Creating an Ethical Organizational Environment: The Relationship between Ethical Leadership,

Ethical Organizational Climate, and Unethical Behavior

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Abstract

The purpose of this research is to provide a richer lens on the ethical organizational environment by

examining the relationship between ethical leadership and unit-level unethical behavior through

ethical organizational climate, with collective moral identity as a boundary condition. In testing our

theoretical model, we first develop and validate a measure of ethical organizational climate, the

EOC, to address concerns with existing measures of ethical climate. Second, we examine the role of

collective moral identity as a moderator of the relationship between ethical organizational climate

and unit unethical behavior. We discuss implications regarding the importance of developing a more

comprehensive conceptualization of ethical organizational climate.

Corporate indiscretion, wrongdoing, and corruption have recently been the subject of considerable media attention. For example, in 2016, Wells Fargo fell from a position of high respectability to being labeled as one of the most hated American companies due to exposure of their unethical business practices (Gujarathi & Barua, 2017; Stebbins & Comen, 2017). The bank created millions of fictitious accounts and forced some of its customers to take out unnecessary auto insurance. How does a longstanding, large company adopt such insidious practices?

There is mounting evidence that, in addition to the personal characteristics of employees, cues in the organizational environment play an important role in determining unethical behavior (Kish-Gephart, Harrison, & Treviño, 2010; Martin & Cullen; 2006; Newman, Round, Bhattacharya, & Roy, 2017). Organizations are comprised of formal systems for recruitment and selection, orientation and training, policy and codes, reward and punishment, accountability and responsibility, and decision-making systems (Treviño & Nelson, 2017). Each of these systems has specific ethical policies, procedures, and practices. When these policies, procedures, and practices are consistent and shared among employees in a unit or organization, they form *perceptions* of the unit's or organization's ethical climate (Reichers & Schneider, 1990).

In the case of Wells Fargo's ethical breach, the company relied on its ability to cross-sell more profitable products to customers to increase profits. CEO John Strumpf had a mantra of "eight is great," meaning employees sought to sell eight Wells Fargo products to every customer (Stebbins & Comen, 2017). This mantra turned into sales goals employees could not meet and resulted in unethical behavior such as ordering credit cards for pre-

approved customers without their consent and creating fraudulent checking and savings accounts. The scandal illustrates how perceptions of policies, procedures, and practices in formal systems could lead to an unethical organizational climate. For example, practices related to a policy of selling eight products included selling unneeded products to customers and creating accounts without customers' authorization. In terms of reward systems, bonuses were tied to unrealistic sales goals, which encouraged the use of unethical practices. Additionally, employees were punished with termination for challenging unethical practices. Initially when the fraudulent practices were exposed, top management and other managers were not held accountable for their role in the scandal. Although many things contributed to the problems of Wells Fargo, one can see how an environment replete with unethical practices across multiple systems could foster unethical behaviors. We are interested in examining a comprehensive assessment of employees' perceptions of the ethical practices, policies, and procedures in organizations' formal systems to understand how ethical organizational climate forms and affects behaviors.

Researchers have been studying ethical climate for over 30 years. Although there is considerable interest and research on the topic (i.e., more than 100 empirical articles from 2006-2016, Newman et al., 2017), much of the research has been critiqued on theoretical, empirical, methodological, and operational grounds (see Arnaud & Schminke 2007; Mayer, Kuenzi, & Greenbaum, 2009; and Newman et al., 2017 for reviews). We offer and promote a different way to operationalize and measure ethical organizational climate by focusing on

shared perceptions of ethical policies, practices, and procedures[1] in formal organizational

systems.

Victor and Cullen originally defined ethical climate as "the shared perception of what

is correct behavior, and how ethical situations should be handled in an organization" (1987,

p. 51). They used this definition to develop the Ethical Climate Questionnaire (ECQ), which is

the most commonly used measure of ethical climate (Kish-Gephart et al., 2010). However,

according to Litwin and Stringer's (1968) seminal work on organizational climate, climate is

the filter through which day-to-day practices are experienced by employees. Organizational

practices are critical factors influencing the development of organizational climate (Ostroff,

Kinicki, & Tamkins, 2003). Unfortunately, the ECQ does not assess multiple practices. Rather,

it focuses on how decisions are made. Decision making is an important part of ethical

climate, but it has a narrow focus and is not inclusive of other practices within the formal

organizational systems.

In this research, we seek to build on extant theory and research by contributing to the

organizational ethics, organizational climate, and moral identity literatures. First, related to the

organizational ethics literature, we develop a comprehensive measure of ethical organizational

climate. We draw on an established theoretical framework that describes formal organizational

systems in the work environment (Treviño & Nelson, 2017) to examine perceptions of ethical

organizational climate in work units. This new conceptualization addresses limitations of prior

research on ethical climate by (1) defining and operationalizing our measure in line with accepted

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[1] Treviño and Nelson's (2017) six formal systems are composed of policies, practices, and procedures. However, to make the paper more concise and easier to read, we will use the term practices to represent policies, practices, and procedures when referring to this framework and our ethical climate measure.

definitions of organizational climate, (2) drawing on an established unit- and organizational-level framework of ethical context based on principles of management, (3) using multilevel confirmatory factor analyses (MCFA) to establish construct validity, (4) collecting data at the unit level from multiple sources, (5) establishing convergent and divergent validity by examining the relationship between ethical organizational climate and related variables, (6) testing our conceptual model while controlling for related constructs to demonstrate the incremental validity of our EOC measure, and (7) examining a unit-level antecedent and consequence of ethical organizational climate as well as a moderator of the relationship between ethical organizational climate and unit-level unethical behavior.

Second, we contribute to the organizational climate literature by developing a theoretically-derived, psychometrically sound measure to assess an organization's ethical climate. The climate literature has struggled with how to operationalize organizational climate constructs for methodological as well as theoretical reasons. There has been a proliferation of organizational climate studies in the literature, but few of them are based on theories or frameworks at the collective level (Kuenzi & Schminke, 2009). Our measure is one of the few climate measures to draw on specific organizational-level theories, to operationalize the construct at the unit level, and to test a theoretical model at the unit level.

Third, we contribute to the moral identity literature (e.g., Aquino & Reed, 2002) by being among the first researchers to theorize and measure collective moral identity as a contextual variable in work units, and to examine how it interacts with ethical organizational climate to affect employees' unethical behavior. Moral identity, defined as a self-schema organized around a set of moral traits (Aquino & Reed, 2002) , is generally tested as an individual difference, but we examine collective moral identity—the mean level of moral identity in a unit—as another aspect of the ethical organizational environment.

To be clear, scholars have conducted decades of empirical research on ethical climate, but many of the studies use methods that do not meet modern standards for organizational climate research. Researchers can thus continue to develop and increase confidence in the validity of research on ethical organizational climate. In what follows, we define ethical organizational climate, describe limitations of prior empirical research and explain how to address the concerns, detail the basis of our new conceptualization and measure, develop a collective moral identity construct, and discuss two main studies that support the convergent, divergent, and predictive validity of our measure. We test a conceptual model linking ethical leadership to unit-level unethical behavior through ethical organizational climate, and explore the moderating role of collective moral identity.

Theoretical Background

Ethical Organizational Context

Individuals vary in how they perceive and evaluate (un)ethical behavior (Kish-Gephart et al., 2010). Therefore, organizations need to provide guidance to employees as to what constitutes appropriate workplace behavior. The organization's ethical context is one way to provide structure and guidance to employees. Researchers have studied the ethical context of organizations for decades and the literature is replete with constructs such as ethical climate (e.g., Victor & Cullen, 1987, 1988), ethical culture (e.g., Treviño, 1990; Treviño, Butterfield, & McCabe, 1998), and ethical infrastructures (Tenbrunsel, Smith-Crowe, & Umphress, 2003). The proliferation of constructs and measures to assess the ethical context in organizations creates confusion and raises the question - do we need another measure of ethical context?

The two most widely studied ethical context constructs are ethical climate and ethical culture; however, there is often misunderstanding regarding their distinctiveness. Both climate and culture refer to an organization's ethical environment and, although they have overlapping

elements, they are distinct constructs (see Denison, 1996 and reviews by Kuenzi & Schminke, 2009; Ostroff, Kinicki, & Muhammad, 2013; and Schneider, Ehrhart, & Macey, 2011). Both climate and culture are shared among employees and are used to help make sense of the work environment. They also both develop through the interaction of organizational members. However, culture focuses on how the social environment is created, while climate focuses on the way the environment is experienced by employees. Denison (1996) highlights the differences between organizational culture and climate. He suggests that culture refers to the deeper structure of organizations including values, beliefs, and assumptions held by employees. Culture may manifest through organization-specific artifacts, myths, and symbols. As employees are socialized in the organization, shared meaning develops through interactions with each other and the work environment. On the other hand, organizational climate has more surface-level manifestations from a sense of 'how things are done around here.' Organizational climate emerges from the values provided by top management that are implemented through policies, practices, and procedures. When employees share perceptions of these policies, practices and procedures, organizational climate develops.

Treviño et al. (1998) conducted a study to "examine issues of convergence and divergence" between ethical culture and climate. They developed a measure of ethical culture based on an early version of Treviño's ethical culture framework (1990) and compared it to ethical climate using Victor and Cullen's (1987, 1988) ECQ measure. Treviño et al. (1998) concluded that "the two constructs are measuring somewhat different, but strongly related dimensions of the ethical context" (p. 447). A recent meta-analysis also found empirical evidence that ethical culture and ethical climate are distinct constructs (Kish-Gephart et al., 2010). However, it is important to note that the majority of the literature using the ECQ measures psychological ethical climate and not organizational ethical

climate (Martin & Cullen, 2006). In their seminal study, Victor and Cullen (1987) point out that data need to be aggregated for a valid assessment of organizational ethical climate.

Ethical Organizational Climate

An organization's climate is one tool the organization can use to help employees make sense of the work environment, by helping employees discern how to behave appropriately. Because climate is more tangible to employees and easier to change than culture, our research focuses on ethical organizational climate. Unfortunately, the most widely used measure of ethical climate, the ECQ (Victor & Cullen, 1987, 1988), has been criticized for operationalization and measurement issues. As pioneers of the field of ethics and climate, Victor and Cullen offered cutting-edge research when their ethical climate measure was first introduced. Yet, over the past 30 years, the ethics, climate, and research methods literatures have developed in such a way that the ECQ is no longer compatible with current research standards.

