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Jennifer Jordan, Michael E. Brown, Linda K. Treviño and Sydney Finkelstein

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# Someone to Look Up To: Executive–Follower Ethical Reasoning and Perceptions of Ethical Leadership

Jennifer Jordan

*University of Groningen*

Michael E. Brown

*Penn State Erie, The Behrend College*

Linda K. Treviño

*The Pennsylvania State University*

Sydney Finkelstein

*Dartmouth College*

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*Despite a business environment that highlights the importance of executives' ethical leadership, the individual antecedents of ethical leadership remain largely unknown. In this study, the authors propose that follower perceptions of ethical leadership depend on the executive leader's cognitive moral development (CMD) and, more importantly, on the relationship between executive leader and follower CMD. In a sample of 143 leader–follower dyads, the authors find a direct positive relationship between leader CMD and perceptions of ethical leadership. Using polynomial regression, they find that ethical leadership is maximized when the leader's CMD diverges from and is greater than the follower's CMD. The authors explain these findings using a social learning theory framework. Leaders who are more advanced ethical reasoners relative to their followers are likely to stand out as salient ethical role models whose ethics-related communication and behavior attract followers' attention. The authors discuss the research and practical implications of these findings.*

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*Corresponding author: Jennifer Jordan, University of Groningen, Faculty of Economics and Business, Department of HRM/OB, Nettelbosje 2, 9747 AE Groningen, The Netherlands*

*Email: [j.jordan@rug.nl](mailto:j.jordan@rug.nl)*

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The ethical culture and climate of organizations are greatly influenced by executive-level leaders who set the organizational agenda in ethical (Kelly, Kocurek, McGaw, & Samuelson, 2004; Treviño, Brown, & Hartman, 2003; Treviño, Hartman, & Brown, 2000) as well as strategic domains (Hambrick & Mason, 1984; Mintzberg, 1973). Executives also influence the thinking of other high-level members of the organization who work for them. Recent research has found that the positive effects of executive ethical leadership cascade to lower level employees through the ethical leadership practiced by supervisors (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). Ethical leadership positively influences many important employee outcomes (Brown, Treviño, & Harrison, 2005; Mayer et al., 2009). But, despite its obvious importance, little is known about its antecedents (for an exception, see Walumbwa & Schaubroeck, 2009). In this study, we investigate the direct relationship between leaders' style of ethical reasoning (i.e., cognitive moral development; Kohlberg, 1969; Rest, 1993) and followers' perceptions of leaders' ethical leadership. We also examine the more complex relationship between leader and follower ethical reasoning style and perceptions of ethical leadership.

It is important to focus on what makes followers perceive senior executives to be ethical leaders, because these individuals are strategic leaders who formulate organizational policies and objectives (Barnard, 1938), engage in organizational planning (Page & Tornow, 1987), and provide the organization's strategic vision (Smidt, 1998). Senior executives also establish and communicate the organization's value system and develop new leaders (House & Aditya, 1997; Ireland & Hitt, 1999). Many scholars propose that it is the tone that is set within the organization's upper echelons, ethics (Treviño et al., 2003; Treviño et al., 2000) and nonethics related (Barney, 2005; Weaver, Treviño, & Agle, 2005), that has the greatest impact on the organization. In addition, social learning theory (Bandura, 1986) asserts that power and status enhance the likelihood that an individual will be a model for the impartation of normatively appropriate behaviors. There is little question that executive leaders possess the greatest power and status in their organization, thus serving as potentially the most potent sources of ethical leadership. Perceptions of a leader's demonstration of ethical leadership can vary from follower to follower depending on the follower's experiences with the leader and the follower's own characteristics. In this investigation, we hypothesize that follower perceptions of ethical leadership are directly related to the leader's cognitive moral development and are related as well to the relationship between leader and follower cognitive moral development. We hypothesize that perceptions of ethical leadership are maximized when the leader reasons about ethical issues at a level that is more sophisticated than the follower's.

### *Ethical Leadership*

While the topic of ethical leadership is not new to the philosophical literature—for example, see Marcus Aurelius's *Meditations* (2008; original work from AD 170-180) and Plato's

*Republic Book VII* (2007; original work from 380 BC)—an empirically based understanding of the construct is still in its early stages. Construct development work commenced with a qualitative, interview-based approach in which Treviño and colleagues (Treviño et al., 2003; Treviño et al., 2000) asked corporate executives to characterize executive-level ethical leaders with whom they were familiar. Informants perceived that ethical leaders possessed personal qualities such as demonstrating care, trustworthiness, honesty, and fairness, and they modeled behaviors that included explicitly demonstrating ethical conduct, making fair and principled decisions, communicating the importance of ethics to followers, rewarding positive ethical behavior, and disciplining unethical behavior.

In subsequent construct development work, Brown and colleagues (2005) developed a formal constitutive definition of ethical leadership, defining it as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (p. 120). Thus, ethical leaders are perceived as caring, honest, and principled individuals who make fair and balanced decisions. Ethical leaders are also perceived as engaging in explicit communication about ethical issues and supporting this communication with consistent ethical action and reinforcement of others’ ethical conduct (Brown & Treviño, 2006).

The researchers proposed that followers form perceptions of their leaders’ ethical leadership via processes derived from social learning theory (Bandura, 1977, 1986), including modeling and attractiveness. According to Bandura (1977), to be a model one must be attractive and credible, as well as elicit attention from those in one’s environment. Ethical leaders are attractive and credible because they model normatively appropriate behavior and use the performance management system to consistently reinforce ethical conduct.

Brown and colleagues (2005) developed a 10-item scale to measure ethical leadership based upon social learning theory and the personal qualities and behaviors uncovered in previous research. In studying the outcomes of ethical leadership, they found that subordinates led by those they perceived to be ethical leaders were more likely to exert extra effort on the job, to see the leader as effective, and to report problems to these supervisors. More recently, Mayer and colleagues (2009) found that perceptions of ethical leadership were associated with reduced organizational deviance and increased citizenship behaviors, such as extrarole helping. Walumbwa and Schaubroeck (2009) found that perceptions of ethical leadership were related to increased employee voice via their influences on heightened psychological safety. Thus, perceptions of ethical leadership have been shown to favorably influence a number of significant employee outcomes. Yet, researchers have only begun to uncover its antecedents. For example, Walumbwa and Schaubroeck found that two of the Big Five personality traits, leader agreeableness and conscientiousness, were positively related to subordinate perceptions of ethical leadership.

The goal of the current investigation is to contribute to knowledge about a particularly important individual-difference antecedent of ethical leadership: cognitive moral development (Kohlberg, 1969). This construct represents the cognitive structures and criteria that an individual employs when reasoning about ethical issues. We examine both the direct association between the leader’s cognitive moral development and the follower’s perception of ethical leadership and the relationship between leader and follower cognitive moral development

and the follower's perception of ethical leadership. We focus on this construct because it is conceptually and theoretically tied to ethical cognition and behavior and has been found to influence ethical decision making and action in organizational contexts (see Kish-Gephart, Harrison, & Treviño, 2010, for a meta-analysis). In summary, research has consistently found a moderate-sized correlation between cognitive moral development and a variety of ethical behaviors (Blasi, 1980; Rest & Narvaez, 1994), making it a viable candidate for examining the individual-difference correlates of ethical leadership perceptions.

