

Running head: SITUATIONAL IMPACTS
<https://doi.org/10.1016/j.leaqua.2011.07.013>

Situational Impacts on Leader Ethical Decision-Making

Cheryl K. Stenmark

Angelo State University

Michael D. Mumford

University of Oklahoma

Journal: The Leadership Quarterly

Submission Date:

Abstract

Leader ethical decision-making has received a great deal of attention in the academic literature. Most research examining ethical leadership has focused on the leader characteristics and subordinate outcomes associated with ethical leadership, but research examining the situational variables influencing leader ethical decision-making is limited. Thus, the purpose of this study was to examine a number of situational variables that may influence leader ethical decision-making. This study examined the impacts of performance pressure, interpersonal conflict, the leader's decision-making autonomy, the type of ethical issue at hand, and the level of authority of the other person involved in the interaction. The results indicated that when making a decision in response to a superior (as opposed to a peer or subordinate), leaders make worse decisions. Additionally, a number of interactions of the other variables negatively impacted leaders' ethical decision-making. The implications of these findings are discussed.

KEYWORDS: leadership, ethical decision-making, performance pressure, interpersonal conflict, authority, autonomy

Author Note

Address correspondence to: Cheryl Stenmark, Angelo State University, Department of Psychology, Sociology, and Social Work, ASU Station #10907, San Angelo, TX 76909. Phone: 325-942-2219 x 278; Fax: 325-942-2290; Email: cstenmark@angelo.edu.

Word Count: 8,262

Figures: 1

Tables: 2

Situational Impacts on Leader Ethical Decision-Making

A number of organizations have been accused of, and even convicted of, criminal behavior resulting from breeches in ethical conduct, including Enron, WorldComm, Tyco, and HealthSouth (Jennings, 1999; McCraw, Moffeit, & O'Malley, 2008; Russell & Smith, 2003). Egregious cases of unethical conduct such as these are particularly salient in the media, because these actions are often intentional, unethical, and even illegal. Because of the threat that unethical business practices can pose to both the business community, industry, and the everyday lives of millions of people (Verschoor, 2006; 2007c), business leaders, and academics alike, have begun work to improve the ethical conduct of members of organizations, both in terms of research examining the mechanisms surrounding ethical behavior and decision-making, and exploring and designing training interventions aimed at improving ethical behavior and decision-making.

In order to address the ethical misconduct occurring in organizations, many look to organizational leaders (McCraw, Moffeit, & O'Malley, 2009). Indeed, Verschoor (2007b) points out that organizational leaders, including CEO's, boards of directors, and other leaders, are largely to blame for organizational ethics scandals. Additionally, findings from the 2007 Deloitte & Touche USA LLP Ethics & Workplace survey indicated that managers and supervisors play a critical role in promoting ethical conduct by all employees. Specifically, survey respondents ranked the behavior of management and direct supervisors as the top two factors involved in promoting an ethical workplace environment (Verschoor, 2007c). Furthermore, Hunter (2008) outlines the role of top organizational management in promoting ethical conduct in organizations. He recommends that organizational leaders take responsibility for promoting an ethical culture by acting as ethical role models for the rest of the organization, as employees

often imitate their bosses' behavior. Thus, while it is important for leaders to behave ethically and make ethical decisions, in order to promote ethical behavior and decision-making organization-wide, there are likely to be a number of factors influencing a leadership ethical decision-making. The purpose of this study is to examine situational factors that may influence a leader's ethical decision-making.

Because it is apparent that ethical leadership is critically important for the success of organizations, both financially and in terms of general organizational integrity, there has been a great deal of research on ethical leadership. Ethical leadership has been found to be associated with positive affective reactions toward the leader, including perceptions of effectiveness and trustworthiness (Brown & Trevino, 2006; DeHoogh & DenHartog, 2008), and a number of important outcome variables, including job satisfaction and organizational citizenship behaviors (Brown, Trevino, & Harrison 2005; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009).

While there has been much research on what ethical leadership is and how ethical leadership impacts employee and organizational outcomes, there has been much less attention given to situational influences on leader ethical decision-making. Situational influences have been demonstrated to predict ethical decision-making (Mumford et al., 2007). More specifically, Brown and Trevino (2006) point out that there are a number of situational influences on a leader's ethical decision-making. Indeed, the organizational context creates additional pressures and complexity, influencing the relationship between ethical decision-making and ethical behavior (Trevino & Brown, 2004). Furthermore, leaders are in a unique position in organizations: not only do their decisions and behavior, especially with regard to ethics, set the standard for the decision-making and behavior of their subordinates (Hunter, 2008; Verschoor, 2007c), but a leaders' ethical behavior has implications for important subordinate and

organizational outcomes (Brown, Trevino, & Harrison, 2005; DeHoogh & Den Hartog, 2008; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009).

While there is a dearth of research examining situational variables impacting leader ethical decision-making, theoretical perspectives on destructive leadership and corporate corruption can inform this area of research, by suggesting a number of broad contextual variables that may influence leader ethical decision-making. Mumford, Espejo, Hunter, Bedell-Avers, Eubanks, and Connelly (2007) proposed that, in addition to individual leader characteristics, characteristics of the group, organization, and external environment are likely to contribute to destructive leadership. Indeed, situational characteristics such as perceptions of injustice (Moghaddam, 2005) and a high degree of organizational centralization (Post, Ruby, & Shaw, 2002) have been proposed as contributors to destructive leadership. Furthermore, models of corporate corruption also emphasize the influence of a number of situational factors on (un)ethical decisions and behaviors (Baucus, 1994; Finney & Lesieur, 1982). Specifically, in the prevailing model of corporate corruption, Baucus (1994) suggests that pressure, opportunity, and predisposition, with regard to the organization and the external environment, influence corporate corruption.

Situational variables that impact ethical decision-making are likely to be especially salient in leaders' ethical decision-making, as they strive to make the best decisions possible for their subordinates and organizations. This project examined a number of specific situational variables that are likely to influence a leader's ethical decision-making. Specifically, this study will examine the impact of six situational variables, indicated to be relevant by research in ethical leadership, destructive leadership, and corporate corruption: performance pressure,

interpersonal conflict, threats to self-efficacy, decision-making autonomy, type of ethical issue, and level of authority of the people involved.

Situational Variables

Performance pressure

Leaders are likely to experience a great deal of performance pressure in their jobs (Trevino & Brown, 2004), due to their unique position in organizations. Performance pressure has been shown to degrade performance on cognitively demanding tasks (Baumeister, 1984; Beilock & Carr, 2001; Lewis & Linder, 1997), such as ethical-decision-making (Mumford et al., 2006). Furthermore, Fiedler and Garcia (1987) note that stress serves to limit the application of complex cognitive processes, thus environmental factors leading to undue pressure are likely to be negatively related to ethical decision-making.

Not only is pressure the leading factor in models of corruption (Baucus, 1994; Finney & Lesieur, 1982), but the relationship between pressure and unethical conduct has been demonstrated in a number of different empirical settings. Jasanoff (1993) performed a qualitative analysis of scientific misconduct, and she found that production pressure, among other environmental variables, was associated with ethical misconduct. Similarly, Goldberg and Greenberg (1994) found that scientific professionals perceived production pressures to be the most important cause of ethical breaches they had observed in the course of their work. Furthermore, Malhotra, Ku, and Murnigan (2008) suggest that when people in organizations are pressured to “win at all costs”, poor ethical decision-making is likely to occur. Finally, Nill, Shibrowsky, and Peltier (2004) found that as competitive pressure increases, students’ unethical decision-making increases. It is clear that performance pressure often has a negative impact on

cognitively demanding tasks, such as ethical decision-making, thus the following hypothesis is warranted:

H1: High performance pressure on the leader will be associated with poorer ethical decision-making, as compared to low performance pressure.

