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A New Theory and Measure of Ethical Work Climate: The Psychological Process Model (PPM) and the Ethical Climate Index (ECI)

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A NEW THEORY AND MEASURE OF ETHICAL WORK CLIMATE:
THE PSYCHOLOGICAL PROCESS MODEL (PPM)
AND
THE ETHICAL CLIMATE INDEX (ECI)

by

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ABSTRACT

With this dissertation I developed a new theory and measure of ethical work climate (EWC). Currently, there exists one dominant theory and measure of EWC developed by Victor and Cullen (1988, 1987). Even though researchers have identified problems with this theory, such as inconsistencies with regard to its limited theoretical scope and troubling psychometric properties, it is the most widely utilized framework for conceptualizing and testing EWC. Therefore, I propose to develop an improved theory and measure of EWC, one capable of addressing some of the principle shortcomings of earlier efforts. Building on Rest's (1986, 1979) "Four-Component" model of individual-level ethical decision-making and behavior, I specify four dimensions of EWC necessary for the emergence of ethical behavior: collective moral sensitivity, collective moral judgment, collective moral motivation, and collective moral character.

I developed a multidimensional instrument capable of capturing each of these dimensions at the climate level. I anticipate that this theory and instrument will allow researchers to understand EWCs and their impact on attitudes and behaviors more effectively than previous approaches.

Chapter 1 reviews the organizational climate and culture literatures, so as to gain a comprehensive understanding of the organizational climate construct in general and how it differs from organizational culture in particular. Chapter 2 includes a review and evaluation the EWC literature. This helped to identify opportunities and suggestions for a new theory and measure of EWC. Chapter 3 describes the development of the new theory of EWCs, the Psychological Process Model, with propositions for future research. Chapter 4 informs about the

development of the Ethical Climate Index, the measure used to assess the new theory of EWCs.

It describes 3 studies that were used to construct the Ethical Climate Index to 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). Study 1 and 2 resulted in parsimonious and reliable scales for each one of the four dimensions. Results of the 3rd study support convergent and discriminant validity for each one of the scales and suggest that the ECI is a valid and reliable predictor of ethical and unethical behavior.

Implications and suggestions for the use of this measure in future research is discussed.

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CHAPTER 1

**ORGANIZATIONAL CLIMATE AND ORGANIZATIONAL
CULTURE: LITERATURE REVIEW**

Abstract

The EWC is a sub-climate of the broader organizational climate and is conceptually and methodologically related to it. Therefore, I began my dissertation research with an in depth review of the conceptual and methodological developments of the broader construct, the organizational climate. This review provided me with a well grounded understanding of the climate literature in general and the conceptual developments and methodological issues related to studying the construct in particular.

All of the issues discussed in chapter one directly affect the development of my theory and measure of EWC. As I progress through this chapter, I explain the reason for including and reviewing each one of the issues.

Introduction

The organizational climate is conceptualized as a construct with particular referents, or sub-climates, such as the service climate, the safety climate (Schneider & Rentsch, 1988) and the ethical work climate (EWC) (Victor & Cullen, 1987). Because the EWC represents a sub-climate of the organizational climate, it is closely linked to the latter. Hence, theoretical developments and empirical findings on the overall organizational climate can inform us greatly about the more specific EWC. For example, the solutions that have been offered to the level-of-analysis problem that widely affects organizational climate research (Glick 1985, 1988) in general transfers directly to research on EWC. Therefore, I find it necessary to review the broader organizational climate literature first, to identify the important concerns and avoid pitfalls that affect the study of climate construct in general and EWC in particular. Finally, a critical literature review of organizational climate will raise my awareness of the important measurement issues related to organizational climate and its sub-climates, including the EWC. This should assist me in the development of a more valid and reliable measure of EWC.

I will begin the literature review by differentiating the organizational climate construct from the organizational culture construct followed by a discussion of the conceptual developments in the organizational climate literature. Then, I will discuss important methodological issues related to this construct.

Organizational Climate or Organizational Culture?

The constructs of organizational climate and organizational culture are closely related. Some researchers use the terms interchangeably (e.g. Schneider, 2000), others explain that the

two overlap (e.g. Denison, 1996), or define one (culture) as encompassing the other (climate) (e.g. Trice & Beyer, 1984). A content analysis by Verbeke, Volgering, and Hessels (1998) of the published literature on organizational climate and culture documented 54 different organizational culture definitions and 32 different organizational climate definitions. These numerous definitions reveal some confusion about the distinction between the two constructs. Therefore, I will clarify the puzzling relationship between these constructs first. Then, I will explain why they are interrelated but distinct constructs.

