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Business Society 2010 49: 345 originally published online 11 March 2010
DOI: 10.1177/0007650310362865

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Conceptualizing and Measuring Ethical Work Climate

Development and Validation of the Ethical Climate Index

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This article describes the development of a new theory and measure of ethical work climate. Three studies are conducted to construct the Ethical Climate Index (ECI) and measure the ethical work climate dimensions of collective moral sensitivity (12 items), collective moral judgment (10 items), collective moral motivation (8 items), and collective moral character (6 items). Results of the third study indicate that the ECI is a reliable instrument and support the convergent and discriminant validity of each. Furthermore, results support the predictive validity of the ECI with respect to ethical and unethical behaviors.

Keywords: ethics; ethical climate; organizational climate; Ethical Climate Index; ethical behavior

Recurring and frequent reports of ethical transgressions such as embezzlement, insider trading, and corporate fraud continue to spark researchers’ and practitioners’ interest in ethical work climate (EWC), the organizational context in which ethical and unethical activities occur. The majority of this research rests on Victor and Cullen’s (1988) work on EWCs, in which the authors developed and tested a theory and measure

Authors’ Note: This article was earlier presented as a dissertation that was successfully defended in December 2005 under the direction of Marshall Schminke and committee members Maureen L. Ambrose, Cameron M. Ford, and Barbara A. Fritzsch. The author was awarded the doctor of philosophy degree at the University of Central Florida in May 2006. At the 2006 Academy of Management meetings, the said thesis won the William H. Newman Award for Outstanding Paper Based on a Dissertation. Anke Arnaud, Embry-Riddle Aeronautical University, College of Business, Department of Management, 600 S. Clyde Morris Blvd, Daytona Beach, FL 32144, USA; e-mail: arnauda@erau.edu.
of EWC. This framework has become the dominant foundation for ethical climate research, providing the basis for nearly 75% of all studies of ethical climate.

However, the Victor and Cullen’s (1988) framework has been the target of a number of serious critiques on both theoretical and empirical fronts (e.g., Arnaud & Schminke, In Press; Vaicys, Barnett, & Brown, 1996; Wimbush, Shepard, & Markham, 1997a). At the 2004 conference of the International Association for Business and Society, a session termed “Revisiting Victor and Cullen’s theory and measure of EWCs” concluded with a call for new theory and measurement of the construct.

This article addresses this call by developing a new theory and measure of EWC. First, I provide some background on Victor and Cullen’s (1987, 1988) theory and measure (Ethical Climate Questionnaire) of EWCs and review their shortcomings. Second, I present a broader theoretical model of EWC founded on Rest’s (1984) four-component model. It encompasses not only the moral judgment component that provides the foundation for Victor and Cullen’s framework but also includes other components of the ethical decision process: moral sensitivity, moral motivation, and moral character. In addition, I develop, validate, and test a new measure of EWC on the basis of this theoretical model.

**Conceptualizing EWCs**

**Victor and Cullen’s Theory of EWCs**

According to Victor and Cullen (1987), EWCs are defined as collective employee perceptions of ethical events, ethical practices, and ethical procedures, which depend on two dimensions: the ethical criteria used for organizational decision making, and the loci of analysis used as a referent in the ethical decision-making process. The authors define three criteria for each one of the two dimensions and cross-tabulate them to define nine different ethical climate types. For example, a self-interest EWC is defined by a focus on the employee’s own benefit and well-being in ethical decision making, and, as a law and code, EWC is characterized by a focus on strong principles (e.g., professional standards) and ethical decisions that consider the benefit of society.

Numerous authors have offered theoretical critiques of Victor and Cullen’s (1988) framework (e.g., Arnaud & Schminke, In Press; Vaicys et al., 1996; Wimbush et al., 1997a). A variety of issues have been raised,
but I identify two as especially important. The first is the question of whether the model’s two dimensions—ethical criteria and loci of analysis—represent distinct and independent aspects of an ethical climate. The second focuses on the question of whether the model is comprehensive enough to capture the true breadth of the ethical climate construct.

