveness. These findings indicate that the influence of transformational leaders on person-organization congruence and subsequent effectiveness is partly contingent on a follower spending sufficient time with his or her leader. However, tenure with leader did not moderate the relationship between transformational leadership and person-supervisor congruence. The effect of tenure was weak in this study, underscoring the notion that transformational leaders may be able to foster high levels of value congruence among followers in a relatively short amount of time. It is possible that transformational leaders’ high degree of referent power engenders rapid personal identification on the part of followers, but it takes more time to secure follower alignment in terms of organizational values.

Despite these suggestive findings, it should be noted that the interaction effect was not particularly pronounced, suggesting that followers of transformational leaders are likely to report higher levels of person-organization value congruence regardless of the length of their relationship with their leader. In addition, it is possible that the moderating effect of tenure is attributable to employees with incongruent values leaving the group, rather than transformational leaders directly influencing perceived congruence. Accordingly, longitudinal research is needed to more adequately investigate the causal influence of transformational leadership on person-organization value congruence. Although the cross-sectional design of this study does not allow for conclusive evidence that transformational leaders actually change follower values, what is clear is that the influence of transformational leaders on work group effectiveness occurs through follower perceptions of person-organization value congruence. Thus, whether or not follower values actually change in the leadership process, transformational leadership must be viewed through the lens of follower perceptions of value congruence.

An additional limitation is that value congruence was operationalized using perceptions of congruence rather than an assessment of actual congruence. Thus, it is possible that our results would differ if values were assessed objectively. However, the assessment of perceptions is in line with prior research conceptualizing the primary function of leadership as a sense-making phenomenon (Festinger, 1954; Piccolo & Colquitt, 2006; Smircich & Morgan, 1982; Weber, 1947) as well as existing empirical research linking transformational leadership to perceptions of value congruence (Erdogan, Kraimer, & Liden, 2007; Jung & Avolio, 2000). In addition, by operationalizing value congruence as shared perceptions, our approach is consistent with direct consensus models in the organizational climate literature, in which group-level variables reflect a collective reality rather than one individual's perceptions (Glisson & James, 2002). Thus, regardless of the actual level of value congruence, our results suggest that as long as followers perceive congruence with their organization's values, work group effectiveness is enhanced. Nevertheless, future research investigating actual fit is needed.

Next, in keeping with the leadership (Brown & Treviño, 2006; Jung & Avolio, 2000) and person-environment fit (Cable & DeRue, 2002) literature, we operationalized value congruence using perceptions of general value congruence rather than congruence with respect to specific values. Doing so may have obscured potentially important findings regarding the content of the values that lead to enhanced unit effectiveness. On the other hand, in their investigation of transformational leadership and goal importance congruence, Colbert et al. noted that "transformational CEOs communicate such a broad and compelling vision for their organizations that VPs perceive all organizational goals as being of high importance" (2008: 92). Based on these results, it appears that to followers of transformational leaders, all goals that enhance organizational functioning are viewed as important. Assuming that these results translate to values, it is possible that investigations of congruence on specific values will yield similar results to investigations of general perceptions of value congruence.

In any case, in accordance with our theoretical framework, transformational leaders are effective because they foster perceptions of congruence with organizational values. Although clarifying the nature of the specific values at the heart of these observed effects is an important area for future research, there is also much to be learned by investigating perceptions of general value congruence. In our view, both approaches to conceptualizing value

congruence are important to understanding the effectiveness of transformational leaders, and it would be particularly interesting to illuminate the interplay between transformational leadership, congruence on specific values, and perceptions of overall value congruence.

Next, work group effectiveness was measured only as a group-level construct, meaning that there was no within-group variation, precluding an investigation of cross-level or emergent effects. For instance, because our design was cross-sectional, we were unable to investigate the influence of within-group characteristics or processes on the development of shared perceptions of value congruence. Future research could examine the interactions among individual group members (i.e., group dynamics) to further understand the formation, development, and maintenance of group-level perceptions.