Interpersonal Conflict

Interpersonal conflict may be another situational variable that impacts the ethicality of a leader's decision (Levenson, 1986). Indeed, Keenan and Newton (1985) found interpersonal conflict to be one of the top stressors on the job. Interpersonal conflict at work has been shown to be related to a number of negative outcomes for employees, including depression, anxiety, frustration, and intention to quit (Spector & Jex, 1998). It also appears to be related to role conflict and role ambiguity (Spector & Jex, 1998); stress, role ambiguity, and role conflict are likely to contribute to the complexity of the work environment. Such environmental complexity has been proposed as a contributor to corporate corruption (Baucus, 1994). Furthermore, Mumford, et al. (2007), found that experience with interpersonal conflict in the workplace was negatively related to ethical decision-making. In this study, the authors surveyed doctoral students about their past experiences and examined how past experience related to ethical decision-making. They found that experienced interpersonal conflict was the only climate dimension that they studied to have a strong, consistent (and, in fact, negative) relationship with ethical decision-making. Because, interpersonal conflict likely contributes to the complexity of the organizational environment, and it has been demonstrated to have a negative impact on ethical decision-making, the following hypothesis is warranted:

H2: High interpersonal conflict in the organization will be associated with poorer ethical decision-making, as compared to low interpersonal conflict.

Threats to Self-Efficacy

Self-efficacy, is defined by Bandura (1986, p. 391) as the assessment of one's capacity to perform a task. We believed that self-efficacy is another variable that may impact ethical decision-making. Because self-efficacy is task-specific, situational variables that decrease an individual's feelings of competence may negatively impact ethical decision-making via a number of mechanisms, including inducing defensive self-protection, inhibiting self-regulation, or provoking people to follow the path of least resistance (Mumford, Gessner, Connelly, O'Connor, & Clifton, 1993). Threats to self-efficacy may also promote the search for disparaging information in problem-solving (Frey & Stahlberg, 1987). Mumford et al. (1993) suggest that this disparaging information may lead people to distance themselves from problem situations, which can lead to poor ethical decision-making. Specifically, they proposed that situational factors threatening self-efficacy, such as poor performance, may lead to poor leader ethical decision-making.

Indeed, self-efficacy has been demonstrated to be related to attitudes and behaviors indicative of ethical decision-making. Elias (2008), in a study of perceptions of cheating, found that students with low academic self-efficacy were less likely to view cheating as unethical, as compared to students with high academic self-efficacy. Additionally, MacNab and Worthley (2007) found that self-efficacy is related to internal whistleblowing behaviors, which indicates that people with high self-efficacy are more likely to object vocally to perceived unethical behaviors. Finally, Maheshwari and Ganesh (2006) further propose that people with high levels of self-efficacy will make more ethical decisions. Consistent with these findings, in a study of leader destructiveness, Mumford et al. (1993) found that people with low self-efficacy made poorer organizational decisions. Thus, the following hypothesis is warranted:

H3: A threat to the leader's self-efficacy will be negatively related to ethical decision-making.

Type of Ethical Issue

Leaders encounter a variety of problems with ethical implications. These problems are likely to have different bases of ethicality, including 1) using a fair procedure in making the decision, 2) making sure that the outcome of the decision is fair, or 3) strictly following organizational rules to make the decision (Schminke, Ambrose, & Noel, 1997). There is much in the organizational justice literature regarding procedural (fair procedures) and distributive (fair outcomes) justice. Perceptions of these types of justice are important for organizational employees' motivation and, ultimately, for organizational performance (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Furthermore, perceptions of injustice have been proposed as contributing to destructive leadership (Moghaddam, 2002).

Indeed, these principles are considered to be important in making an ethical decision (Messick & Bazerman, 2001; Schminke, Ambrose, & Noel, 1997). When using these standards as guidelines for making decisions, however, leaders may be subject to what is called a "self-serving fairness bias" (Messick & Bazerman, 2001). This bias is exhibited when there is some disagreement about deservedness based on relative contributions. People (and organizational units) are more aware of their own contributions than those of others, therefore, they place more value on their own contributions. Thus, it may be difficult to make ethical decisions when faced with decisions requiring fairness of procedures or outcomes.

On the other hand, some decisions simply require leaders to follow organizational rules (Schminke, Ambrose, & Noel, 1997). These decisions, however, may not be as simple as they may seem at first glance. Many ethical dilemmas occur because there is a conflict between a

strict interpretation of the rules and other situational variables and outcomes at hand (DeVries, Anderson, Martinson, 2006). Indeed, Brown and colleagues (Brown, 2007; Trevino & Brown, 2004) and Webley and Werner (2008) point out the misconception that simply following the rules is not sufficient for ethicality, due to the number of social and situational influences on ethical decision-making. They emphasize that failure to break the rules does not equal positive ethical behavior/decision-making. Additionally, they suggest that organizational ethics cannot be managed simply through formal ethics codes and rules. Without an ethical culture that demonstrates that ethical conduct is rewarded, while unethical conduct is punished, the ethics codes and rules can become excuses for people not to consider the full complexity of the situation in making decisions. Thus, the following hypothesis is warranted:

H4: Decisions involving following the rules will be more unethical than those involving fair procedures or outcomes.

Authority of People Involved in Interaction

Within the organization, a leader is likely to receive a request for a decision from his/her subordinates, peers, or superiors. Brown and Trevino (2006) point out that the level of management of the other person involved in the ethical situation is likely to influence how the leader addresses the problem; leaders are likely to respond differently from requests from these three levels of constituencies. Thus, it is important for studies of leader ethical decision-making to consider the authority of the people involved in the ethical situation.

A number of studies using the Milgram (1965) paradigm have demonstrated that people are willing to engage in questionable behavior toward others, including physically harming them, simply because an authority figure asked them to do so (Blass, 1999). One explanation for this finding is that individuals may actually use a person of higher authority as an excuse for

engaging in questionable behavior. The individuals engaging in the behavior are able to place the responsibility for the consequences of their own actions on the authority figure. Other explanations for this behavior have focused on the power held by the authority figure (Blass, 1999). Specifically, the perception of the authority figure as an expert has been suggested as the reason for the followers' obedience. Furthermore, Mumford et al. (1993) found that individuals were more likely to make unethical decisions when such decisions appear to be supported by organizational authorities. Thus, individuals may be more likely to make unethical decisions when interacting with a superior.

Another potential mechanism that may suggest differences in the interactions between leaders and their colleagues of various levels can be found in the models of corporate corruption (Baucus, 1994). Baucus' (1994) model of corporate corruption suggests that when individuals are highly committed to their organization, they may actually be more likely to engage in corporate corruption. Their high level of commitment to the organization leads them to put the needs of the organization above their own ethical principles and/or society's tenets. When a leader is interacting with a superior, he or she may behave in a way that indicates a higher level of commitment, than he or she would when interacting with peers or subordinates. In attempting to appear more committed to the organization, the leader may be more likely to prioritize organizational needs above personal, ethical values and society's values. Thus, the following hypothesis is warranted:

H5: Poorer ethical decisions will be associated with responding to a superior, as compared to responding to a subordinate or peer.

Autonomy

There has been some research examining the construct of moral, or ethical, autonomy (e.g., MacLagan, 2007), but there has been relatively little work examining the role of decision-making autonomy at work, with regard to ethical decision-making. Autonomy on the job is related to a number of positive individual and organizational outcomes, including work motivation (Gagne & Deci, 2005; Hardre & Reeve, 2009; Ryan and Deci, 2000), creativity (Cardinal & Hatfield, 2000; Shalley & Gilson, 2004), and organizational performance (Davis & Schul, 1993; Frenendall & Emery, 2003). When employees have greater degrees of autonomy, they seem to be more internally motivated to perform their job, which improves their satisfaction, performance, and creativity. Thus, it may be the case that individuals with greater levels of autonomy will make better ethical decisions in response to organizational problems, because they have a greater investment in the organization, and a greater desire to see the organization succeed. Additionally, a high degree of organizational centralization has been proposed as a contributor to destructive leadership (Post, Ruby, & Shaw, 2002); when organizations are less centralized, leaders are likely to have a higher degree of autonomy, which may suggest that less centralized organizations (which provide leaders with more autonomy) would be associated with more ethical leadership.

The role of autonomy in ethical decision-making, however, may be more complex. In a study of crisis management Gebert, Piske, Baga, Lanwehr, and Kearney (2006) determined that there is an optimal level of autonomy. Employees with too little or too much autonomy performed more poorly in response to an organizational crisis than those employees with a moderate level of autonomy. Thus, when a leader is faced with making a decision, in order to solve an organizational problem, too much autonomy may lead to a poor decision, while not enough autonomy may also lead to a poor decision. It is clear that autonomy is likely to have a

complex role in organizational leaders' decision-making processes, thus, the following research question is warranted:

RQ1: How does autonomy, accompanied by varying levels of performance pressure, interpersonal conflict, and self-efficacy impact ethical decision-making?

