

# The relationship between ethical leadership and core job characteristics

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## Summary

In the current study, we draw on the original job characteristics model (JCM) and on an elaborated model of work design to examine relationships between ethical leadership, task significance, job autonomy, effort, and job performance. We suggest that leaders with strong ethical commitments who regularly demonstrate ethically normative behavior can have an impact on the JCM elements of task significance and autonomy, thereby affecting an employee's motivation (willingness to exert effort), which in turn will be evidenced by indications of enhanced task performance and organizational citizenship behavior. We conducted a field study by surveying pairs of co-workers in a diverse set of organizations. Results provide support for a fully mediated model whereby task significance and effort fully mediate relationships between ethical leadership and subordinates' job performance. Implications for future research on job design are discussed. Copyright © 2010 John Wiley & Sons, Ltd.

At the heart of the job characteristics model (JCM, Hackman & Oldham, 1976) is the premise that leaders can shape intrinsic motivation by the way in which they structure the objective characteristics of the work itself.<sup>1</sup> The theoretical model of job design was rooted in an examination of the “basic conditions that promote high performance motivation and satisfaction at work,” in order “to determine how those conditions can be created” (Hackman & Oldham, 1976; p. 71). We argue that the conceptual and empirical developments of the JCM to date can be expanded to encompass a broader role for leaders. In particular, we suggest that leaders with strong ethical commitments who regularly demonstrate ethically normative behavior can have an impact on the JCM elements of task significance and autonomy, thereby affecting an employee's motivation (willingness to exert effort), which in turn will be evidenced by indications of enhanced task performance and organizational citizenship behaviors.

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<sup>1</sup>Hackman and Oldham referred to “internal motivation” but noted that Deci's (1975) concept of intrinsic motivation was similar (Hackman & Oldham, 1980).

We conceptualize the role of ethical leaders in regard to the JCM as two-fold: First, ethical leadership might itself be partly constituted by introducing objective features into jobs that can increase intrinsic motivation. That is, literatures such as LMX (i.e., *role making*; Graen & Uhl-Bien, 1995) and job crafting (Wrzesniewski, Dutton, & Debebe, 2003) imply that leaders might affect perceptions of autonomy and significance by actually altering objective features of jobs.<sup>2</sup> The original interpretation of the JCM emphasized changes to the objective aspects of jobs (Griffin, Bateman, Wayne, & Head, 1987), and so one role of leadership in general—and ethical leadership in particular, as our focus—can be conceptualized in terms of task significance and autonomy as objective properties.

Second, a subsequent interpretation of the JCM—the social information processing perspective (Salancik & Pfeffer, 1978)—portrayed core job characteristics (e.g., task significance and autonomy) in subjective terms, hence susceptible to environmental cues such as those that stem from social influence and social learning. For example, ethical leaders might perceive their leadership role as having substantial significance for the organization, for their own work groups, and for society as a whole. Those perceptions might in turn influence the way their subordinates perceive their own jobs as regards the core job characteristics, including both significance and autonomy (Ferris, 1983; Piccolo & Colquitt, 2006; Purvanova, Bono, & Dzieweczynski, 2006).

Consistent with early examinations of models of job and task design (e.g., Griffin, 1981; Griffin et al., 1987; Schwab & Cummings, 1976), we see those two perspectives on the job characteristics model as complementary. In the current study, however, we focus primarily on a leader's role in shaping the *objective* nature of jobs, and propose that ethical leadership is associated with assessments of task significance and job autonomy as perceived by a focal respondent's *co-worker*. This methodological approach avoids same-source bias, but it also represents a way to consider leadership, task significance, and autonomy from both the objective and the subjective points of view (consistent with the two conceptualizations of the JCM). The greater the extent to which certain features characterize the relevant working conditions in some objective sense, the more a co-worker's perceptions of those job characteristics are likely to be influenced. These co-worker job-characteristic perceptions—although subjective reports—could reflect objective characteristics of the job to the extent that they have an influence on the focal respondent's self-reported effort. Presumably one person's judgments of working conditions would not influence a second person's effort on the job unless some objective features of those conditions existed as a shared stimulus.

In sum, the purpose of this study is to test a model in which the effects of ethical leadership on task and citizenship performance are mediated by task significance, autonomy, and effort. Our model proposes a broader role for leaders in the assessment of core job characteristics, consistent with elaborated models of job design (e.g., Humphrey, Nahrgang, & Morgeson, 2007; Parker et al., 2001), and by using co-workers rating of job characteristics, our method attempts to ground job perceptions in objective reality. In the following sections, we provide a brief summary of research on ethical leadership and job characteristics, and then introduce several hypotheses regarding relationships among ethical leadership, task significance, autonomy, effort, and job performance.

## Ethical Leadership

Effective and inspirational leaders are often expected to rely on idealistic visions and persuasive communication styles when motivating followers (Bass, 1985), but ethical behavior is critical to a

<sup>2</sup>We borrow this way of putting it from the special-issue editor and thank him for that contribution.

leader's credibility and his or her potential to have meaningful influence. In the last decade, models of ethical leadership have been the subject of several academic studies (e.g., Detert, Treviño, Burris, & Andiappan, 2007) and a number of practitioner oriented, popular press books (e.g., Kanungo & Mendoca, 1996). By emphasizing fair treatment, shared values, and integrity in common personnel and business transactions, ethical leaders inspire favorable behaviors among employees, encourage high levels of pride and commitment to the organization, and shape the way employees perceive the work context (for a review, see Brown & Treviño, 2006).

Ethical leadership, as defined by Brown, Treviño, and Harrison (2005), captures employees' perceptions of ethical behavior inferred from the leader's conduct. More specifically, ethical leadership is defined 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). To act in a normatively appropriate manner is to act consistently with general expectations regarding how leaders should behave in a work context. For example, "normatively appropriate" implies that leaders are fair, honest, principled, and trustworthy in taking responsibility for their own actions, and use rewards and punishments where appropriate to hold subordinates responsible for their actions. At the same time, normatively appropriate conduct is deliberately vague because expectations regarding correct behavior depend on the organizational context (Brown et al., 2005).