Lastly, method variance is a concern to the extent that the same individuals completed the measures of value congruence and transformational leadership. That said, we measured the criterion variable by using a different rater to reduce this concern. Further, the multilevel analyses used in this study separated individual from group-level variation. As such, the group-level effects reported here are free from common rater variance, which is an inherently individual perceptual phenomenon (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Nevertheless, it is possible that processes such as social contagion and conformity norms operate similarly among group members, yielding what is, in essence, a socially constructed "halo effect." Thus, although method variance does not play a major role in our results in a conventional sense, it is possible that such a process inflated observed correlations. Still, to the degree that these shared perceptions foster enhanced work unit effectiveness as evaluated by an independent source, they reflect an important component of the leadership process.

## Summary and Conclusions

The findings in this study suggest that the frequently supported effect of transformational leadership on work group effectiveness is contingent upon followers perceiving consistency with their organization's values, as opposed to their leader's own personal values. In addition, our results underscore the importance of considering group-level effects when investigating explanatory mechanisms of the leadership process in general and of transformational leadership in particular.

## REFERENCES

- Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Avolio, B. J., & Bass, B. M. 1988. Transformational leadership, charisma, and beyond. In J. G. Hunt, B. R., Baliga, H. P., Dachler, & C. A. Schriesheim (Eds.), *Emerging leadership vistas*: 29–49. Lexington, U.K.: Lexington Books.
- Barrick, M. R., Stewart, G. L., Neubert, M. J., & 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: Good, better, best. *Organizational Dynamics*, 13(3): 26–40.
- Bass, B. M., & Avolio, B. J. 1995. *Multifactor leadership questionnaire (form 5x-short)*. Menlo Park, CA: Mind Garden.
- Bauer, T. N., & Green, S. G. 1996. Development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, 39: 1538–1567.
- Bauer, D. J., Preacher, K. J., & Gil, K. M. 2006. Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, 11: 142–163.
- Bickel, R. 2007. *Multilevel analysis for applied research*. New York: Guilford.
- 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.
- Brown, M. E., & Treviño, L. K. 2006. Socialized charismatic leadership, values congruence, and deviance in work groups. *Journal of Applied Psychology*, 91: 954–962.
- Burke, C. S., Stagl, K. C., & Klein, C. 2006. What type of leadership behaviors are functional in teams? A meta-analysis. *Leadership Quarterly*, 17: 288–307.
- Burns, J. M. 1978. *Leadership*. New York: Harper & Row.
- Cable, D. M., & DeRue, D. S. 2002. The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology*, 87: 875–884.
- Colbert, A. E., Kristof-Brown, A. L., Bradley, B. H., & Barrick, M. R. 2008. CEO transformational leadership: The role of goal importance congruence in top management teams. *Academy of Management Journal*, 51: 81–96.
- Conger, J. A. 1999. Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *Leadership Quarterly*, 10: 145–170.
- Conger, J. A., & Kanungo, R. N. 1987. Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, 12: 637–647.
- Conger, J. A., and Kanungo, R. N., (1998.) *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- DeChurch, L. A., & Mesmer-Magnus, J. R. 2010. The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology*, 95: 32–53.
- Dionne, S. D., Yammarino, F. J., Atwater, L. E., & Spangler, W. D. 2004. Transformational leadership and team performance. *Journal of Organizational Change Management*, 17(2): 177–193.
- Edwards, J. R., & Cable, D. M. 2009. The value of value congruence. *Journal of Applied Psychology*, 94: 654–677.
- Edwards, J. R., & Lambert, L. S. 2007. Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12: 1–22.
- Erdogan, E., Kraimer, M., & Liden, R. 2007. Work value congruence and intrinsic career success: The compensatory roles of leader-member exchange and perceived organizational support. *Personnel Psychology*, 57: 305–322.
- Festinger, L. 1954. A theory of social comparison processes. *Human Relations*, 7: 117–140.
- Glisson, C., & James, L. R. 2002. Cross-level effects of culture and climate in human service teams. *Journal of Organizational Behavior*, 23: 767–794.
- Graen, G. B., & Uhl-Bien, M. 1995. Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6: 219–247.
- Hoffman, B. J., Lance, C., Bynum, B., & Gentry, B. 2010. Rater source effects are alive and well after all. *Personnel Psychology*, 63: 119–151.
- Hoffman, B. J. & Woehr, D. J. 2006. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68: 389–399.
- Hoffman, B. J. & Woehr, D. J. 2009. Disentangling the meaning of multisource feedback: An examination of the nomological network surrounding source and dimension factors. *Personnel Psychology*, 62: 735–765.
- Hofmann, D. A. 2007. An overview of the logic and rationale of hierarchical linear models. *Journal of Management*, 23: 723–744.
- Howell, J. M. 1988. Two faces of charisma: Socialized and personalized leadership in organizations. In J. A. Conger & R. N. Kanungo (Eds.), *Charismatic leadership: The elusive factor in organizational effectiveness*: 213–236. San Francisco: Jossey-Bass.