Dimensions of Ethicality

The dependent variable for this study, ethicality, can be considered a very subjective construct. If, however, the construct can be broken down into a number of more objective dimensions, it can potentially be measured more objectively and reliably (e.g., Lievens & Sanchez, 2007; Sulsky & Kline, 2007). Three dimensions of ethicality were identified and measured in this study. First, ethicality involves an element of Fairness, especially with regard to making decisions. Fairness involves taking the needs and goals of others into account when making decisions (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Messick & Bazerman, 2001). Second, ethicality involves a Regard for the Welfare of Others. Regard for the welfare of others involves intentionally working to benefit others, such as helping others and respecting the rights of others (Darke & Chaiken, 2005; Knaus, 2003; Moore & Loewenstein, 2004; Munro & Powis, 2005). Third, ethicality involves the Awareness of Social Obligations. This awareness involves the awareness of, and respect of, cultural norms and values, both formal and informal and attending to the duties of a given social role (Anderson, 2003; Helwig & Turiel, 2003; Schweitzer, DeChurch, & Gibson, 2005; Smetana, 2006; Turiel, 1983).

Method

Sample

The sample used to test these hypotheses consisted of 238 undergraduate psychology students attending a large southwestern university. These participants received extra credit in their introductory psychology course for participation in this study. Participants were recruited through a website providing an overview of the study, where the study was described as an investigation of complex problem-solving in a brief one-paragraph summary statement. The sample consisted of 143 females and 89 males, with six not reported. Most participants were in their first year of college and were an average age of 19.66 ($SD = 2.85$). The available demographic data indicated that participants were typical of undergraduate students attending the university.

Individual Difference Control Measures

After reading and signing the informed consent forms, participants were asked complete two timed psychometric measures to be described below. These measures were administered to provide controls for relevant individual differences variables. Once participants had completed these measures, they were ostensibly presented with feedback regarding their performance on those measures. This feedback was designed to induce either high or low self-efficacy. Following this feedback, participants were asked to proceed to the primary task employed in this investigation.

The individual difference control measures participants were asked to complete were selected to cover key cognitive capacities known to influence complex problem-solving and leader behavior – intelligence, divergent thinking, and influence tactics (Mumford et al., 2000; Kipnis, Schmidt, & Wilkinson, 1980). The intelligence scores and divergent thinking scores were not retained as covariates because they were not significantly related to any of the study variables. Gender, task motivation, as measured by the post-task questionnaire (Cronbach's alpha

= .73), and one dimension of the influence tactics scale (Sanctions), however, were retained as covariates.

Influence tactics. Because of the open-ended nature of this experiment, a measure of influence tactics was administered to the study participants. In writing about how they would go about solving the organizational problem, participants might have described actions indicative of certain influence tactics, which might have more or less ethical connotations. Thus, the ratings of the dependent variable of ethicality could have potentially been impacted by a participant's tendency to use a particular type of influence tactic. Therefore, we wanted to control for the use of particular influence tactics, so that the variance associated with those tactics would not be included in scores on the dependent variable.

The scale of influence tactics used in this study was a 58-item questionnaire designed to measure which types of influence tactics respondents are most likely to use. The scale requires respondents to indicate the extent to which they use or have used different influence tactics. This scale consists of eight dimensions, involving different types of influence tactics: assertiveness, ingratiation, rationality, sanctions, exchange, upward appeals, blocking, and coalitions (Kipnis, Schmidt, & Wilkinson, 1980). The sanctions scale from this measure was retained as a covariate because it was significantly related to the dependent variable. For this study, the Cronbach's alpha of this scale was .78.

Experimental Task

The primary experimental task consisted of a scenario in which the participants assumed the role of a manager of an advertising firm. The participant read a brief description of the company mentioned in the scenario, including a brief statement about the current circumstances the company is facing. Throughout the rest of the vignette the participant reads 18 mock emails

from different characters in the organization, each presenting different problems and asking for solutions to each problem. In response to each e-mail problem, the participants wrote their solution in the form of an e-mail back to the person asking the question. The responses to the ethical problem questions were scored by trained judges for ethicality, based on the dimensions of fairness, regard for the welfare of others, and attending to social obligations, and overall ethicality.

The problem scenarios for this task were designed to be problems that a leader in an organization might face on any given day. They were designed to be meaningful and relevant to undergraduate students. An example problem scenario is presented in Figure 1.

INSERT FIGURE 1 ABOUT HERE

In reading through these problems, participants were asked to assume the role of a leader in a fictional advertising firm who was being asked a question about an ethical problem. Participants were presented with background information describing the circumstances involved in the organization, including their role as a leader in the organization, information about the other characters involved, and the consequences at stake. Specifically, the participants assumed the role of a middle-level manager in the organizational department in charge of designing advertising campaigns for the clients. The participants were presented with information about their superiors (upper-level management), peers (other middle-level managers), and subordinates (the employees working in the campaign department). Each e-mail was from a superior, peer, or subordinate, and asked the participant to make a decision about a problem. Any problem-specific information that participants would have needed in thinking about the problem was included in

the stimulus e-mail. After reading each e-mail describing the problem, participants were asked to respond to the problem using two paragraphs. The first paragraph described the decision that the participant made. The second paragraph described the participants' reasoning behind the decision. It should also be noted that past studies (e.g., Dailey & Mumford, 2004; Marcy & Mumford, 2007) have shown these types of tasks to be interesting and engaging to students.

It should be noted that this study did not include scenarios asking the participants to make decisions about committing egregious ethical violations. This is the case for two reasons. First, there is evidence to suggest that egregious ethical violations are not the primary concern of practitioners in business and the sciences (De Vries, Anderson, & Martinson, 2006). Indeed, these practitioners are much more concerned with the more ambiguous ethical concerns that they face on a daily basis, such as how to trim data or assign authorship with integrity. Second, in terms of the integrity of the experimental study, using the more ambiguous ethical scenarios allows for a more diverse set of responses, because the "right" answer is not obvious, and the participants must work with what they know about the situation and the people involved, in order to generate a solution.

Manipulations

All experimental manipulations, aside from the self-efficacy manipulation, occurred within the context of the fictional organization, within the written study materials. Therefore, it should be noted that the participants did not necessarily actually experience the manipulations (e.g., actual performance pressure was not induced in the participants). Thus, this experiment is based on perceptions of these situational variables. After completing the experimental task, participants completed the remaining, untimed, covariate measures, a demographics

questionnaire, and a post-task survey measuring perceived task difficulty, engagement, and motivation to complete the task.

Threat to Self-Efficacy. The threat to self-efficacy (SelfEfficacy) manipulation occurred in the form of bogus feedback to the participants regarding their performance on the first covariate measures that they completed. This was a variation of threat to self-efficacy manipulations used in previous researcher (Frey & Stahlberg, 1987; Mumford et al., 1993). After participants completed the timed measures, the experimenter left the room for 5-10 minutes and returned with a feedback form that informed the participants that they were either in the top (high self-efficacy group) or bottom (low self-efficacy group) 50% of participants who had taken these measures. It should be noted that self-efficacy is considered to be task-specific (Bandura, 1986); the experimental task, however, was not identical to the tasks on which the participants' threat to self-efficacy was based. This manipulation, however, has been demonstrated to have an effect on open-ended decision-making tasks that follow similar feedback on similar covariate measures as used in this experiment (e.g., Mumford et al., 1993).

Performance Pressure. The performance pressure (Pressure) manipulation occurred in the organizational background materials presented to the participants. Participants in the high performance pressure group were told that the organization was not performing well, in terms of getting new clients, and even that current clients had plans to cut back on their advertising budgets. Thus, it was extremely important that the character's group create extremely high-quality advertising campaigns, in order to help keep the organization afloat. Participants in the low performance pressure group were told that the organization is performing very well, and is the top advertising campaign in the region.

Interpersonal Conflict. The interpersonal conflict (Conflict) manipulation also occurred in the organizational background materials presented to participants. Participants in the high interpersonal conflict group were told that two of the organizational units have been feuding lately (IT and Finance), and that the feud has caused the IT department not to service computers as well as usual, among other specific problems that the feud has caused. Participants in the low interpersonal conflict group were told that the organization is very fortunate in that the employees work well together and very rarely have disagreements.