Although ethical behavior is reflected in various leadership constructs, including the transformational (Bass, 1985), authentic (Gardner, Avolio, Luthans, May, & Walumbwa., 2005), self-sacrificial (De Cremer & van Knippenberg, 2004), servant (Graham, 1991; Greenleaf, 1977), and spiritual models of leadership (Fry, 2003), ethical leaders, as described by Brown and Treviño (2006), distinguish themselves by exhibiting traits that are consistent with normative ethical principles such as honesty, fairness, and trustworthiness. These leaders make fair and balanced decisions, and actively consider the appropriateness of those decisions in terms of their ethical consequences. According to Brown et al. (2005), demonstrating moral management behavior, such as communicating about ethics and rewarding employees based on ethical compliance, is a critical component of leadership that does not compromise ethical standards in the pursuit of short-term, bottom-line, organizational performance. With an emphasis on moral management through transactional means (e.g., rewards, punishments), ethical leadership is conceptually distinct from similar concepts (e.g., idealized influence, Bass, 1985; interactional justice, Colquitt, 2001), and is likely to reveal itself in the manner in which these leaders shape the work experience in terms of a job's core characteristics.

In sum, we posit that ethical leadership is associated with greater task performance and organizational citizenship behaviors among followers. We further posit that the direct effects of ethical leadership on performance are revealed through enhanced job characteristics (namely *task significance* and *job autonomy*), which encourage followers to exhibit extra effort and demonstrate productive behaviors at work. In the following sections, we provide support for this study's hypothesized relationships between ethical leadership, two core job characteristics, effort, and two aspects of job performance, namely task performance and organizational citizenship behavior.

### *Task significance, autonomy, and ethical leadership*

Task significance and autonomy are two central characteristics in the JCM (Hackman & Oldham, 1976). Task significance reflects the degree to which a job and its assignments have "substantial impact on the lives of people, whether those people are in the immediate organization or in the world at large" (Hackman & Oldham, 1976, p. 79). Additional aspects of the task significance concept may include the extent to which one's work supports the mission and values of the organization, is important in the

organization or in society overall, or offers a means by which one can realize his or her personal values. Job autonomy reflects the extent to which a job allows the freedom, independence, or discretion to schedule work, make decisions, or select the methods used to perform work tasks (cf. Hackman & Oldham).

Autonomy and task significance are often regarded as objective properties of a job, which can be manipulated by altering the demands and responsibilities associated with a particular assignment. Griffin et al. (1987), for example, asked 200 undergraduate students to review applications for an MBA program in an experimental study of objective job characteristics. The authors experimentally manipulated the *autonomy* of the assignment by reducing review guidelines and allowing participants to use their own judgment in decision making. The authors also manipulated the assignment's *significance* by telling participants that their evaluations would be included in the school's final decision regarding an applicant's admission to the MBA program. As reflected in Griffin et al.'s study, jobs enhanced along aspects of the JCM reflect the objective reality of work assignments, including the importance and relevance of work on an organization's success (e.g., *task significance*), as well as the flexibility with which one carries out his or her work and the pattern of interpersonal interactions that one has with others in the workplace (e.g., *autonomy*).

Although the JCM and its tenets have provided a valuable platform for the examination of job design, development of the model, including identification of antecedents of work characteristics, has not kept pace with the changing nature of work (Parker et al., 2001). In recognition of limitations in the original JCM and its narrow set of sources for job characteristics ratings, Parker et al. (2001), Morgeson and Humphrey (2006), and Humphrey, Nahrgang, and Morgeson (2007) each introduced extended models of job and work design, which recommended, among other things, inclusion of management style and rewards systems (Parker et al.), social support (Morgeson & Humphrey, 2006), and feedback from the job and others (Humphrey et al.) in a comprehensive examination of the conditions that shape objective and socially constructed assessments of work. These models each recognize the role of an organization's leader in shaping the nature of work and offer guidance for how behaviors of an ethically sensitive leader enhance objective ratings of autonomy and task significance.

Ethical leaders give followers an opportunity to express themselves (voice) and offer followers high levels of autonomy and influence over decision making (Brown et al., 2005; De Hoogh & Den Hartog, 2008; Kjonstad & Willmott, 1995). De Hoogh and Den Hartog argued that ethical leaders allow subordinates a say in decision making and listen to their ideas and concerns, a dimension of leader behavior the authors labeled as "power sharing." Similarly, Resick, Hanges, Dickson, and Mitchelson (2006) highlighted an *empowering* aspect of ethical leadership, noting that shared power provides subordinates more control over their own work and makes them less dependent on their leaders (see also Yukl, 2006). An increased sense of control among employees leads to a greater sense of personal responsibility, often revealing itself in greater motivation and effort. Kalshoven, Den Hartog, and De Hoogh (2008), for example, find a high correlation ( $r = .74$ ) between power sharing and overall ethical leadership as measured with the Brown et al. (2005) scale, suggesting a positive link between ethical leadership and employees' sense of autonomy on the job.

Similar to transformational leaders (Piccolo & Colquitt, 2006), ethical leaders stress moral values and purpose in their decision making, and clarify to followers how the tasks and efforts of group members contribute to the achievement of important goals (e.g., De Hoogh & Den Hartog, 2008). These leaders clarify how performing tasks contribute to the achievement of socially responsible goals, and make salient to followers the purpose, morality, and ethicality of work, likely enhancing the significance of group members' tasks. In this way, ethical leaders give meaning to various work activities (Podolny, Khurana, & Hill-Popper, 2005; Smircich & Morgan, 1982) and embed principle-inspired ideals in work assignments (Thompson & Bunderson, 2003).

Ethical leaders also consider the consequences of organizational decisions and policies in terms of their ethical consequences, and specifically embed ethical norms in systems of employee evaluation.