Conceptual Resemblance of Organizational Culture And Organizational Climate

The conceptual resemblance between the two constructs is largely to blame for the fact that many researchers confuse organizational culture and organizational climate or use the terms interchangeably. First, both constructs are used to identify and make sense of the environment that affects the behaviors and attitudes of members of a particular social system (e.g. organizational department, team, or organization) (Reichers & Schneider, 1990); and Moran and Volkwein (1992) explain that organizational climate and organizational culture are probably the most potent constructs available to researchers for understanding the human (expressive, communicative) dimension of organizations and its influence on organizational life.

Second, organizational culture and organizational climate are both learned over time through socialization processes and symbolic interaction among members of a social system. For example, Schneider (1987) explained that shared interactions and socialization processes lead to value congruence and that sharing of values within an organization may positively influence internal processes such as integration, job satisfaction and reduced conflict. More specifically, he

proposed the attraction-selection-attrition (ASA) framework, which holds that organizations tend to attract and retain people with similar views, and thus become more homogeneous over time.

Finally, they are both multidimensional constructs (Reichers & Schneider, 1990). Researchers have defined such a multitude of dimensions for organizational culture and organizational climate that many of those dimensions overlap. For example with respect to culture, Hofstede, Neuijen, Ohayv and Sanders (1990) defined authority, power distance, security, collectivism, and results orientation as important dimensions. O'Reilly, Chatman and Caldwell (1991) identified the cultural dimensions of stability, respect for people, innovation, teamwork and outcome orientation. Cook & Rousseau (1988) discussed conventional culture, humanistic culture, avoidance culture, affiliative culture and achievement culture as dimensions of organizational culture.

Similar dimensions have been used to define climate. For example, Kopelman and colleagues (1990) proposed goal emphasis, means emphasis, reward emphasis, task support, and socioemotional support as climate dimensions. Litwing and Stringer (1968) defined the climate dimensions of responsibility, reward, risk, warmth, support, standards, conflict and identity. Hellriegel and Slocum (1974) established the organizational climate dimensions of centralization, supportiveness, innovation, peer relations, and motivation to achieve.

It is apparent from the discussion above, that there exists some overlap between the constructs in general and their dimensions in particular. Yet, several important distinctions between the two constructs (see Table 1) suggest that, while closely interrelated, the constructs are distinct.

Insert Table 1 about here.

Conceptual Differences of Organizational Culture And Organizational Climate

The most fundamental difference between the constructs is a direct result of their different scientific heritage. Organizational culture is a concept borrowed from anthropology and reflects the way things are done around the organization while organizational climate is a construct that naturally evolved out of psychology and reflects the way people perceive and describe the environment (Verbeke et al., 1998). It was Pettigrew (1979) who first introduced the anthropological concept of culture to the organizational science audience. He demonstrated how culture and related anthropological concepts such as symbolism, myths, and rituals could be used to study the context of the organization.

The concept of organizational climate has its roots in Lewin's studies of experimentally created social climates (Lewin, Lippit, & White, 1939) and grew out of the desire of psychologists to specify environmental influences on motivation and behavior (Reichers & Schneider, 1990). For example, in one of the earlier publications, Litwin and Stringer (1968) consider climate a direct correlate of work motivation and explore its effect on human motives for power, achievement, and affiliation.

In summary, organizational climate and culture are grounded in different schools of thought. This has direct implications for the evolution of each concept including how they are defined and studied.

Distinct Definitions

First, the conceptual distinction between organizational culture and climate directly affects how each one is defined. For example, Kroeber & Kluckhohn (1952) defined organizational culture as a transmitted pattern of values, ideas, and other symbolic systems that

shape behavior. Rousseau (1990) defined organizational culture as a layered construct, where shared behavioral expectations and norms represent the outer, more conscious layer and values, assumptions represent the inner, less conscious layer to members of an organization. Both of these definitions conceptualize organizational culture as behavioral expectations and normative beliefs of individuals in the organizational work unit (Cooke & Szumal, 1993). Thus culture is defined as the *property of the work unit* and encompasses a “system of shared norms and behaviors that are learned by the members of the organization and shape their way of doing (Verbeke et al.,1998, p.313).”

In contrast, organizational climate is conceptualized as the way individuals perceive the personal impact of their work environment (James, James & Ashe, 1990). Thus, climate is the *property of the individual* and encompasses “the set of characteristics, which the members of the organization perceive and come to describe in a shared way (Verbeke et al., 1998, 313).”