The empirical validation of the nine theoretical climate types has been elusive because different clusters of climate types have emerged across studies (e.g., Fritzsche, 2000; Peterson, 2002a, 2002b; Wimbush et al., 1997a, 1997b). The most reasonable explanation for this is the fact that Victor and Cullen’s two dimensions—ethical criteria and loci of analysis—do not represent independent dimensions (Victor & Cullen, 1988, p. 106), make note of this nonindependence, remarking that both dimension are related to Kohlberg’s stages of CMD, and, therefore, may not explain nine distinct climate types as originally proposed. A closer look at the dimensions reveals this nonindependence. The ethical criteria dimension grounded in Kohlberg’s (1981, 1984) theory of CMD spans individual, collective, and universal ethical criteria. Likewise, the loci of analysis dimension involve individual, collective, and universal concerns. Hence, both dimensions encompass three factors related to making moral judgments. Thus, I propose that Victor and Cullen capture a very important—but single—element of EWCs: the shared moral reasoning (shared CMD) of individuals, that is, the norms of making judgments about which course of action is morally right.

A New Conceptualization of EWC: The Psychological Process Model (PPM)

Victor and Cullen’s (1988) model of EWC captures an important component of the ethical decision-making process: moral judgment. However, for ethical behavior to occur, moral judgments are but one of several necessary conditions. To identify the others, I turn to Rest’s (1984, 1986) four-component model of ethical decision making. Rest’s model is generally accepted and presented—either explicitly or implicitly—as the foundation for most contemporary models of ethical decision making and behavior (see Jones, 1991).

Rest (1984, 1986) argued that for individuals to engage in ethical acts, they must engage in four basic psychological processes: moral sensitivity, moral judgment, moral motivation, and moral character. Moral sensitivity involves recognizing that an ethical dilemma exists and evaluating how one’s actions affect others. Moral judgment involves bringing one’s moral decision-making framework (such as that reflected in Kohlberg’s [1984]
concept of cognitive moral development) to bear on the problem and to
determine the ethical course of action. Moral motivation concerns the
degree to which ethical values dominate other potential values (e.g., power
values or economic values) in a particular situation. Finally, moral character
relates to whether an individual possesses the personal fortitude to follow-
through on what he or she has determined to be the correct ethical course of
action.

I argue here that each of these four components of the ethical decision-
making process may be present at the social system level as well, as
reflected in four distinct facets of EWC. Of course, a fundamental chal-
lenge for my theory is the question of whether it is appropriate to raise these
individual-level dimensions of ethical decision making to the collective
level of the social system. Although ample precedent exists for doing so
within the EWC literature (e.g., Victor and Cullen’s [1988] framework does
so with respect to moral judgment), research in multilevel analysis offers
additional support. For example, Kozlowski and Klein referenced the orga-
nizational climate construct as an exemplar of a composition model—
where the lower-level construct is fundamentally isomorphic with the
higher-order construct—noting that the lower-level (individual) and higher-
order (organizational) factors “reference the same construct, have the same
meaning, and share the same nomological network” (2000, p. 17). Citing
examples of an organization’s climate for service, they observe that organi-
zational climate emerges from shared perceptions of individual organiza-
tional members regarding service.

The same logic applies to EWCs, which represent the shared, aggregate
perceptions of employees with respect to the content and strength of the
prevalent values, norms, attitudes, and behaviors of the members of a social
system. The same psychological components that comprise individual ethi-
cal decision making and subsequent action will also apply at the social
system level. Following Rest (1986), I label these four components of
EWCs as follows: collective moral sensitivity, collective moral judgment,
collective moral motivation, and collective moral character.

Consistent with Rest (1984, 1986), the collective moral sensitivity com-
ponent of EWC involves two subcomponents: moral awareness and empa-
thetic concern. Moral awareness reflects the prevalent mode within the
social system of envisioning what alternative actions are possible. Empathetic
concern reflects the prevalent mode of evaluating the consequences of those
actions in terms of how they affect others and who would be affected by
them. Thus, collective moral sensitivity involves the prevalent norms that
exist in a social system for both moral awareness and empathetic concern.
The collective moral judgment component of EWC reflects the prevalent form of moral reasoning utilized within the social system. More specifically, collective moral judgment is defined as the norms of moral reasoning used to judge which course of action is morally right. I have argued that Victor and Cullen’s (1988) theoretical framework might be more accurately represented by a single dimension, one that captures this prevailing model of moral judgment in a social system, on the basis of Kohlberg’s (1984) three levels of moral development. Thus, modified to a single dimension, I suggest that Victor and Cullen’s existing framework captures this component well.

The collective moral motivation component of EWC involves assessing whether ethical concerns dominate other concerns when determining actions. More specifically, collective moral motivation involves the prevalent values of the social system, and whether moral values such as honesty, fairness, or helping are generally prioritized over other values such as power, control, or personal achievement.