Brown et al.'s (2005) suggest ethical leaders make ethics “an explicit part of their leadership agenda by communicating an ethics and value message. . . and by using the reward system (rewards and discipline) to hold followers accountable for ethical conduct” (p. 597). Ethical leaders, for example, are likely to use reinforcements to reward employees for the demonstration of ethically normative behaviors, and to discipline employees who fail to consider how individual decisions impact the work group, the organization, and society as a whole. Reward systems signal to employees a company's key values and strategic priorities (see Latham & Pinder, 2005), so by including measures of ethics and impact in their reward systems, ethical leaders enhance the manner in which followers evaluate the importance of their own behavior and the processes by which organizational results are achieved (i.e., task significance), a notion suggested in the Parker et al. (2001) model of work design. Thus, ethical leaders enhance task significance by making clear the contribution of group members' tasks to moral ideals and higher order goals.

Ethical leaders can be trusted, emphasize business ethics and values to employees, and ask, “What is the right thing to do?” (Brown et al., 2005). By being mindful of ethical standards and giving careful consideration to the consequences of personal and organizational decisions, ethical leaders signal to followers the importance and value of job assignments, a cue that is likely to enhance the significance and meaning that employees ascribe to their work. An interpersonal sensemaking perspective on job attitudes (Wrzesniewski et al., 2003) suggests that individuals form judgments of meaning and significance in their jobs based in large part on the patterns of interaction they experience with others in the organization, including one's supervisor. Ethical leaders tap broadly held value systems and infuse value in the content of work, augmenting the nature of meaning that employees ascribe to their own assignments.

Consider also the supervisor who does things “the right way” and who disciplines those who do things the wrong way (e.g., those who narrowly focus on results without regard for how those results are obtained). Compare that with the description of meaningful work—work imbued with importance—as involving congruence with a “system of values” (Hackman & Oldham, 1980; p. 73). A leader who does not dismiss the significance of events at work, but who instead treats job-related events as those to be judged by a set of higher-order values, ascribes significance to tasks in ways that promote the tendency for others to assign them significance as well. Workplace events acquire importance when held up to the light of ethical standards—when “social validation of the importance of the activity” occurs (Hackman & Oldham, 1980; p. 74).

In sum, we see ethical leaders as having an influence on the objective nature of jobs (e.g., Griffin, 1981; Schwab & Cummings, 1976). Ethical leaders utilize inclusive communication patterns (i.e., listen to what employees have to say) and share power with employees in decision making. Ethical leaders also stress the contribution of tasks to overarching ethical goals and consider the demonstration and impact of an employee's ethical behavior in an organization's reward system, embedding significance and job impact into the objective properties of one's work. Finally, ethical leaders consider and emphasize how decisions influence the organization and society as a whole, fostering a job's significance. We therefore hypothesize:

*Hypothesis 1:* Ethical leadership will be positively associated with (a) task significance and (b) job autonomy.

In this study, we measure autonomy and task significance from the view of a focal employee's *co-worker*. We argue that ethical leadership, as operationalized by Brown et al. (2005), should not only constitute such perceptions on the part of a focal respondent but also register in terms of a co-worker's ratings of task significance and autonomy—in ways that will be manifested as influences on the focal respondent's motivation. When an employee (the focal respondent) reports working for a supervisor



who exhibits ethical behaviors to a considerable extent, such a leader tends to create a work-group atmosphere also noticeable to the focal respondent's co-workers—an atmosphere that includes concomitants of ethical leadership manifested as core job characteristics. This reasoning stems not only from the construct of ethical leadership as conceptualized by Brown et al. but also from the items constituting the scale they created. Ethical leaders, according to Brown et al., “Listen to what employees have to say”; “Discipline employees who violate ethical standards”; and “Have the best interests of employees in mind” (p. 125). The ethical leadership construct and items used to measure it are inherently *group-oriented*, capturing a leader's behavior towards both focal employees and their co-workers in the same work group (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009).

### *Task significance, job autonomy, and effort*

A central assertion of the job characteristics model (JCM) is that enhanced core job characteristics are associated with higher levels of job satisfaction and work motivation (Hackman & Oldham, 1976). Comprehensive summaries of the literature on job design and the job characteristics model provide supporting evidence that jobs regarded as challenging, meaningful, and autonomous are more satisfying and more intrinsically motivating (Fried & Ferris, 1987; Humphrey et al., 2007). In their recent meta-analysis of 259 studies, for example, Humphrey et al. reported corrected correlations ranging from .26 to .45 between the five core characteristics and internal work motivation. In addition, Johns, Xie, and Fang (1992) conducted a multivariate path analysis of intrinsic motivation and concluded that expressions of motivated effort are reliant on the characteristics that inspire meaningfulness in one's job (see also Champoux, 1991).

The task significance and autonomy aspects of the job characteristics model account for meaningful variance in job satisfaction, motivation, and both objective and subjective measures of performance (e.g., Humphrey et al., 2007). When employees know that their job assignments have a positive and meaningful impact on the lives of other people, these employees are more likely to exert effort for the successful and timely completion of job assignments (Morgeson & Humphrey, 2006). As Grant (2008) proposed, “the experience of meaningfulness [increases] job performance by motivating employees to invest additional time and energy in completing their assigned tasks” (p. 109).

Beyond perceived significance, job autonomy may also enhance effort and job performance. Autonomy is intrinsically motivating, tapping an employee's desire for a sense of control, responsibility, and constructive change (Fuller, Marler, & Hester, 2006), resulting in greater effort and persistence (Morgeson & Campion, 2003). Job autonomy also allows for one to more effectively leverage his or her existing knowledge and skills, fostering the development of new knowledge and contributions at work (Parker, Wall, & Jackson, 1997). Further, job autonomy allows employees to broaden the scope of responsibility and expand the view of their own work roles (i.e., role breadth), leading to extra effort, stronger identity with the job, and better performance (Morgeson, Delaney-Klinger, & Hemingway, 2005; Wrzesniewski et al., 2003). We therefore hypothesize:

*Hypothesis 2:* Task significance (H2a) and job autonomy (H2b) are positively associated with effort.

