Are we on the same page? Effects of self-awareness of empowering and transformational leadership.

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This study examines the effects of leaders' self-awareness of their own leadership on followers' satisfaction, self-leadership, and leader effectiveness. A leader's self-awareness was conceptualized as the degree of similarity between the leader's self-description and his or her followers' descriptions of leader behaviors. Transformational and empowering leadership are measured from 48 leaders and 222 of their followers. Results from confirmatory factor analyses provide support for two types of leadership: transformational and empowering. Results from polynomial regression analyses indicate that self-awareness of transformational leadership is related to leader effectiveness and followers' supervisory satisfaction. In contrast, self-awareness of empowering leadership is related to followers' self-leadership. These effects of leadership self-awareness extend beyond the direct effect of leadership on the outcome variables.

Keywords: leader effectiveness; transformational leadership; empowering leadership; polynomial regression; self-awareness; follower satisfaction; follower self-leadership; emotional intelligence

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It is wisdom to know others; It is enlightenment to know one's self.

Lao-Tzu

How well do we know ourselves? Does it matter? Is self-awareness somehow connected with our effectiveness as a leader? These are the fundamental questions that inspired the research reported in this article.

Self-awareness is related to the notion of self-evaluation. If we know our self, then our self-evaluation is likely to be more accurate. According to the literature on self-evaluation, individuals may either overrate or underrate their own performance when compared with ratings from other sources (Harris & Schaubroeck, 1988; Mabe & West, 1982). But in addition, another form of self-assessment is related to the way we view ourselves as a leader. Are we accurate in describing our own leadership? Is this accuracy related to our effectiveness as a leader? Past research on leadership has investigated discrepancies between self-descriptions of leadership and descriptions provided by others (e.g., Atwater, Roush, & Fischthal, 1995; Atwater & Yammarino, 1997; Felfe & Schyns, 2004; Thornton, 1980). These discrepancies can be interpreted as a leader's lack of self-awareness about his or her own leadership.

In the research reported here, we investigated the influence of leader self-awareness on outcomes such as leader effectiveness, follower satisfaction, and follower self-leadership. To some degree, we were inspired by the notion of emotional intelligence, which suggests that emotional self-awareness is an important part of one's life and work effectiveness (Bar-On, 2000; Gross, 1998). According to this viewpoint, if one is aware of one's own emotions, then life and work experiences are likely to be more effective and satisfying (Cote & Miners, 2006; Jordan & Ashkanasy, 2006; Sosik & Megeirian, 1999). Extrapolating from this viewpoint, we suggest
that self-awareness about one's own leadership is likely to produce enhanced effectiveness and satisfaction at work.

In general, research on leader self-awareness is relatively rare in the leadership literature. Interesting exceptions are the works of Atwater and Yammarino (1992); Atwater, Ostroff, Yammarino, and Fleenor (1998); Bass and Yammarino (1991); Fleenor, McCauley, and Brutus (1996), Felfe and Schyns (2004); Riggio and Cole (1992); and Sosik and Megerian (1999). Overall, this previous research found that a leader's agreement with followers (or self-awareness) about his or her own transformational leadership was associated with leader effectiveness. Yet self-awareness may be related to other outcomes, including follower affective responses and self-leadership. Atwater et al. (1998) stated, "self-other agreement is most relevant to outcomes that involve human perceptions [emphasis added] and less relevant to more objective measures such as sales volume or meeting productivity goals" (p. 595). Therefore, in this study, we extend the investigation of leader self-awareness by exploring the effect of leader self-awareness on affective and behavioral outcomes, such as satisfaction with supervisor and self-leadership, in addition to the more usual outcome of leader effectiveness.

Furthermore, we extend previous work by investigating self-awareness of empowering leadership in addition to transformational leadership. In recent decades, we have certainly seen an increasing interest among organizations to promote autonomy, especially with self-managing teams. Parallel to this interest has been the emergence of empowering leadership as a new focus of leadership. This form of leadership concentrates on the notion of a leader who enhances follower self-leadership (e.g., Arnold, Arad, Rhoades, & Drasgow, 2000; Cohen, Chang, & Ledford, 1997; Manz & Sims, 1987; Salam, Cox, & Sims, 1997; Stewart & Manz, 1995). Several recent studies (Ahearne, Mathieu, & Rapp, 2005; Cohen et al., 1997; Ensley, Hmieleski, & Pearce, 2006; Houghton & Yoho, 2005; Manz & Sims, 1987; Pearce & Sims, 2002; Pearce, Yoo, & Alavi, 2004; Yun, Cox, & Sims, 2006; Yun, Faraj, & Sims, 2005) have recognized empowering leadership as distinct from transformational leadership.

Although empowering leadership behavior has received relatively less attention in the leadership literature when compared to transformational leadership, results have consistently found linkages to follower self-leadership and team performance. Therefore, an important part of this research is our extension of prior studies by examining leaders' self-awareness of their own empowering leadership. Our research not only compared the results of self-awareness of transformational leadership with past studies but also investigated whether the findings are similar for empowering leadership. In summary, the main contribution of this study is to extend prior research about self-awareness of one's own leadership by investigating (a) both empowering leadership and transformational leadership and (b) additional outcomes such as follower satisfaction and self-leadership.

Hypotheses

Leadership

Over the years, the literature has developed many perspectives and viewpoints of leadership. For an extensive review, we refer the reader to the encyclopedic work of Bass (1990) and the ongoing review and synthesis of the leadership literature presented by Yukl (2002, 2006). Here, we briefly review perspectives represented by the labels of transformational and empowering leadership.

Transformational leadership is defined as the process of cultivating followers' commitment to organizational objectives and shaping the culture in ways consistent with the organizational strategy (Yukl, 2002). Transformational leadership is directed toward inspiring followers to share and pursue the leader's vision (Yammarino & Bass, 1990) and motivating followers to go beyond acting in their own self-interest of
exchanging effort and compliance for rewards (Hater & Bass, 1988) and to work for the good of the group (Yammarino & Bass, 1990). Transformational leadership, then, helps concentrate followers' efforts on long-term goals (Howell & Avolio, 1993). To meet these goals, transformational leaders focus on developing vision and inspiring followers' pursuit of the vision. Furthermore, they stimulate changes or alignment of systems in service of a new vision rather than working within existing systems to sustain the status quo (Howell & Avolio, 1993).