### *Ethical Reasoning*

Prior to Lawrence Kohlberg's research in the mid-20th century, ethical behavior was thought to be a function of societal rules and norms. Kohlberg (1969) argued that it was not just society that dictated ethical behavior but that the individual decision maker also played an important role—particularly the person's cognitive capacity to reason through ethical issues. Based upon decades of empirical research, Kohlberg devised a step-based hierarchical model of ethical reasoning (i.e., cognitive moral development) that focused on the structures of reasoning that people used to decide what was and was not ethically right and how those structures developed over time and life experience.

Cognitive moral development is a construct that explains the structures of reasoning that individuals apply when thinking through ethical issues and resolving ethical dilemmas. Kohlberg's (1969) theory asserts that individuals develop from childhood onward in their ability to reason about ethical issues and rarely regress to earlier stages. Kohlberg's argument, based upon Jean Piaget's (1932/1965) earlier theorizing on human development, is a cognitive consistency one: Individuals who are capable of reasoning at higher levels find it unnatural to reason at lower levels and therefore predominantly reason at their highest capability levels.

It is important to note that the construct of cognitive moral development focuses on moral reasoning, not behavior. Piaget (1932/1965) acknowledged a potential disconnect between cognition and behavior, stating that how a person thinks about moral issues is not always exemplified in the way he or she acts in ethics-related situations. And Krebs and Denton (1997, 2005) presented convincing evidence that individuals do not always use moral reasoning for moral ends. However, how individuals think about ethical issues has been found to be related (albeit at a moderate magnitude) to how they behave. The significant relationship between ethical reasoning and behavior has been found across life domains, including organizational contexts (e.g., Blasi, 1980; Kish-Gephart et al., 2010), helping to secure Kohlberg's approach as the dominant one in empirical ethical decision-making research for the past 40 years (Rest, Thoma, Narvaez, & Bebeau, 1997).

According to cognitive moral development theory, ethical reasoning progresses through three levels, from *preconventional* to *conventional* to *postconventional*. The large majority of adults reason at the conventional level. And some adults never progress past the preconventional level (Kohlberg, 1981; Rest, 1986; cf. Treviño, 1992).

*Preconventional* ethical reasoners, the least sophisticated reasoners, are egocentric thinkers. They conceive of morality as a set of rules that is imposed by outside authorities, and they

make decisions based upon self-interest (asking, “What’s in it for me?”). They seek rewards, avoid punishments, and are inclined to obey the dictates of authority figures.

*Conventional* ethical reasoners base decisions upon upholding the ethical norms of significant others, including their peer groups, leaders, families, or societies (including looking to rules and laws for guidance). In contrast to preconventional reasoners, they are less self-interested and more others-focused. Conventional reasoners receive satisfaction from fulfilling duties and obligations that accompany their roles. They conform to the expectations of significant others about what is right (Kohlberg, 1981), looking to others in their referent groups and their organizations or to societal laws when making decisions about ethics.

Finally, *postconventional* reasoning is more autonomous than are the other two levels in the basis for its judgment. A postconventional reasoner goes beyond identification with others’ expectations, rules, and laws and beyond looking to others for guidance about what is right. For the postconventional reasoner, what is right is determined based upon considerations of the greater good and universal principles of rights and justice. For example, a postconventional reasoner would be more likely to make ethical decisions by applying a broadly applicable set of justice-based rules rather than by basing the decisions on the rewards or punishments that might ensue from each option (*viz.*, the preconventional level) or what significant others think is appropriate (*viz.*, the conventional level).

Kohlberg’s theory has been the target of criticism and revision (e.g., Gibbs, Basinger, Grime, & Snarey, 2007; Gilligan, 1982; Krebs & Denton, 2005). Some of the criticism has lacked empirical substantiation. For example, Gilligan (1982) contended that gender differences exist in styles and foci of ethical reasoning. She argued that, whereas men are more likely to reason based on principles of justice, women are more likely to consider care-based structures in their ethical reasoning. This difference did not hold up in empirical examination, particularly when studying adult women in work contexts (e.g., Cohen, Pant, & Sharp, 1998; Derry, 1989; Gilligan & Attanucci, 1994; Walker, 1984).

An additional, and more cogent, criticism of Kohlberg’s (1969) theory for the current research questions focuses on the progressive step-based model of moral reasoning that assumes continual increases in a positive direction (Krebs, Denton, Vermeulen, Carpendale, & Bush, 1991; Siegler, 1997). In contrast, Krebs and Denton (2005: 633) argued and found that “moral development is defined more by an expansion in the range of structures of moral reasoning available to people than by the last structure they acquire.” We explain the central relevance of this finding in greater detail when we discuss our divergence hypothesis in the sections below.

### *Leader Cognitive Moral Development and Ethical Leadership*

First, we propose a direct, positive relationship between executives’ cognitive moral development and followers’ perceptions of their ethical leadership. Kohlberg (1981) considered higher levels of cognitive moral development to be preferable to lower levels, on the grounds that more developed reasoners were more likely than their lower level counterparts to include the principles of fairness, justice, and human rights in their decision making. Specifically, whereas preconventional-level reasoners are primarily concerned with gaining

rewards and avoiding punishments and conventional-level reasoners are primarily concerned with maintaining positive interpersonal relationships, postconventional-level reasoners consider justice, individual rights, and the well-being of others to be paramount—even when such consideration might lead to disapproval from powerful others, may not benefit those within one’s personal network, or may even lead to less self-beneficial outcomes. Thus, higher level ethical reasoning may facilitate perceptions of ethical leadership because executives who reason at this level are perceived to care about employees’ well-being, value employees’ opinions, make decisions that balance multiple interests, and act in a fair and principled manner—all of which are components of the ethical leadership construct (Brown & Treviño, 2006; Brown et al., 2005; Treviño et al., 2003).

In addition, as noted earlier, ethical reasoning is moderately correlated with actual ethical behavior (Kish-Gephart et al., 2010), such as reduced cheating (Malinowski & Smith, 1985), greater prosociality (Kohlberg & Candee, 1984), increased whistle-blowing (Brabeck, 1984), and fewer unethical decisions (Treviño & Youngblood, 1990). Modeling such normatively appropriate behavior should increase followers’ perceptions of ethical leadership in these individuals.

*Hypothesis 1: Leaders’ cognitive moral development is positively related to followers’ perceptions of the leader’s ethical leadership.*

### *Leader and Follower Cognitive Moral Development and Ethical Leadership*

We argue next for a more complex relationship between perceptions of ethical leadership and leaders’ levels of cognitive moral development; how the follower’s cognitive moral development relates to the leader’s may also be important in shaping the follower’s perception of the leader’s ethical leadership. Research has found that a substantial proportion of perceived leader behavior is explained by perceiver-based effects (Lord, Phillips, & Rush, 1980)—sometimes as much as the variance explained by the leader’s own characteristics. Thus, perceptions of ethical leadership are likely to depend in part on a follower’s cognitive construal of the leader’s behavior (Maddux, 1999). We will argue here that the relationship between leader and follower ethical reasoning should affect perceptions of ethical leadership. And we propose that divergence between leader and follower ethical reasoning, particularly when the leader is above the follower, will lead to the strongest perceptions of ethical leadership because such a leader will garner attention from followers through making principled decisions and modeling normatively appropriate behavior.