### *The mediating role of job characteristics*

Ethical leadership has been found to be related to a number of behavioral outcomes, including deviant behavior, job performance (Brown & Treviño, 2006), and a subordinate's willingness to report

problems (Brown et al., 2005). In each case, effects are explained through social learning and self regulatory processes (Bandura, 1977), whereby followers model attractive behavior of leaders and act in ways that are guided by personal standards of ethical behavior. By emphasizing ethics in decision making and the relevant consequences of those decisions, leaders make ethics and personal standards salient for followers, “guiding good behavior (consistent with the standards) and deterring misconduct (that would violate the standards)” (Treviño, Weaver, & Reynolds, 2006; p. 958).

We argue that ethical leaders encourage motivated behavior (effort) through the manner in which these leaders shape the objective and subjective nature of jobs. Ethical leaders make fair and balanced decisions, stress moral values, are trustworthy and caring, and offer subordinates autonomy in their work and the opportunity to participate in assignments that have meaningful impact on others. Subordinates of ethical leaders may come to see their work roles as enhanced in regard to aspects of the JCM, therefore, which could cause them to reciprocate by exhibiting extra effort, greater task performance, and increased organizational citizenship behaviors. Such reasoning is similar to that in the leader-member exchange literature (e.g., Liden, Erdogan, Wayne, & Sparrowe, 2006).

*Hypothesis 3:* Task significance (H3a) and job autonomy (H3b) mediate the link between ethical leadership and effort.

### *Effort and performance*

Effort is the translation of motivation into completed work (Parsons, 1968). High levels of motivation, as a psychological state, translate into greater effort and therefore higher task performance (e.g., Blau, 1993; Gardner, Dunham, Cummings, & Pierce, 1989; Pierro, Kruglanski, & Higgins, 2006). Effort is often operationalized in terms of the intensity or the extent of hard work exerted towards completing a task (Brown & Leigh, 1996). Effort intensity, in particular, is reflected by how hard a person tries on an assignment (Kanfer & Kanfer, 1991) or the resources he or she expends toward task performance (Yeo & Neal, 2004).

Consistent with the extant literature, individuals who exert higher levels of effort are expected to yield higher levels of task performance. In a repeated measures design, Yeo and Neal (2004), for example, found that through practice, employees' effort increased, which resulted in higher task performance. Additionally, Brown and Leigh (1996) found that effort intensity was positively related to several task performance dimensions (i.e., sales objectives, technical knowledge, and administrative performance). Likewise, we expect to find a positive relationship between effort and task performance.

As a form of job performance that goes beyond task performance, organizational citizenship behavior (OCB) is also expected to be affected by employees' effort. Supervisors often include OCB in their assessment of job performance (Organ, 1977; Orr, Sackett, & Mercer, 1989; Rotundo & Sackett, 2002). Employees who display high levels of effort exert themselves to the fullest, work as hard as they can, and work with intensity and energy (Brown & Leigh, 1996). These employees are expected to exert effort toward all behaviors that affect their job performance, including organizational citizenship behaviors. Indeed, organizational citizenship behavior, as discretionary behavior, requires additional levels of effort beyond what is needed for task performance. In other words, high levels of effort are required to serve the common good (i.e., the organization and its representatives) (Van Dyne, Graham, & Dienesch, 1994).

Moreover, when employees exhibit high levels of effort, they actively engage themselves in broader work roles (Khan, 1990, 1992), including organizational citizenship behavior. Saks (2006), for example, found that when employees exhibited high levels of concentration and were engrossed in their

work, they were more likely to engage in OCB. Rich, Lepine, and Crawford (in press) also found a positive relationship between job engagement (which is partly described in terms of effort) and organizational citizenship behavior. Likewise, we expect employees' effort to be positively related to organizational citizenship behavior.

*Hypothesis 4:* Effort is positively related to (a) task performance and (b) organizational citizenship behavior.

### *The mediating role of effort*

The theoretical relationships we have described thus far naturally suggest that effort serves as a mediator between core job characteristics and job performance. First, Hackman and Oldham (1976) argued that enhanced job characteristics lead to high levels of work motivation. Motivation, as a psychological state, is translated into high levels of effort, which then leads to higher job performance (Blau, 1993; Gardner et al., 1989; Pierro et al., 2006). Thus, when employees are motivated by jobs that have a positive and meaningful impact on other people, they work harder by exhibiting high levels of effort, which then lead to higher job performance. Likewise, autonomous jobs are intrinsically motivating in that employees have greater control and responsibility over their work (Fuller et al., 2006). Employees channel their intrinsic motivation into greater effort that is positively related to job performance. Given these arguments, and our preceding hypotheses, we predict that effort serves as a key mechanism by which task significance and autonomy are related to job performance.

*Hypothesis 5:* Effort mediates the relationships between task significance and (a) task performance and (b) OCB, and effort mediates the relationships between autonomy and (c) task performance and (d) OCB.

In sum, we consider ethical leadership as the first link in a causal chain eventually driving the task and citizenship aspects of job performance. We begin with the perceptions of leadership as garnered from a focal employee. At that point, an assessment of the employee's ratings of core job characteristics (autonomy and task significance) would be subject to potential percept–percept (same source) bias, thus evoking the methodological value of assessing a co-worker's perceptions of job characteristics instead. Doing so has a theoretical payoff as well, we argue, because the prediction of a focal respondent's motivation (self-reported effort) from a peer's ratings of job characteristics suggests that those characteristics have the “objective” feature of interpersonal cross validation.

## **Method**

### *Participants and procedures*

One hundred seventy four junior- and senior-level undergraduate students and 107 masters of business administration students from a large southeastern university in the United States were invited to participate in this study. We used a method whereby working students either participated directly in the study or recruited working adults to serve as focal respondents. Those who agreed to participate then



asked a co-worker who directly reported to the same supervisor to complete a complementary survey. In this way, the sample consisted of dyadic pairs of focal respondents and co-workers, whereby co-workers and focal respondents assessed different variables in the proposed model, a design similar to those used by Lee and Allen (2002), Mayer et al. (2009), and Morgeson and Humphrey (2006). We administered surveys to participants through a secure online website and had participants use a unique three-digit code for the purpose of matching paired surveys while assuring participant anonymity.