Autonomy. The autonomy (Autonomy) manipulation also occurred in the organizational background materials. Participants in the high autonomy group were told that they have a lot of freedom in decision-making and that the CEO trusts them implicitly. Participants in the low autonomy group were told that they must run all decisions by the CEO and justify their decisions to him.

Type of Ethical Issue. The type of ethical issue (Issue) was manipulated within-participants. Of the 18 e-mails, there were 6 of each type of ethical issue: issues involving using a fair procedure, issues involving coming to a fair outcome, and issues involving following organizational rules.

Authority of People Involved in the Interaction. The authority of the people involved in the interaction (Authority) was also manipulated within-participants. Of the 18 e-mails, there were 6 from each of three levels of authority: a superior, a peer, or a subordinate of the participant's character. The type of ethical issue and authority of people involved manipulations were crossed, such that there were two e-mails of each combination (e.g., 2 superior-procedure e-mails, 2 peer-outcome e-mails, etc.)

Measurement

Ethicality of Decisions. The decision ethicality measure was obtained through the written answers provided by participants working through the questions following the presentation of each problem scenario. Each question was responded to in a two-paragraph written answer, including a description of the decision, and a rationale for the decision.

The written answers provided in response to these questions were presented to a panel of four judges, all of whom were doctoral students in industrial and organizational psychology. These doctoral students were familiar with the ethical decision-making literature and complex cognitive performance, but not the hypotheses underlying the present study. All four students have taken (as students), and served as instructors for, the ethical decision-making training program developed by Mumford et al. (2008). For each of the responses, the judges rated the extent to which the response reflected 1) fairness (rated on a 3-point scale), 2) regard for the welfare of others, 3) adherence to/knowledge of social obligations, and 4) overall ethicality, on a 5-point scale. Fairness was defined as the extent to which the participant's response indicated taking into account the needs and goals of multiple other constituents. Regard for the welfare of others (Welfare of Others) was defined as the extent to which a participant's response reflected attention and care for the welfare of others, including decisions that intentionally work to benefit others, and behaving for the benefit of others, even at personal expense. Adherence to/knowledge of social obligations (Social Obligation) was defined as the extent to which a participant's response reflected an understanding and respect of cultural norms and values, including understanding guidelines and the duties of given social roles. The overall ethicality dimension took these subdimensions into account, and was an overall impression of the ethicality of the decision.

Prior to making these ratings, judges completed a 20-hour training program. In this training program, judges were initially familiarized with the nature of the problems and the definitions of the dimensions being applied. Subsequently, they were asked to apply these rating scales in evaluating a set of sample problem solutions and then meet and discuss and discrepancies observed in their evaluations. Following training, the interrater agreement coefficients obtained for evaluations of fairness, regard for the welfare of others, adherence to/awareness of social obligations, and ethicality were .82, .64, .66, and .68 respectively.

Results

Table 1 shows the descriptive statistics and intercorrelations among our study constructs. A mixed-design ANCOVA was used to analyze these data. The between factors included performance pressure, interpersonal conflict, autonomy, and threat to self-efficacy. The within factors included type of ethical issue and level of authority of the person requesting the decision. The dependent variable was the aggregation of the dimensions of ethicality. The ethicality constructs were highly correlated (ranging from .86 to .97). Additionally, a factor analysis was performed, revealing only a single factor with an Eigenvalue greater than 1, explaining 93.61% of the variance. Thus, it was determined that the constructs were not distinct enough to constitute four different dependent variables.

 Insert Table 1 about here

Table 2 presents the results of the mixed-design ANCOVA. Gender, scores of task motivation, and the Sanctions scale of the Influence Tactics measure were retained as significant covariates. Females' decisions were more ethical than males', task motivation was positively

related to ethicality, and the tendency to use sanctions in influence attempts was negatively related to ethicality. The only significant main effect was that of Authority.

Consistent with hypothesis 5, Authority yielded a significant main effect on ethicality ($F(2, 203) = 3.42, p < .05$), with a decision request from a superior exhibiting the worst decisions ($M = 3.00, S.D. = .03$, vs. $M = 3.07, S.D. = .03$). Additionally, the interaction of Authority, Autonomy, and Self-Efficacy was significant ($F(2, 203) = 3.44, p < .05$). Further examination of the cell means indicated that participants in the low autonomy, threat to self-efficacy condition, responding to a superior, made the worst decisions ($M = 2.92, S.D. = .05$, vs. $M = 3.06, S.D. = .05$).

Furthermore, the interaction of Authority, Autonomy, Interpersonal Conflict, and Performance Pressure yielded a significant effect ($F(2, 203) = 5.92, p < .01$). An inspection of the relevant cell means revealed that participants in the low autonomy, low interpersonal conflict, low performance pressure group receiving a decision request from a superior, made the worst decisions ($M = 2.76, S.D. = .08$, vs. $M = 3.06, S.D. = .08$). Finally, the interaction of Authority, Issue, Pressure, and Self-Efficacy was significant ($F(4, 203) = 2.45, p < .05$). Examination of the cell means indicated that participants in the low performance pressure, threat to self-efficacy condition, responding to a superior about an issue involving following the rules, made the worst decisions ($M = 2.54, S.D. = .10$, vs. $M = 3.06, S.D. = .08$).

Taken together, these results suggest that leaders who have a low level of autonomy and whose self-efficacy has been threatened, may be more likely to use the authority of their superiors as an excuse to make poor ethical decisions, even in the absence of interpersonal conflict and pressure in the workplace, especially when the decision involves following organizational rules.

The interaction of Autonomy, Interpersonal Conflict, and Performance Pressure also yielded a significant effect ($F(1, 204) = 6.52, p < .05$). Further examination of the cell means showed that participants in the low autonomy, low interpersonal conflict, low performance pressure condition made the worst decisions ($M = 2.89, S.D. = .06$, vs. $M = 3.07, S.D. = .06$). These results indicate that low decision-making autonomy, combined with the lower level of complexity of a workplace associated with low interpersonal conflict, is associated with poorer decisions in the presence of low performance pressure.

 Insert Table 2 about here

Discussion

The results obtained in the present study have noteworthy implications for understanding the role of important situational variables in leader ethical decision-making. The results of this study demonstrated that leaders responding to a superior in regard to an ethical problem are likely to make worse decisions than those responding to either peers or subordinates. This finding is consistent with the well-documented findings of the Milgram experiments (Milgram, 1965). It seems that participants are more likely to make unethical decisions when there is a higher authority figure involved in the interaction. The participant can diffuse responsibility for the decision and the consequences of that decision to the higher authority, thus, allowing the participant to make a poor decision, without feeling accountable for potentially negative consequences due to the poor decision (Blass, 1999).

Additionally, the corporate corruption literature can provide another potential mechanism for the observed effect of interacting with a superior when making an (un)ethical decision, which

suggests that a high degree of commitment to an organization can lead to unethical decisions (Baucus, 1994). When an organizational leader interacts with a superior, he or she may desire to appear more committed to the organization, so as to get in the “good graces” of the superior. This greater degree of organizational commitment when interacting with a superior may induce leaders to forego their own personal standards, and society’s standards, and put the needs of the organization above all else. By ignoring personal and broader cultural ethical standards, leaders may be more likely to make poor ethical decisions.

Moreover, there were a number of interactions among the situational variables examined in this study that had significant impacts on leader ethical decision-making. First, when leaders have less autonomy to make independent decisions, and their self-efficacy is threatened, they appear more likely to use the authority of the superior involved in the interaction as an excuse to make a poorer decision. Low autonomy is likely to contribute to this effect because the leaders feel like most of the decision-making is the responsibility of the superior (Gagne & Deci, 2005; Hardre & Reeve, 2009; Ryan and Deci, 2000). Furthermore, the findings with regard to low autonomy are consistent with the idea that a high degree of centralization, which leads to low decision-making autonomy, is associated with destructive leadership (Ruby, Post, & Shaw, 2002). Additionally, threats to self-efficacy may also enhance a leader’s desire to appear committed to the organization in the eyes of his/her superior. If a leader is feeling incompetent, he or she may seek positive feedback from organizational superiors (Baumeister, 1984), perhaps by zealously committing to the organization. Thus, when a leader’s self-efficacy is threatened, he or she may overemphasize the needs of the organization, over the needs of individuals, leading to a poor decision (Baucus, 1994).