Kohlberg asserted that individuals do not understand reasoning that is at levels more advanced than their own (Kohlberg, 1981; Rest, 1994). Therefore, it is reasonable to question if leaders who are more advanced in ethical reasoning than their followers can effectively communicate about ethics with these lower level individuals. But, post-Kohlbergian research suggests that individuals who reason at higher levels of cognitive moral development both can “speak the same ethical language” as those who are less developed than themselves and can present their more advanced ways of thinking about ethical issues

(Krebs & Denton, 2005), creating, in a sense, an ideal ethical model. Thus, this research suggests that leaders who are advanced moral reasoners are able to relate to individuals who are at levels below their own level of cognitive moral development, as well as be capable of presenting novel ethical arguments to them (Krebs et al., 1991; Levine, 1979). In contrast to Kohlberg's (1969) cognitive moral development theory, which asserts that individuals "transform and displace" their previous structures of ethical reasoning as they advance (Colby & Kohlberg, 1987), more recent research finds that individuals do not engage in displacement (Krebs et al., 1991). As Krebs and Denton (2005) explain in their influential review and critique of Kohlberg's work, progress in moral development is characterized by an expansion in the range of structures available to the reasoner, not a progression accompanied by an abandonment of earlier structures—what they labeled the *layer cake* model. So, while individuals may be unable to comprehend reasoning that is at stages above their own (Rest, 1994), individuals who are at more advanced levels are capable of comprehending reasoning below their own, making it possible for them to tailor their communication to a less ethically developed audience. Relevant to the research question at hand, this assertion suggests that leaders who are more advanced in ethical reasoning can simultaneously (1) present novel, justice-oriented ways of reasoning about ethical issues and (2) speak to their followers using ethical reasoning at levels that their followers can comprehend (i.e., at levels below the leader's highest capacity).

Perhaps most important for the divergence hypothesis is the fact that the ethical leadership construct (Brown et al., 2005) is built upon a social learning theory foundation. Social learning theory (Bandura, 1977, 1986) asserts that being a model depends on being noticed, garnering attention, and conveying attractive information in one's social environment. Ethical leaders are proposed to be attractive and credible role models who elicit followers' attention to messages about ethics by both modeling ethical behavior and reinforcing it in relevant others (Brown et al., 2005; Brown & Treviño, 2006). By definition, role modeling (i.e., *being* that attractive and credible behavioral example) includes one individual looking up to another. Thus, reasoning about ethical issues at a more advanced level than one's follower should attract the follower's attention and be noticed. Schminke, Ambrose, and Neubaum (2005) acknowledged this point by asserting that individuals prefer and are more attracted to higher levels of ethical reasoning, even if they are not yet cognitively capable of reasoning at such levels themselves.

In addition, social learning theory emphasizes the centrality of message salience for laying the foundation for social learning processes to occur (Bandura, 1986). Qualitative research on ethical leadership demonstrates that the salience of a leader's moral message (i.e., "conveying an ethics message that will stand out and be noticed"; Treviño et al., 2003: 26) is integral to being perceived as an ethical leader. For ethical leaders, salience may be established by demonstrating ethically appropriate behavior, especially behavior that is novel or unexpected (Fiske, 1980; Fiske & Taylor, 1991). Note that unless a message is considered to have an ethical valence, mere message novelty is unlikely to elicit perceptions of ethical leadership. Thus, we propose that salience related to ethics-related communication and behavior results from followers being exposed to ethical reasoning more advanced than their own. Such communications and behaviors are likely to be noticed by followers, thereby contributing to perceptions of ethical leadership.



We have argued for a divergence hypothesis, but it is plausible that convergence between leader and follower ethical reasoning might lead to the strongest perceptions of ethical leadership. While there is little research looking at the effects of leader and follower “fit,” research examining leader and follower cognitive convergence has found that it is associated with a number of positive outcomes. For example, Gibson, Cooper, and Conger (2009) found that convergence on how a team leader and the team as a whole view the extent to which the team has accomplished its goals and engages in constructive conflict maximizes team performance. In the ethics domain, Schminke and colleagues (2005) found that followers report greater job satisfaction when they converge with their leader’s cognitive moral development. The researchers drew their explanation from the values congruence literature (Kluckhohn, 1962; Schneider, 1987), arguing that individuals who shared a style of reasoning about ethical issues were also likely to share values—leading to greater subordinate job satisfaction. But job satisfaction and perceptions of ethical leadership are very different types of outcome variables. With job satisfaction, liking of and similarity with the leader (i.e., congruence) are likely to be paramount in forming one’s perceptions. But with perceptions of ethical leadership, what is important is that the leader communicates an ethics message that stands out and is noticed by the follower. For that outcome, divergence should be more important. Thus, the evidence from recent research advancing Kohlberg’s cognitive moral development theory (Krebs & Denton, 2005), combined with the social learning foundation of ethical leadership (Brown et al., 2005), suggests that divergence, particularly when the leader reasons at a level more advanced than that of his or her follower, will likely lead to the strongest perceptions of ethical leadership.

*Hypothesis 2:* Divergence between leader and follower cognitive moral development, when the leader is more advanced than the follower, will lead to the strongest perceptions of ethical leadership.

## Method

### *Participants and Procedures*

Participants were senior executives participating in a university executive education program and their direct reports. The participants came from a variety of organizations and industries. We contacted the executives with the request that they participate in a study on executive leadership. They were each sent a letter describing the project, including the request that they would be asked to submit the names of 5 to 10 of their direct reports. We directly contacted these direct reports with an explanation of the project and what would be required of them. We assured participants that individual-level data or confirmation of their participation would not be shared with their organizations. We also assured them that their leaders would not know if they participated in the project and would not be provided with their responses.

The executives we contacted included those in positions such as chief operating officer, chief financial officer, chief information officer, and vice president. Of the 38 executives we contacted as part of their executive education course, 31 completed all study-related

**Table 1**  
**Leader and Direct Report Descriptive Statistics**

Variable	Leader	Direct Report
Gender (% male)	100	67
Race (% Caucasian)	50	41
Age (average years)	45.36 (5.35)	42.07 (8.34)
Formal education (years)	17.79 (1.79)	17.19 (2.00)
Experience in profession (years)	19.64 (6.31)	16.09 (8.24)
Number of individuals directly supervised	8.33 (3.65)	
Ethical reasoning (P-score)	31.51 (13.09)	35.14 (15.13)
Ethical leadership (as rated by direct reports)	4.17 (0.48)	

*Note:* *N*s ranged from 28 (for leader-based variables) to 143 (for direct report-based variables). Except for gender and race, all fields contain sample means and standard deviations (in parentheses).

materials (82% participation rate); however, 3 of these leaders did not submit the names of their direct reports.