Finally, the collective moral character component of EWC involves the norms for implementing a planned course of action. Rest (1986) noted that this dimension is also characterized by multiple subfactors such as norms of self-control and norms for assuming responsibility. He identifies individuals with high levels of moral character, those able to follow through on decisions regarding the correct course of ethical action and as exhibiting these traits. Self-control reflects the ability to control one’s actions in committing to and implementing a planned course of action. Assuming responsibility means that individuals accept responsibility for the welfare of others, live up to moral commitments, and follow either personal or societal rules and dictates.

In all, I suggest that these four components comprise the foundation for the ethical climate of organizations.

**Synopsis of Research Strategy**

Following the guidelines suggested by Nunally and Bernstein (1994), I assessed the construct and criterion (predictive) validity of the ECI (Ethical Climate Index). For this purpose, I conducted three studies; the first two studies were used to develop and refine the ECI, and the third study was used to assess the validity of the ECI. With Study 1, I developed the preliminary version of the ECI, drawing upon a combination of existing individual-level scales for each of the dimensions. I modified items to fit the social system-level analysis (e.g., department). After a sorting exercise and
a field test, the result of Study 1 was the alpha version of the ECI containing reliable scales for collective moral sensitivity and collective moral judgment. However, further scale development was necessary to develop reliable scales for collective moral motivation and collective moral character. Study 2 was designed to refine the alpha version of the ECI, further reducing the item pool and refining scales for collective moral motivation and collective moral character. After conducting another field test, the result of Study 2 was the final version of the ECI (see Appendix). Study 3 was designed to assess the ECI’s construct validity, including its discriminant, convergent, and criterion-related validity. The following discussion highlights the findings related to Study 3.

Study 3: Validating the ECI

Sample

Participants in Study 3 included 652 employees from 113 different departments and 101 different organizations in the southeast United States ($RR = 98\%$); 51% of the participants were men, with a mean age of 30 years ($SD = 10.94$); participants averaged 4.12 years of tenure with their organizations ($SD = 5.60$) and 3.13 years of tenure with their department ($SD = 4.57$).

Procedure and Measures

All of the questionnaires were composed of demographic questions regarding age, sex, education, organization, and department tenure, on the basis of an abbreviated, 9-item version of the Crowne and Marlowe’s Social Desirability Scale (Ballard, 1992) and the final version of the ECI. In addition to these scales, employee surveys included multiple scales to assess convergent and discriminant validity. These scales were randomly distributed among the different departments such that each scale was rated by at least 240 individuals across 42 departments.

To assess convergent validity, I identified four constructs that can be expected to relate to organizational ethics because they refer to the concern for others: I used the abbreviated 4-item version of the Procedural Justice Climate Scale (Ehrhart, 2004), the Perceptions of General Justice Scale (Ambrose & Schminke, 2006), and the 10-item Climate for Safety Scale (Safety Expectation; Zohar, 2000).
To assess discriminant validity, I identified four constructs that were expected not to be related very strongly to organizational ethics. I used a 7-item Organizational Structure Scale (Khandwalla, 1977), the 3-item Perceived Functional Dependence Scale (Morris & Steers, 1980), the 7-item Climate for Initiative Scale (Frese, Fay, Hilburger, Leng, & Tag, 1997), and the 5-item Problem-Solving Demand Scale (Wall, Jackson, & Mullarkey, 1995).

To avoid same source bias, I collected data from department supervisors to assess criterion-related validity. The scales for criterion-related validity included the 2-item General Political Behavior Scale (Kacmar & Carlson, 1997) and the 10-item Ethical Behavior Scale (Akaah, 1992), the 7-item Perceived Department Performance Scale (Delaney & Huselid, 1996), the 9-item Interpersonal Deviance Scale (Bennett & Robinson, 2000), the 4-item Ethics Program Follow-Through Scale (Trevino & Weaver, 2001), and the 5-item Organizational Citizenship Behavior Helping Scale (Moorman & Blakely, 1995).

**Results and Interpretation**

The purpose of Study 3 was to assess the dimensionality and construct validity of the ECI that had emerged from Study 2. This final ECI consisted of 6 factors: Collective Moral Sensitivity (12 items), which includes two factors: Norms of Moral Awareness (5 items) and Empathetic Concern (7 items); Collective Moral Judgment (10 items), which includes two factors: Collective Moral Judgment with Focus on Self (5 items) and Collective Moral Judgment with Focus on Others (5 items); Collective Moral Motivation (8 items); Collective Moral Character (6 items).