Second, when leaders have low decision-making autonomy, and they are in an organizational environment with relatively low conflict and pressure, they appear to make poorer decisions in response to superiors. Once again, with low autonomy, the leaders are likely to defer responsibility for the decision to his or her superior (Gagne & Deci, 2005; Hardre & Reeve, 2009; Ryan and Deci, 2000), who, in this study, had the final say in the leader's decisions; this low degree of accountability for decisions is likely to contribute to poorer decision-making. Additionally, low interpersonal conflict means that there is little role ambiguity, thus, the person understands his or her role in the organization, and thus may be more comfortable with deferring responsibility to the superior (Milgram, 1965). Additionally, this effect occurs even in the absence of pressure; this effect will be discussed more below.

Third, when a leader is under low performance pressure, has experienced a threat to self-efficacy, and is interacting with a superior with an issue involving following the rules, he/she is likely to make poorer decisions. The mechanisms involving the threat to self-efficacy and a desire to endear oneself to superiors mentioned previously (i.e., enhanced organizational commitment toward superiors) may account, in part, for this finding. It may be that one way the threatened leader can attempt to enhance appearance of organizational commitment is to follow organizational rules to the letter, without taking the situation, including extenuating circumstances, into account. Failure to take situational variables into account has been proposed as a significant influence on poor ethical decisions (Mumford et al., 2008). Again, this effect occurs in the absence of high performance pressure.

Finally, when a leader experiences low autonomy, low interpersonal conflict, and low performance pressure, it appears that he/she may make poor ethical decisions. Interestingly, in this, and a number of the other interactions, the leader is making poor decisions in a relatively

stress-free environment: low autonomy (low responsibility), low conflict, and low pressure. Perhaps when people experience high levels of interpersonal conflict, they are more likely to take into account the needs, goals, motives, and expectations of other people, in order to minimize the impact of the interpersonal conflict. A related, but different, mechanism may be that interpersonal conflict serves to *make salient* the needs, goals, motives, and expectations of others. Thus, those participants who were not presented with interpersonal conflict might have been less likely to consider other people. A similar effect may occur with regard to performance pressure; enhanced pressure may benefit a leader's ethical decision-making by causing the leader to focus on the most relevant situational variables at hand, in making the decision (Stenmark, Antes, Wang, Caughron, Thiel, & Mumford, 2010). Finally, autonomy increases intrinsic motivation, which fosters the sense of responsibility for the outcomes of decisions (Gagne & Deci, 2005; Hardre & Reeve, 2009; Ryan and Deci, 2000); which may lead to better ethical decisions. Thus, some level of stress, pressure, and/or accountability is likely to be necessary for leader ethical decision-making.

The conclusions from this study have a few important implications for practice in enhancing leaders' ethical decision-making. First, the finding that leaders make worse decisions when responding to superiors indicates that, perhaps flatter organizations, with less of an emphasis on hierarchy, could facilitate leaders' taking full responsibility for their decisions. This responsibility, in turn, may lead to more ethical organizational decisions. Additionally, organizations may simply want to emphasize the responsibility of leaders to make their own decisions, enhancing decision-making autonomy, but also removing the temptation to use a superior's authority as an excuse to make a poor decision. Indeed, in this study, low autonomy was an important factor (especially in combination with other situational variables) in

contributing to poorer leader decisions. Thus, increasing autonomy is likely to improve leader ethical decision-making (Gagne & Deci, 2005; Hardre & Reeve, 2009; Ryan and Deci, 2000).

Additionally, the findings with regard to the “low stress” situations examined in this study have interesting implications. Leaders experiencing low interpersonal conflict, low performance pressure, and low autonomy (low responsibility for their decisions) made poor decisions. It may be that leaders actually need some stress in their workday, in order to ensure that the leader fully analyzes the problem situation when making a decision. This is consistent with findings that munificent environments may actually impede creative problem-solving (Csikszentmihalyi, 1997); indeed, ethical decision-making can be seen as a type of problem-solving, involving ambiguous, ill-defined situations (Mumford et al., 2008). Furthermore, low interpersonal conflict, which allows for little to no role ambiguity, may contribute to this effect by making the rules more salient by emphasizing that there is a particular way things proceed at the organization. In other words, the lack of ambiguity may highlight the idea that there is little room for deviation from organizational rules; this lack of ambiguity is likely to allow less for consideration of other relevant situational, extenuating factors that may influence the problem situation.

Not only has interpersonal conflict been cited as one of the foremost stressors on the job (Keenan & Newton, 1985), it has also been demonstrated that too much pressure can be detrimental to decision-making and problem-solving. High performance pressure is likely to contribute to a heuristic processing (De Dreu, 2003; Ordóñez & Benson, 1997) that encourages people to fall back on simple black-and-white decision-making processing, without taking the time, energy, and resources, to consider other situational factors that might be relevant. Thus, while there is evidence to suggest that organizations should attempt to minimize performance

pressures as much as possible, in order to allow leaders the time and resources to think through the problem situation (Mumford et al., 2008), in order to take into account both rules, and additional situational variables that may be relevant in making the decision, the findings of this study suggest that organizational efforts to decrease performance pressure (Amabile, Hadley, & Kramer, 2002; Cardinal & Hatfield, 2000) may not improve the ethical decision-making of leaders.

Thus, while organizations should continue to strive to reduce performance pressures and interpersonal conflict, they should keep in mind that when leaders do not feel any stress or pressure, their decisions may suffer, especially if they are not given a minimum level of autonomy. Thus, again, we echo our recommendation that leaders be afforded decision-making autonomy, in order to potentially counteract the negative effects of other (desirable) low-stress situational variables. A greater level of autonomy fosters intrinsic motivation, dedication, and commitment (Gagne & Deci, 2005; Hardre & Reeve, 2009; Ryan and Deci, 2000), thus encouraging leaders to feel more accountable and responsible to their workgroup personally, for their workgroup's performance, and ultimately, for the decisions that they make.

Finally, organizations can address the tendency for leaders to over-rely on rules in making ethical decisions. Although the findings with regard to an over-reliance on the rules in this study were, admittedly, specific in context (e.g. under low performance pressure, with an experienced threat to self-efficacy, and when interacting with a superior with an issue involving following the rules), this has been offered as an important issue (e.g., Brown, 2007; Mumford et al., 2008; Trevino & Brown, 2004; Webley & Werner, 2008) for organizations to consider. While it is clear that rules and guidelines for organizational behavior and decision-making are important, organizations should also emphasize a thorough analysis of the problem situation in

making decisions, especially in decisions of an ethical nature (Mumford et al., 2008). Many leader ethical decision-making scholars agree that rules and codes of conduct are a necessary, but not sufficient, means toward improving ethical decision-making; there are a number of situational variables that must also be considered, in order to make the most effective decision (Brown, 2007; Trevino & Brown, 2004; Webley & Werner, 2008). Indeed, studies of ethics training programs have shown that programs which emphasize cognitive decision-making strategies, which help the decision-maker to think through the problem situation, are associated with better ethical decision-making than those which focus solely on teaching rules and guidelines (Antes et al., 2009; Waples et al., 2009), thus, any organizational interventions designed to improve leader ethical decision-making should have a broader focus, beyond organizational rules and guidelines, instructing participants about the processes involved in ethical decision-making and the important situational variables that need to be taken into account when considering an ethical problem.

Despite the value of the findings in this effort, certain limitations should be noted. To begin, it should be recognized that the present study was based on an experimental paradigm. Although the task employed in this study represents a low-fidelity simulation of a real-world problem calling for leader ethical decision-making, the question remains, nonetheless, concerning the generality of our findings to people making real-world ethical decisions.

On a related note, the participants were undergraduate students. It is possible that older participants might have different perspectives on ethical behavior, or they may differ in cognitive development or moral development, and as a result may perform differently on the experimental task. Moreover, the participants performing these simulations would not have as much “at stake” as real-world leaders in an organization. It is possible that different results would be obtained in

a field study, with an older population. Additional research is necessary to address the generalizability of these results.