We distributed 209 direct report surveys, and 140 direct reports completed and returned them (67% participation rate). These direct reports held relatively high-level positions in the organizations, including facilities management officer, operations officer, and regional manager. All of the direct reports worked directly for the executive, and all reported having regular in-person and virtual contact with the executive. See Table 1 for sample descriptive statistics.

### *Executive and Direct Report Measure*

*Cognitive moral development.* The executives and their direct reports completed the short form of the Defining Issues Test (DIT; Rest, 1979), the most widely used measure of cognitive moral development (Gibbs & Widaman, 1982; see Rest, Narvaez, Bebeau, & Thoma, 1999) and, according to a recent meta-analysis, the one most used in investigations of ethical cognition in organizations (Kish-Gephart et al., 2010). The measure takes approximately 20 minutes to complete. Its P-score, the most commonly reported index (Rest et al., 1997), measures the extent to which an individual engages in postconventional ethical reasoning.

The DIT presents three ethical dilemmas. After reading each dilemma, individuals are asked to indicate what the protagonist should do and then to rate a series of 12 statements for how important each is to determining how to act in the dilemma. Ratings range from *great importance* to *no importance*. The individual is then asked to select the four most important statements for deciding how to resolve the dilemma. Each of the 12 statements corresponds to a specific level of cognitive moral development. An individual's combined rating and selection of the statements, each of which represents an important consideration for the situation, is used to compute his or her P-score. If an individual is at a particular level of reasoning, he or she will recognize the corresponding level items as being important. If the individual is below that level, he or she will not understand the relevance of those higher level items to resolving the dilemma and dismiss them as unimportant or irrelevant (Rest, 1994). The DIT also provides an M-score, which measures the extent to which

the individual selected meaningless, albeit erudite-sounding, statements. Individuals with scores above 8 should be eliminated (Rest, 1993). Our sample contained no M-scores above this cutoff.

### *Direct Reports Measure*

*Ethical leadership.* We measured followers' perceptions of ethical leadership using Brown and colleagues' (2005) 10-item scale ( $\alpha = .85$ ). We instructed direct reports that the items on this scale asked about their executive leader and to respond to each item on a 5-point Likert-type scale (1 = *strongly agree* to 5 = *strongly disagree*). We reverse-scored the responses so that a higher score indicated a greater perception of the leader's ethical leadership. Sample items included, "Listens to what employees have to say," "Has the best interests of employees in mind," and "Sets an example of how to do things the right way in terms of ethics."

## Results

### *Ethical Reasoning Scores (DIT)*

Three leaders and 11 direct reports had incomplete responses on the DIT, the measure of cognitive moral development, warranting the exclusion of these scores from the analyses. Using multiple-missing-data imputation methods (Enders, 2001; Newman, 2009; Schafer, 1997), described in detail below, we included these 11 direct reports in our data set; however, since we could not determine the ethical leadership ratings for the three leaders without DIT scores (these individuals did not have direct reports who rated them and therefore had no ethical leadership scores as well), these leaders were excluded from the analyses. These exclusions left us with 143 pairs on which to complete the analyses, comprising 28 executives. There was an average of 5.11 ( $SD = 2.28$ ) direct reports per executive in the final sample analyzed. The median number of direct reports was 5 and the mode was 4. In 59 (41%) executive-direct report pairs, the executive had a greater cognitive moral development score than his or her direct report. The average difference for this group was 16.09 ( $SD = 9.47$ ). In 80 (56%) pairs, the executive's cognitive moral development score was less than that of his or her direct report. The average difference for this group was  $-16.21$  ( $SD = 11.71$ ). And 4 (3%) pairs had equal cognitive moral development scores. Note that it is not necessary to have exactly equivalent leader and follower cognitive moral development scores in order to test the effects of divergence or convergence (J. Edwards, personal communication, February 4, 2010).

Because of missing data due to purged or missing DIT scores (see the section above), we employed standardized data imputation techniques (Newman, 2009) to account for these missing values. We first performed a multiple-missing-data analysis, which showed that our missing data were missing completely at random (MCAR; Little's MCAR test,  $\chi^2(58) = 61.44, p = .35$ ; Little & Rubin, 1987). An MCAR result allowed confidence in the assumption

**Table 2**  
**Intercorrelations for Leader and Direct Report Scale Scores**

Variable	1	2	3
1. Leader cognitive moral development			
2. Direct report cognitive moral development	.02	–	
3. Ethical leadership <sup>a</sup>	.23**	–.07	–

*Note:* These are maximum likelihood estimates based on the expectation maximization algorithm (Enders, 2001; Newman, 2003; Schafer & Graham, 2002); sample *N*s ranged from 129 to 143. These correlations should be interpreted with caution, as there is shared variance in the observations (i.e., multiple leader–direct report observations sharing the same leader).

a. Variable 3 was rated by direct reports.

\*\* $p < .01$ .

that we were using unbiased maximum likelihood techniques in our data imputation. Because our missing values were composed primarily of scale-level nonresponses (e.g., missing the entire DIT or ethical leadership score), we imputed these values using the expectation maximization (EM) variation of the maximum likelihood technique (Enders, 2001; Schafer, 1997). The EM technique assumed a distribution for the partially missing data and based its inferences on the likelihood under that distribution (Newman, 2003, 2009). We reported all descriptive statistics that follow based on the EM algorithm (Enders, 2001; Newman, 2003; Schafer & Graham, 2002).

### *Ethical Reasoning and Ethical Leadership*

Table 2 contains the intercorrelations between the study variables. To test our hypothesis on the relationship between leader cognitive moral development and perceptions of ethical leadership (Hypothesis 1), we used linear regression. To test the relationship between leader and follower cognitive moral development and perceptions of ethical leadership (Hypothesis 2), we used polynomial regression analyses (Edwards & Parry, 1993). Doing so allowed us to examine the relationship among these three variables by examining patterns in the data and the shape of these patterns when graphed on a three-dimensional surface (see Edwards, 2002). Polynomial regression is the appropriate alternative to using difference scores to examine “(mis)fit” hypotheses. The problem accompanying difference scores includes, but is not limited to, that they do not allow researchers to examine how different forms of (mis)fit result in unique relationships with the outcome of interest (see Edwards, 1994, or Edwards and Parry, 1993, for an in-depth examination of polynomial regression and the problems accompanying difference scores). Within both the linear and polynomial regression approaches, we used a cluster regression technique that estimated the variance–covariance matrix and assumed covariance between individuals in the same group but none across different groups (Antonakis, Bendahan, Jacquart, & Lalive, 2010; Glomb & Welsh, 2005; Rogers, 1993). We employed this technique because some leader–follower pairs in our data set shared the same leader (that is, there were 28 leaders spread across the 143 leader–direct report pairs). We also employed a White correction (White, 1980) when calculating the standard errors,

**Table 3**  
**Polynomial Regression Results of Perceptions of Ethical Leadership (Z)**  
**on Leader (X) and Follower (Y) Cognitive Moral Development**

Fixed Effects Coefficients <sup>a</sup>						Response Surface Features			
						$X = -Y$ misfit line		$X = Y$ fit line	
$R^2$	$X$	$Y$	$X^2$	$X \times Y$	$Y^2$	Slope ( $b_1 - b_2$ )	Curvature ( $b_3 - b_4 + b_5$ )	Slope ( $b_1 + b_2$ )	Curvature ( $b_3 + b_4 + b_5$ )
.09*	.18*	-.10	.01*	-.001	.002	.28*	.02†	.01	.014†

*Note:* The dependent variable used to compute these parameters is the transformed ethical leadership score. Ethical leadership was transformed,  $(Z - 1) \times 25$ , in order to lift the corresponding graph (Figure 1) off of the floor (J. Edwards, personal communication, November 20, 2008). Transforming the dependent variable did not affect the significance of any of the parameters.