First, Victor and Cullen's (1987) definition of ethical climate is inconsistent with the generally accepted definition of organizational climate, which focuses on shared perceptions of policies, practices, and procedures that are rewarded, supported, and encouraged with regard to 'something' in organizations (e.g., safety, service, innovation; Schneider & Reichers, 1983). In contrast, Victor and Cullen's original definition of ethical climate is "a shared perception of what is correct behavior and how ethical issues should be handled" (1987, p. 52) and focuses on decision-making processes in organizations. Second, Victor and Cullen (1987) relied on three types of moral reasoning (egoism, utilitarianism, and deontology) and three loci of analyses (individual, local, and cosmopolitan) to arrive at nine types of ethical climate. Although five ECQ climates (caring, laws and codes, rules, instrumental, and independence) are most common, the literature has produced over 20 variations using the ECQ (Arnaud, 2010). These variations suggest the ECQ is not robust. Third, even for the five

most prevalent climate types, the items do not consistently load on their intended factors. These inconsistencies have led to a proliferation of different measures to assess ethical organizational climate (Smith, Thompson, & Iacovou, 2009), with some measures representing different constructs than originally intended (Simha & Cullen, 2012). Finally, the majority of research using the ECQ has been conducted at the psychological climate level (i.e., an individual's perception of the psychological effect of the work environment on their own well-being) rather than the organizational level (i.e., shared unit perceptions of the work environment) (Martin & Cullen, 2006). In fact, Cullen, Victor, and Bronson (1993) conclude that the ECQ is less stable when used as a measure of organizational climate rather than psychological climate.

Meta-analyses demonstrate that ethical climate that is measured using variations of the ECQ is related to important organizational outcomes. Martin and Cullen's (2006) meta-analysis demonstrates that instrumental (combining self-interest and company profit) and caring (combining friendship and team interest) climates are the strongest predictors of cognitive and affective states. Yet, neither of these climates is one of the original nine theorized by Victor and Cullen (1987, 1988). The Kish-Gephart et al. (2010) meta-analysis also combines ethical climates, but the combinations are different than Martin and Cullen's (2006) combinations. Kish-Gephart et al. (2010) find that benevolent (combining friendship and team interest) and principled (combining rules and laws and code) ethical climates are significant predictors of unethical choices. They also propose dropping independence climates from the ethical climate framework due to conceptual concerns related to individual versus group interests (Kish-Gephart et al., 2010). Neither meta-analysis resolves the issue that different items were used to create the types of ethical climates.

We argue that the ECQ does not measure ethical organizational climate as it is defined and operationalized today. Rather, the ECQ captures individuals' perceptions of the organizational principles used in ethical decision making. Although ethical decision making is a component of

ethical organizational climate, the climate construct also includes a more encompassing set of practices that arise from the organization's formal systems (Treviño, 1990; Treviño & Nelson, 2017). Thus, to advance ethical organizational climate research, it is important to utilize a valid measure. We propose that a new operationalization of ethical organizational climate is needed that (1) utilizes organizational-level theory, (2) measures perceptions of policies, procedures, and practices related to ethics, (3) focuses on shared perceptions at the unit level, (4) captures organizational ethical climate rather than psychological ethical climate, (5) demonstrates construct validity (i.e., convergent, divergent, and predictive validity) across multiple studies, and (6) shows incremental validity over the ECQ and other related measures.

A New Operationalization of Ethical Organizational Climate Based on Formal Organizational Systems

The behavioral ethics literature provides several theoretical frameworks for understanding ethical context and ethical practices (e.g., Tenbrunsel et al., 2003; Treviño, 1990; Treviño & Nelson, 2017). Due to its relevance and comprehensiveness, we draw from Treviño and Nelson's (2017) ethical culture framework of formal and informal systems of organizations to propose a new operationalization of ethical organizational climate. The Treviño and Nelson (2017) framework draws on an understanding of culture to propose multiple formal and informal organizational systems. Treviño and Nelson (2017) suggest that each of the formal systems has practices specifically related to ethics. When these systems and practices consistently provide salient cues to employees, they result in shared perceptions of an ethical organizational climate. These shared perceptions of ethical organizational climate then support ethical judgment and actions from employees (Treviño et al., 1998).

Organizational practices are actions or activities that are repeated and recognizable in organizations—they are what organizations actually do rather than just what is touted (Johnson, Langley, Melin, & Whittington, 2007). Practices focus on the day-to-day activities in organizations that lead to shared practical understandings. Practices also take into account structural features of organizations as well as the importance of human agency (Feldman & Orlikowski, 2011). Specifically, ethical practices represent the organization's commitment to ethics and serve as a signal to employees about the attitudes and behaviors that are valued regarding ethics. When these multiple practices are salient, employees form shared perceptions, which set the stage for employees' perceptions of ethical organizational climate (Stringer, 2002).

Treviño and Nelson's (2017) formal systems include the following six systems: recruitment and selection, orientation and training, policy and codes, reward and punishment, accountability and responsibility, and decision-making systems.[2] Together, these formal systems lead to ethical practices, which provide guidelines for employees regarding acceptable ethical behaviors within the organization. *Recruitment and selection* reflects ethical practices that consider a person's ethical standards before entering the organization, as well as whether those personal standards match the organization's values. At the recruiting stage, organization representatives consider the applicant's moral character and make selection decisions based on the applicant's espoused ethical values. *Orientation and training* systems reflect ethical practices that socialize employees by communicating the organization's values. During orientation, employees are exposed to potential ethical issues associated with the job. Employees are trained to handle ethical dilemmas and apply their gained

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[2] In addition to these six formal organizational systems, Treviño and Nelson (2017) discuss leadership as another component. We did not include leadership as a formal organizational system for two reasons. First, in recent years there has been considerable work on the ethical leadership construct and a measure has been developed (Brown, Treviño, & Harrison, 2005). Second, leadership is generally thought of as an antecedent of, as opposed to a specific aspect of, climate (Kuenzi & Schminke, 2009).

knowledge on the job. *Policies and codes* reflect ethical practices that highlight a code of conduct that represents employees' actual behaviors. The code of ethics is strictly enforced and followed as opposed to serving as 'window dressing.' *Reward and punishment* systems reflect ethical practices that focus on the consequences for employees who engage in (un)ethical behavior. Employees who behave in an ethical manner receive positive feedback and are rewarded, whereas employees who violate ethical codes are appropriately disciplined. *Accountability and responsibility* systems reflect ethical practices that emphasize the need for employees to take responsibility for their unethical behavior, with structures in place to promote accountability and responsibility. Employees at all levels should take responsibility for their unethical behavior and feel comfortable telling management if unethical behavior occurs. *Decision-making* systems generate ethical practices related to ethical decision making. Even during stressful times, employees should discuss ethical concerns before making final decisions. Altogether, when the ethical organizational climate is strong, these multiple ethical practices ensure that the right employees are selected, are trained to achieve ethics-related goals, receive rewards for their efforts regarding ethical matters, are monitored and influenced with respect to (un)ethical behavior, and know how to make decisions consistent with ethical expectations.

In sum, we use employees' shared perceptions of the ethical practices associated with the six formal systems of organizations as the basis of our ethical organization climate measure. Perceptions of the practices that result from these six formal systems are combined to create a higher-order factor of ethical organizational climate (i.e., a formative measure). To avoid further confusion in the literature, it is important to note that Treviño et al. (1998) created a measure of ethical culture from the formal organizational systems framework; however, it does not tap into all of the formal organizational systems. Schaubroeck et al. (2010) use this culture measure developed by Treviño et al. (1998) in a study that successfully links ethical leadership at the unit level to lower-

level employee unethical behaviors and cognitions through ethical culture (as measured by the Treviño et al., 1998 culture measure). Our approach differs in that we: (1) develop a more comprehensive measure that assesses all of the formal organizational systems rather than just some of them, (2) focus on employee perceptions of specific practices for each of the formal systems, and (3) use the ethical culture framework as a way to explain how practices reflect the values of top management

Relationship between Ethical Leadership and Ethical Organizational Climate

It is important to understand factors that lead to an ethical organizational climate, such as leadership. 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" (Brown et al., 2005, p. 120). Ethical leadership has two components that influence employees: (1) the moral person aspect, which includes demonstrating integrity, fairness, and a concern for others, and (2) the moral manager aspect, which focuses on transactional efforts, such as using reward and punishment systems to communicate appropriate ethical behavior to subordinates (Treviño, Hartman, & Brown, 2000). Social learning theory (SLT; Bandura 1977, 1986) explains how and why ethical leaders influence their followers. SLT suggests that employees learn appropriate behaviors through role modeling and the use of rewards and punishments. Ethical leaders model appropriate behavior, communicate ethical standards, and punish and reward employees based on ethical compliance. In turn, leader actions contribute to employee perceptions of the policies, practices, and procedures leaders set, implement, and enforce.

Zohar and Luria (2005) suggest that top managers set policies (e.g., strategic goals) and establish procedures (e.g., guidelines related to these goals). Supervisors interpret and filter broad strategies and policies through the implementation of practices. Practices then provide predictable

and specific directions for employees to follow. Zohar and Luria (2005) state, "The core meaning of climate relates, therefore, to socially construed indications of desired role behavior, originating simultaneously from policy and procedural actions of top management and from supervisory actions exhibited by shop-floor or frontline supervisors" (p. 616).