Two hundred eight focal participants responded to measures of ethical leadership, effort, and demographic variables (e.g., age, gender, ethnicity) for a total response rate of 74%; one hundred eighty-one co-worker participants responded to measures of task significance, autonomy, focal respondents' organizational citizenship and task performance. Participants worked in a variety of industries, including retail, health care, real estate, education, finance, construction, aerospace, restaurant, and hospitality. Fifty four percent of the focal respondents were male, and the average age of the focal respondents was 26.0 years ( $SD = 6.2$ ). The focal respondents had an average organizational tenure of 3.5 years ( $SD = 3.5$ ). Fifty-nine percent of the sample was employed full-time (41% part-time). In terms of ethnicity, 8.6% of the focal respondents were African American, 6.2% Asian American, 66.5% Caucasian/White, 8.6% Hispanic, 3.8% Latino/a, 1.0% Native American, 1.4% Biracial, and 3.8% marked "other" or did not indicate an ethnicity.

Fifty percent of the co-worker respondents were male, and the average age of the co-worker respondents was 28.5 years ( $SD = 8.4$ ). The co-worker respondents had an average organizational tenure of 3.9 years ( $SD = 4.6$ ). Seventy five percent were employed full-time (25% part-time). In terms of ethnicity, 5.8% were African American, 9.5% Asian American, 64% Caucasian/White, 11.1% Hispanic, 4.2% Latino/a, 2.1% biracial, and 3.2% marked "other" or did not indicate an ethnicity.

## Measures

### Ethical leadership

Ethical leadership was measured using Brown et al.'s (2005) ethical leadership scale (10 items). Using a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree), respondents indicated the extent to which they agreed with statements about their leader such as "my supervisor... defines success not just be the results but also by the way they are obtained" and "disciplines employees who violate ethical standards" ( $\alpha = .94$ ).

### Job characteristics

We used two items from the revised form of the Job Diagnostic Survey (Idaszak & Drasgow, 1987, see Hackman & Oldham, 1974) to measure *task significance*, and two items to measure *autonomy*. Co-worker participants were asked to indicate on a 7-point Likert scale (1 = very inaccurate, 7 = very accurate) the accuracy of statements regarding *task significance*: (1) "The job is very significant and important in the broader scheme of things"; (2) "This job is one where a lot of other people can be affected by how well the work gets done" ( $\alpha = .72$ ); and *autonomy*: (1) "The job gives me a chance to use my personal initiative and judgment in carrying out the work"; (2) "The job gives me considerable opportunity for independence and freedom in how I do the work" ( $\alpha = .78$ ).

### Effort

Focal respondents rated their effort using the 5-item work intensity portion of Brown and Leigh's (1996) effort scale. Ratings were made on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). A sample item includes, "When there is a job to be done, I devote all my energy to getting it done" ( $\alpha = .92$ ).

### Citizenship behaviors

Citizenship behavior was measured using seven items from Williams and Anderson's (1991) OCBI scale. Co-worker respondents were asked to indicate the extent to which their co-workers (i.e., the focal respondents) engaged in citizenship behaviors based on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). A sample item includes, "Helps others who have been absent" ( $\alpha = .88$ ).

### Task performance

Co-workers were asked to complete the 7-item scale developed by Williams and Anderson (1991). Co-workers indicated the extent to which they agreed with statements about the focal respondents' performance, such as "This employee...adequately completes assigned duties," and "...fulfills responsibilities specified in his/her job description." Two reverse-coded items were dropped from the final analyses because of poor reliability as indicated by the item-to-total correlations (see Schmitt & Stults, 1985), and one particularly vague item ("Engages in activities that will directly affect his/her performance") had a low item-to-total correlation and was also dropped from the final analyses. Overall, four of the seven task performance items were used in subsequent analyses, with a coefficient  $\alpha$  reliability of .91.

We used co-worker assessments of job characteristics to reduce potential same source bias in the measurement of the study's primary variables. A number of studies have reported high levels of convergence of job design ratings ( $>.60$ ) at the job-level between supervisors, employees, and observers (see Morgeson & Campion, 2003), suggesting that assessments of job complexity are indeed derived from some level of objective reality. In addition, group members' assessments of the challenge and meaningfulness of job assignments tend to converge with only modest levels of discussion about work (Bateman, Griffin, & Rubinstein, 1987), further supporting the use of co-worker ratings of job characteristics. We also had co-workers report the focal respondents' task and citizenship performance, drawing on the suggestions that co-workers tend to be reliable sources of performance information (Greguras & Robie, 1998; Latham & Mann, 2006; Latham, Skarlicki, Irvine, & Siegel, 1993), and that co-worker reports are particularly optimal for rating OCB and job-oriented behaviors that are interpersonal in nature (Dominick, Reilly, & McGourty, 1997; Druskat & Wolff, 1999; Fletcher, 2001).

Administering questionnaires to two different respondents in this way (1) capitalizes on the subjective perceptions of each, and at the same time (2) capitalizes on those two perspectives as a means to reveal the objective character of stimuli shared in common (viz., the leader's influence on the work environment). First, a focal respondent's assessment of a leader's ethical behavior tracks the potential for ethical leadership to shape employee judgments in ways that influence motivation (i.e., effort). Second, we obtain a co-worker's assessment of the task significance and autonomy afforded by the work environment. Obtaining responses from two different sources allows us to test a mediational model whereby a leader's ethical behaviors shape perceptions that in turn influence effort (the subjective route), *or* are comprised in part by introducing features into jobs that can increase intrinsic motivation (the objective route), *or* both.

## Results

The means, standard deviations, correlations, and reliabilities for all variables are presented in Table 1.