<sup>a</sup>Entries are unstandardized regression coefficients.

† $p < .10$ . \* $p < .05$ .

which accounted for the heteroscedasticity in our regression residuals. All of the regression analyses that follow include these corrected estimates.

*Leader ethical reasoning and ethical leadership.* Before examining the full polynomial regression model, we examined the direct hypothesis (Hypothesis 1), that is, our prediction that higher cognitive moral development on the part of the leader would relate to greater perceptions of his or her ethical leadership. This prediction was confirmed via a direct, positive effect,  $b = .01$ ,  $R^2 = .051$ ,  $p = .039$ . Thus, leaders who reasoned at a more advanced level were perceived to be stronger ethical leaders (Kohlberg, 1981).

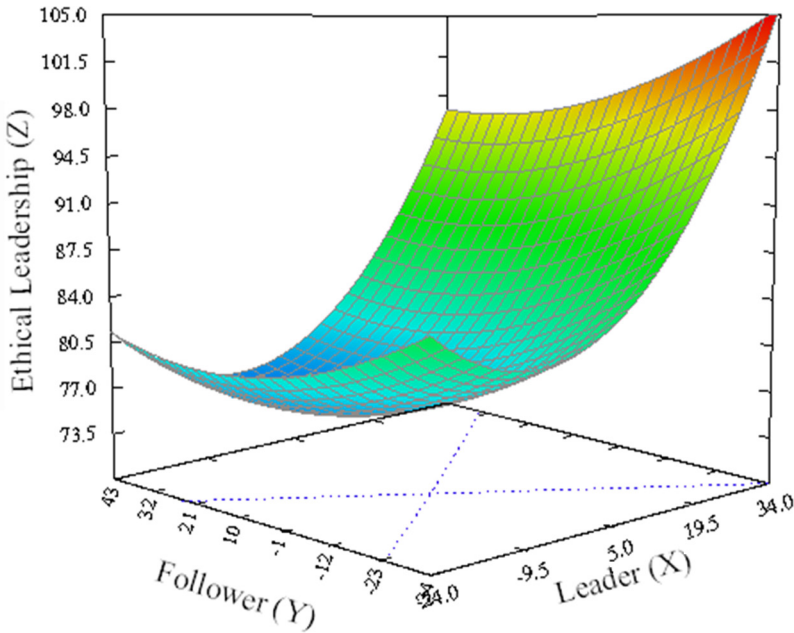
*Leader–follower ethical reasoning divergence and ethical leadership.* The polynomial regression analyses involved estimating a quadratic model with perceptions of ethical leadership as the outcome variable ( $Z$ ) and both leader ( $X$ ) and follower ( $Y$ ) cognitive moral development as the independent variables. The full polynomial equation is

$$Z_{EL} = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2. \quad (1)$$

Results of this regression analysis are presented in Table 3, and the corresponding surface is shown in Figure 1.

In this figure, the leaders' and followers' cognitive moral development scores are located on the  $X$ ,  $Y$  plane, or the "floor" of the graph. Followers' perceptions of their leaders' ethical leadership are located on the  $Z$ -axis, that is, the vertical axis extending up from the floor of the graph. The line of fit, this is where  $X = Y$ , is the line that extends from the front to the back of the graph. However, Hypothesis 2 primarily involves what happens along the line of incongruence ( $X = -Y$ ), which extends from the left to the right side of the graph. We were particularly interested in the effects on perceptions of ethical leadership when a leader's cognitive moral development was above that of the follower's, which was represented by the area of the surface on the right side of the graph (i.e., to the right of the  $X = Y$  line). We hypothesized that there would be a positive slope along the line of incongruence, such that

**Figure 1**  
**Leader (X) and Follower (Y) Cognitive Moral Development**  
**and Perceptions of Ethical Leadership (Z)**



*Note:* The X-axis contains the leader's mean-centered P-score. The Y-axis contains the direct report's mean-centered P-score. The Z-axis contains the transformed ethical leadership score as assessed by the direct report. Ethical leadership was transformed,  $(Z - 1) \times 25$ , in order to lift the graph off of the floor (J. Edwards, personal communication, November 20, 2008).

as one advanced along the line of incongruence, where  $X > Y$ , values of ethical leadership (Z) would be maximized. We evaluated the divergence hypothesis (Hypothesis 2) by examining both the slope (represented by  $b_1 - b_2$ ) and the curvature (represented by  $b_3 - b_4 + b_5$ ) along this line. These coefficient values are provided in Table 3.

First, as we predicted, the incongruence line ( $X = -Y$ ) had a positive slope, indicating that the surface (i.e., perceptions of ethical leadership) was increasing as it crossed the  $X = Y$  line into the area where  $X > Y$ —or the leader's cognitive moral development was greater than the follower's. In addition, as we predicted, the  $X = -Y$  line had positive curvature, with the surface flattening out as it approached the line of congruence.

We also examined the line of congruence, as it indicated important attributes of our data that were relevant to examining the divergence hypothesis. For example, evidence of a positive slope or negative curvature along the  $X = Y$  line would weaken support for the divergence hypothesis. As featured in Table 3, the line of congruence had a slope of 0, meaning that perceptions of ethical leadership did not increase or decrease along the  $X = Y$  line. However,

the positive curvature (combined with the curvature also witnessed along the  $X = -Y$  line) indicated a slight bowl shape to the surface. Specifically, an examination of the three-dimensional surface suggested that perceptions of ethical leadership were at their minimum when both leader and follower were moderate on cognitive moral development and that any upward curvature stopped (or at least significantly decreased) when leaders and followers reached this point (i.e., were both low, as opposed to both high, on cognitive moral development). We confirmed this visual observation statistically by testing the difference between two points along the fit line. We located a point along the line of fit where both the leader and follower were high on cognitive moral development (i.e., P-score = 60) or both low on cognitive moral development (i.e., P-score = 10). These values corresponded to recommended percentile cutoffs (Rest, 1993; used in Turner, Barling, Epitropaki, Butcher, & Milner, 2002); thus, the leader and the follower were either both in the first quartile or both in the fourth quartile of ethical reasoning. Using the polynomial equation, we tested the difference between the following two  $z$ -hat values for perceptions of ethical leadership at each of these two points (see Edwards & Rothbard, 1999, for a detailed description of this analysis).