In comparison, empowering leadership involves a different set of leader behaviors that are directed more toward developing the self-influence capabilities, including: self-control, self-regulation, self-management, and self-leadership of followers (see Manz & Sims, 1987, for the first appearance of empowering leader behaviors). To achieve this goal, empowering leaders delegate extensive responsibility to followers and create an environment that enables followers to satisfy needs for growth and autonomy by exercising effective self-control and self-direction toward organizational objectives (Cohen et al., 1997; Manz & Sims, 1987, 1991, 1995; Sims & Manz, 1996; Yun et al., 2006; Yun et al., 2005). That is, they provide opportunities for their followers to make decisions and carry them out.

Empowering leadership is different from transformational leadership. In general, transformational leadership is centered largely on the vision of the leader. In contrast, empowering leadership is targeted at developing the self-leadership capabilities among followers. Indeed, Pearce et al. (2003) have empirically supported the distinction between empowering and transformational leadership behaviors. Furthermore, Arnold et al. (2000), Cohen et al. (1997), and Pearce and Sims (2002) provided support for empowering leadership as encompassing a different set of leader behaviors from those of transformational leadership. Recently, Houghton and Yoho (2005) also recognized empowering leadership as a separate type of leadership and included it in their contingency model of leadership and psychological empowerment. Following these endeavors, we conceptualize and operationalize empowering leadership as distinct from transformational leadership. Because there has been relatively little research that has directly compared empowering and transformational leadership, as a preliminary analysis, we will first empirically examine this distinction; thus, we hypothesize the following:

Hypothesis 1a: Transformational and empowering leadership are two separate constructs.

Hypothesis 1b: Controlling for empowering leadership, transformational leadership will explain additional variance only on follower ratings of leader effectiveness and follower supervisory satisfaction.

Hypothesis 1c: Controlling for transformational leadership, empowering leadership will explain additional variance on follower ratings of leader effectiveness, follower supervisory satisfaction, and follower self-leadership.

Self-Awareness and Leadership

Our main focus is on the accuracy of leaders' views of their own leadership. Considering the importance of leadership to organizations and the extent to which a leader's influence may depend on the perceptions of followers, an important question is the extent to which leaders and their followers agree in their descriptions of the leaders' behaviors. For example, perceptual disagreement between leaders and followers may imply leaders' miscommunication or failure to respond to the demands of followers, leading to unexpected outcomes. In this research, we conceptualize leader self-awareness as the degree of similarity between leaders'
descriptions of their own leadership when compared to descriptions of leadership through the eyes of their followers.

Moreover, we follow the terminology previously used in the literature (Atwater et al., 1998; Atwater & Yammarino, 1997; Fleenor et al., 1996; Sosik & Megerian, 1999) to denote various types of disagreement: underestimation, in agreement and good estimation, in agreement but poor estimation, and overestimation. Leaders whose self-ratings are below followers' ratings are referred to as underestimators. Leaders whose self-ratings are high and similar to the followers' rating are referred to as in-agreement-good estimators. Leaders whose self-ratings are low and similar to their followers' rating are referred to as in-agreement/poor estimators. And leaders whose self-ratings are greater than their followers' ratings are referred to as overestimators.

In the following section, we present the main arguments and primary hypotheses in our study. We first present the effect of leader self-awareness of their leadership on leader effectiveness. Note that, for the most part, these hypotheses that refer to transformational leadership are generally consistent with prior research. However, hypotheses that refer to empowering leadership are examined here for the first time. Furthermore, we also extrapolate the arguments to follower-related outcomes—satisfaction with supervision and self-leadership.

Self-Awareness and Leader Effectiveness

An abundance of studies and reviews, including meta-analyses, have demonstrated that transformational leadership directly predicts leader effectiveness (e.g., Felfe & Schyns, 2004; Judge & Bono, 2000; Lowe, Kroeck, & Sivasubramaniam, 1996). Furthermore, research on leadership has documented a relationship between self-awareness of transformational leadership, operationalized in terms of self-other agreement, and leader performance. For example, Atwater and Yammarino (1997) proposed that overestimators of transformational leadership may dramatically misdiagnose their leadership strengths and weaknesses. As a result, they may limit their own effectiveness by failing to set self-improvement goals. In-agreement/poor estimators of transformational leadership may accurately diagnose their strengths and weaknesses but may take relatively few actions to improve their performance due to low self-efficacy regarding their leadership capabilities. Conversely, in-agreement/good estimators of transformational leadership may accurately diagnose their strengths and weaknesses and set realistic self-improvement goals, thus motivating improvement and supporting effectiveness. Although underestimators may misdiagnose their strengths and weaknesses, they may pursue unchallenging and easy improvement goals that may imply a low level of effectiveness. In summary, the logic offered by Atwater and Yammarino (1997) suggests that self-awareness of transformational leadership is related to leader effectiveness.

Indeed, the relationship between transformational self-awareness and initial levels of leader performance has received empirical support (Atwater et al., 1995; Atwater & Yammarino, 1992; Johnson & Ferstl, 1999). For example, Atwater et al. (1995) found that underestimators had the highest performance, followed by leaders who were in agreement with followers. Finally, overestimators had the lowest performance as leaders. Similarly, Bass and Yammarino (1991) reported that leaders who overestimated their transformational leadership performed more poorly than those who agreed with followers or who were underestimators.

In a further study, and consistent with the logic above, Atwater et al. (1998) reported that leaders' effectiveness was greater for in-agreement/good than in-agreement/poor transformational leaders. In addition, they reported that underestimators were more effective than overestimators. It seems, therefore, that accuracy in self-assessment of leadership is related to leader effectiveness. Following Atwater et al. (1998), we expect that in-agreement/good leaders will have the highest level of effectiveness, followed by underestimators. Furthermore,
we expect the lowest level of effectiveness for overestimators due to a tendency to ignore criticism and discount failure (cf. Atwater et al., 1998; Atwater & Yammarino, 1997; Taylor & Brown, 1988).