The process of interpreting and implementing practices stems from both the moral person (interpreting) and moral manager (implementing) components of ethical leadership. Ethical leaders use transactional influence processes such as setting standards, rewards and punishments, and aspects of performance appraisals to hold their employees accountable for ethical conduct (Treviño, Brown, & Hartman, 2003). Additionally, an ethical leader's moral characteristics and behaviors are expected to shape the implementation of ethical practices. For example, when recruiting and hiring new employees, ethical leaders are expected to hire employees with high moral standards. Because ethical leaders believe in the active management of ethics (Brown & Mitchell, 2010), they are particularly likely to implement training and orientation practices to clarify the acceptability of several organizational behaviors. Ethical leaders are also more likely to openly discuss business ethics or values with employees (Brown et al., 2005), which serves to clarify policies and codes for employees. Further, ethical leaders are more likely to focus on the processes by which organizational goals are obtained rather than just the final results (Greenbaum, Quade, & Bonner, 2015). Associated with reward and punishment practices, ethical leaders are more intent on setting up systems that discipline employees who violate ethical standards and reward individuals for ethical behavior and decisions (Ng & Feldman, 2015). Related to accountability and responsibility practices, ethical leaders set an example of how to do things the right way in terms of ethics and admit when they make mistakes (Brown et al., 2005). They are also more likely to set up systems that allow employees to question the ethical behaviors of others and to encourage employees to be accountable for their own behaviors. Lastly, ethical leaders tend to make fair and balanced decisions

(Xu, Loi, & Ngo, 2016) and encourage employees to consider 'what is the right thing to do' when making decisions.

Previous research suggests that leaders influence the work environment and specifically climate perceptions (Mayer, Kuenzi, & Greenbaum, 2010; Schneider et al., 2011; Stringer, 2002; Zohar & Luria, 2005). Based on the priorities and behaviors of ethical leaders and their status as role models, the importance of ethics should be reflected in the practices emphasized and implemented within the unit or organization. Unit leaders take direction from top management and seek to create multiple formal systems in the immediate work environment to ensure a consistent organizational message to employees regarding ethical behavior expectations. Thus, we predict:

Hypothesis 1: Ethical leadership will be positively related to ethical organizational climate.

Relationship between Ethical Organizational Climate and Unit Unethical Behavior

We suggest that ethical organizational climate is negatively related to unit-level unethical behavior. Two theories, social information processing theory (SIPT) and SLT, help explain why ethical organizational climate is related to unit unethical behavior. These theories highlight how individuals look to their social environment for cues about (in)appropriate behavior.

There are several tenets of SIPT (Salancik & Pfeffer, 1978) that apply to the organizational climate literature. First, SIPT suggests that the individual's social environment provides cues that can be used to characterize the work environment. Second, the social environment provides information to individuals as to how they (and others) weigh the importance of what they see in the work environment. Finally, the actions of others inform individuals' thinking about what behaviors are important, appropriate, and likely to be, or not to be, rewarded. SIPT thus suggests that individuals use cues, such as shared perceptions of organizational climates from the work environment, to determine the desired and appropriate ways to behave. In this case, ethical organizational climate provides understanding and meaning as to what unit values and types of behaviors are ethically

acceptable. If there is a strong ethical organizational climate, employees will be less likely to exhibit unethical behaviors.

We also draw on SLT (Bandura, 1977). SLT maintains that when there are role models in the work environment, individuals will seek to emulate these role models. Often role models are leaders, but employees in the unit can also be role models (e.g., lateral influence). Research indicates that unit members not only serve as role models of ethical behavior (Robinson & Bennett, 1997), but provide rewards and punishments related to normative compliance (e.g., being included in unit activities, being ostracized by the group, making positive or negative comments). Employees in work units witness sanctions to others for inappropriate behaviors and rewards for positive behaviors. This contributes to shared perceptions regarding the group's ethical expectations. Employees will interpret observable actions as representative of "the way things are done around here" regarding ethics and will then model similar behaviors.

If the unit's organizational climate supports ethics (e.g., strong ethical organizational climate), employees will regularly witness ethical conduct among coworkers and will seek to emulate those behaviors. If the ethical organizational climate is strong, there will also be less pressure to compromise the organization's ethical standards to reach goals and objectives. Thus, as a result of social information processing and role modeling, we expect ethical organizational climate to be negatively related to the work unit's unethical behavior. Therefore, we predict:

Hypothesis 2: Ethical organizational climate will be negatively related to unit unethical behavior.

Mediating Role of Ethical Organizational Climate between Ethical Leadership and Unethical Behavior

We hypothesized that ethical leadership is positively related to ethical organizational climate and that ethical organizational climate is negatively related to unit unethical behavior. Taken

together, we predict that ethical organizational climate mediates the relationship between ethical leadership and unethical behavior. We draw on SIPT (Salancik & Pfeffer, 1978) to explain this mediating process. The social context makes ethical information more or less salient in the work environment, providing expectations regarding how individuals should behave. A leader's implementation of multiple organizational systems that are tied to ethical practices leads to shared perceptions of an ethical organizational climate. In turn, the ethical organizational climate provides information to employees regarding ethically-appropriate behavior as they strive to maintain high ethical standards, resist pressure to compromise ethical standards, and obtain knowledge about how to handle ethical situations. Climate perceptions inform employees about how the work unit operates and how ethics should be handled with respect to pursuing organizational objectives (Reichers & Schneider, 1990). Indeed, past research demonstrates that organizational climate mediates the relationship between various forms of leadership and unit-level outcomes (Kuenzi & Schminke, 2009).

In sum, ethical leaders interpret, implement, and enforce the practices that form employee perceptions of ethical organizational climate. These perceptions influence unit members to refrain from unethical behavior in the unit. Therefore, we predict:

Hypothesis 3: Ethical organizational climate will mediate the relationship between ethical leadership and unit unethical behavior.

Moderating Role of Collective Moral Identity

We expect the relationship between ethical organizational climate and unit unethical behavior to be influenced by another aspect of the ethical organizational environment—collective moral identity. Specifically, we propose that work units with high collective moral identity pay more attention to the ethical organizational climate, which results in even less unit unethical behavior.

Moral identity is a self-conception organized around a set of moral traits (Aquino & Reed, 2002). Moral identity helps people to arrive at moral judgments that then affect their ethical conduct. Individuals strive to engage in behaviors that are consistent with their moral identities (Blasi, 1984). Indeed, research shows that individuals with high moral identities are more likely to engage in morally "correct" behaviors and to refrain from unethical behaviors (Aquino, Freeman, Reed, Lim, & Felps, 2009; Reynolds & Ceranic, 2007; Thorton & Rupp, 2016). Moral identity is recognized as an important moderator of the effect of contextual variables on individual attitudes and behavior (Aquino, McFerran, & Laven, 2011).

Typically, moral identity is studied as an individual difference. However, extant research suggests that people read the cues of their environment to take on the accepted traits of the environment (e.g., Chan, 1998; Dragoni & Kuenzi, 2012; Park & DeShon, 2010; Porter, Webb, & Gogus, 2010). When members of a unit are exposed to the same cues, they can develop shared perceptions regarding the importance of upholding moral traits, which is reflected by a collective moral identity. Collective moral identity represents the extent to which employees in the work unit internalize moral traits as central to their shared unit-conception. Because of the importance of behavioral consistency to one's identity (Aquino & Reed, 2002), unit members typically respond to environmental cues in ways that are consistent with their internalized, unit identities.

Collective moral identity is likely to develop because employees strive to adopt social identities to reduce uncertainty (e.g., Hogg & Terry, 2000). One of the most pervasive features of organizations is the emergence of agreement among unit members regarding attitudes, beliefs, and values (Mason, 2006). The tendency toward conformity is a necessary feature if members are to define and maintain the group and work successfully toward goals (Kiesler & Kiesler, 1969). Values play an important role in the process. Distinct unit values serve to distinguish groups and provide a basis for a unique group identity (Ashforth & Mael, 1989). Thus, unit values are central to social

identity formation. Unit members engage in a process known as depersonalization in which they view themselves as embodying the positive traits of the prototypic group member (Stets & Burke, 2000). In adopting a prototypic set of group values (Ashforth & Mael, 1989), individuals act in accordance with these values and match their own behavior to the standards of the group (Stets & Burke, 2000; Terry & Hogg, 1996).

Goffman (1959) suggests that individuals are more attuned to meeting the expectations of the group than to their own personal identities. Individual traits can be overruled by strong cues in the environment. In the case of moral identity, unit members strive to be consistent with the moral identity of the group. Leavitt, Zhu, and Aquino (2016) find that individuals can be primed with subtle environmental cues that affect their ethical intentions. They suggest that cues in the environment serve to activate different facets of the self, often without a person's awareness (Leavitt et al., 2016). Additionally, Aquino et al. (2009) find that individuals can be primed to adopt a moral identity. This research suggests that environmental cues can prime all members of the group to adopt a collective moral identity.

Thorton and Rupp (2016) theorize that collective moral identity exists and their experiment manipulates collective identity; however, they suggest future research should develop better operationalization of collective moral identity. Chan (1998) argues that constructs and phenomena can exist at multiple levels within organizations and can "apply to individual-level attributes such as cognitive ability and styles, personality, mental representations, and behavioral variables" (p. 237). Therefore, we use a direct consensus composition model to capture collective moral identity. Employees' moral identities are aggregated to the unit level based on within-group agreement. Collective moral identity is different from organizational ethical climate because collective moral identity captures cognitions related to valued traits (i.e., moral traits) as opposed to perceptions regarding ethical policies, procedures, and practices.

Collins (2004) suggests that when individuals are in a group, they have a common focus, common mood, and a sense of morality that is tied to the group. Over time, employees in the same unit can become alike in how they perceive and respond to events in the environment. When moral identity is more central to the shared identity of the group, individuals will be more sensitive to cues in the organizational context, such as ethical organizational climate. In turn, units with high collective moral identities will respond to the ethical organizational climate with enhanced behavioral consistency by refraining from unethical behavior (e.g., Aquino et al., 2009). Empirical evidence supports the idea that moral cues have the most consistent effects on moral behaviors when moral identity is high rather than low (Aquino et al., 2009). Therefore, we expect the negative relationship between ethical organizational climate and unit unethical behavior to be stronger when units are high in collective moral identity.

Hypothesis 4: Collective moral identity will moderate the negative relationship between ethical organizational climate and unit unethical behavior such that that the relationship will be stronger when units are higher (rather than lower) on collective moral identity.