### Measurement model

Prior to testing the hypothesized structural model, we tested a measurement model at the item-level to determine if scale items were adequate indicators of their underlying constructs (Anderson & Gerbing,

Table 1. Means, standard deviations, correlations, and reliabilities

Variable	$\mu$	SD	1	2	3	4	5	6
1. Ethical leadership	5.13	1.35	(.94)					
2. Task significance	5.34	1.50	.17*	(.72)				
3. Autonomy	5.23	1.42	.19*	.67**	(.78)			
4. Effort	5.74	1.03	.19**	.25**	.19**	(.92)		
5. Organizational citizenship behavior	4.38	.65	.16*	.16*	.17*	.16*	(.88)	
6. Task performance	4.63	.61	.12 <sup>†</sup>	.11	.08	.15*	.57**	(.91)

Note:  $n = 181$ .

<sup>†</sup> $p \leq .10$ ; \* $p \leq .05$ ; \*\* $p \leq .01$ .

1988; Bandalos & Finney, 2001). The measurement model had six latent factors (i.e., ethical leadership, task significance, autonomy, effort, citizenship behavior, and task performance) and 30 indicators (10 items for ethical leadership, 2 items for both task significance and autonomy, 5 items for effort, 7 items for citizenship behavior, and 4 items for task performance). The measurement model provided a good fit to the data ( $\chi^2 = 549.55$ ,  $df = 390$ ,  $p \leq .001$ ;  $\chi^2/df = 1.41$ ; RMSEA = .05; CFI = .98; NNFI = .97) (Arbuckle, 1997; Bentler & Bonnett, 1990; Hoyle & Panter, 1995), and all of the indicators had statistically significant ( $p \leq 0.01$ ) factor loadings ( $>.65$ ) on their intended constructs.

### Structural model

We tested our proposed model using structural equation modeling (SEM) in LISREL 8.8 (Jöreskog & Sörbom, 2006). Prior to testing our structural equation model, we created three parcels across the 10-item measure of ethical leadership (two parcels had three items each; one parcel had four items), and three parcels across the 7-item measure of OCB (two parcels had two items; one parcel had three items). Parcels in SEM help to maintain a manageable indicator-to-sample size ratio (e.g., Bagozzi & Edwards, 1998; Bagozzi & Heatherton, 1994), provide an adequate representation of latent constructs (Hagtvet & Nasser, 2004), have higher reliabilities than single items, and offer a better approximation of normal distribution on continuous variables (Bentler & Chou, 1987). By creating parcels of items in the measures of leadership and organizational citizenship, we reduced the number of parameters relative to the number of free elements in the sample covariance matrix, a strategy recommended for small sample sizes.

A model of proposed relationships among the study variables and SEM results are presented in Figure 1. We allowed the disturbance terms to correlate for OCB and task performance because these

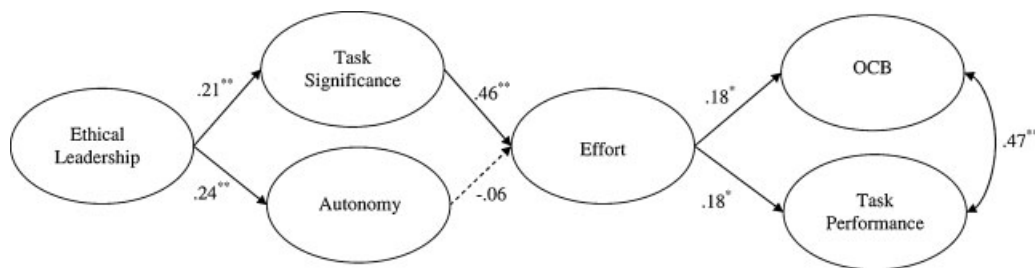


Figure 1. Hypothesized model and structural equation modeling results. Note: Dashed lines are non-significant.  $n = 181$ , \* $p \leq .05$ , \*\* $p \leq .01$

variables are related for reasons beyond their common antecedent. OCB and task performance, for example, are both considered dimensions of overall job performance (Rotundo & Sackett, 2002), which implies that a relationship exists between these variables that extends beyond their mutual association with effort. As shown in Figure 1, results indicate that the proposed model provides a good fit to the data ( $\chi^2 = 250.24$ ,  $df = 145$ ,  $p \leq .001$ ;  $\chi^2/df = 1.73$ ; RMSEA = .06; CFI = .95; NNFI = .95) (Arbuckle, 1997; Bentler & Bonnett, 1990; Hoyle & Panter, 1995).

We examined the SEM path coefficients to estimate support for our hypotheses. Hypothesis 1 predicted a positive relationship between ethical leadership and (a) task significance ( $b = .21$ ,  $p \leq .01$ ) and (b) autonomy ( $b = .24$ ,  $p \leq .01$ ). Both relationships were positive and significant, in support of H1. Hypothesis 2 predicted a positive relationship between (a) task significance and effort and (b) autonomy and effort. The path coefficient between task significance and effort was positive and significant ( $b = .46$ ,  $p \leq .001$ ); the path coefficient between autonomy and effort, however, was not significant ( $b = -.06$ , ns), thus providing partial support for H2. In support of Hypothesis 4, the path coefficients between effort and OCB ( $b = .18$ ,  $p \leq .01$ ), and effort and task performance ( $b = .18$ ,  $p \leq .01$ ), were positive and significant.