As predicted by Atwater and Yammarino (1997) and supported by Atwater et al. (1998), we expect the effectiveness of in-agreement/poor transformational leaders to be lower than underestimators because the former take relatively fewer actions to improve their leadership. On the other hand, we expect the effectiveness of in-agreement/poor leaders to be higher than overestimators to the extent that overestimators inflate assessment of their strengths but deflate their weaknesses that hinder behavioral changes (Ashford, 1989). In contrast, in-agreement/poor leaders may have more realistic self-perceptions of their own leadership behavior. This may motivate them to work toward self-improvement. In-agreement/poor leaders may also be perceived as modest, thus leading their followers to evaluate the leaders’ effectiveness more favorably.

Although nearly all of the previously mentioned work is in reference to transformational leadership, we also expect the arguments to be similar for leaders’ self-awareness of their empowering leadership, mainly because empowering leadership has also been demonstrated to influence leaders’ effectiveness or team effectiveness (e.g., Cohen et al., 1997; Pearce & Sims, 2002). Unlike underestimators and in-agreement/good empowering leaders, those who overestimate their empowering leadership are less likely to respond to feedback from their followers. However, in-agreement/poor empowering leaders may not set sufficiently high standards to improve their effectiveness due to factors such as a lack of self-efficacy in their own ability to effectively function as empowering leaders. Therefore, we hypothesize the following:

Hypothesis 2: Follower ratings of leader effectiveness will be the highest for in-agreement/good leaders, the second highest for underestimators, the third highest for in-agreement/poor leaders, and the lowest for overestimators of their (a) transformational leadership and (b) empowering leadership.

Self-Awareness and Follower Satisfaction With Supervision

Locke (1976) defined satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience" (p. 1300). One of the main sources of one's job experience is the interaction with the leader. Empirical studies have indicated that followers' experiences with their leaders can enhance satisfaction with supervision (e.g., Felfe & Schyns, 2004; Jaussi & Dionne, 2004; Judge & Bono, 2000) as well as job satisfaction in general (Walumbwa, Lawler, Avolio, Wang, & Shi, 2005; Walumbwa, Wang, Lawler, & Shi, 2004). For example, Judge and Bono (2000) found support for the hypothesis that transformational leadership is directly related to followers' satisfaction with the leader because followers tend to identify with the leader. Also, Conger, Kanungo, and Menon (2000) showed that transformational leadership was positively correlated with supervisory satisfaction. Empowering leadership has similarly been associated empirically with followers' satisfaction. For example, Cohen et al. (1997) found followers' quality of work life to be associated with perceptions of empowering leadership.

Although these findings demonstrate links between follower perceptions of leadership behavior and satisfaction of followers, they do not address the extent to which leader self-awareness affects follower satisfaction with supervision. As documented in past research, one rationale for how leader self-awareness relates to follower satisfaction is through the leader's responsiveness to feedback from followers (cf. Atwater et al., 1995; Atwater et al., 1998; Atwater & Yammarino, 1992, 1997).

Atwater and Yammarino (1997) argued that in-agreement/good leaders react positively to the feedback they receive from followers and respond with realistic improvement goals and appropriate changes in behavior. Responsiveness to the interests and suggestions of followers may well increase followers' satisfaction with
their supervisors. Furthermore, they proposed that in-agreement/good leaders may have more positive job attitudes that promote positive affect and high levels of supervisory satisfaction among followers.

On the other hand, in-agreement/poor leaders may not effectively respond to followers' feedback even if they agree with the feedback provided (Atwater & Yammarino, 1997). As described earlier, these leaders, compared to in-agreement/good leaders, may be less willing or able to respond to followers' input because of low self-efficacy in their leadership roles. Atwater and Yammarino (1997) also proposed that in-agreement/poor estimators may have more negative job attitudes that could be reflected in reduced follower satisfaction. Therefore, we expect followers of in-agreement/poor leaders to experience lower levels of supervisory satisfaction than those of in-agreement/good leaders.

Similarly, overestimators may discount or ignore suggestions provided by their followers, because of inflated or otherwise inaccurate self-appraisals of their own leadership behavior (Atwater & Yammarino, 1997). We expect that relative unresponsiveness to feedback from followers by overestimators may lower followers' satisfaction with supervision. In addition, Atwater and Yammarino (1997) have proposed that overestimators have high expectations for recognition, rewards, and so forth, which are seldom met because they are unlikely to seek feedback and exert little effort to improve their effectiveness. Hence, they may feel dissatisfied with their job and may express very negative job-related attitudes. These attitudes may filter down to followers who become dissatisfied with their supervisors. Accordingly, we expect that follower satisfaction with the supervision of overestimators will be particularly low.

We expect higher levels of satisfaction with supervision for followers of underestimators relative to in-agreement/poor leaders and overestimators because underestimating of leadership strengths will promote greater responsiveness to follower feedback (Atwater & Yammarino, 1997). However, as described earlier, underestimators may not respond as effectively as in-agreement/good leaders because of their relatively less accurate self-appraisals. We expect that similar dynamics will operate both for transformational and empowering leadership. Following the logic outlined above, we hypothesize the following:

Hypothesis 3. Followers' report of satisfaction with supervision will be the highest for followers of in-agreement/good leaders, second highest for those of underestimators, third highest for in-agreement/poor leaders, and the lowest for followers of overestimators of their (a) transformational leadership and (b) empowering leadership.

Self-Awareness and Follower Self-Leadership

We argue that the above rationale can be extended from follower affective responses to behavioral outcomes as well. Self-leadership (also called self-management, self-control, or self-regulation) refers to the degree of self-influence a follower exerts over his or her own behavior (Manz & Sims, 1989). Empowering leaders can promote follower self-leadership behavior by providing opportunity and active encouragement of self-leadership (Cohen et al., 1997; Houghton & Yoho, 2005; Manz & Sims, 1991, 1995; Sims & Manz, 1996). In particular, Manz and Sims (1991, 1995) and Sims and Manz (1996) argue that empowering leaders motivate their followers to lead themselves. Yun et al. (2006) found that empowering leadership influenced subsequent self-leadership for followers who were high on need for autonomy.