Overview of Studies

We conduct two main studies by developing and validating our new measure of ethical organizational climate (the EOC) in Study 1 and testing our conceptual model in Study 2.[3] We follow Hinkin (1998) and Hinkin and Tracey's (1999) recommendations for measure development. In Study 1, Part A, we develop the items for the EOC measure. We then use factor analysis to help refine and reduce the number of items in the EOC measure. In Part B, we test the content validity of the EOC measure by examining the definitional correspondence of the EOC items (Colquitt, Sabey, Rodell, &

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[3] We received IRB approval from two institutions. We received approval from the University of Central Florida (IRB# SRB-06-03737 titled, "The Development of a Measure of Ethical Climate"). We also received IRB approval from Southern Methodist University (IRB# H190029-KUEM titled, "Developing a Measure of Ethical Climate").

Hill, in press). In a supplemental analysis, Part C, we provide evidence that the EOC measure remains significant while controlling for the ECQ, the ethical climate index (ECI; Arnaud, 2010), and overall justice climate (OJC; Ambrose & Schminke, 2009). We do this by examining the predictive incremental validity of the EOC measure over the ECQ, ECI, and OJC through the mediation part of our model. In Study 2, we build on the prior study by testing our complete model including collective moral identity as a moderator of the relationship between ethical organizational climate and a second type of unethical behavior—unit deviance.

Study 1

In Study 1, we establish an initial version of our measure by generating items that reflect the formal systems of an organization's ethical practices and pilot testing these items. Because we draw on an established theoretical framework, we use deductive scale development to generate items (Schwab, 1980). We use Treviño and Nelson's (2017) theoretical framework to develop items reflecting the formal organizational systems' practices in the work environment. We follow Hinkin (1998) and Hinkin and Tracey's (1999) steps for measure development. The final items are in the Appendix. In the development of the EOC measure, we also set out to address some of the methodological and data-related concerns of the ECQ.

Finally, climate research has been theorized about and tested at different levels within the organization, such as unit, department, and organization (e.g., Colquitt, Noe, & Jackson, 2002; Zohar, 2000; Zohar & Luria 2005). According to Kozlowski and Klein (2000), climate researchers need to be specific about the level at which they are theorizing. For this study, we use the unit level and all assessment tools that reference the unit's ethical organizational climate. According to Zohar and Luria (2005), supervisors serve to interpret and filter broad strategies with the implementation of practices, and this is done most often at the unit level. Because we are focusing on perceptions of ethical practices, it makes sense to examine ethical climate at the unit level.

Part A: Item Development and Substantive Validity

The EOC items reflect the formal components of Treviño and Nelson's (2017) model. We first generated 51 items that reflect ethical practices related to the six formal systems in organizations: recruitment and selection, orientation and training, policy and codes, reward and punishment, accountability and responsibility, and decision-making systems.

Second, we examined the measure's substantive validity, or the extent to which a measure is judged to be reflective of, or theoretically linked to, some construct of interest (Anderson & Gerbing, 1991). To do this, we employed an item-sorting task (Anderson & Gerbing, 1991) to see if the items could be clearly identified as reflecting the six formal organizational systems. In 2008, 11 trained doctoral students in management sorted the 51 items into the six organizational systems and one general ethical organizational climate category (if they thought the item was too broad for the systems categories). In addition, they were asked to rate each item as to its relevance, clarity, and overall quality. Using a 75% substantive agreement cutoff (Hinkin, 1998), 38 items were retained as they were written, and six were modified slightly for clarification, totaling 44 items.[4]

Third, we assessed the factor structure of these 44 items to determine the psychometric properties of the measure and further refine the measure. We evaluated the factor structure of the new measure and reduced the 44 items using exploratory factor analysis.[5] There is a long-standing debate in the literature regarding whether confirmatory or exploratory factor analysis is more

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[4] Raters were provided definitions of climate in general, ethical climate, and the six formal systems. We asked the raters to identify which formal system appropriately categorized each statement. They were allowed to choose more than one if they thought the item could belong in more than one category. Raters were asked to rate the relevance, clarity, and overall quality of all items. At the end, there was an open-ended section where raters were asked to explain why they placed items in more than one category if they did. In addition, there was a section where they could add any items they felt were missing. Six items were modified slightly based on this feedback to clarify the items.

[5] We surveyed 476 working adults on their ethical organizational climate and then conducted principal axis factoring (PAF). We chose the three items with the highest loadings of each of the formal systems representing organizational ethical climate for a total of 18 items.

appropriate (Hurley et al., 1997). Even though we have a theoretical foundation for our factors, as this is in part a measure development study, we chose the more conservative route and conducted an exploratory factor analysis and then followed up with confirmatory factor analyses using subsequent data sets.

Method

      Sample and Procedure. In 2008, we distributed surveys for Study 1, Part A to 545 members from 109 organizations in the southeast United States operating in the technology, government, insurance, financial, food service, retail, manufacturing, and medical sectors. Business administration students at a large southeastern university contacted each organization. Students received extra credit for hand delivering one survey packet to each participating unit within an organization. The packet contained five employee surveys and clear instructions regarding who should fill out the surveys. Each packet included self-addressed stamped envelopes for the participants to send their completed surveys back to the researchers. The respondents were informed that their responses would be kept confidential. A number of other researchers have used similar snowball approaches when collecting data (Ambrose & Schminke, 2009; Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Morgeson & Humphrey, 2006). Our study tried to reduce careless responders by piloting the survey, using working adults, examining surveys for participants who used response patterns when completing the survey, controlling for social desirability, and conducting an even-odd consistency test (Meade & Craig, 2012).

      We received a total of 358 usable responses (66%). Employees responding were 53.4% female, 56.1% Caucasian (10.8% African-American and 17.0% Hispanic), and averaged 28.19 years of age (SD = 11.24) with 3.37 years of tenure (SD = 4.50) in the organization and 2.64 years in the unit (SD = 3.10).

Results

Following Hinkin and Tracey (1999), we conducted an exploratory factor analysis with a principle components extraction and varimax rotation[6] (Ford, MacCallum, & Tait, 1986) at the item-level using MPlus Version 8 (Muthén & Muthén, 2017). The results revealed the items loaded onto a 6-factor solution (see Table 1). Research indicates that short measures reduce response bias caused by boredom and fatigue (Schriesheim & Eisenbach, 1990). Yet, more items allow for a more prescriptive use if needed. We retained the three items with the highest loadings and face validity that still assessed the breadth of each of the organizational systems. We then further reduced the items to have a 6-item, 12-item, and 18-item measure (one, two, or three items per formal system) of the EOC (see Appendix[7]).

Next, we assessed the degree of agreement by calculating the r_{wg} statistic (George & James, 1993) for the 6-item EOC. The EOC r_{wg} is .87, which provides evidence that there is strong agreement within units for our new measure. We also assessed the reliability of the 6-item EOC using Cronbach's alpha (Cortina, 1993). The EOC met psychometric standards, as the alpha is .78.

Multilevel Confirmatory Factor Analysis. We used multilevel confirmatory factor analysis (MCFA) to test the fit of the overall model (Bagozzi, Yi, & Phillips, 1991). We used MCFA because it provides evidence as to which items are reflective of the latent construct at the individual and unit levels of analysis (Dyer, Hanges, & Hall, 2005). As the EOC is an organizational climate measure, it is

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[6] We followed Hinkin (1998) and Hinkin and Tracey's (1999) steps for the development of measures used in survey questionnaires. Therefore, we used principal components analysis (PCA). Since we collected this data, it is standard practice to use principle factor analysis (PFA) or maximum likelihood.

[7] We also developed and tested a 12- and 18-item EOC measure. These longer measures may serve as more comprehensive, diagnostic tools for assessing an organization's ethical climate. The r_{wg} for the 12-item EOC is .92 and α =.88. The r_{wg} for the 18-item EOC is .94 and α =.92. The items for the longer measures are presented in the Appendix.

important that it maintains its structure at the group level. We utilized MPlus 8 for these analyses (Muthén & Muthén, 2017) and we followed Muthén's (1994) approach to conduct MCFA.

First, we examined whether it is appropriate to use multilevel analysis with the data by estimating the between group variation for the observed variables in the model. To do this, we calculated intraclass correlation coefficients (ICCs) to determine the extent of systematic variance for each indicator, using Muthén's (1994) ICC, which is similar to the ICC(1). ICC values less than .05 suggest that there may be little value in conducting multilevel modeling (Bliese, 2000). The ICC for Recruitment and Selection is .20, Orientation and Training is .28, Policies and Codes is .18, Reward and Punishment is .21, Decision Making is .17, and Accountability is .29. Given the ICC values for this study, there was sufficient between-group variation to justify the use of multilevel analysis of the EOC measure. We conducted MCFA on the study variables to determine the validity of our EOC measure. We assessed the fit of a 1-factor model (χ^2 = 37.65, df = 18, χ^2/df = 2.09, RMSEA = .06, CFI = .94, TLI = .91, SRMR$_{within}$ = .04, SRMR$_{between}$ = .09) and a 3-factor model (χ^2 = 31.19, df = 12, χ^2/df = 2.60, RMSEA = .07, CFI = .95, TLI = .86, SRMR$_{within}$ = .03, SRMR$_{between}$ = .08). The 1-factor model demonstrated acceptable and better fit to the data than the 3-factor model (χ^2 difference = 6.46, df = 6, p < .001).

Part B: Content Validity

In Study 1, Part B, we examine the definitional correspondence of the EOC items to test the degree to which the items of the EOC reflect the ethical organizational climate construct (Colquitt et al., in press).

Method

Sample and Procedure. In 2019, we recruited 170 participants through MTurk and paid them five dollars for their time. The participants were working adults who were also classified as advanced MTurkers. The participants were provided the definition of ethical organizational climate

and asked to rate how well the items of the EOC matched the definition (1 = *extremely bad match to the definition* to 7 = *extremely good match to the definition*).

Eight surveys were eliminated because they were incomplete, leaving 162 usable surveys (95.3%). We again follow Meade and Craig's (2012) recommendations to reduce careless responders. The respondents were 47.2% female, 77.8% were working full- versus part-time, 73.3% were Caucasian (18.0% Asian/Pacific Islander, 5.6% African American), and averaged 40.22 years of age (*SD* = 11.71).

Measures

We used the EOC items developed in Study 1, Part A to assess organizational ethical climate.

Results

Following the recommendations of Hinkin and Tracey (1999), we calculated the mean score for each of the items to determine if they were a good match to the definition of ethical organizational climate. The means for the items for the EOC ranged from 5.7 to 6.35 with a mean score of 6.03. These results indicated support that the items of the EOC represent the definition of ethical organizational climate.