Additionally, statistically significant manipulation checks were not obtained in this study. There is some evidence, however, that the manipulations did, indeed, impact the participants' ethical decision-making. First, the manipulation checks for autonomy, performance pressure, and interpersonal conflict were in the appropriate direction, although the groups did not significantly differ in the ratings of their experiences of the manipulated variables. It is possible that, due to the length and complexity of the study materials, participants may not have felt the manipulations as strongly by the time they filled out the post-task questionnaire. Previous research, however, has shown that participants do, indeed, pick up on manipulations such as these, embedded within the study material (e.g., Dailey & Mumford, 2004; Marcy & Mumford, 2007). Second, the manipulation for self-efficacy was a variation on a self-efficacy manipulation that has proven to be effective in previous research studies (Frey & Stahlberg, 1987; Mumford et al., 1993). Finally, the results of the study indicated differences between the experimental groups. Thus, while it is likely that these manipulations did, indeed, impact participants' ethical decision-making, it remains to be seen exactly how these variables may impact real-world leaders' ethical decision-making on a day-to-day basis.

Also, the effect sizes obtained for the significant effects in this study were relatively low. A low effect size could indicate that the effects of the variable have little practical significance. On the other hand, a low effect size could also indicate that the manipulation in the study was not very strong. Indeed, Cohen (2007) suggests that, in order to increase an effect size, a researcher may attempt to increase the strength of the given manipulation. Given the fact that all but one manipulation in this study were embedded into the written study materials, as opposed to being

externally imposed on the participants, the low effect sizes may very well be due to relatively weak manipulations. Thus, future studies should attempt to examine these variables in more “real-world” settings, with externally imposed manipulations, and also tasks with more “at stake” for the participants.

Another potential limitation relates to the procedure applied for judging the participants’ responses. All of the judges were Industrial/Organizational Psychologists. All four judges have been involved, both as students and instructors, in an ethical decision-making training program that has been empirically demonstrated to be successful (Brock, Vert, Kligyte, Waples, Sevier, Mumford, 2008; Kligyte et al., 2007; Mumford et al., 2008). Although these judges were familiar with the general ethical decision-making literature and norms for ethical conduct across a range of professional fields, it is possible that their personal and professional frames of references may differ from practitioners in other fields. Thus, future studies using these procedures might utilize judges in different fields, such as philosophy, to address this issue.

Finally, this study looked at only a few situational variables that may impact ethical decision-making: the authority of the person involved in the interaction, the ethical issue involved in the situation, the level of autonomy held by the leader, performance pressure, and interpersonal conflict. It should be recognized, however, that other variables, such as expertise, may also influence ethical decision-making. Future studies should examine expertise, and other variables, that might shape our knowledge of situational influences on leaders’ ethical decision-making. Additionally, examining different combinations of variables may be useful in explicating the situational variables that impact leaders’ ethical decision-making.

In conclusion, this study demonstrates that there are a number of situational variables that impact leaders’ ethical decision-making. Indeed, the results of this study demonstrated that

situational variables may have a complex effect on ethical decision-making. Not only was a significant main effect observed, but there were a number of complex interactions of variables that impact ethical decision-making in leaders. Situational variables have largely been neglected in the study of leader decision-making, and this study establishes a need for the study of situational variables, in order to better understand the process of leader ethical decision-making.

References

- Amabile, T. M., Hadley, C. N., & Kramer, S. J. (2002). Creativity under the gun. *Harvard Business Review*, *80*, 52-61.
- Anderson, C. J. (2003). The psychology of doing nothing: Forms of decision avoidance result from reason and emotion. *Psychological Bulletin*, *129*, 139-168.
- Antes, A. L., Murphy, S. T., Waples, E. P., Mumford, M. D., Brown, R. P., Connelly, S., & Devenport, L. D. (2009). A meta-analysis of ethics instruction effectiveness in the sciences. *Ethics and Behavior*, *19*, 379-402.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*, 359-373.
- Baucus, M. S. (1994). Pressure, opportunity, and predisposition: A multivariate model of corporate illegality. *Journal of Management*, *20*, 699-721.
- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, *46*, 610-620.
- Beilock S. L. & Carr, T. H. (2001). On the fragility of skilled performance: What governs choking under pressure? *Journal of Experimental Psychology: General*, *130*, 701-725.
- Blass, T. (1999). The Milgram paradigm after 35 years: Some things we now know about obedience to authority. *Journal of Applied Social Psychology*, *29*, 955-978.
- Brock, M. E., Vert, A., Kligyte, V., Waples, E. P., Sevier, S. T., & Mumford, M. D. (2008). Mental models: An alternative evaluation of a sensemaking approach to ethics instruction. *Science & Engineering Ethics*, *14*, 449-472.

- Brown, M. E. (2007). Misconceptions of ethical leadership: How to avoid potential pitfalls. *Organizational Dynamics*, 36, 140-155.
- Brown, M. E., & Trevino, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17, 595-616.
- Brown, M. E., Trevino, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117-134.
- Cardinal, L. B. & Hatfield, D. E. (2000). Internal knowledge generation: The research laboratory and innovative productivity in the pharmaceutical industry. *Journal of Engineering & Technology Management*, 17, 247-272.
- Cohen, B. H. (2007). *Explaining Psychological Statistics (3rd ed.)*. Hoboken: Wiley & Sons.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425-445.
- Csikszentmihalyi, M. (1997). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Collins.
- Dailey, L., & Mumford, M. D. (2004). Evaluative Aspects of Creative Thought: Errors in appraising the implications of new ideas. *Creativity Research Journal*, 18, 367-384.
- Darke, P. R., & Chaiken, S. (2005). The pursuit of self-interest: Self-interest bias in attitude judgment and persuasion. *Journal of Personality and Social Psychology*, 89, 864-883.
- Davis, P. S., & Schul, P. L. (1993). Addressing the contingent effects of business unit strategic orientation on relationships between organizational context and business unit performance. *Journal of Business Research*, 27, 183-200.

- De Dreu, C. K. W. (2003). Time pressure and closing of the mind in negotiation. *Organizational Behavior and Human Decision Processes*, 91, 280-295.
- De Hoogh, A. H. B., & Den Hartog, D. N. (2008). Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: A multi-method study. *The Leadership Quarterly*, 19, 297-311.
- De Vries, R. Anderson, M. S., & Martinson, B. C. (2006). Normal misbehavior: Scientists talk about the ethics of research. *Journal of Empirical Research on Human Research Ethics*, 1, 43-50.
- Elias, R. Z. (2008). The impact of anti-intellectualism attitudes and academic self-efficacy on business students' perceptions of cheating. *Journal of Business Ethics*, 86, 199-209.
- Fiedler, F. E. & Garcia, J. E. (1987). *New Approaches to Effective Leadership: Cognitive Resources and Organizational Performance*. Oxford, England: John Wiley & Sons.
- Finney, H. C., & Lesieur H. R. (1982). A contingency theory of organizational crime. In S. B. Bacharach (Ed.), *Research in the sociology of organizations (vol. 1)*, pp. 255-299. Greenwich, CT: JAI Press.
- Frenendall, L. D., & Emery, C. R. (2003). Productivity increases due to the use of teams in service garages. *Journal of Managerial Issues*, 15, 221-242.
- Frey, D., & Stahlberg, D. (1987). Selection of information after receiving more or less reliable self-threatening information. *Personality and Social Psychology Bulletin*, 12, 434-441.
- Gagne, M. & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-362.

- Gebert, D., Piske, R., Baga, T., Lanwehr, R., & Kearney, E. (2006). Empowerment in the context of transformational change: A study of acquisitions and privatizations in Eastern Europe. *Journal of Leadership and Organizational Studies, 12*, 101-118.
- Goldberg, L., & Greenberg, M. (1994). A survey of ethical conduct in risk management: Environmental economists. *Ethics and Behavior, 4*, 331-343.
- Hardre, P. L., & Reeve, J. (2009). Training corporate managers to adopt a more autonomy-supportive motivating style toward employees: An intervention study. *International Journal of Training and Development, 13*, 165-184.
- Helwig, C. C., & Turiel, E. (2003). Children's social and moral reasoning. In P. K. Smith & C. H. Hart (Eds.), *Blackwell handbook of childhood social development* (pp. 475-490). Oxford: Blackwell.
- Hunter, S. (2008). Ethics: The framework for success. *Strategic Finance, 89*, 51-53.
- Jasanoff, S. (1993). Innovation and integrity in biomedical research. *Academic Medicine, 68*, 591-595.
- Jennings, M. M. (1999). What's happening in business schools? *The Public Interest, 137*, 25-32.
- Keenan, A., & Newton, T. J. (1985). Stressful events, stressors, and psychological strains in young professional engineers. *Journal of Occupational Behaviour, 6*, 151-156.
- Kipnis, D. Schmidt, S. M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Exploration in getting one's way. *Journal of Applied Psychology, 65*, 440-452.
- Kligyte, V., Marcy, R. T., Waples, E. P., Sevier, S. T., Godfrey, E. S., & Mumford, M. D. (2007). Application of a sensemaking approach to ethics training in the physical sciences and engineering. *Science and Engineering Ethics, 14*, 251-278.