We expect that the effects of leader self-awareness on follower self-leadership are more salient or direct in regard to empowering leadership as compared to transformational leadership. Empowering leadership is defined primarily in terms of how the leader behaviorally encourages followers to lead themselves.
Accordingly, and extending Atwater and Yammarino's (1997) propositions, a leader’s self-awareness about his or her own empowering leadership is likely to influence followers' ability to lead themselves. For example, when leaders underestimate their own empowering leadership behavior, they are more likely to be motivated to behave in ways that enhance follower self-leadership and to respond to follower suggestions that opportunity for self-leadership be provided. In contrast, if leaders overestimate their empowering leader behavior, they may misdiagnose their actual empowering influence and be less likely to be responsive to followers’ self-leadership aspirations. Due to leader self-efficacy and accurate self-appraisal outlined above, we expect that followers of in-agreement/good empowering leaders will be more likely to exhibit self-leadership than those of in-agreement/poor leaders. Hence, we offer the following hypothesis:

Hypothesis 4a. Follower self-leadership will be the highest for followers of in-agreement/good leaders, second highest for underestimators, third highest for in-agreement/poor leaders, and lowest for overestimators of empowering leader behavior.

As mentioned above, the effect on self-leadership behavior outcome is likely to be influenced by leader self-awareness about empowering leadership, but not about transformational leadership because of the differential focus of the two types of leadership. Although empowering leadership is directed toward enhancing follower independent action or self-leadership among followers, transformational leadership focuses more on motivating follower conformity to the inspiring vision of the leader. This differential focus led Sims and Manz (1996) to suggest that empowering leadership may more directly influence follower self-leadership than transformational leadership. Thus, we offer the following hypothesis:

Hypothesis 4b. There will be a relationship between leader self-awareness and followers' self-leadership only for empowering leadership (but not for transformational leadership).

In summary, we first predict similar effects of both transformational and empowering leadership self-awareness on leader effectiveness and follower supervisory satisfaction. In contrast, we do not expect a similar pattern between empowering and transformational self-awareness in relation to follower self-leadership.

Method

Sample and Procedures

Participants included 48 leaders and 222 of their followers employed by a Mid-Atlantic defense company. For the most part, participants were technical production engineers and managers. Leaders were typically middle managers, while followers were first-line supervisors. The average follower was 40.3 years old, had worked for 14.7 years in the organization, and had completed a bachelor's degree. Most (61.5%) had reported to their current leaders for 1 to 5 years. Seventy-nine percent of the followers were male. There were between 2 and 11 followers for each respondent leader, with a mean of 4.6. Detailed demographic data were not available for the leaders, except that all leaders were male and their age was slightly higher than the followers.

A survey was used to collect data from both leaders and followers. Leaders were asked to describe their own transformational and empowering leadership. Followers were identified through human resource records as those who report directly to the subject leaders. Leaders and followers completed parallel surveys, except that leader surveys were self-referential, whereas follower surveys were worded to prompt upward description of the focal leader. Followers were also asked to report on their satisfaction with supervision, their own self-leadership behavior, and their leaders' effectiveness. Questionnaires completed by leaders and followers were
sent directly to the researchers. Unless mentioned otherwise, items were measured on a 5-point Likert-type scale (1 = definitely not true to 5 = definitely true).

Measures

Transformational Leadership. Seven items, adapted from the Leadership Strategies Questionnaire (Manz & Sims, 1987) and inspired by the work of Avolio, Bass, and Jung (1999), were used to describe transformational leadership from the perspective of the leader (self-description) and followers (upward description). These items emphasized the interpretation of organizational vision from a middle management position, willingness to undertake change, and idealism. Items in the transformational leadership scale had a reliability coefficient of .85 in the survey administered to leaders and .89 in the follower survey. An example item states, "He/she provides a clear vision of where we are going."

Empowering Leadership. Seven items, adapted from Leadership Strategies Questionnaire (Manz & Sims, 1987), were used to describe empowering leadership from leader and follower perspectives. The reliability coefficients of the items were .92 in the supervisor survey and .92 in the follower survey. An example item is "He/she encourages me to find solutions to my problems at work without seeking his/her direct input."

Leader Effectiveness. Leader effectiveness was measured with four items originally used by Manz and Sims (1987). They reported a reliability coefficient of .92 in their study. An example is, "He/she is very effective." The items had a reliability coefficient of .96 in the present study.

Satisfaction With Supervision. Satisfaction with supervision was measured with two items derived from a shortened form of Hackman and Oldham's (1980) Job Diagnostic Survey. The two items are "I am satisfied with the degree of respect and fair treatment I receive from my supervisor" and "I am satisfied with the overall quality of the supervision I receive in my work." Respondents were asked to describe their satisfaction or dissatisfaction using a 5-point Likert-type scale (1 = very dissatisfied to 5 = very satisfied), producing a reliability coefficient of .84.

Follower Self-Leadership. Follower self-leadership was measured with four items reflecting teamwork (Cox, 1993). Teamwork here refers to the extent to which a follower provides support to other team members and coordinates activities with other team members without direct intervention from the leader. Teamwork was chosen to represent self-leadership because teams, especially self-managed teams, are the principal way that self-leadership is implemented in U.S. organizations (Manz & Sims, 1987). Four items with a reliability coefficient of .93 were used to capture follower self-leadership in teamwork. An example is "I coordinate my efforts with other managers/supervisors who report to my supervisor."

Data Analysis

We used multiple procedures to test the hypotheses in the study. First, we ran confirmatory factor analysis (CFA) using structural equation modeling (EQS) to examine the factor structure of the scales used in the study. Due to the lack of sufficient sample size to perform CFA with all items used in the study, we reduced the leadership items to three (for transformational leadership) and two (for empowering leadership) by combining two or more items. To test Hypothesis la, a separate CFA of the leadership items was conducted using EQS to assess the fit indices and change in chi-square as suggested by Loehlin (1992). Specifically, we compared two factors (i.e., transformational and empowering leadership factors) to a single factor (i.e., leadership factor). Furthermore, we ran hierarchical regression analyses, whereby we regressed each dependent (or outcome) variable on (a) transformational leadership by controlling for empowering leadership and on (b) empowering
leadership by controlling for transformational leadership, to test Hypotheses 1b and 1c, respectively. Finally, we tested for any evidence of group-level effect on the outcome variables using hierarchical regression, one-way analysis of variance, and ordinary least-square regression analyses. Overall, these analyses did not indicate a group-level effect. Therefore, all further analyses were done at the individual level (n = 222). As suggested by Edwards (1994), we used polynomial regression analyses to test Hypotheses 2, 3, and 4. The results from these analyses were used to draw figures representing the relationships.