Results indicate that the ECI represents a reliable and valid indicator of the content and strength of the prevalent ethical values, norms, attitudes, feelings, and behaviors of the members of a social system. Confirmatory Factor Analysis results support findings from Study 2 and provide evidence that the proposed six factor structure fit the data well. The six ECI factors are distinct, yet significantly and positively related except for the Focus-on-Self factor of the Collective Moral Judgment Scale, which is significantly and negatively related to each of the other ECI factors. This provides further support for the validity of the PPM of EWC, which explains that EWCs are defined by four distinct, but highly related dimensions, which in its entirety encompass the six factors measured by the ECI. Aggregation analyses supported my proposition that department members have shared
perceptions regarding the norms for moral sensitivity, moral judgment, moral motivation, and moral character.

Evidence for the construct validity of the ECI was found by assessing the relationships between the ECI scales and other measures purported to assess similar and distinct constructs. Overall, convergent validity was supported with significant and moderate to high correlations between the ECI and scales of Safety Climate (action and expectation), Perceived General Justice, and the Climate for Procedural Justice. The ECI has shown discriminant validity, as it was not significantly or only weakly correlated with scales from unrelated constructs such as organizational structure, problem solving demand, and perceived functional dependence.

Criterion-related validity was assessed by regressing ethical climate on ethical behavior, political behavior, ethics program follow-through, organizational citizenship behavior (helping), interpersonal deviance, and perceived performance. Overall, the regression results suggest that shared perceptions for all the four dimensions of EWC exist and that these shared perceptions exert a collective influence on the ethical decisions and actions of individuals in the organization.

It is important to note that different ECI factors influence different behaviors, a further indication of the distinct nature and importance of the various climate types. Therefore, researchers who study the influences of EWCs on different organizational outcomes and employee behaviors and attitudes should include all of the dimensions of the ECI in their studies to identify which factor of the PPM of EWCs influences the particular behaviors and outcomes most strongly.

Overall, the model including all EWC dimensions explained 22% of the variance in ethical behavior. Three of the six climate factors (Norms of Empathetic Concern, Collective Moral Motivation, and Collective Moral Character) were significant predictors of ethical behavior. It was most interesting to find that neither factor of collective moral judgment (with Focus on Self and with Focus on Others) significantly influenced ethical behavior. This is noteworthy because the current model most frequently used to assess the influence of EWC on ethical behaviors, Victor and Cullen’s (1988) framework is grounded in the theory of CMD (moral judgment). Therefore, it is not surprising that to date the influence of EWC on the ethical behavior of employees has not been clearly identified and that findings have been rather mixed (Arnaud & Schminke, In Press).

The link between EWC and political behavior is significant and strong. EWC dimensions explain 42% of the variance in general political behavior of the department. EWCs, characterized by higher levels of norms of
empathetic concern, collective moral judgment with a focus on others, and lower collective moral judgment with a focus on self, are inversely related to political behavior. However, collective moral awareness is positively related to general political behavior. A possible explanation may be that employees who work in environments characterized by higher levels of moral awareness notice political activity more and, therefore, may be more likely to engage in political behavior, too. This is another interesting finding, which warrants further investigation.

The PPM with its 4 dimensions explained 12% of the variance in perceived performance. I am not aware of any study to date that has been able to demonstrate a clear link between EWC and department or organizational performance. Higher levels of collective moral motivation and collective moral character in the department are related to higher levels of perceived performance as reported by supervisors. However, norms of empathetic concern seem to be inversely related to perceived performance. It is possible that in climates where individuals are empathetic to others such as their peers employees are not as productive and focused on performance than they would be in less empathetic work environments. It may be that in those work environments employees are more concerned about helping and caring for their peers, which may negatively influence perceived performance. Future research should investigate this issue in more depth.

**General Discussion:**

**What Is the Climate of the Future?**

The main purpose of this thesis was to present a new theory of EWCs, the PPM of EWCs, and develop a measure capable of assessing the four dimensions of the model. This goal was accomplished. As noted in Study 3, the four dimensions of EWC and their factors have differential effects on various organizational outcomes. For example, the regression analyses revealed that the factors of collective moral judgment, which in the past have been used (in an extended and modified version of ECQ; Victor & Cullen, 1987, 1988) to assess the ethical climate of the organization, have the weakest effect on organizational outcome variables, including the ethical behaviors of employees. Therefore, the ECI represents a potential superior predictor of ethical behavior and other important outcomes and can serve as a tool for identifying in more detail the specific relationships the different components of EWCs have with different outcomes.
In conclusion, I believe that the present findings provide an important first step in introducing the concept and measurement of the components of the PPM of EWCs. Although more research is needed, to further validate and refine the ECI, and to replicate my current findings, I believe that with the size of the samples used in the current studies and the breadth of the variables examined, the present investigations provide a base for further examining the PPM of EWCs and its impact in the workplace.