$$Z_{EL1} = b_0 + b_1X_{L1} + b_2Y_{F1} + b_3X_{L1}^2 + b_4X_{L1}Y_{F1} + b_5Y_{F1}^2 \quad (2)$$

$$Z_{EL2} = b_0 + b_1X_{L2} + b_2Y_{F2} + b_3X_{L2}^2 + b_4X_{L2}Y_{F2} + b_5Y_{F2}^2 \quad (3)$$

Results provided statistical evidence that perceptions of ethical leadership were greater when both the leader and the follower were at higher rather than lower levels of cognitive moral development ( $F = 4.23, p = .04$ ). However, given the fact that perceptions of ethical leadership were not maximized along the line of congruence (which would be evidenced by a downward slope along the line of incongruence) and that there was a nonsignificant slope along this ridge, one could not conclude from this analysis that convergence, especially at higher levels of leader–follower cognitive moral development, maximized perceptions of ethical leadership. However, it did suggest that the upward curvature of the convergence line did not extend below moderate levels of cognitive moral development, meaning that when the leader and follower were both low on cognitive moral development, the leader was seen as less of an ethical leader than when both were high on cognitive moral development.

Another important feature to explore on the response surface was the rotation of the graph along the lines of congruence and incongruence, meaning the examination of lateral shifts in the surface along the two lines of focus. An examination of the response surface relative to these lines (drawn along the floor of Figure 1) indicated that the graph was rotated slightly clockwise, into the region where  $X > Y$ . This rotation indicated that the leader's cognitive moral development ( $X$ ) was playing a larger role in predicting perceptions of his or her ethical leadership than was the follower's ( $Y$ ). This effect was unsurprising for two reasons. First, the leader was the target of our outcome variable; thus, it is reasonable that leader-based characteristics more strongly affected perceptions of ethical leadership. Second, a vast body of literature indicates the importance of leader characteristics for individual and organizational outcomes (e.g., Hambrick & Mason, 1984; Kelly et al., 2004; Mintzberg, 1973). Schminke and colleagues (2005) also found that leaders' cognitive moral development was more important than followers' for predicting their employee-based outcome variables.

Thus, in sum, the polynomial regression and accompanying response surface analysis indicated the following: (1) There was a positive slope along the line of incongruence—ethical leadership increased into the area where the leader’s cognitive moral development was above the follower’s. (2) There was no slope along the line of congruence, meaning no increase nor decrease along the line where the leader’s cognitive moral development equaled that of the follower’s. (3) The upward curvature along both the incongruence and congruence line indicated a slight bowl shape to the overall surface; (4) however, the upward curvature along the line of congruence stopped (or at least was significantly reduced) at points at or below where the leader and follower had moderate levels of cognitive moral development. Lastly, (5) there was a slight clockwise rotation of the graph’s surface along the floor, indicating that the leader’s cognitive moral development exerted a larger role in the leader–follower cognitive moral development to perceptions of ethical leadership relationship.

*Post hoc analyses of leader–follower divergence.* Given the support for the divergence hypothesis (Hypothesis 2), we conducted post hoc analyses to explore this relationship with greater precision. Specifically, we wanted to know if the magnitude of the difference between leaders’ and followers’ cognitive moral development affected perceptions of ethical leadership. We examined whether the follower’s perception of ethical leadership was affected by the leader’s cognitive moral development being substantially greater versus slightly greater than the follower’s own cognitive moral development. To address this question, we conducted an analysis similar to the one performed above on the line of congruence (Edwards & Rothbard, 1999); however, here we chose two points along the line of incongruence: one where the leader’s cognitive moral development score was substantially greater and one where it was slightly greater than the follower’s. We had some freedom in deciding what “substantially” and “slightly” implied; however, we selected P-score values that corresponded to recommended percentile cutoffs (Rest, 1993) and were actual leader and follower values found in our sample. Specifically, we used 60 to represent the leader’s P-score and 20 to represent a “substantially” lower follower’s P-score and 43 to represent a “slightly” lower follower’s P-score. These three scores corresponded to a first-quartile leader with both a fourth- and second-quartile follower, respectively. This analysis revealed that perceptions of ethical leadership were unaffected when the follower was substantially lower versus slightly lower than the leader ( $F = 0.01, p = .94$ ).<sup>1</sup> In other words, this analysis indicated that a follower’s perception of ethical leadership was unaffected by the magnitude of discrepancy between his or her cognitive moral development and the leader’s cognitive moral development; what was important was having a leader whose cognitive moral development was more advanced (to any extent) than the follower’s.

## Discussion

This investigation examined the previously untested relationship between executive leader and follower ethical reasoning and perceptions of the leader’s ethical leadership (Brown & Treviño, 2006). We proposed and found that direct reports’ perceptions of ethical leadership were stronger when leaders were higher in cognitive moral development. We also learned



that divergence on cognitive moral development (when the leader's cognitive moral development was above the follower's) was associated with stronger follower perceptions of ethical leadership.

Consistent with Kohlberg's (1981) initial theorizing that reasoning at more advanced ethical stages is preferable to reasoning at less advanced stages and that there is a significant relationship between cognitive moral development and normatively appropriate behavior (e.g., Blasi, 1980; Kish-Gephart et al., 2010), we found a direct relationship between leaders' ethical reasoning and perceptions of their ethical leadership. This direct relationship suggests that if a leader reasons at a more sophisticated level of cognitive moral development, followers are more likely to perceive him or her as an ethical leader. This finding suggests that highly ethically developed leaders are not just reasoning silently about ethical issues but are translating this reasoning into communication and (or) action that affect followers' perceptions of them as ethical leaders. While we discuss future directions for research in detail below, this finding highlights the importance of devoting greater attention to investigating underlying processes in order to learn more about what such leaders are doing or saying to create these perceptions of ethical leadership.

While the leader's ethical reasoning is important to perceptions of ethical leadership, we found that its relationship to the follower's ethical reasoning is also important. The more complex divergence finding demonstrates that perceptions of ethical leadership are stronger when the leader is above the follower on cognitive moral development. The divergence finding is consistent with the social learning foundation (Bandura, 1977, 1986) of ethical leadership (Brown et al., 2005), which emphasizes the importance of the salience and credibility of the leader's ethics message (Treviño et al., 2003; Treviño et al., 2000). Executives appear to maximize perceptions of their ethical leadership by distinguishing themselves from followers and by being noticed by followers on behavioral dimensions such as explicit communication about ethics, fair judgment, care for employees, and reinforcement of ethical conduct. In other words, they "stand out" as ethical leaders. According to the current findings, leaders achieve this, in part, by reasoning about ethical issues at a more sophisticated level than their followers. The divergence finding suggests that maximizing perceptions of ethical leadership is also about leader-follower "misfit" on the dimension of cognitive moral development. As an example, a conventional-level leader (Kohlberg, 1981) would be perceived as stronger on ethical leadership by a pre-conventional follower. But this same leader may be perceived to be weaker on ethical leadership by a conventional or a post-conventional follower. Thus, to be perceived as stronger on ethical leadership, the leader should be a more developed ethical reasoner than his or her follower. Post hoc analyses demonstrated that the divergence finding holds when the leader is greatly above the follower's level of cognitive moral development (three quartiles; Rest, 1993) as well as when slightly above (one quartile). Post hoc analyses also confirmed conclusions drawn from visual inspection of the graph: Divergence does not work both ways; the follower being above the leader on cognitive moral development does not strengthen perceptions of ethical leadership.