Results

CFA of Measures

The results from the CFA of the measures used in the study indicated that the items loaded onto the expected constructs. The fit indices of the CFA were as follows: comparative fit index (CFI) = .965; standardized root mean square residual (SRMR) = .078; and Akaike information criteria (AIC) = 21.611.

Tests of Hypotheses

Table 1 presents the means, standard deviations, correlations, and reliabilities of the variables.

As described in the Method section, we ran CFA using EQS to assess the fit of the two-factor model (i.e., transformational and empowering leadership factors) to the data. Results indicated that this model fit the data well (CFI = .962; SRMR = .088; AIC = 24.554). We also compared the two-factor model with a single-factor (i.e., leadership) model. However, as evidenced by the chi-square change statistics (i.e., [DELTA] [chi square] = 66.220 with one degree of freedom, p < .001), the single-factor model had worse fit statistics than the two-factor model. In general, these results provided support for Hypothesis 1a, and the factor loadings clearly showed different behaviors for empowering versus transformational leadership.

As hypothesized, transformational leadership explained additional variance on leader effectiveness and follower supervisory satisfaction (see Table 3). Note that the effect of transformational leadership on follower self-leadership disappeared when empowering leadership was entered in the second step. In addition, transformational leadership did not explain additional variance in follower self-leadership after controlling for empowering leadership, supporting Hypothesis 1b. Similarly, empowering leadership explained additional variance on leader effectiveness, follower supervisory satisfaction, and follower self-leadership, providing support for Hypothesis 1c.

Hypothesis 2a predicted a relationship between leaders' self-awareness of transformational leadership and leader effectiveness. The results of polynomial regression analyses are presented in Table 4. For leader effectiveness as an outcome variable, results indicate that Model 1 was significant ([R.sup.2] = .57, F = 145.67, p < .001), which means that there was a main effect of transformational leadership on leader effectiveness. Furthermore, Model 2 was significant ([R.sup.2] = .59, F = 61.48, p < .001) and explained additional variance ([DELTA][R.sup.2] = .02, [DELTA][F = 2.85, p < .05], implying that leaders' self-awareness of their transformational leadership was related to effectiveness. To test Hypothesis 2a, we drew a surface representing this relationship (see Figure 1). Following Edwards's (1994) procedure, [a.sub.2] (which is [b.sub.3] + [b.sub.4] + [b.sub.5]) did not differ from 0 along the F = S line ([a.sub.2] = -.02, t = .14, p > .05), where F represents the followers' ratings and S corresponds to the leaders' self ratings; therefore, the hypothesis that the curve was flat along the F = S was not rejected. In addition, the line along F = S increases from the near corner (point S = -2, F = -2) to the far corner of the figure (point S = 2, F = 2), implying that in-agreement/good estimators were rated as more effective than in-agreement/poor estimators.
Examining the surface along the $F = -S$ line indicates that it was concave ($[a_{sub.2}] = -.43, t = -2.73, p < .01$), rejecting the hypothesis that the surface was flat along the $F = -S$ line, which means that the level of self-awareness had different effects on leader effectiveness. Movement to the right or left from the $F = S$ line indicates a decline in leader effectiveness. However, this decline was greater when moving more to the right than to the left. This indicates that when leaders and followers disagree, ratings of leader effectiveness decline and the degree of decline for overestimators is greater than for underestimators. In general, the figure indicates that in-agreement/good leaders were rated as the most effective, followed by underestimators. In-agreement/poor leaders were rated as less effective, but they were rated higher than overestimators. These results support Hypothesis 2a.

Hypothesis 2b predicted a similar relationship with respect to empowering leadership between leader self-awareness and follower ratings of leader effectiveness. Results from the regression analysis indicate that Model 1 explained significant variance ($[R.sup.2] = .42, F = 78.79, p < .001$), whereas Model 2 failed to provide incremental variance ($[DELTA][R.sup.2] = .01, F = 1.69, p > .05$). These findings imply that empowering leadership has a direct effect on leader effectiveness; however, the level of agreement on empowering leadership is not related to leader effectiveness. Therefore, Hypothesis 2b was not supported.

Hypothesis 3a predicted a relationship between leaders' self-awareness of transformational leadership and followers' satisfaction with supervision. Models 1 and 2 for the outcome variable of satisfaction with supervision were significant ($[R.sup.2] = .44, F = 86.85, p < .001$, and $[R.sup.2] = .48, F = 39.69, p < .001$, respectively), and Model 2 explained significant additional variance ($[DELTA][R.sup.2] = .04, [DELTA]F = 5.04, p < .01$; see Table 4). Therefore, we analyzed the nature of the surface (see Figure 2). Consistent with the congruence literature, $[a_{sub.2}]$ was not significant ($[a_{sub.2}] = -.26, t = -1.77, p > .05$) along the $F = S$ line, thus failing to reject the hypothesis that the line was flat along the $F = S$ line. However, the line increases from the near comer ($S = -2, F = -2$) to the far comer ($S = 2, F = 2$), implying that follower reporting to in-agreement/good leaders had higher satisfaction with supervision than those who report to in-agreement/poor leaders.

As shown in Figure 2, the surface is fiat on the $F = -S$ line, too ($[a_{sub.2}] = -.311, t = -1.473, p > .05$), failing to reject the hypothesis that the surface was flat along this line. However, further examination of the line indicates curvilinearity with respect to the $F$-axis, as evidenced by a large coefficient on $[F.sup.2]$ ($t = -3.78$) and coefficients that approach 0 on $[S.sup.2]$ and SF. The negative sign of $[a_{sub.2}]$ also indicates that the curve was concave. This implies that follower satisfaction with supervision is similarly higher for those who report to underestimators and in-agreement/good estimators than for those who report to overestimators and in-agreement/poor leaders. These results provided partial support to Hypothesis 3a.