Appendix

The Ethical Climate Index (ECI)

Collective moral sensitivity—Norms of Moral Awareness

1. People around here are aware of ethical issues.
2. People in my department recognize a moral dilemma right away.
3. If a rule or law is broken, people around here are quick to notice.
4. People in my department are very sensitive to ethical problems.
5. People around here do not pay attention to ethical issues.

Collective Moral Sensitivity—Norms of Empathetic Concern

1. People in my department sympathize with someone who is having difficulties in their job.
2. For the most part, when people around here see that someone is treated unfairly, they feel pity for that person.
3. People around here feel bad for someone who is being taken advantage of.
4. Sometimes people in my department do not feel very sorry for others who are having problems.
5. Others’ misfortunes do not usually disturb people in my department a great deal.
6. When people in my department see someone being treated unfairly, they sometimes don’t feel much pity for them.
7. In my department people feel sorry for someone who is having problems.

Collective Moral Judgment—Focus on Self

1. People around here protect their own interest above other considerations.
2. People in my department are very concerned about what is best for them personally.

(continued)
Appendix (continued)

3. People around here are mostly out for themselves.
4. People in my department think of their own welfare first when faced with a difficult decision.
5. In my department people’s primary concern is their own personal benefit.

**Collective Moral Judgment—Focus on Others**

1. In my department it is expected that you will always do what is right for society.
2. People around here have a strong sense of responsibility to society and humanity.
3. What is best for everyone in the department is the major consideration.
4. The most important concern is the good of all the people in the department.
5. People in my department are actively concerned about their peers’ interests.

**Collective Moral Motivation**

1. In my department people are willing to break the rules in order to advance in the company.
2. Around here, power is more important than honesty.
3. In my department authority is considered more important than fairness.
4. Around here, achievement is valued more than commitment and loyalty.
5. In my department personal success is more important than helping others.
6. In my department people strive to obtain power and control even if it means compromising ethical values.
7. Around here, people are willing to tell a lie if it means advancing in the company.
8. In order to control scarce resources, people in my department are willing to compromise their ethical values somewhat.

**Collective Moral Character**

1. People around here are confident that they can do the right thing when faced with moral dilemmas.
2. People I work with would feel they had to help a peer even if that person were not a very helpful person.
3. People in my department feel it is better to assume responsibility for a mistake.
4. No matter how much people around here are provoked, they are always responsible for whatever they do.

(continued)
Appendix (continued)

5. Generally people in my department feel in control over the outcomes when making decisions that concern ethical issues.

6. When necessary, people in my department take charge and do what is morally right.

Short form. This includes only the three highest factor loadings from each dimension results in the following 18-item short form of the Ethical Climate Index (with resulting alphas and correlation with original scale; see the following table):

| Collective moral sensitivity (moral awareness): | Items 1, 2, 4 | \( \alpha = .80 \) | \( R = .93 \) |
| Collective moral sensitivity (empathetic concern) | Items 6, 7, 8, 12 | \( \alpha = .83 \) | \( R = .88 \) |
| Collective moral judgment (focus on self) | Items 3, 4, 5 | \( \alpha = .89 \) | \( R = .95 \) |
| Collective moral judgment (focus on others) | Items 7, 8, 9 | \( \alpha = .81 \) | \( R = .96 \) |
| Collective moral motivation | Items 1, 2, 8 | \( \alpha = .90 \) | \( R = .94 \) |
| Collective moral character | Items 2, 3, 4 | \( \alpha = .82 \) | \( R = .93 \) |

References


Anke Arnaud (PhD, University of Central Florida) is an assistant professor of management at Embry-Riddle Aeronautical University. She teaches ethics, organizational behavior, international business, and management of the multicultural workforce. Her research focuses on the ethical climate and organizational climate for sustainability and how these climates influence human decision making and behavior as well as organizational performance. Her work has been published in journals such as the *Organizational Dynamics* and the *Journal of Business Ethics*. In addition, she has published several book chapters on leadership, justice, and ethics.