In our review of the polynomial regression findings, we did not find support for a general convergence hypothesis (i.e., no downward curvature along the line of misfit). However, we did find that perceptions of ethical leadership were greater when both the leader and the follower were high (rather than moderate or low) on cognitive moral development. This

additional finding suggests that followers who are also high on cognitive moral development are more likely than those moderate or low on cognitive moral development to perceive their leaders to be ethical leaders when they are paired with a leader who is at an equally high level. Followers who are high-level reasoners themselves may be particularly attuned to ethical leadership, and they will be looking for it and will recognize it in leaders who are similarly advanced ethical reasoners.

### *Implications for Research*

The finding that leaders' positive divergence from their followers is associated with stronger perceptions of ethical leadership raises interesting theoretical questions about divergence or convergence between leaders and followers more generally and when divergence versus convergence might be associated with beneficial outcomes. Some research on leader–follower fit indicates that divergence leads to more positive outcomes. For example, leader–follower divergence on control traits (i.e., the dominance scale of the California Personality Inventory), with the leader being above the follower, leads to greater satisfaction with one's supervisor (Glomb & Welsh, 2005) because these divergent traits produce more seamless, less-conflict-ridden interactions (Kiesler, 1983). And the findings of the current study demonstrate that divergence in ethical reasoning, with the leader being above the follower, is positively related to perceptions of ethical leadership.

Yet, other research has found that convergence between leaders and followers leads to favorable outcomes. For example, perceived leader–follower values congruence, associated with transformational leadership (Jung & Avolio, 2000), has long been linked to positive outcomes, such as the quality of leader–member exchange (Ashkanasy & O'Connor, 1997) and follower job satisfaction and commitment (Meglino, Ravlin, & Adkins, 1989). And, as noted earlier, leader–follower ethical reasoning convergence has been associated with greater job satisfaction, commitment, and lower turnover intentions on the part of followers (Schminke et al., 2005).

Researchers will need to think carefully (and theoretically) about the variables of study before predicting whether divergence or convergence between leaders and followers is likely to be more beneficial. One possible explanation is that divergence leads to better outcomes when it is important for the leader to stand out and be noticed, to actually be different in some way, or when being similar would create conflict (e.g., as when both are high on dominance, viz., Gibson et al., 2009). Alternatively, convergence may lead to the most favorable outcomes when similarity, liking, or identification is the important underlying process (Byrne, 1971). Clearly, it is not always good for leaders and followers to share traits. Sometimes a better outcome is achieved when they differ (Dryer & Horowitz, 1997; Moynihan & Peterson, 2001).

As just noted, Schminke and colleagues (2005) found that convergence on leader–follower cognitive moral development can maximize important outcomes, such as employee satisfaction, commitment, and turnover intentions. We found that divergence produced stronger perceptions of ethical leadership. These differences in findings are most likely a consequence of the very different dependent variables in these two investigations: Job satisfaction and commitment are related to perceptions of the job environment and individuals' psychological

comfort and contentment within it. They are not necessarily related to perceiving the leader as a stronger or weaker ethical leader. However, another significant difference between the two investigations lies in the samples. Schminke and colleagues did not report the level of contact between their leaders and followers; however, given that their leaders were organizational CEOs and less than a third of their followers were in supervisory roles themselves, we assume that the nature of contact between these two groups was lower than was the case in the current sample of executives and their direct reports. In the current sample, followers had, at a minimum, direct contact weekly with their leaders.<sup>2</sup>

The difference in samples (and outcomes) suggests the possibility of moderators in the relationship between cognitive moral development and perceptions of ethical leadership. One possible moderator might be the intimacy of leader–follower interactions. It is possible that when a leader–follower relationship is characterized by greater distance, how the leader’s cognitive moral development relates to the follower’s may have less impact on the follower’s perception of the leader’s ethical leadership. Distant subordinates are less likely to have the opportunity to directly observe the leader reasoning about ethical issues, compared with direct reports with a close relationship, and therefore may have insufficient insight into the leader’s ethical reasoning style for it to significantly influence their ethical leadership perceptions.

While recognizing this potential moderator, we believe that the upward divergence relationship found in the current study will likely be robust to myriad characteristics of leader–follower dyads and organizational contexts because of the benefits that apparently accompany a leader’s advanced cognitive moral development. Nevertheless, the exploration of this and other moderators remains important for future research.

The polynomial regression model, which included both leader and follower cognitive moral development, accounted for 9% of the variance in followers’ perceptions of ethical leadership. Given the multitude of factors that likely influence the extent to which a follower perceives his or her leader as an ethical leader (e.g., the ethical climate of the organization, other characteristics of the leader, a follower’s moral awareness; Jordan, 2007), being able to explain nearly one tenth of the variance in ethical leadership is noteworthy. However, nine tenths of the variance remains unexplained. Thus, particularly given the importance of ethical leadership, additional research that explores the factors predicting perceptions of ethical leadership is needed—particularly research on the antecedents. Potential antecedents may be, but are not limited to, perceptions of whether the leader has dealt with significant organizational crises in a normatively appropriate way and his or her ability to recognize and communicate about ethical issues with followers (Jordan, 2009; Reynolds, 2008).

### *Practical Implications*

The results of the current investigation have practical implications for organizations. Our findings suggest that to maximize perceptions of ethical leadership, leaders should be advanced ethical reasoners and, preferably, more advanced on this dimension than their followers. We know of no organizations that have taken an individual-difference approach to ethical leadership and none that have focused on the cognitive moral development of leaders or followers. Therefore, this research has the potential to inform organizations about a new

way of thinking about ethical leadership. They may want to incorporate this information into leadership selection and assessment programs. We discuss this possibility in detail below.

The current findings also draw some important implications for executive leader ethics training. As a result of the U.S. Sentencing Guidelines for Organizations and Sarbanes-Oxley legislation, as well as measures instituted to reign in reckless business practices across the world (e.g., Greek austerity measures, the Dutch “Banking Code”), organizations are expending significant resources to encourage ethical behavior at all levels of management, including the executive and even the board levels. Many of these organizations are searching for information about how to most effectively provide ethics training. The current results suggest that *rigorous* cognitive moral development–based training should certainly be considered as part of the offerings (Wells & Schminke, 2001). We emphasize the word “rigorous,” because research has found that advancing an individual’s cognitive moral development is accomplished only through intensive, focused training procedures delivered by a trained facilitator. The most effective training programs are focused on facilitated ethical discussions with peers about hypothetical or real ethical dilemmas. These discussions challenge individuals’ reasoning by exposing them to reasoning that is one stage above their own (Rest, 1988; Rest & Thoma, 1986; explained in Treviño, 1992). This training is most effective when it lasts between 4 and 12 weeks. Trainings of fewer than 4 weeks show negligible effects (Rest & Thoma, 1986). Such extended training would rely on hypothetical ethical dilemmas, or even better, dilemmas taken from the organization’s own experience, and would challenge the executives to think about these dilemmas in an increasingly principled way. This is a completely unique approach compared with the brief ethics training for executives that most organizations currently have in place. Therefore, only organizations that are serious about improving executive ethical leadership are likely to adopt such an approach. Perhaps they will be convinced by the accumulating evidence about the beneficial influence of ethical leaders, including the reduced deviance (Mayer et al., 2009), increased willingness to report problems to management (Brown et al., 2005), and increased voice (Brown et al., 2005; Walumbwa & Schaubroeck, 2009) of organizational members.