Hypothesis 3b predicted similar patterns of satisfaction with supervision for followers who report to empowering leaders. Model 1 of the regression analysis indicated that empowering leadership explained significant variance on supervisory satisfaction ($[R.sup.2] = .375, F = 65.49, p < .001$); however, Model 2 did not explain additional variance ($[DELTA][R.sup.2] = .005, [DELTA]F = 1.69, p > .05$). This implies that empowering leadership has a direct effect on follower satisfaction with supervision but leader self-awareness has no effect on follower satisfaction with supervision; hence, Hypothesis 3b was not supported.
Hypothesis 4a predicted a relationship between leaders' self-awareness of empowering leadership and followers' self-leadership. Models 1 and 2 explained significant variance in followers' self-leadership ($\text{R}^2 = .09$, $F = 10.44$, $p < .001$, and $\text{R}^2 = .13$, $F = 6.44$, $p < .001$, respectively). In addition, Model 2 explained additional variance in self-leadership ($\Delta \text{R}^2 = .04$; $\Delta F = 3.53$, $p < .05$; see Table 4). These findings imply that both empowering leadership and leaders' self-awareness of their empowering leadership were related to followers' self-leadership. The surface was convex, as it is evidenced by a positive and significant value of $[a_{sub.2}]$ along the $F = -S$ line ($[a_{sub.2}] = .34$, $t = 2.61$, $p < .01$; see Figure 3). This implies that followers of underestimators displayed higher self-leadership than those of in-agreement/good or in-agreement/poor leaders. In addition, follower self-leadership was higher for followers of underestimators than of overestimators, as evidenced by higher values of self-leadership at the far left of the $F = S$ axis than at the far right of the axis. However, the hypothesis that the line was a curve along the $F = S$ line was rejected as evidenced by the nonsignificant value of $[a_{sub.2}]$ ($[a_{sub.2}] = -.04$, $t = -.36$). Along the same line ($F = S$), the line increased from the near comer ($S = -2$, $F = -2$) to the far comer ($S = 2$, $F = 2$), which implies that followers' self-leadership was higher for followers of in-agreement/good leaders than for those of in-agreement/poor leaders. In general, followers of underestimators displayed the most self-leadership behavior, followed by those of in-agreement/good leaders. Self-leadership was the lowest among followers of in-agreement/poor leaders. Hypothesis 4a was partially supported.

[FIGURE 3 OMITTED]

Hypothesis 4b predicted that follower self-leadership would be similar at all levels of agreement with respect to leader transformational leadership. Although the overall equation in Model 1 explained significant variance ($\text{R}^2 = .04$, $F = 4.62$, $p < .05$), neither self-rating nor follower rating of leader transformational leadership was related to follower self-leadership. Furthermore, leaders' self-awareness about their transformational leadership was not related to follower self-leadership ($\Delta \text{R}^2 = .01$; $\Delta F = 0.86$, $p > .05$; see Table 4). Therefore, these results provided support for Hypothesis 4b.

In summary, we found that (a) transformational leadership and leader self-awareness of transformational leadership were related to both subordinates' ratings of leader effectiveness and satisfaction with their supervision; (b) neither transformational leadership nor leader self-awareness of transformational leadership was related to subordinate self-leadership; (c) empowering leadership and leader self-awareness of empowering leadership were related to subordinate self-leadership; and (d) empowering leadership, but not leader self-awareness in empowering leadership, was related to leader effectiveness and subordinate satisfaction with supervision (see Table 5). Overall, the effects of self-awareness of transformational leadership were different from those of self-awareness of empowering leadership. In addition, results of self-awareness were distinct and separate from the direct effects of leadership.

Discussion

This study was designed to extend our current understanding of the effects of leaders' self-awareness of their own leadership on various outcomes of interest. In addition to dependent variables such as leader effectiveness and satisfaction with supervisor, we investigated the influence of self-awareness on follower self-leadership. Moreover, nearly all of the previous work in this line of research concentrated on self-awareness of transformational leadership. In this research, we have extended the issue to include self-awareness of empowering leadership.
To operationalize leader self-awareness, leaders were categorized as underestimators, in-agreement/ good estimators, in-agreement/poor estimators, and overestimators, based on agreement with followers in describing their own transformational and empowering leadership. We expected that followers would experience different responses, depending on the degree of leaders’ self-awareness.

In terms of transformational self-awareness, our results are generally consistent with previous research such as Atwater and Yammarino (1992) and Sosik and Megerian (1999). For example, although the self-descriptions of leadership were generally more favorable than followers’ descriptions, we did find variance and diversity in leader self-awareness. That is, some leaders indeed underestimate, others agree, and others overestimate their own transformational and empowering leadership. And more important and again consistent with previous research, we also found that underestimators and in-agreement/good transformational leaders were, in general, identified as most effective by followers.

Results from confirmatory factor analyses, hierarchical regression, and polynomial regression analyses demonstrated distinct differences in the way transformational and empowering leadership related to follower outcomes. Note that the two leadership behaviors, although sharing some communality, are different, yet both have incremental direct effects on various outcome variables (see Table 3). These results demonstrate differential predictive reliability of the leadership measures. In addition, polynomial regression shows that transformational self-awareness was positively related to follower satisfaction with supervision and leader effectiveness, whereas empowering self-awareness was not. In turn, self-awareness in empowering leadership was related to follower self-leadership, whereas transformational self-awareness was not. We believe that the explanation for these findings lie in the conceptual definitions of the two types of leadership. Transformational leadership is defined more in terms of formulation and implementation of leader vision and inspiration of followers (Yammarino & Bass, 1990), which is a type of overarching organizational goal or mission. In contrast, the fundamental conceptualization of empowering leadership has been directly linked to follower self-leadership (Houghton & Yoho, 2005; Manz & Sims, 1991 1995; Sims & Manz, 1996). That is, empowering leadership is a more narrowly focused leadership that is intended to directly enhance follower self-leadership and, indirectly, long-term follower performance. Thus, the self-awareness of transformational and empowering leadership might be expected to follow a different pattern of relationship with various outcomes due to the different foci of the two forms of leadership.