- Knaus, W. J. (2000). Procrastination, blame, and change. *Journal of Social Behavior & Personality, 15*, 153-167.
- Levenson, J. L. (1986). When a colleague practices unethically: Guidelines for intervention. *Journal of Counseling and Development, 64*, 315-317.
- Lewis, B. P., & Linder, D. E. (1997). Thinking about choking? Attentional processes and paradoxical performance. *Personality and Social Psychology Bulletin, 23*, 937-944.
- Lievens, F., & Sanchez, J. I. (2007). Can training improve the quality of inferences made by raters in competency modeling? A quasi-experiment. *Journal of Applied Psychology, 92*, 812-819.
- Maclagan, P. (2007). Hierarchical control of individuals' moral autonomy? Addressing a fundamental tension in the management of business ethics. *Business Ethics: A European Review, 16*, 48-61.
- Maheshwari, S. K., & Ganesh, M. P. (2006). Ethics in organizations: The case of Tata Steel. *Vikalpa: The Journal for Decision Makers, 31*, 75-87.
- Malhotra, D., Ku, G., & Murnigan, J. K. (2008) When winning is everything. *Harvard Business Review, 86*, 78-86.
- Marcy, R. T., & Mumford, M. D. (2007). Social innovation: Enhancing creative performance through causal analysis. *Creativity Research Journal, 19*, 123-140
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. (2009). How long does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes, 108*, 1-13.
- McCraw, H., Moffeit, K. S., & O'Malley, J. R. (2008). An analysis of the ethical codes of corporations and business schools. *Journal of Business Ethics, 87*, 1-13.

- MacNab, B. R., & Worthley, R. (2007). Self-efficacy as an interpersonal predictor for internal whistleblowing: A US and Canada examination. *Journal of Business Ethics, 79*, 407-421.
- Messick, D. M., & Bazerman, M. H. (2001). Ethical leadership and the psychology of decision-making. In J. Dienhart, D. Moberg, Duska, R. (Eds.). *The next phase of business ethics: Integrating psychology and ethics* (pp. 213-238). US: Elsevier Science/JAI Press.
- Milgram, S. (1965). Some condition of obedience and disobedience to authority. *Human Relations, 18*, 57-76.
- Moghaddam, F. M. (2005). The staircase to terrorism: A psychological exploration. *American Psychologist, 60*, 161-169.
- Moore, D. A., & Loewenstein, G. (2004). Self-interest, automaticity, and the psychology of conflict of interest. *Social Justice Research, 17*, 189-202.
- Mumford, M. D., Zaccaro, S. J., Harding, F. D., Jacobs, T. O., & Fleishman, E.A. (2000). Leadership skills for a changing world: Solving complex social problems. *The Leadership Quarterly, 11*, 11-35.
- Mumford, M. D., Devenport, L. D., Brown, R. P., Connelly, M. S., Murphy, S. T., Hill, J. H., & Antes, A. L. (2006). Validation of ethical decision-making measures: Evidence for a new set of measures. *Ethics and Behavior, 16*, 319-345.
- Mumford, M. D., Espejo, J., Hunter, S. T., Bedell-Avers, K. E., Eubanks, D. L., & Connelly, S. (2007). The sources of leader violence: A comparison of ideological and non-ideological leaders. *The Leadership Quarterly, 18*, 217-235.
- Mumford, M. D., Murphy, S. T., Connelly, S., Hill, J. H., Antes, A. L., Brown, R. P., Devenport, L. D. (2007). Environmental influences on ethical decision-making: Climate and environmental predictors of research integrity. *Ethics and Behavior, 17*, 337-366.

- Mumford, M. D., Gessner, T. L., Conelly, M. S., O'Connor, J. A., & Clifton, T. C. (1993). Leadership and destructive acts: Individual and situational influences. *The Leadership Quarterly, 4*, 115-147.
- Mumford, M. D., Connelly, S., Brown, R. P., Murphy, S. T., Hill, J. H., Antes, A. L., Waples, E. P., & Devenport, L. D. (2008). Ethics training for scientists: Effects on ethical decision-making. *Ethics and Behavior, 18*, 315-339.
- Munro, D., Bore, M., & Powis, D. (2005). Personality factors in professional ethical behaviour: Studies of empathy and narcissism. *Australian Journal of Psychology, 57*, 49-60.
- Neill, A., Shibrowsky, J. A., & Peltier, J. W. (2004). The impact of competitive pressure on students' ethical decision-making in a global setting. *Marketing Education Review, 14*, 61-73.
- Ordóñez, L., & Benson, L. (1997). Decisions under time pressure: How time constraint affects risky decision making. *Organizational Behavior and Human Decision Processes, 71*, 121-140.
- Post, J. M., Ruby, K. G., & Shaw, E. D. (2002). The radical group in context: An integrated framework for the analysis of group risk for terrorism. *Studies in Conflict and Terrorism, 25*, 73-100.
- Russell, K. A., & Smith, C. S. (2003). It's time for a new curriculum. *Strategic Finance, 85*, 47-51.
- Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78.
- Schminke, M., Ambrose, M. L., & Noel, T. W. (1997). The effect of ethical frameworks on perceptions of organizational justice. *Academy of Management Journal, 40*, 1190-1207.

- Schweitzer, M. E., DeChurch, L. A., & Gibson, D. E. (2005). Conflict frames and the use of deception: Are competitive negotiators less ethical? *Journal of Applied Social Psychology, 35*, 2123-2149.
- Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly, 15*, 33-53.
- Smetana, J. G. (2006). Social-cognitive domain theory: Consistencies and variations in children's moral and social judgments. In, M Killen & J. Smetana (Eds.), *Handbook of Moral Development* (119-153). London: Lawrence Erlbaum Associates.
- Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology, 3*, 356-367.
- Stenmark, C. K., Antes, A. L., Wang, X., Caughron, J. J., Thiel, C. E., Mumford, M. D. (2010). Strategies in forecasting outcomes in ethical decision-making: Identifying and analyzing the causes of the problem. *Ethics & Behavior, 20*, 110-127.
- Sulsky, L. M., & Kline, T. J. B. (2007). Understanding frame-of-reference training success: A social learning theory. *International Journal of Training and Development, 11*, 121-131.
- Trevino, L. K., & Brown, M. E. (2004). Managing to be ethical: Debunking five business ethics myths. *Academy of Management Executive, 18*, 69-81.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, UK: Cambridge University Press.

Verschoor, C. C. (2006). IFAC committee proposes guidance for achieving ethical behavior. *Strategic Finance*, 88, 18-55.

Verschoor, C. C. (2007a). Work-life balance, superior's actions strongly influence ethical culture. *Strategic Finance*, 88, 13-15.

Verschoor, C. C. (2007b). Siemens AG is the latest fallen ethics idol. *Strategic Finance*, 89, 11-61.

Verschoor, C. C. (2007c). Who should be blamed the most for the subprime loan scandal? *Strategic Finance*, 89, 11-59.

Waples, E. P., Antes, A. L, Murphy, S. T., Connelly, S., & Mumford, M. D. (2009). A meta-analytic investigation of business ethics instruction. *Journal of Business Ethics*, 87, 133-151.

Webley, S., & Werner, A. (2008). Corporate codes of ethics: Necessary but not sufficient. *Business Ethics: A European Review*, 17, 642-652.