Another important practical issue to discuss is what the current findings suggest about leader (and follower) selection. Previous research has found that managerial-level ethical leaders are seen as having greater potential to reach senior leadership positions within their organizations (Rubin, Dierdorff, & Brown, 2010), so it is reasonable to believe that most organizations value strong ethical leadership within their leadership ranks. We found that perceptions of ethical leadership are maximized when the leader shows advanced reasoning about ethical issues, as well as when he or she is above the follower on this dimension. This finding seems to strongly suggest that executive searches should consider the sophistication of a candidate’s ethical reasoning. According to our findings, organizations should think of executives as “thought leaders” in terms of ethics.

### *Strengths and Limitations*

Because recent high-profile ethics scandals emanated from the highest levels of organizational leadership and because individuals at these levels play such an important role in

setting the organization's ethical and strategic agenda (Hambrick & Mason, 1984; Kelly et al., 2004; Mintzberg, 1973; Treviño et al., 2003; Treviño et al., 2000), we sought to recruit a sample characterized by a high organizational level in both the leaders and their direct reports. The upper echelon sample is unique and, therefore, a strength of the research. However, recruiting senior executives to complete surveys proved to be a great challenge, leaving us with a sample size that was smaller than ideal and restricting our ability to investigate additional questions such as, What are the moderators of the divergence relationship? Also, this executive-level sample prompts questions about whether our findings will generalize to leaders and followers at lower levels of the organizational hierarchy. Theory (e.g., Brown et al., 2005; Treviño et al., 2003) provides no reason to predict that the relationships we found would not hold at lower organizational levels but additional research is needed to address this question. And, as we stated above, the level of contact between the leader and follower may moderate the current divergence finding. Related to this point, we must also temper our conclusions and resulting prescriptions by the fact that they are drawn from a single sample of upper echelon leaders and direct reports. A strength of this sample is that our leaders hailed from multiple companies, industries, countries, and races. At the same time, they were from a single sample of leaders (all of whom were taking part in voluntary executive education, which may communicate an above-average aspiration level) and their direct reports. Thus, in order to feel confident in the current research conclusions and recommendations, replication is necessary. We strongly encourage other researchers to heed this call for replication, including examining potential moderators and mediators in the process.

Related to the previous point, because of the time demands on our senior executive sample, we were compelled to keep the surveys as short as possible (e.g., even the short form of the DIT takes 20 minutes to complete). Thus, we were unable to probe processes underlying the divergence finding. For example, while Hypothesis 2 was based in social learning theory, we were unable to study the modeling processes through which divergence led to greater perceptions of ethical leadership. Additional research is needed to determine and understand these mechanisms. Consistent with our theorizing, a potential proposed mechanism for the divergence relationship is followers' perceptions of the leader's message as novel and more salient (Brown et al., 2005). Leaders with greater cognitive moral development may also elicit admiration from followers because of leaders' abilities to impart ethical guidance while identifying with followers. Theory also points to other potential mechanisms, such as perceived transparency of ethical reasoning (Kish-Gephart et al., 2010). It is possible that leaders who are more sophisticated ethical reasoners are also more likely to ruminate over challenging ethical issues, feel confident in talking about ethical issues, and thus be more likely to verbalize their reasoning to followers, providing followers with a window into their sophisticated reasoning. Finally, another social cognitive theory, moral self-regulation (Bandura, 1991), proposes that high moral self-regulators engage in self-monitoring, judgment relative to personal standards, and affective self-reaction in response to ethical dilemmas. It is possible that leaders who are advanced ethical reasoners are also high moral self-regulators, engaging their personal ethical standards when making moral judgments. If this engagement is apparent to followers, it may, in turn, lead to stronger perceptions that the leader is an ethical leader who personally cares about ethical issues in the organization

as well as in his or her personal interactions. These speculations provide interesting directions for future research.

Finally, our study was cross-sectional. Therefore, we cannot determine causality in the relationship between cognitive moral development divergence and perceptions of ethical leadership. However, theory supports the currently proposed direction. Future research should involve a longitudinal design and consider questions such as, How long does it take for followers to perceive ethical leadership, and do these perceptions change over time? In the current sample, direct reports were with their leaders for an average of 2.59 years ( $SD = 2.17$ ), presumably enough time to develop perceptions of ethical leadership. However, the cross-sectional design of this investigation did not allow a deeper analysis to determine questions of how the length of the pairing affected perceptions of ethical leadership and if these perceptions changed over time.

### Conclusion

The current investigation sheds light on an important domain of the leader–follower organizational experience—perceptions of executive ethical leadership. We find that leaders who are more advanced ethical reasoners are more likely to be perceived as ethical leaders. More importantly, when the leader's cognitive moral development diverges from and is above that of the follower's, perceptions of ethical leadership are maximized. This finding is consistent with the social learning theory foundation of ethical leadership and the notion that executives of higher ethical reasoning are more likely to be looked up to as ethical leaders by their direct reports. Given that ethical leaders have the potential to affect a wide array of individual, organizational, and societal outcomes, it is particularly important to understand the influences on followers' perceptions of executive ethical leadership.

### Notes

1. Because of the upward curvature along the misfit line and the slight upward curvature evidenced in the lower left-hand corner of our response surface (see Figure 1), we wanted to statistically confirm that divergence when the follower was above the leader did not result in a maximization of perceptions of ethical leadership, as was the case when the leader was above the follower. To do so, we chose a first-percentile leader P-score (i.e., 60) and a fourth-percentile follower P-score (i.e., 20; again, set by the percentile cutoffs indicated by Rest, 1993) to indicate one point along the  $X = -Y$  line. We then reversed these values so that the follower's P-score was in the first percentile and the leader's P-score was in the fourth percentile and tested the significance in the change between these two points in the line. If our suspicions based on the appearance of the graph were confirmed, that is, that it was when the leader was above the follower but not when the follower was above the leader that perceptions of ethical leadership were maximized, then the difference between these points would be significant. If, however, divergence in both directions led to equivalent perceptions of the leader's ethical leadership, then this difference would be non-significant. As predicted, this difference was significant ( $F = 5.28, p = .02$ ), suggesting that divergence where the leader was above the follower did not result in the same outcome for perceptions of ethical leadership, as did the case where the follower was above the leader.

2. We should also note that Schminke, Ambrose, and Neubaum (2005) used a different Defining Issues Test index: the N2. However, direct comparisons between the N2 score and the P-score are possible, as the N2 has been adjusted to reflect the same mean and standard deviation as the P-score.

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