- Howell, J. M., & Shamir, B. 2005. The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30: 96–112.
- Hox, J. 2002. *Multilevel analysis techniques and applications*. Mahwah, NJ: Erlbaum.
- Jansen, K. J., & Kristof-Brown, A. 2006. Toward a multi-dimensional theory of person-environment fit. *Journal of Managerial Issues*, 18: 193–212.
- Judge, T. A., & Piccolo, R. F. 2004. Transformational and transactional leadership: A metaanalytic test of their relative validity. *Journal of Applied Psychology*, 89: 755–768.
- Jung, D. I., & Avolio, B. J. 2000. Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership. *Journal of Organizational Behavior*, 21: 949–964.
- Kaiser, R. B., Hogan, R., & Craig, S. B. 2008. Leadership and the fate of organizations. *American Psychologist*, 63: 96–110.
- Kark, B., Shamir, B., and Chen, G. 2003. The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, 88: 246–255.
- Keller, R. T. 1992. Transformational leadership and the performance of research and development project groups. *Journal of Management*, 18: 489–501.
- Keller, R. T. 2006. Transformational leadership, initiating structure, and substitutes for leadership: A longitudinal study of R&D project team performance. *Journal of Applied Psychology*, 91: 202–210.
- Kelman, H. C. 1958. Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, 2: 51–56.
- 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.
- Kets de Vries, M. F. R. 1988. Prisoners of leadership. *Human Relations*, 41: 261–280.
- Klein, K. J., & House, R. J. 1995. On fire: Charismatic leadership and levels of analysis. *Leadership Quarterly*, 6: 183–198.
- Kline, R. B. 2005. *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.
- Kraimer, M. L. 1997. Organizational goals and values: A socialization model. *Human Resource Management Review*, 7: 425–447.
- Kreft, I., & de Leeuw, J. 1998. *Introducing multilevel modeling*. Newbury Park, CA: Sage.
- 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.
- Kudisch, J. D., Poteet, M. L., Dobbins, G. H., Rush, M. C., & Russell, J. E. A. 1995. Expert power, referent power, and charisma: Toward the resolution of a theoretical debate. *Journal of Business and Psychology*, 10: 177–195.
- Lindell, M. K., & Brandt, C. J. 1999. Assessing interrater agreement on the job relevance of a test: A comparison of the CVI, T,  $r_{WG(j)}$  and  $r^*_{WG(j)}$  indexes. *Journal of Applied Psychology*, 14: 640–647.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. 1996. Effectiveness correlates of transformation and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly*, 7: 385–425.
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. 2001. A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26: 356–376.
- Meglino, B. M., & Ravlin, E. C. 1998. Individual values in organizations: Concepts, controversies, and research. *Journal of Management*, 24: 351–389.
- Meindl, J. R., & Ehrlich, S. B. 1987. The romance of leadership and the evaluation of organizational performance. *Academy of Management Journal*, 30: 91–109.
- Mischel, W. 1977. The interaction of person and situation. In D. Magnusson, & N. S. Endler (Eds.), *Personality at the crossroads: Current issues in interactional psychology*: xxx–xxx. Hillsdale, NJ: Erlbaum.
- Mintzberg, H. 1975. The manager's job: Folklore and fact. *Harvard Business Review*, 53(x): 49–61.
- Muthén, B. O. 1997. Latent variable modeling of longitudinal and multilevel data. In A. E. Rafferty (Ed.), *Sociological methodology*: 453–480. Washington, DC: Blackwell.
- Muthén, B. O., & Muthén, L. K. 2004. *Mplus user's guide*. Los Angeles: Muthén & Muthén.
- Ostroff, C., & Rothausen, T. J. 1997. The moderating effect of tenure in person-environment fit: A field study in educational organizations. *Journal of Occupational and Organizational Psychology*, 70: 173–188.
- Piccolo, R. F., & Colquitt, J. A. 2006. Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49: 327–340.
- Podsakoff, P. M., & MacKenzie, S. B. 1997. Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance*, 10(x): 133–151.
- Podsakoff, P., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88: 879–903.