To test for mediation (i.e., Hypotheses 3 and 5), we examined the goodness-of fit of task significance/autonomy as mediators between ethical leadership and effort (H3), and effort as a mediator between task significance/autonomy and OCB/task performance (H5) (James, Mulaik, & Brett, 2006). We followed recommendations outlined by MacKinnon, Lockwood, Hoffman, and Sheets (2002) and examined indirect effects by calculating the product of coefficients. We used LISREL's (Jöreskog & Sörbom, 2006) effect decomposition statistics for this purpose. A statistically significant indirect effect indicates that the relationship between the antecedent and outcome occurs through the mediator, thus providing support for the mediating effect. The statistically significant indirect effect for effort ( $b = .08$ ,  $p \leq .05$ ) indicates that the relationship between ethical leadership and effort was carried through the mediators, which provides support for Hypothesis 3. Further, the indirect effects for the relationships between task significance and (a) OCB ( $b = .09$ ,  $p \leq .05$ ) and (b) task performance ( $b = .09$ ,  $p \leq .05$ ) were statistically significant, whereas the indirect effects for the relationships between autonomy and (c) OCB ( $b = -.01$ , ns) and (d) task performance ( $b = -.01$ , ns) were not, thus providing partial support for Hypothesis 3.

Following the recommendations of James et al. (2006), we also examined alternative structural equations models to explore full versus partial mediation of our proposed relationships. We examined several partially mediated models with, for example, (1) direct paths from ethical leadership to job performance, (2) direct paths from ethical leadership to effort and job performance, (3) a direct path from ethical leadership to effort, (4) direct paths from task significance and autonomy to job performance, (5) a direct path from task significance to job performance, and (6) a direct path from autonomy to job performance. Each of these alternative models provided an adequate fit to the data, but as revealed by a series of  $\chi^2$ -difference tests, none offered an improvement in fit over the fully mediated model (Figure 1). The rule of parsimony, therefore, suggests that the fully mediated model is the preferred model for examination of these particular data (James et al., 2006).

## Discussion

In this study, we propose an extended role for leaders in the evaluation of job autonomy and task significance, two core aspects of the job characteristics model (JCM; Hackman & Oldham, 1976). We found support for a model in which the positive effect of ethical leadership on follower effort was

mediated by task significance. By allowing employees voice in organizational decisions, using rewards to encourage ethical behavior, and injecting ethical values in regular business activity, ethical leaders enrich the autonomy and significance of work. This sense of task significance then translates into extra effort and higher levels of the task and citizenship aspects of job performance. These results broaden the contribution of organizational leaders in job design, consistent with the extended models of work design proposed by Parker et al. (2001) and Humphrey et al. (2007).

The results of this study may also have important implications for the job design literature. First, mindful of the recent calls for an extension of job design research along relational (Grant, 2007), ideological (Thompson & Bunderson, 2003), and group/organizational (Parker et al., 2001) boundaries, our results suggest that ethical behavior by organizational leaders is an important component in the evaluation of one's job. Until recently, the job design literature has provided very little guidance regarding the role of leaders in job design and evaluation, much less ethical behavior among leaders or co-workers. Ethical leaders, for example, help employees ascribe meaning to job assignments and direct the relational and role boundaries of work, grounding decisions in normative standards and highlighting the impact of work on people both inside and out of the organization (Wrzesniewski & Dutton, 2001), thus enhancing the nature of work.

Second, an observed association between ethics and assessments of job characteristics may reflect the desire for employees in the modern workplace to seek employment at organizations in which they can take pride, and to earn job assignments that offer an opportunity to have a meaningful impact on the lives of others (Wrzesniewski, 2002). Employees join organizations with expectations that policies and leaders will be supportive and fair, and that companies will operate in ethical and socially responsible ways (Turban & Greening, 1997). As ethical perceptions influence one's choice of employer and career (Sparks & Johlke, 1996), it is no surprise that Keith, Pettijohn, and Burnett (2003), in an experimental study of organizational preferences, concluded, "[individuals] prefer to work for firms that they perceive as ethical" (p. 252).

This phenomenon presents an extension in the context of work expectations and job design, as employees come to pursue not only economic and social rewards in challenging jobs but also ideological rewards including the experience of meaning and significance in their work. Thompson and Bunderson (2003) addressed this idea explicitly in their assertion that the conception of a psychological contract between employee and organization be expanded to include "ideological currency" that includes ethical, principle-, and cause-inspired components. As the authors argued, violations of the psychological contract can include cases when organizational practices and policies fail to meet an employee's desire to derive meaning in his or her work, or when organizational leaders fail to demonstrate commitment to valuable ideals.

Third, we see leaders as having an impact on both the objective and socially constructed nature of jobs. Indeed, these are complementary processes in the formation of job attitudes (Griffin, 1981; Griffin et al., 1987; Schwab & Cummings, 1976). Leaders clarify roles and the patterns of interaction among employees, and have control of organizational resources including job assignments, rewards, and promotional opportunities. In this way, leaders shape the tangible features of a job by adjusting the structural attributes of one's work. We also contend that employees' impute the significance and personal responsibility of their jobs based in part on the behaviors and model of their organization's leaders, reinforcing the notion that attitudes in the workplace depend on the interpretation of informational and behavioral cues provided by significant others, including one's immediate supervisor (Salancik & Pfeffer, 1978; Wrzesniewski et al., 2003).

In support of this notion, we assessed core characteristics as viewed by a focal employee's *co-worker*. Given that ratings of job complexity from multiple sources tend to converge over time (Morgeson & Campion, 2003), the use of co-worker ratings allowed us to capture aspects of the work environment that are grounded in objective reality, and at the same time avoid percept-percept (same



source) bias in ratings of the primary concepts in the study, namely ethical leadership, autonomy, and task significance. This approach avoids such bias, yet may underestimate the impact of ethical leaders on *perceived* job characteristics, thus in future research, measuring core characteristics of the job from multiple sources would be of interest.

We argue that task significance and job autonomy flow, in part, from observing ethical behavior by organizational leaders. It is possible, however, that autonomy and experienced meaningfulness at work facilitate the perception of ethical behavior in the organization, consistent with Schneider's (1987) model of attraction–selection–attrition. In other words, employees who have high perceptions of task significance or job autonomy may be drawn to ethical leaders. These leaders may also be more likely to choose employees who are able to work independently and see the value of their own work. Although such occurrences are possible, we personally do not consider them to be as plausible as the direction of causality we have postulated. In particular, it seems unlikely that such selection processes would have been in place to the extent necessary for producing the findings we obtained.