Part C: Discriminant and Predictive Validity of the Ethical Organizational Climate Measure

Lastly, we conducted supplemental analyses to examine whether the EOC measure of organizational ethical climate has predictive power beyond the ECQ, ECI, and OJC

Sample and Procedure. We collected data in 2008, using a similar procedure as in Study 1, Part A, except we also surveyed supervisors of the unit. Business administration students at a large southeastern university contacted each organization. The students received extra credit for hand delivering the surveys to five employees and their supervisor. The instructions indicated that the five employees agreeing to participate in the study must be the subordinates of the supervisor who also agreed to participate in the study. The surveys were coded such that surveys from the same units

could be linked together. Surveys were distributed to 254 units in 254 different organizations. A total

of 557 usable responses (42.9% of employees; 46.9% of supervisors) were received, leaving data for

133 units (e.g., with three or more respondents). The average number of respondents per group was

5.6. Employees responding were 54.3% female, 62.2% Caucasian (8.5% African American and 13.0%

Hispanic), average 27.78 years of age (*SD* = 10.28) with 3.1 years of tenure in the organization (*SD* =

4.11), and 2.53 years in the unit (*SD* = 3.49). Supervisor respondents were 39.5% female, 71.5%

Caucasian (3.1% African American and 10.0% Hispanic), average 35.43 years of age (*SD* = 10.91) with

7.42 years of tenure in the organization (*SD* = 6.97), and 5.09 years in the unit (*SD* = 5.04).

Employee surveys contained instructions, demographic questions, the EOC, the three

additional climate measures (i.e., ECQ, ECI, and OJC), ethical leadership, and social desirability.

Supervisor surveys contained instructions, demographic questions, social desirability, and a measure

of unit unethical behavior.

Measures

We measured EOC as in Study 1, Part A (α =.83).

Ethical climate questionnaire (ECQ).[8] We included the 16-item short form of the ECQ

(Schminke, Ambrose, & Neubaum, 2005) and participants rated the using a 5-point Likert scale (1 =

strongly disagree; 5 = *strongly agree*). Sample items for the caring dimension include, "what is best

for everyone in the unit is the major consideration here" (α = .80), for the law and code dimension,

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[8] For the 16-item ECQ, we use the same items adapted by Schminke et al. (2005). In searching papers citing Victor and Cullen (1987, 1988) and Cullen et al. (1993), Schminke et al. (2005) find 31 papers using the ECQ, with 12 of them providing factor analysis reports. They examine the studies to identify the common ethical climate types. Schminke et al. (2005) identify no stable alternatives to the original 5-factor model found by Victor and Cullen (1988). They also examine the items that consistently loaded on these five ethical climates. Published studies may have found similar ethical climate factors, but the items of the ECQ do not always consistently load on the originally-specified ethical climate types. Schminke and his colleagues (2005) find 16 items consistently load on the five most often found ethical climates and thus they use these items in their study. We use these same 16 items of the most common five ethical climates in our study to examine divergent and predictive validity of our ethical climate measure.

"the first consideration is whether a decision violates a law" (α = .86), for the rules dimension, "it is very important to follow the company's rules and procedures here" (α = .85), for the instrumental dimension, "people are mostly out for themselves" (α = .88), and for the independence dimension, "people are guided by their own personal ethics" (α = .86).

Ethical climate index (ECI). Participants rated 18 items of the ECI as an alternative ethical climate measure, using a 5-point Likert scale (1 = *strongly disagree;* 5 = *strongly agree*). (Arnaud, 2010). The ECI is an ethical climate measure based on Rest's (1984, 1986) four-component model of ethical decision making and is composed of four dimensions: collective moral sensitivity, collective moral judgment, collective moral motivation, and collective moral character. A sample item for collective moral sensitivity is, "people in my department are aware of ethical issues" (α = .70), for collective moral judgment, "others' misfortunes do not usually disturb people in my department a great deal" (α = .77), for collective moral motivation, "what is best for everyone in the department is a major consideration" (α = .89), and for collective moral character, "people I work with would feel they have to help a peer even if that person was not a very helpful person" (α = .84).

Overall justice climate. Participants rated OJC using six items from Ambrose and Schminke's (2009) OJC measure. Responses were made on a 5-point Likert- scale (1 = *strongly disagree*; 5 = *strongly agree*). The measure includes items such as, "for the most part, this department treats its employees fairly" and "in general, employees can count on this department to be fair" (α = .85).

Ethical leadership. We measured ethical leadership using Brown et al.'s (2005) 10-item measure, using a 5-point Likert scale (1 = *strongly disagree;* 5 = *strongly agree*). Sample items include, "my unit manager discusses business ethics and values with employees," and "my unit manager disciplines employees who violate ethical standards" (α = .95).

Unit unethical behavior. Unit supervisors rated their unit's unethical behavior using Akaah's (1996) 17-item unethical behavior measure. Responses were made on a 5-point Likert- scale (1 =

strongly disagree; 5 = *strongly agree*). Sample items include, "uses company services for personal use" and "pilfers company materials and supplies" (α = .96).

Social Desirability. We measured social desirability of employees and supervisors using the 10-item short form Crowne-Marlowe measure (Strahan & Gerbasi, 1972) and a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). Sample items include, "I'm always willing to admit it when I make a mistake" and "at times I have really insisted on having things my way" (manager α = .68, unit social desirability α = .81).

Results

Table 2 reports the correlations, means, and standard deviations of variables in Study 1, Part C.

Aggregation. We assessed the degree of agreement for the measures by calculating the r_{wg} statistics (George & James, 1993). The mean r_{wg} statistics included the following: ethical leadership r_{wg} = .94, EOC r_{wg} = .90, ECQ-caring r_{wg} = .82, ECQ-law and code r_{wg} = .89, ECQ-rules r_{wg} = .85, ECQ-instrumental r_{wg} = .75, ECQ-independence r_{wg} = .79, overall justice climate r_{wg} = .88, ECI-moral sensitivity r_{wg} = .88, ECI-moral judgment r_{wg} = .87, ECI-moral motivation r_{wg} = .78, and ECI-moral character r_{wg} = .82. These results provided evidence of strong agreement within units for our new measure and the other climate measures.

Convergent and discriminant validity. We conducted a series of CFAs using the EOC, the dimensions of the ECQ, OJC, and ethical leadership. We assessed discriminant validity using a series of confirmatory factor analyses using MPlus Version 8. The tests assessed whether our EOC measure could be distinguished from the ECQ, OJC, and ethical leadership.

Following Chen, Gully, and Eden (2001), we compared the fit of eight models: an 8-factor model (EOC, five ECQ dimensions, OJC, and ethical leadership), a 6-factor model (EOC and five ECQ dimensions), two 2-factor models (EOC and OJC; EOC and EL), and four 1-factor models (EOC, five

ECQ dimensions, OJC, and EL loaded onto a single factor; EOC and OJC as one factor; EOC and OJC as one factor; and EOC and EL as one factor). The results are provided in Table 3. The CFA results provided evidence of discriminant validity of the EOC from other similar climate types.

Discriminant Predictive Validity. Next, we examined whether our new measure of ethical organizational climate remained significant when the other climate measures were entered into an equation to predict unit unethical behavior. Thus, we examined the extent to which the EOC mediates the relationship between ethical leadership and unit unethical behavior (Hypotheses 1, 2 and 3), while controlling for the ECQ, ECI, and OJC. We followed the procedures outlined by Preacher, Rucker, and Hayes (2007) and used the SPSS macro developed by Hayes (2013) to test the model (PROCESS v2 16.3) using SPSS 23. The results are presented in Table 4. We found that ethical leadership was positively related to ethical organizational climate (b = .20, SE = .08, p = .013), showing support for Hypothesis 1. In addition, ethical organizational climate was negatively related to unit unethical behavior (b = -1.02, SE = .36, p = .005), supporting Hypothesis 2. To test the amount of influence the mediator carries from the independent variable to the dependent variable, we conducted a test of the indirect effects. To directly test the indirect effect of ethical leadership on unit unethical behavior through ethical organizational climate, we used bootstrapping analysis (Preacher & Hayes, 2008). The PROCESS macro generated 5,000 bootstrap samples and computed a 95% bias-corrected confidence interval (CI). The indirect effect was significant for the relationships between ethical leadership and unit unethical behavior through ethical organizational climate because the CI did not include zero (b = -.20, SE = .11, 95% CI [-.49, -.04]). This provides support for Hypothesis 3, while controlling for other ethical climate measures.

Study 2

Study 1 provides content and discriminant validity support for the measure, and predictive validity evidence, given we found support for part of our theoretical model while controlling for related constructs. In Study 2, we seek to constructively replicate the Study 1 findings by using an alternative measure of employee unethical behavior—unit deviance. In addition, we test a more complex model by examining collective moral identity as a boundary condition of the relationship between ethical organizational climate and unit unethical behavior.

Sample and Procedure. We collected data in 2008, using a similar procedure as in Study 1, Part C, across a variety of industries. We received 878 usable responses (50.4% response rate), leaving data for 194 units. Employee respondents were 50.4% female, 57.9% Caucasian (11.2% African American and 14.4% Hispanic), average 29.67 years of age (SD = 11.74) with 3.91 years of tenure (SD = 5.26) in the organization and 3.03 years in the unit (SD = 4.12). Supervisors responding were 41.6% female, 75.3% Caucasian (7.9% African American and 7.9% Hispanic), average 38.06 years of age (SD = 12.46) with 8.46 years of tenure in the organization (SD = 7.80) and 6.0 years in the unit (SD = 6.62).

Employee surveys contained instructions, demographic questions (i.e., age, gender, education, unit tenure, and unit size) and measures of ethical leadership, the new measure of ethical organizational climate, and collective moral identity. Supervisor surveys contained instructions, demographic questions, and a measure of unit deviance.

Measures

We measured ethical leadership (α = .95), EOC (α = .82), and unit and supervisor social desirability (α = .71, α = .77, respectively) as in Study 1, Part C.