A secondary finding, following the work of Atwater and Yammarino (1997) and Atwater et al. (1998), concerns separating in-agreement leaders into in-agreement/ good and in-agreement/poor groups. This distinction showed that in-agreement/good leadership was generally associated with higher levels of individual outcomes than in-agreement/poor leadership. This implies that self-awareness per se is not necessarily optimal in regard to follower responses. Atwater and Yammarino (1997) and Atwater et al. (1998) have also presented convincing arguments about the importance of this finer distinction of self-awareness for research and managerial purposes. In particular, this classification has training implications, which are discussed next.

Managerial Implications

The most important managerial implication of this research derives from the overall finding that self-awareness of one’s own leadership was related to various affective and behavioral outcomes, including follower ratings of leader effectiveness, follower satisfaction with supervision, and follower self-leadership. These results support the potential efficacy of leadership development interventions that are specifically intended to enhance leader self-awareness. For example, the results support the potential benefits of classical survey feedback on leadership (Thach, 2002). That is, if an organization periodically conducts surveys about
the behavior of leaders and offers timely, candid individual feedback in a constructive manner (Atwater, Waldman, & Brett, 2002), then our results suggest that enhanced self-awareness might produce benefits. In fact, our results suggest future field experimentation to assess the effectiveness of survey feedback about leadership in enhancing self-awareness.

A more contemporary evolution of survey feedback is the 360[degrees] feedback, where ratings or descriptions are taken from followers, peers, and superiors of focal leaders. This approach more fully acknowledges the value of different perspectives and offers the potential of greater triangulation among data sources. The leadership-outcome relationships documented in this research suggest that measures of specific leadership behavior should be considered as potentially important components of the 360[degrees] feedback for developmental purposes. Another contemporary development approach is the use of executive coaching, which typically entails one-on-one tutoring about leadership. Coaching typically includes the development of specific information about an executive's leadership and guided personal experimentation on how leadership can be made more effective. An important component of this is a focus on leadership self-awareness. As Brett and Atwater (2001) reported, overraters are more likely to consider the discrepant feedback from various sources as negative feedback and hence less likely to use such feedback for developmental purposes. Therefore, it is essential that coaches providing such feedback also consider managers' personality because research shows that personality interferes with the perception of feedback. Specifically, Smither, London, and Richmond (2005) noted that coaches and psychologists providing training to leaders "may benefit from understanding [a leader's] personality profile and using it as an indicator of the [leader's] likely perceptivity to feedback [and coaching]" (p. 203). They also suggested that devoting more attention and effort on leaders who are low in the big-5 personality dimensions (e.g., conscientiousness, emotional stability, openness to experience, agreeableness, and/or extraversion) helps them benefit from the feedback from various sources, even if such feedback is not consistent with the managers' initial expectations or views. Thus, the coaches may focus on training leaders to use the feedback on their self-awareness to better manage and influence their subordinates' attitudinal and behavioral outcomes.

Of course, leaders can also independently seek feedback and engage in self-development through deliberate self-monitoring coupled with behaviorally oriented conversations about leadership. An organization may need to develop a system that can support leaders' effort to seek feedback from their followers, peers, and superiors. It may also provide a training program to help leaders develop their feedback seeking and communication skills and how to use feedback received from other sources. Finally, our results demonstrate that leader self-awareness per se does not substitute for effective leadership. That is, leadership does have a main effect! In particular, the results of polynomial regression suggest that both leadership behavior and leader self-awareness can influence outcomes.

Issues and Limitations

This study should be considered in view of certain issues and limitations. First, the study compared leaders' self-assessment of their leadership to their followers' assessment to explain outcome variables but did not address the assessment of other sources (e.g., peers and superiors of the leaders). Therefore, we suggest future studies include assessments from other sources not only about leader transformational leadership but also about empowering leadership. Second, the outcome variables were gathered only from the followers, raising the possibility of common-method bias influencing the findings. We do not dispute that gathering outcome variables from other sources would strengthen the conclusions to be drawn from the results. However, for most of the outcome variables in this study, followers were the most appropriate source. In addition, the findings are
consistent with results from previous studies (e.g., Atwater et al., 1998; Sosik & Megerian, 1999), which should minimize concerns about assessing leader effectiveness from the follower perspective. Finally, this study focuses on only two types of leadership, and it shows that self-awareness of each of these two leadership styles has similar effects, but on different outcome variables. Future research may extend our study to other forms of leadership such as transactional leadership and directive leadership.

Contributions of This Research

The line of research about leader self-awareness is relatively well developed. Yet this study extends our prior understanding of the effects of leadership self-awareness in several ways. First, although the results of prior studies have generally been supported (e.g., Atwater et al., 1998), our research does indicate that the results that apply to self-awareness about transformational leadership might not be generalizable to self-awareness about empowering or, perhaps, other types of leadership. Second, the study extends our understanding of the effects of leadership self-awareness on follower self-leadership. Finally, the study highlighted differential effects of self-awareness about transformational and empowering leadership in that the former is more related to leader effectiveness and follower satisfaction with supervision, and the latter is more related to followers' self-leadership. Last but not least, the results do call to mind the sage advice of one of the first self-help writers:

Observe all men; thy self most!