Table 1

Mixed-Model ANCOVA on Ethicality

	<i>F</i>	<i>df</i>	<i>P</i>	Partial η^2
<u>Covariates</u>				
Gender	1	9.61	0.00**	0.04
Motivation	1	10.20	0.00**	0.05
Sanctions	1	7.13	0.01**	0.03
<u>Main Effects</u>				
Authority	2	3.42	0.03*	0.02
Issue	2	0.95	0.39	0.00
Autonomy	1	0.41	0.52	0.00
Conflict	1	2.73	0.10	0.01
Pressure	1	0.84	0.36	0.00
SelfEfficacy	1	0.67	0.41	0.00
<u>Two-Way Interactions</u>				
Authority * Autonomy	2	0.33	0.72	0.00
Authority * Conflict	2	0.68	0.51	0.00
Authority * Pressure	2	0.36	0.70	0.00
Authority * SelfEfficacy	2	0.34	0.71	0.00
Authority * Issue	4	0.59	0.67	0.00
Issue * Autonomy	2	0.66	0.52	0.00
Issue * Conflict	2	0.62	0.54	0.00
Issue * Pressure	2	0.22	0.80	0.00
Issue * SelfEfficacy	2	0.37	0.69	0.00
Autonomy * Conflict	1	5.07	0.03*	0.02
Autonomy * Pressure	1	1.93	0.17	0.01
Autonomy * SelfEfficacy	1	0.16	0.69	0.00
Conflict * Pressure	1	0.15	0.70	0.00
Conflict * SelfEfficacy	1	0.18	0.67	0.00
Pressure * SelfEfficacy	1	0.00	0.95	0.00
<u>Three-Way Interactions</u>				
Authority * Autonomy * Conflict	2	2.87	0.06	0.01
Authority * Autonomy * Pressure	2	0.51	0.60	0.00
Authority * Autonomy * SelfEfficacy	2	3.44	0.03*	0.02
Authority * Conflict * Pressure	2	1.03	0.36	0.00
Authority * Conflict * SelfEfficacy	2	1.01	0.37	0.00
Authority * Pressure * SelfEfficacy	2	1.75	0.18	0.01
Authority * Issue * Autonomy	4	0.72	0.58	0.00
Authority * Issue * Conflict	4	0.24	0.92	0.00
Authority * Issue * Pressure	4	1.38	0.24	0.01
Authority * Issue * SelfEfficacy	4	0.38	0.82	0.00
Issue * Autonomy * Conflict	2	2.29	0.10	0.01
Issue * Autonomy * Pressure	2	0.15	0.86	0.00

Issue * Autonomy * SelfEfficacy	2	2.38	0.09	0.01
Issue * Conflict * Pressure	2	0.65	0.52	0.00
Issue * Conflict * SelfEfficacy	2	0.79	0.46	0.00
Issue * Pressure * SelfEfficacy	2	1.52	0.22	0.01
Autonomy * Conflict * Pressure	1	6.52	0.01*	0.03
Autonomy * Conflict * SelfEfficacy	1	1.14	0.29	0.01
Autonomy * Pressure * SelfEfficacy	1	0.56	0.46	0.00
Conflict * Pressure * SelfEfficacy	1	0.08	0.77	0.00
<u>Four-Way Interactions</u>				
Authority * Autonomy * Conflict * Pressure	2	5.92	0.00**	0.03
Authority * Autonomy * Conflict * SelfEfficacy	2	0.35	0.70	0.00
Authority * Autonomy * Pressure * SelfEfficacy	2	0.78	0.46	0.00
Authority * Conflict * Pressure * SelfEfficacy	2	2.16	0.12	0.01
Authority * Issue * Autonomy * Conflict	4	1.05	0.38	0.01
Authority * Issue * Autonomy * Pressure	4	1.06	0.38	0.01
Authority * Issue * Autonomy * SelfEfficacy	4	1.00	0.41	0.00
Authority * Issue * Conflict * Pressure	4	0.48	0.75	0.00
Authority * Issue * Conflict * SelfEfficacy	4	1.48	0.21	0.01
Authority * Issue * Pressure * SelfEfficacy	4	2.45	0.04*	0.01
Issue * Autonomy * Conflict * Pressure	2	0.94	0.39	0.00
Issue * Autonomy * Conflict * SelfEfficacy	2	0.10	0.91	0.00
Issue * Autonomy * Pressure * SelfEfficacy	2	0.68	0.51	0.00
Issue * Conflict * Pressure * SelfEfficacy	2	1.64	0.20	0.01
Autonomy * Conflict * Pressure * SelfEfficacy	1	0.01	0.91	0.00
<u>Five-Way Interactions</u>				
Authority * Autonomy * Conflict * Pressure * SelfEfficacy	2	1.47	0.23	0.01
Issue * Autonomy * Conflict * Pressure * SelfEfficacy	2	0.97	0.38	0.00
Authority * Issue * Autonomy * Conflict * Pressure	4	0.44	0.78	0.00
Authority * Issue * Autonomy * Conflict * SelfEfficacy	4	0.91	0.46	0.00
Authority * Issue * Autonomy * Pressure * SelfEfficacy	4	0.31	0.87	0.00
Authority * Issue * Conflict * Pressure * SelfEfficacy	4	2.33	0.05	0.01
<u>Six-Way Interaction</u>				
Authority * Issue * Autonomy * Conflict * Pressure * SelfEfficacy	4	0.34	0.85	0.00

Notes: F = F Ratio, df = Degrees of Freedom, P = Significance Level, Partial η^2 = Effect size

** $p < .01$, * $p < .05$, † $p < .10$

Table 2

Descriptive Statistics and Intercorrelations Among the Constructs

Variables	M	SD	Intercorrelations														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1. Gender	(1=M, 2=F)	---															
2. Motivation		12.21	2.22	0.01													
3. Sanctions		8.81	3.38	0.84**	-0.05												
4. Autonomy	(1=L, 2=H)	---		-0.08	0.02	-0.01											
5. Conflict	(1=L, 2=H)	---		0.07	0.04	-0.05	-0.08										
6. Pressure	(1=L, 2=H)	---		0.15*	0.01	0.07	-0.08	0.09									
7. Self-Efficacy	(1=L, 2=H)	---		-0.02	-0.10	-0.03	0.00	0.00	0.00								
8. Superior-Outcome Ethicality		3.23	0.56	0.14*	0.17**	-0.08	-0.01	0.07	0.05	-0.05							
9. Peer-Outcome Ethicality		3.24	0.54	0.20**	0.20**	-0.18**	-0.06	0.06	-0.03	0.02	0.38**						
10. Subordinate-Outcome Ethicality		3.34	0.44	0.11	0.06	-0.22**	0.02	-0.02	0.05	0.00	0.24**	0.18**					
11. Superior-Process Ethicality		3.12	0.72	0.05	0.16*	-0.11	0.00	0.11	0.02	-0.10	0.16*	0.19**	0.12				
12. Peer-Process Ethicality		3.14	0.52	0.16*	0.18**	-0.14*	-0.03	0.09	-0.02	-0.05	0.22**	0.26**	0.17**	0.09			
13. Subordinate-Process Ethicality		3.17	0.50	0.24**	0.15*	-0.33**	0.00	0.05	-0.08	0.01	0.29**	0.33**	0.17*	0.20**	0.24**		
14. Superior-Rules Ethicality		2.68	0.75	0.04	0.14*	-0.01	0.07	0.01	-0.06	-0.04	0.10	0.15*	0.11	0.06	0.18**	0.07	
15. Peer-Rules Ethicality		2.98	0.68	0.21**	0.09	-0.12	0.09	0.06	-0.03	0.00	0.16*	0.23**	0.16*	0.11	0.20**	0.11	0.1
16. Subordinate-Rules Ethicality		2.75	0.54	0.01	0.12	-0.20**	0.00	0.04	-0.03	-0.11	0.02	0.05	0.10	0.19**	0.12	0.13*	0.1

Figure 1. Example problem scenario e-mail

CB Advertising

TO: Chris Jones
FROM: Richard Karnes
DATE: June 19, 2007
SUBJECT: Budget

Hi, Chris-

I'm still looking at the company's budget for next year, and I need to get the estimated budget for your team. Some of the other VP's have started doing the budget with their team members. Although they believe it slows the process down (and takes up valuable time), they believe that it helps to develop the team members. So, I wanted to see if you will be working on your budget alone, or if you will be involving your team members in the process.

Let me know what you decide and why.

Thanks,

Richard Karnes
VP-Finance, CB Advertising
rkarnes@cbadvertising.com
888-900-7891