Unit deviance.[9] We measured the unethical behavior of unit employees using Bennett and Robinson's (2000) 12-item Organizational Deviance Scale (ODS). We followed previous research and asked about deviance at the unit level (Brown & Treviño, 2006; Mayer et al., 2009). We used unit deviance as a proxy for unethical behaviors because deviance is similar to unethical conduct in that it focuses on violations of normatively appropriate behaviors (Treviño et al., 2006). Supervisors rated the extent to which unit employees, as a whole, engaged in various deviant behaviors within the past year on a 7-point response format (1 = *never*, 2 = *once*, 3 = *a few times*, 4 = *several times*, 5 = *monthly*, 6 = *weekly*, 7 = *daily*). Example behaviors include, "took property from work without permission" and "discussed confidential company information with an unauthorized person" (α = .94).

Collective moral identity. We measured moral identity using Aquino and Reed's (2002) 5-item moral identity internalization measure. Participants were provided a list of nine characteristics and asked to respond to items such as, "it would make me feel good to be a person who has these characteristics" and "being someone who has these characteristics is an important part of who I am" (1 = *strongly disagree*; 5 = *strongly agree*) (α = .77).

Results

Table 5 reports the correlations, means, and standard deviations of all variables used in Study 2.

Aggregation

In order to determine whether unit-level aggregation is appropriate, we assessed the degree of agreement for ethical leadership, ethical organizational climate, and collective moral identity by

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[9] We report the results using supervisor ratings of unit deviance to address the same source bias. However, we find the same pattern of results when using employee ratings of unit deviance.

calculating r_{wg} statistics (George & James, 1993). The mean r_{wg} statistics included the following: ethical leadership r_{wg} = .90, EOC r_{wg} = .87, and moral identity r_{wg} = .84.

These results provide evidence of strong agreement within units for all the measures.

Test of Our Conceptual Model

We conducted confirmatory factor analysis using MPlus Version 8 to assess whether the variables were distinct from each other. We assessed the fit of a 3-factor model (χ^2 = 590.28, df = 186, χ^2/df = 3.17, RMSEA = .07, CFI = .92, TLI = .91, SRMR = .05) and a 1-factor model (χ^2 = 1522.70, df = 189, χ^2/df = 8.06, RMSEA = .13, CFI = .73, TLI = .70, SRMR = .10). The 3-factor model demonstrated acceptable and better fit to the data than the 1-factor model (χ^2 difference = 932.42, df = 3, p =.000).

In this study, we examined the extent to which ethical climate mediates the relationship between ethical leadership and unit deviance (Hypotheses 1, 2, and 3) and the moderating role of collective moral identity (Hypothesis 4). We followed the procedures outlined by Preacher et al. (2007) and used the SPSS macro developed by Hayes (2013) to test the model (PROCESS v2 16.3) using SPSS 23.

The results of the analysis are presented in Table 6. Ethical leadership is positively related to ethical organizational climate (b = .70, SE = .06, p = .000), supporting Hypothesis 1. In addition, ethical organizational climate is negatively related to unit deviance (b = -.33, SE = .12, p = .007), supporting Hypothesis 2.

We also predicted an interactive effect between collective moral identity and ethical organizational climate on unit deviance (Hypothesis 4). The index of moderated mediation is significant for the relationships between ethical leadership and unit deviance (b = -.28, SE = .11, 95% CI [-.49, -.07]). Following the recommendations of Aiken and West (1991), the variables were mean centered before constructing interaction terms. Following Cohen and Cohen (1983), we plotted the

interactions by using collective moral identity at one standard deviation above and below the mean for high and low values, respectively. The interaction is presented in Figure 1. We conducted a simple slopes analysis and found that the slope at one *SD* above the mean was significant (*b* = -.57, *t* = -4.924, *p* = .000), but not at one *SD* below the mean (-.10, *t* = -.515, *p* = .607). The difference between the simple slopes at high and low moral identity is significant (.47, *p* = .00). This provides support for Hypothesis 4 that the relationship between ethical organizational climate and unit deviance is stronger in units with higher collective moral identity than those with lower collective moral identity.

Finally, Preacher et al. (2007) suggests the conditional indirect effects should be examined. We did not hypothesize this relationship, but in a supplementary analysis, we tested for the conditional indirect effect of collective moral identity on the relationship between ethical leadership and unit deviance. The PROCESS macro (Hayes, 2013) used bootstrapping to assess the magnitude of the indirect effect of ethical leadership on unit unethical behavior at different values of moral identity. We found that the conditional indirect effects were significant at one standard deviation above the mean for collective moral identify (indirect effect = -.07, *SE* = .11, 95% CI [-.28, .15]), but not one standard deviation below the mean (indirect effect = -.40, *SE* = .10, 95% CI [-.61, -.20]). These results suggest that there is a negative association between ethical leadership and unit deviance through ethical organizational climate when moral identity is high (1 *SD* above the mean).

Discussion

The purpose of this research is to develop and test a comprehensive model linking ethical leadership to unit-level unethical behavior through ethical organizational climate. In addition, we examine a boundary condition (collective moral identity) of the relationship between ethical organizational climate and unit-level unethical behavior. In Study 1, Part A, we develop items and provide factor-analytic evidence for the distinctiveness of a new measure of ethical organizational

climate. In Study 1, Part B, we assess how well the items of the EOC reflect the definition of ethical organizational climate. In Study 1, Part C, we find convergent and divergent validity evidence for our measure in comparing it to several other climate measures (i.e., ECQ, ECI, and OJC). We demonstrate predictive validity evidence through finding support for the mediation part of our theoretical model, whereby ethical leadership is related to unit-level unethical behavior through ethical organizational climate while controlling for ECQ, ECI, and OJC. In Study 2, we constructively replicate Study 1, Part C's findings using a different type of unethical behavior (i.e., unit deviance) and find support for collective moral identity as a boundary condition of the relationship between ethical organizational climate and unethical behavior. In sum, we provide support for a more comprehensive conceptualization of ethical organizational climate and use of our new EOC measure.

Theoretical Implications

The present research provides a number of implications for theory. The most commonly used conceptualization and measure of ethical climate (i.e., ECQ; Victor & Cullen, 1988) draws on philosophical and sociological theories related to moral decision making. However, this construct has produced a number of theoretical and methodological inconsistencies (e.g., Cullen et al., 1993), with concerns raised about the relevance of specific types of ethical climates (Kish-Gephart et al., 2010), and extant research producing substantial variations in the use of this measure (Arnaud, 2010). Additionally, the ECQ provides a rather narrow focus on decision making, even though ethical organizational climate results from perceptions of policies, procedures, and practices that stem from multiple organizational systems. Furthermore, the ECQ is often paired with individual-level theories, rather than unit-level theories. To overcome these limitations, our research draws on Treviño and Nelson's (2017) model of formal organizational ethical systems, as well as theory and research on organizational climates as unit-level, rather than individual-level, phenomena. In this respect, our measure captures perceptions of organizational practices related to multiple organizational ethical

systems, thus providing a more comprehensive measure of ethical organizational climate.

Importantly, our research demonstrates that ethical organizational climate mediates the relationship between ethical leadership and unit-level unethical behavior even when controlling for several related constructs. In this respect, Study 1, Part C demonstrates that our measure of ethical organizational climate is significantly, negatively related to unethical behavior after controlling for the most commonly used measures of ethical climate, the ECQ and ECI, as well as OJC. Demonstrating incremental validity of the EOC provides a more rigorous test of our conceptual model and demonstrates the practical relevance of introducing our measure to the literature.

We also examine a novel construct in the organizational context, collective moral identity, and find that high collective moral identity moderates the relationship between ethical organizational climate and unethical behavior in organizations. While Thorton and Rupp (2016) manipulate collective moral identity, we show evidence of the importance of moral identity at the unit level utilizing a field study in which we measure collective moral identity. Indeed, we find that the negative relationship between ethical organizational climate and unit unethical behavior is stronger in units with higher collective moral identity than those with lower collective moral identity.

Theoretically, our findings suggest that groups do indeed develop a common understanding of shared, unit-level traits, which then affect the group's environmental interpretations and subsequent behaviors. Work units that collectively internalize the importance of kindness, compassion, helpfulness, and generosity will be particularly responsive to environmental cues, such as ethical organizational climate, that reinforce these traits, and thus they will be more likely to display behavioral consistency (e.g., by refraining from engaging in unethical behavior).

We also contribute to the organizational practices literature by demonstrating that, in addition to studying actual practices, there is value to studying *perceptions* of the organization's practices. Researchers have studied actual practices such as strategy (e.g., Whittington, 2006),

technology and learning (e.g., Orlikowski, 2002), and human resources (HR; e.g., Huselid, 1995).

Rather than studying actual practices, we demonstrate that perceptions of organizational practices inform organizational climates. By doing so, we contribute to the broader climate literature by examining a range of organizational systems that produce practices culminating in shared perceptions of ethical organizational climate, which then discourage unit-level unethical behavior. Practically, our research does more than highlight the importance of business ethics, or the need to assess the organization's ethical landscape. We provide an ethical organizational climate measure that points to a range of practices the organization can enforce to develop a highly ethical climate. Most organizations involved in ethical scandals have a code of conduct and tout the importance of ethics, but unethical behavior prevails because something is missing in these environments. Our research provides a recipe for determining what is missing in the environment. As noted by Johnson et al. (2007), "People and what they do have gone missing…. In fact we know that strategies are rarely the result of one-off decisions, but rather the outcomes of quite complex processes" (p. 5). Our research illustrates that when employees perceive that formal organizational systems include multiple consistent ethics-related policies, procedures, and practices, their shared perceptions give rise to ethical organizational climates.

Finally, we add to the growing climate literature more broadly. In a review of the climate literature, Kuenzi and Schminke (2009) provided suggestions for future research. We begin to address several of their recommendations by presenting a theoretical basis for ethical organizational climate research and by explaining how these climates form. First, we draw on a theoretical framework that allows us to measure ethical organizational climate utilizing the preferred definition of climate, which references shared perceptions of policies, practices, and procedures. Importantly, rather than examining ethical organizational climate as the "conditions that likely set the stage for ethical action" (Kuenzi & Schminke, 2009, p. 70), as is done with the ECQ, our measure highlights the

importance of perceptions of contextual factors (i.e., policies, procedures, and practices) that give way to a shared understanding of "the way things are done around here." We also examine moral identity as a collective construct that represents the unit's shared commitment to upholding moral traits such as kindness, justice, and hard work (Aquino & Reed, 2002). Finally, Kuenzi and Schminke (2009) stress the importance of examining multiple climates in the same model. By controlling for several climates, we demonstrate that the EOC is indeed measuring something unique and different. Perhaps more importantly, our research demonstrates the strengths of this approach as our comprehensive, ethical organizational climate measure negatively predicts unit unethical behavior above and beyond related constructs.