### *Future studies*

The results of this study provide the platform for a number of potential future studies. Individual differences, for example, are likely to serve as boundary conditions on a number of relationships in the proposed model. The link between ethical leadership and perceived job characteristics is likely to be stronger for individuals who are attentive to ethical information in the workplace based on their cognitive predispositions (Treviño et al., 2006), moral attentiveness (Reynolds, 2008), or their levels of moral development (Kohlberg, 1981, 1984). As Kohlberg would argue, individuals with high levels of cognitive moral development, characterized by reference to universal principles of morality and justice, are more attentive to and influenced by ethical (or unethical) behavior, perhaps making them more sensitive to the ethical behavior of an organization's leader.

The link between ethical leadership and job behaviors may also depend on the nature of the relationship between a supervisor and subordinate (e.g., leader-member exchange). Most of the existing treatments of ethical leadership rely on social learning theory (Bandura, 1977), which implies a relatively close interpersonal relationship between leader and follower, including sufficient exposure and interaction. Future studies could examine the extent to which role modeling behaviors depend on the nature, tenure, and quality of relationships between leaders and followers. On the one hand, high quality relationships among leaders and followers are likely to enhance the impact of positive leader behaviors (e.g., Piccolo & Colquitt, 2006), such that exceptional leaders motivate followers to focus on ethics and fairness (van Knippenberg, De Cremer, & van Knippenberg, 2007), thereby enhancing the utility of business ethics. On the other hand, a high quality relationship may afford the leader leeway in his or her adherence to normative ethical standards. Perhaps ethical behavior has little utility in explaining variance in job behaviors among those who already have a close and trusting relationship with their supervisors.

Lastly, in this study, we rely on a cognitive motivational mechanism in support of the link between job characteristics and productive behavior at work. However, it is reasonable to examine the extent to which job characteristics facilitate positive affective responses that ultimately lead to a host of favorable work behaviors, including creativity and cooperation (Wright & Staw, 1999). A field study by Saavedra and Kwun (2000), for example, found that task significance and task autonomy were positively associated with activated positive affect, a temporary but influential affective state. Future studies could assess affective mechanisms as a process by which job characteristics are associated with motivated behavior and complementary appraisals of the work environment.

## Limitations

The current study has several limitations that should be noted. First, common source bias for our main hypotheses was reduced by using different respondents for assessments of the leadership and outcome measures. Primary participants, however, had the freedom to select co-workers to rate their work behaviors and the objective nature of their jobs. Although this procedure has been used in other studies (e.g., Grant & Mayer, 2009), there are two potential limitations with this approach. One, focal respondents could have selected co-workers with whom they had the most favorable relationships, resulting in assessments of behaviors (e.g., performance and OCB) that are prone to positive bias. The use of co-worker ratings of performance therefore, while useful for reducing common source bias, leaves open the possibility that these ratings were positively skewed. To limit this bias, all respondents were informed of the confidentiality of their responses, were encouraged to answer each question honestly and objectively, and were told that their co-workers would not see their responses.

Two, whereas co-workers may provide valid ratings of one's altruism or one's adherence to organizational rules and norms (i.e., OCB; Dominick et al., 1997), behaviors that are inherently based on direct interaction among co-workers, these same co-workers may not have the kind of exposure that affords them the ability to make accurate ratings of job performance. It is possible, therefore, that co-worker ratings of OCB were valid while ratings of performance were not. In this study, however, co-workers were managed by the same supervisor in the same work group, likely affording co-workers reasonable exposure to patterns of task performance. Nevertheless, the use of coworker ratings of task performance is a notable limitation in our study.

Second, the cross-sectional design of the study leaves open the possibility of reverse causality among the primary concepts. Whereas the proposed direction of relationships among variables in the study is supported by existing theory and a number of published studies, it may be possible, for example, that employees in the sample were able to "craft" the boundaries and responsibilities of their jobs (Wrzesniewski & Dutton, 2001), altering the significance and autonomy experienced at work. These same employees may have been more likely and more motivated to identify leader behavior that was consistent with their own crafted conceptions of work. As such, it is plausible that employees who experience significance and autonomy at work are more likely to see their leaders as fair, trustworthy, and ethical.

In addition, ethical leadership was conceptualized and operationalized as a unidimensional concept, whereas recent work suggests the usefulness of examining several distinct ethical dimensions of leadership (e.g., De Hoogh & Den Hartog, 2008), including (1) the demonstration of personal honesty and fairness in decision making, (2) the use of rewards for normatively appropriate behavior and punishments for deviations from ethical norms, and (3) the willingness to allow employees to voice their opinions and participate in decisions that are important to their work. Although these three behaviors are related, it seems likely they are distinguishable and may to some extent provide for differential effects among outcomes.

Finally, we acknowledge a possible problem with the use co-worker assessments of task significance and autonomy, which we collected in order to avoid common-method variance. We reasoned that the co-worker's ratings of those job characteristics would not influence the focal employee's effort unless both employees were exposed to the same objective job conditions. It could be argued, however, that objective job characteristics are only important to the degree that they correspond to subjective assessments of job characteristics (Griffin et al., 1987). If that were the case, then the correspondence between the focal employee's actual (objective) job characteristics and his/her subjective assessments of them would be conceptually more important than the (presumed) correspondence between the focal employee's and the coworker's assessment of autonomy and task significance. By that argument, the focal employee's assessment of autonomy and task significance would constitute the more directly

relevant set of data for us to have collected. On the other hand, if it really is objective autonomy and task significance that are important, then it might have been useful to have obtained key informant or expert ratings of autonomy and task significance. These variations on our methodology represent possibilities for future research.

Limitations notwithstanding, our findings provide an expanded perspective on relationships associated with core job characteristics, and support for a broader role for leaders in job development and design. The role of the leader emerges as a relevant factor in the assessment of job characteristics, especially in regards to the leader's ethical conduct in the workplace. This study thus offers potential insights relevant to job design components, thereby pointing toward new directions for future research and theoretical development.

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