- 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.
- Raudenbush, S. W., & Bryk, A. S. 2002. *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Newbury Park, CA: Sage.
- Salancik, J., & Pfeffer, G. R. 1978. A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23: 224–253.
- Saks, A. M., & Ashforth, B. E. 1997. Longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel Psychology*, 50: 395–426.
- Schneider, B., Goldstein, H. W., & Smith, D. B. 1995. The ASA framework: An update. *Personnel Psychology*, 48: 747–773.
- Shamir, B. 1991. The charismatic relationship: Alternative explanations and predictions. *Leadership Quarterly*, 2: 81–104.
- Shamir, B., House, R., & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organizational Science*, 4: 577–591.
- Shea, C. M., & Howell, J. M. 1999. Charismatic leadership and task feedback: A laboratory study of their effects on self-efficacy and task performance. *Leadership Quarterly*, 10: 375–396.
- Smircich, L., & Morgan, G. 1982. Leadership: The management of meaning. *The Journal of Applied Behavioral Science*, 18: 257–273.
- Stapleton, L. M. 2006. An assessment of practical solutions for structural equation modeling with complex sample data. *Structural Equation Modeling*, 13: 28–58.
- Vancouver, J. B., & Schmitt, N. W. 1991. An exploratory examination of person-organization fit: Organizational goal congruence. *Personnel Psychology*, 44: 333–352.
- Van Dick, R., Hirst, G., & Grojean, M. W. 2007. Relationships between leader and follower organizational identification and implications for follower attitudes and behaviour. *Journal of Occupational and Organizational Psychology*, 80: 133–150.
- van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. 2004. Leadership, self, and identity: A review and research agenda. *Leadership Quarterly*, 15: 825–856.
- van Knippenberg, D., van Knippenberg, B., & Geissner, S. R. 2007. Extending the follower-centered perspective: Leadership as an outcome of shared social identity. In B. Shamir, R. Pillai, M. C. Bligh, & M. Uhl-Bien (Eds.), *Follower-centered perspectives on leadership*. Greenwich, CT: Information Age.
- Weber, M. 1947. *The theory of social and economic organization*. [A. M. Henderson & Talcott. Parsons, trans]. New York: Free Press.
- Weierter, J. M. 1997. Who wants to play “follow the leader?” A theory of charismatic relationships based on routinized charisma and follower characteristics. *Leadership Quarterly*, 8: 171–193.
- Yammarino, F. J., Dionne, S. D., Chun, J. U., & Dansereau, F. 2005. Leadership and levels of analysis: A state-of-the-science review. *Leadership Quarterly*, 16: 879–919.
- Yukl, G. A. 1999. An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly*, 10: 285–305.



**Brian J. Hoffman** (hoffmanb@uga.edu) is an assistant professor of psychology in the Industrial/Organizational Psychology Program at the University of Georgia. He received a Ph.D. from the University of Tennessee. His current research focuses on organizational leadership, performance evaluations, and methods of managerial assessment, with an emphasis on assessment centers and multisource performance ratings.

**Bethany H. Bynum** (bethbynum@gmail.com) is a research scientist at Human Resources Research Organization in Louisville, KY. She received a Ph.D. in industrial/organizational psychology from the University of Georgia. Her research interests include multilevel and longitudinal modeling techniques, and performance evaluation.

**Ronald F. Piccolo** (rpiccolo@rollins.edu) is associate professor of management and the academic director of the Center for Leadership Development in the Crummer Graduate School of Business at Rollins College. He received a Ph.D. from the University of Florida. His research interests include leadership, motivation, and job design.

**Ashley W. Sutton** (awilliams384@gmail.com) is a doctoral student in industrial/organizational psychology at the University of Georgia. She earned her M.S. in psychology at the same university. Her research interests include attitudes, performance appraisal, and leadership.