Practical Implications

Our research provides several practical implications. First, our EOC measure (perhaps especially the longer versions found in the Appendix) can be used as a diagnostic tool to assess an organization's ethical environment. Utilizing our measure, organizations can assess their strengths and weaknesses in terms of formulating practices that contribute to a strong ethical organizational climate. For example, an organization may discover that their HR practices (e.g., recruitment, selection, orientating, training) support ethical decision making and behavior; yet, employees may not be held accountable, and may not be reprimanded, for engaging in unethical behavior. In such cases, organizations should continue to promote ethical HR practices, but also take steps to align their reward and punishment systems with strong ethical expectations, thus generating a stronger, more impactful ethical organizational climate. Changes in ethical practices that are consistently followed are expected to contribute to a stronger ethical climate that results in changes in (un)ethical conduct.

Second, organizations can use our measure as a diagnostic tool that connects ethical organizational climate to unethical behavior. If an organization discovers that one facet of ethical

organizational climate is low, managers can try to improve it and then track, over time, whether their changes resulted in a higher ethical organizational climate that diminishes unethical behavior. Our research demonstrates that ethical organizational climate is negatively related to unethical behavior, which is particularly important given that unethical behavior can result in organizational lawsuits (Goldman, Gutek, Stein, & Lewis, 2006) and lost profits (Detert, Treviño, Burris, & Andiappen 2007). Thus, practically speaking, organizations may want to consider ways to improve their ethical organizational climate to keep unethical behavior in check.

Strengths, Limitations, and Future Directions

Despite the strengths of our research, some limitations should be noted that would provide fruitful opportunities for future research. One limitation is that the data are cross-sectional. Although we provide theory for the causal direction of the conceptual model, we are unable to make causal inferences due to the cross-sectional research design. The fit of the model was significantly worse when the model was tested in the reverse order, but the cross-sectional data do not allow us to draw causal conclusions. Future research that examines the effects of our measure using a longitudinal study design would help address this limitation.

A second limitation is that we collected all data using a similar methodology, including units from a variety of organizations. The fact that we find support for our new measure and conceptual model across a variety of organizations and industries speaks to the robustness of the findings, but future research that replicates and extends these findings in a single organization and/or uses a method other than referral sampling would help bolster our findings. Student-recruited samples, in our case referral sampling, are sometimes criticized in the literature. However, the meta-analysis by Wheeler, Shanine, Leon, and Whitman (2013) indicates that results from student-recruited samples are not substantially different than non-student recruited samples; the few differences that exist in their study are not practically significant.

A third limitation is that we focused on one type of outcome—unethical behavior. Given our conceptual grounds for examining the relationships between ethical leadership, ethical organizational climate, and unethical behavior, we deemed unethical behavior as a particularly important outcome. While we examine two types of unethical behavior (unit unethical behavior and unit deviance), future research that examines additional dependent variables, such as whistle-blowing, prosocial behavior, motivation, or performance, would be interesting. Further, examining the effects of ethical leadership and ethical organizational climate on objective outcomes (e.g., stealing based on company records) would be a nice extension of the reports we obtained.

It would also be useful to examine cross-level effects by assessing individual-level outcomes. We know that leaders play an important role in a more top-down approach; however, it would be interesting to see if there could also be bottom-up processes in play (Pinto, Leana, & Pil, 2008). Litwin and Stringer (1968) include a feedback loop between top-down and bottom-up processes in their model and future research should explore this avenue. This would also allow for an examination of the mechanisms that lead to the formation of ethical organizational climate perceptions.

Treviño and Nelson's (2017) framework of ethical culture describes both formal and informal organizational systems, but we only measure formal systems. The informal systems are related to culture, whereas the formal systems are related to climate. The informal systems include role models and heroes, norms, rituals, myths and stories, and language. A close examination of these categories reveals that all but norms are associated with culture and not climate. Indeed, Schein (2004) describes culture as a function of the values and beliefs that lead people to create similar perceptions to what they experience. On the other hand, Schein describes climate as the meaning people derive from what they experience. Using this lens, role models, heroes, rituals, myths, and stories are related to culture, whereas

climate consists of perceptions of policies, practices, and procedures in the organization. A measure of ethical culture could be developed and used alongside our measure of ethical organizational climate in future research.

There has been a proliferation of new measures in the management literature, and we had to think carefully as to whether developing a new measure of ethical organizational climate is necessary and useful. In the end, we concluded that as the organizational climate literature and methods have progressed over the past three decades, continuing to use the ECQ could limit our understanding of the ethical context in organizations. In this respect, the EOC should be used when it is important to comprehensively assess the organization's multiple systems. Moving forward, we recommend referring to the ECQ as a climate for ethical decision making rather than ethical organizational climate. As such, the ECQ can be compared to the decision making dimension of the EOC to assess convergence. In terms of reviewing and citing past ethical climate research, if scholars use individual-level data, we recommend they refer to it as psychological climate. If scholars use aggregated data, this should be referred to as organizational ethical climate. Finally, researchers need to be clear as to what referent is used in the items. We recommend that a referent shift is used to the appropriate unit level for organizational climate research (Klein, Conn, Smith, & Sorra, 2001).

Finally, although we believe our EOC measure provides a well-validated measure of ethical climate at the unit level, scholars should not lose sight of the foundational work that came before our measure. Just as Colquitt (2001) provides a refined measure of justice, researchers still rely on prior, seminal work to build their research arguments. We expect the same pattern to emerge with our new measure, and we hope it will provide a useful path forward.

Conclusions

There is considerable public concern about the plethora of corporate scandals chronicled in the mainstream media. We argue that organizational unethical acts are not solely because of a few

bad apples, but rather that cracks in the foundation of an organization's ethical climate are the likely

cause of the wrongdoing. We hope this research provides useful conceptualization and a tool for

scholars interested in examining the important role of an organization's ethical climate.

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Table 1

Exploratory Factor Analysis for Study 1, Part A

	Factor 1 (OT)	Factor 2 (DM)	Factor 3 (AR)	Factor 4 (DM)	Factor 5 (RS)	Factor 6 (PC)
1. Ethical issues are taken into consideration when decisions are made.	.04	***.83***	.10	.13	.13	.22
2. When decisions are made, we talk about whether something is the "right thing to do."	.20	***.67***	.14	.06	.23	.11
3. Employees consider ethical issues when making decisions even during stressful times.	.14	***.78***	.16	.11	.14	.18

4. Ethics training is consistent with how employees actually perform their jobs.	.21	.13	***.79***	.12	.26	.09
5. All employees are required to attend ethical training.	.25	.12	***.81***	.16	.10	.01
6. Ethical issues are discussed with new employees as part of their initial orientation.	.04	.19	***.75***	.06	.09	.33
7. Employees strictly follow the written code of ethics.	.27	.25	.21	.22	***.68***	.01
8. The behaviors of employees are consistent with the company's ethical codes.	.09	.26	.09	.21	***.74***	.25
9. Employees follow established procedures to seek guidance about business ethics issues.	.22	.13	.21	.20	***.70***	.22
10. An effort is made to search for applicants of a high moral standard.	.36	.16	.09	.12	.24	***.70***
11. When we hire new employees we try to assess how they would handle ethical situations.	.30	.24	.16	.22	.03	***.67***
12. In recruiting new employees, my department emphasizes the importance of ethical behavior.	.16	.29	.20	.16	.27	***.69***
13. A good effort is made to measure and track ethical behaviors.	***.78***	.11	.19	.18	.23	.24
14. Employees receive positive feedback for making ethical decisions.	***.73***	.12	.11	.14	.20	.29
15. Ethical behavior is evaluated as part of performance appraisals.	***.77***	.16	.24	.15	.09	.14
16. When unethical acts occur employees take responsibility for their actions.	.21	.18	.12	***.81***	.19	.08
17. Employees at all levels take responsibility for the outcomes of their actions.	.33	.16	.11	***.81***	.11	.12
18. Employees question authority if an unethical behavior occurs.	-.06	-.03	.14	***.66***	.33	.28

Note: OT=Orientation and training, RP=Reward and punishment systems, AR=Accountability and responsibility, DM=Decision making, RS=Recruitment and selection, PC=Policy and codes

Table 2

Means, Standard Deviations, and Correlations for 6-item EOC for Study 1, Part C

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Ethical leadership	3.87	.49	(.95)													
2. EOC 6-item	3.65	.46	.71	(.83)												
3. Unit unethical behavior	2.44	1.11	-.17	-.24	(.96)											
3. ECQ caring	3.55	.53	.69	.73	-.02	(.80)										
4. ECQ law & code	3.78	.45	.64	.70	-.21	.62	(.86)									
5. ECQ rules	3.79	.46	.65	.69	-.19	.63	.78	(.85)								
6. ECQ instrumental	2.87	.73	.25	.15	-.23	.08	.22	.16	(.88)							
7. ECQ independence	2.63	.55	-.12	-.16	-.07	-.24	-.07	-.12	.60	(.86)						
8. Overall justice	3.6	.52	.58	.44	-.1	.37	.46	.49	.53	.19	(.85)					

Variable	M	SD		1	2	3	4	5	6	7	8	9	10	11	12	13	14
climate	6				5												
9. ECI sensitivity	3.36	.42	.43	.38	-.27	.36	.46	.32	.62	.26	.60	(.70)					
10. ECI judgment	3.23	.49	.53	.45	-.21	.53	.46	.40	.64	.28	.53	.70	(.77)				
11. ECI motivation	3.21	.28	.28	.39	.09	.36	.34	.30	-.07	-.10	.15	.18	.18	(.89)			
12. ECI character	3.54	.51	.59	.64	-.10	.70	.58	.59	.08	-.23	.30	.39	.47	.40	(.84)		
13. Unit social desirability	3.39	.43	.27	.26	-.19	.16	.21	.20	.36	.14	.41	.51	.35	.09	.17	(.81)	
14. Supervisor social desirability	3.35	.52	.22	.15	-.19	.13	.20	.22	.20	.03	.26	.33	.18	.04	.12	.37	(.68)

Note: N = 133 groups. Correlations greater than |.18| are significant at $p < .05$; those greater than |.21| are significant at $p < .01$; those greater than |.27| are significant at $p < .001$; Cronbach's αs presented along the diagonal in italics; EOC = Ethical organizational climate, ECQ = Ethical climate questionnaire, ECI = Ethical climate index.