Benjamin Franklin

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References


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Jonathan Cox is a management and organization consultant in private practice in Houston, Texas. He received his PhD in industrial and organizational psychology from the University of Maryland. He has been a program manager at Dell, Inc., a manager with the Change Leadership practice of Deloitte Consulting L.C., and an associate with the Center for the Study of Work Teams at the University of North Texas. His expertise includes organization change management and project management supporting large-scale organization change such as technology implementation and re-engineering. He has worked with a range of private-sector and public-sector clients representing oil and gas, utilities, chemicals, telecommunications, insurance, manufacturing, and aerospace and defense. His work has appeared in Journal of Applied Psychology, Group and Organization Management, Advances in the Interdisciplinary Study of Work Teams (JAI Press), and in other outlets.
Table 1 Descriptive Statistics and Correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
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<tr>
<td>1. Transformational leadership (leader)</td>
<td>3.66</td>
<td>0.65</td>
<td>(.85)</td>
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<td>2. Transformational leadership (follower)</td>
<td>3.08</td>
<td>0.78</td>
<td>.16 *</td>
<td>(.89)</td>
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<td>3. Empowering leadership (leader)</td>
<td>4.08</td>
<td>0.66</td>
<td>.58 ***</td>
<td>.01</td>
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<td>4. Empowering leadership (follower)</td>
<td>3.65</td>
<td>0.72</td>
<td>.07 .63 ***</td>
<td>.05</td>
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<td>5. Follower rating of leader</td>
<td>3.48</td>
<td>0.90</td>
<td>.00 .75 ***</td>
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<td>6. Satisfaction with supervision</td>
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<td>1.03</td>
<td>.04 .65 ***</td>
<td>.04</td>
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<td>7. Self-leadership</td>
<td>3.68</td>
<td>0.59</td>
<td>.05 .20 **</td>
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</table>

Table 2 Confirmatory Factor Analysis of Leadership Scales

(a) Items Empowering Transformational Leadership

He/she urges me to search for solutions to my problems on the job without his/her supervision. .93 He/she advises me to solve problems when they pop up without always...
getting his/her stamp of approval. .88 He/she urges me to assume responsibilities on my own. .80 He/she encourages me to find solutions to my problems at work without seeking his/her direct input. .78 He/she urges me to work as a team with other managers/supervisors who report to him/her. .68 He/she encourages me to work together with other managers/supervisors who report to him/her. .60 He/she advises me to coordinate my efforts with other managers/supervisors who report to him/her. .54 He/she provides a clear vision of where we are going. .91 He/she provides a clear vision of who and what we are. .91 Because of him/her, I have a clear vision of our organization. .87 He/she is not afraid to "break the mold" to find different ways of doing things. .60 He/she is driven by higher purposes or ideals. .59 He/she isn't afraid to "buck the system" if he/she thinks it is necessary. .53 He/she is a nontraditional type who "shakes up the system" when necessary. .44

Table 3 Incremental Effects of Transformational and Empowering Leadership on Outcome Variables (a)

Outcome Variables
Leader Effectiveness Predictors Model 1 Beta Model 2 Beta A. The role of transformational leadership
Step 1
Empowering leadership .82 *** .37 ***
Step 2
Transformational leadership .66 ***
B. The role of empowering leadership
Step 1
Transformational leadership .87 *** .66 ***
Step 2
Empowering leadership .37 ***

Outcome Variables
Supervisory Satisfaction Predictors Model 1 Beta Model 2 Beta
A. The role of transformational leadership
Step 1
Empowering leadership .91 *** .48 ***
Step 2
Transformational leadership .63 ***

B. The role of empowering leadership
Step 1
Transformational leadership .91 *** .63 ***
Step 2
Empowering leadership .47 ***
Outcome Variables

Follower Self-Leadership Predictors Model 1 Beta Model 2 Beta
A. The role of transformational leadership

Step 1
Empowering leadership .25 *** .24 ***

Step 2
Transformational leadership .01

B. The role of empowering leadership

Step 1
Transformational leadership .15 *** .01

Step 2
Empowering leadership .24 ***

(a.) Values are unstandardized regression coefficients. ** p < .01. *** p < .001.

Table 4 Regressions of Outcome Variables on Self-Ratings and Follower Ratings (a)

Leader Effectiveness Variable Model 1 Beta Model 2 Beta
Transformational leadership
Self-rating -.17 ** -.12
Follower rating .89 *** .72 ***
Self x Self -.09
Self x Follower .22 *
Follower x Follower -.12 *

[R.sup.2] .57 .59
F 145.67 *** 61.48 ***
[DELTA][R.sup.2].02
[DELTA]F 2.85* Empowering Leadership
Self-rating -.13 -.08
Follower rating .83 *** .78
Self x Self -.11
Self x Follower .03
Follower x Follower .06

[R.sup.2] .42 .44
F 78.79 *** 32.83 ***
[DELTA][R.sup.2].01
[DELTA]F 1.69

Supervisory Satisfaction Variable Model 1 Beta Model 2 Beta Transformational leadership
Self-rating -.24 ** -.19 *
Follower rating .93 *** .89 ***
Self x Self -.03
Self x Follower .02
Follower x Follower -.25 ***

[R.sup.2] .44 .48
F 86.85 *** 39.69 ***
[DELTA][R.sup.2].04
[DELTA]F 5.04 ** Empowering Leadership
Self-rating -.23 ** -.10
Follower rating .91 *** 1.10***
Self x Self -.03
Self x Follower -.16
Follower x Follower -.02

(R^2) .38 .380

F 65.49 *** 26.34 ***

[DELTA](R^2) .005

[DELTA]F .53

Self-Leadership Variable Model 1 Beta Model 2 Beta Transformational leadership

Self-rating -.02 -.02

Follower rating .15 .17

Self x Self .06

Self x Follower -.02

Follower x Follower .07

(R^2) .04 .05

F 4.62 * 2.36 *

[DELTA](R^2) .01

[DELTA]F 0.86 Empowering Leadership

Self-rating -.03 .07

Follower rating .25 *** .42

Self x Self .03

Self x Follower -.19

Follower x Follower .12 **

(R^2) .09 .13

F 10.44 *** 6.44 ***

[DELTA](R^2) .04

[DELTA]F 3.53 * (a.) Values are unstandardized regression coefficients. * p < .05. ** p < .01. *** p < .001.

Table 5 Overall Pattern of Significant Relationships Between Leadership, Leader Self-awareness, and Outcomes

Outcome Variables

Leader Subordinate Subordinate

Effectiveness Supervisory Self
Satisfaction Leadership Leadership

Transformational leadership
Yes (a) Yes No (b)

Empowering leadership
Yes Yes Yes

Leadership Leader self-awareness of Transformational leadership
Yes Yes (c) No

Empowering leadership
No No Yes (a) The predictor was significantly related to the outcome variable. (b) The predictor was not significantly related to the outcome variable. (c) Indicates new contribution to the literature.