Table 3

Alternative Model MCFA statistics for EOC, ECQ, Ethical Leadership, and OJC for Study 1 Part C

Hypothesized model	X^2	df	X^2/df	ΔX^2	RMSEA	CFI	TLI	SRMR
EOC and ECQ Factors								
6-factor model (EOC, ECQ care, ECQ law, ECQ rules, ECQ ind, and ECQ inst on separate factors)	617.04	194	3.13		.06	.92	.90	.05
1-factor model (EOC, ECQ care, ECQ law, ECQ rules, ECQ ind, and ECQ inst on one factor)	2191.46	209	10.49	*1574.42 (df=15)*	.13	.62	.58	.11
EOC and OJC								
2-factor model (EOC and OJC on separate factors)	150.19	43	3.49		.07	.95	.94	.05
1-factor model (EOC and OJC on one factor)	690.62	54	12.79	*540.4 (df=11)*	.15	.77	.72	.10
EOC and EL								
2-factor model (EOC and EL on separate factors)	434.20	103	4.21		.08	.93	.92	.05
1-factor model (EOC and EL on one factor)	648.51	104	6.24	*214.31 (df=1)*	.10	.88	.86	.06
EOC, ECQ Factors, OJC, and EL								
8-factor model (EOC, ECQ care, ECQ law, ECQ rules, ECQ ind, and ECQ inst OJC, and EL on separate factors)	1819.41	601	3.03		.06	.90	.88	.05
1-factor model (EOC, ECQ care, ECQ law, ECQ rules, ECQ ind, and ECQ inst OJC, and EL on one factor)	4954.75	629	7.88	*3135.34 (df=28)*	.11	.63	.61	.09

Note: n= 557. EOC = Ethical organizational climate, ECQ = Ethical climate questionnaire; ECQ care = ECQ caring, ECQ law = ECQ laws and codes, ECQ rules = ECQ rules, ECQ inst = ECQ instrumental, ECQ ind = ECQ independence, EL = Ethical leadership, OJC= Overall justice climate.

Table 4

Summary of Regression Analysis Predicting Unit Unethical Behavior for Study 1, Part C

	EOC			Unit Unethical Behavior		
	B (SE)	β	p-value	B (SE)	β	p-value
Constant	-.06 (.37)	.00	.88	4.06 (1.42)	.00	.01
Ethical leadership	.20 (.08)	.22	.01	-.08 (.32)	-.04	.80
EOC				-1.02 (.36)	-.42	.01
ECQ care	.26 (.08)	.31	.00	.92 (.31)	.44	.00
ECQ law	.20 (.09)	.19	.03	-.14 (.36)	-.05	.71
ECQ rules	.15 (.09)	.15	.10	-.23 (.35)	-.10	.52
ECQ instr	.03 (.06)	.05	.59	-.11 (.22)	-.07	.63
ECQ ind	-.01 (.06)	-.01	.89	.14 (.23)	.07	.54
ECIms	-.02 (.10)	-.02	.85	-.49 (.38)	-.19	.20
ECImj	-.07 (.09)	-.07	.45	-.24 (.33)	-.11	.47
ECImm	.14 (.10)	.08	.16	.76 (.37)	.19	.04
ECImc	.08 (.07)	.09	.26	-.00 (.28)	-.00	.99
OJC	-.01 (.07)	-.01	.87	.31 (.27)	.15	.24
Social desirability-unit	.11 (.07)	.10	.11	-.02 (.26)	-.01	.94
Social desirability-supervisor	-.04 (.05)	-.05	.41	-.18 (.19)	-.09	.35
F = 20.56	p = .000			F = 2.46	p = .004	
R^2 = .69				R^2 = .23		
Indirect effect of Ethical leadership on Unit unethical behavior			Effect	SE	CI	
			-.20	.11	[-.49, -.04]	

Note: N= 133 units; B = unstandardized coefficients, *SE*= standard errors; β = standardized coefficients; EOC = Ethical

organizational climate, ECQ = Ethical climate questionnaire, ECI = Ethical climate instrument, OJC = Overall justice climate

Results are based on 5,000 bootstrap samples.

Table 5

Means, Standard Deviations, and Correlations for Study 2

	M	SD	1	2	3	4	5	6
1. Ethical leadership	3.72	.51	(.95)					
2. Ethical organizational climate	3.49	.54	.66	(.82)				
3.Collective moral identity	4.07	.59	.27	.19	(.77)			
4. Unit deviance	2.38	.69	-.46	-.46	-.39	(.94)		
5.Unit social desirability	3.33	.37	.25	.14	.58	-.37	(.71)	
6. Supervisor social desirability	3.39	.59	.13	.06	.14	-.13	.29	(.77)

Note: N = 194 groups. Correlations greater than or equal to $|.19|$ are significant at $p < .01$; those greater than $|.25|$ are

significant at $p < .001$; Cronbach's αs presented along the diagonal in italics.

Table 6

Summary of Regression Analysis Predicting Unit Deviance Study 2

	EOC			Unit Unethical Behavior		
	B (SE)	β	*p*-value	*B* (SE)	β	*p*-value
Constant	-2.42 (.33)	-.01	.00	4.26 (.67)	.04	.00
Ethical leadership	.70 (.06)	.66	.00	-.24 (.16)	-.18	.13
EOC				-.33 (.12)	-.26	.01
Collective moral identity				-.22 (.10)	-.19	.04
Collective moral identity X EOC				-.40 (.16)	-.19	.01

|						
Social desirability-unit	-.02 (.05)	-.03	.76	-.29 (.14)	-.16	.03
Social desirability-supervisor	-.05 (.09)	-.02	.60	.00 (.08)	.00	.98
F = 48.08	*p* = .000			F= 17.56	*p* = .000	
R^2 = .43				R^2 =.36		
Index of Moderated Mediation			Effect	SE	CI	
			-.28	.11	[-.49, -.07]	

Note: N= 194 units; *B* = unstandardized coefficients, *SE*= standard errors; β = standardized coefficients; EOC = Ethical

organizational climate; Results are based on 5,000 bootstrap samples.

Figure 1

Ethical Organizational Climate and Collective Moral Identity on Unit Unethical

Behavior Study 2
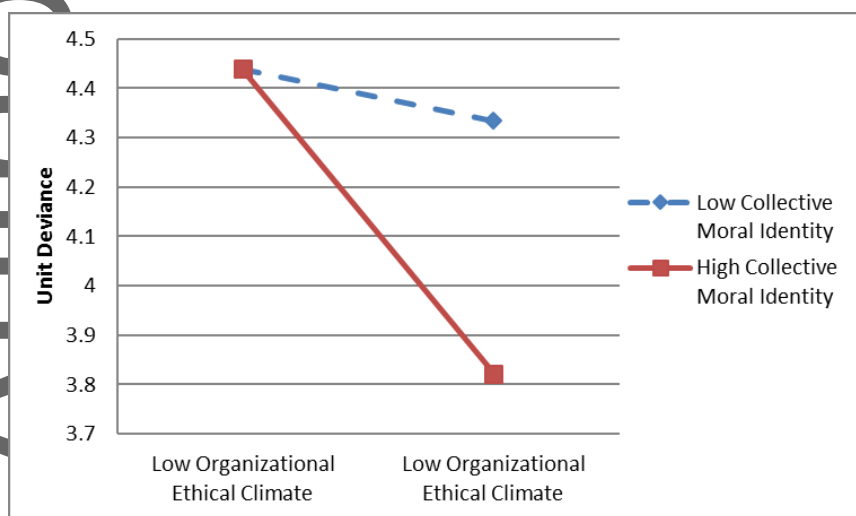
Appendix

6-Item Measure of the EOC (One for each formal system)

1. Ethical issues are taken into consideration when decisions are made. (DM1)
2. Ethics training is consistent with how employees actually perform their jobs. (OT1)
3. Employees strictly follow the written code of ethics. (PC1)
4. An effort is made to search for applicants of a high moral standard. (RS1)
5. A good effort is made to measure and track ethical behaviors. (RP1)
6. When an unethical act occurs, employees take responsibility for their actions. (AR1)

12- and 18-Item Measures of the EOC (For the 12 items, two for each formal system in shown *italics*. For the 18 items, three for each formal system)

1. *Ethical issues are taken into consideration when decisions are made. (DM1)*
2. *When decisions are made, we talk about whether something is the "right thing to do."* (DM2)
3. Employees consider ethical issues when making decisions even during stressful times. (DM3)
4. *Ethics training is consistent with how employees actually perform their jobs. (OT1)*
5. *All employees are required to attend ethical training. (OT2)*
6. Ethical issues are discussed with new employees as part of their initial orientation. (OT3)
7. *Employees strictly follow the written code of ethics. (PC1)*
8. *The behavior of employees are consistent with the company's ethical codes. (PC2)*
9. Employees followed established procedures to seek guidance about business ethical issues. (PC3)
10. *An effort is made to search for applicants of a high moral standard. (RS1)*
11. *When we hire employees, we try to assess how they would handle ethical issues. (RS2)*
12. In recruiting new employees, my department emphasizes the importance of ethical behavior. (RS3)
13. *A good effort is made to measure and track ethical behaviors. (RP1)*
14. *Employees receive positive feedback for making ethical decisions. (RP2)*
15. Ethical behavior is evaluated as part of the performance appraisals. (RP3)
16. *When an unethical act occurs, employees take responsibility for their actions. (AR1)*
17. *Employees at all levels take responsibility for the outcomes of their actions. (AR2)*
18. Employees question authority if an unethical behavior occurs. (AR3)