Definitions do not explicitly distinguish between the two constructs, but indicate the embeddedness of ethical climate in ethical culture. Ashforth (1985) noted: “It is not a large conceptual step from shared assumptions (culture) to shared perceptions (climate) (p.841).” For example, Tagiuri and Litwin (1968:25) defined climate as “the relatively enduring quality of the total environment that is (a) experienced by the occupants, (b) influences peoples’ behavior, (c) can be described in terms of the values of a particular set of characteristics (or attributes) of the environment (p.15). “ Similarly, Schein (1985: 19) defined culture as “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 19).” He concluded that organizational norms, values and rituals as well as climate are manifestations

of culture. Hence, climate can be defined as the way in which the deeper structures of culture are manifested. More specifically, while the two constructs are distinct, they are closely related, and organizational culture encompasses the construct of organizational climate.

Different Methodologies of Organizational Culture and Climate

The distinct methodologies used to study organizational culture and organizational climate are a direct result of their distinct conceptual heritage, too. Schwartz and Davis (1981) explained that studying culture requires qualitative research methods and an appreciation for the unique aspects of individuals' social settings, while studying climate required quantitative methods and the assumption that generalization across social settings is the primary objective of the research. Culture is conceptualized as *inherent to the organization* at a more subconscious level, frequently not even known to the individual. It is manifested in the artifacts and rituals of the organization and researchers have found qualitative methods, e.g. observational tools such as in-depth ethnographies (Harris & Sutton, 1986; Sapienza, 1987), content analyses (Beyer & Trice, 1987) and case studies (Hickman & Silva, 1987) most useful to investigate and compare the dimensions of culture.

Climate is conceptualized as *inherent to the individual* and the shared perceptions of organizational members. Therefore, researchers have mostly used quantitative methods, e.g. questionnaires, to identify perceptions and views of members of the organization. Barley (1983) explained that climate researchers have been content to use nomothetic, quantitative procedures that encompass an etic perspective (imposes meaning on a set of data), instead of using ideographic, qualitative procedures that encompass an emic perspective (letting the meaning emerge from the members of the group under study) used by culture researchers (Barley, 1983).

This obvious methodological distinction has slowly faded over the last decade, and culture studies have become less distinguishable from climate studies. Organizational culture is increasingly assessed with quantitative methods. For example, Chatman (1991) asked questions about risk taking to assess a component of organizational culture, while Litwin and Stringer (1968) asked questions about risk taking to assess organizational climate. Also, when Joyce and Slocum (1982) assessed person-organization fit, they label it a climate study, but when O'Reilly, Chatman and Caldwell (1991) examined person-organization fit they labeled it a culture study.

The distinction between the constructs should be confirmed using empirical research. Consistent empirical findings regarding discriminant validity of climate and culture could serve as 'reliable' evidence for the distinct nature of the constructs. Nevertheless, most articles that address both culture and climate offer only theoretical discussions of the concepts or case studies of single organizations and provide no empirical evidence that the concepts are either different or related (e.g. Payne, 2000; Virtanen, 2000; Barker, 1994; Hoy, 1990). When both constructs were included in an empirical study, the convergence of these constructs was not assessed (Kirsh, 2000; Johnson & McIntye, 1998). Two recent empirical studies provide support for the *conceptual difference* between the two constructs (Glisson & James, 2002; Verbeke et. al, 1998). A content analysis by Verbeke and colleagues (1998) discusses the distinct nature of these constructs and a study of child welfare and juvenile justice case management teams by Glisson and James (2002) suggests that culture and climate may vary by organizational unit.

Different Research Models of Organizational Culture and Climate

Organizational culture and organizational climate are modeled differently. Culture researchers assume the existence of culture (e.g. symbols, myth, and rituals) as a given and

explore the dimensionality and its role in predicting organizational performance. Climate researchers focus on individuals' perceptions of those contextual factors and the antecedents and consequences of them. The work of anthropologists such as Kluckhohn (1951) and Kroeber and Parsons (1958) influenced the study of organizational culture such that emphasis is placed on the identification of culture dimensions and their comparisons across different environments. Culture researchers study the evolution of organizational symbols, myths, and rituals, to identify the elements and dimensions of culture, with no implicit or explicit value judgment about which culture is more effective (e.g. Pettigrew, 1979). Hence, culture researchers find it important to gain a deep understanding of underlying assumptions (e.g. Schein, 1990), and individual meaning of culture (Geertz, 1973), to gain an insider's point of view of the organization.

Organizational climate research developed from the research of organizational psychologists, Kurt Lewin and his protégées, Argyris and McGregor, whose primary interest was the prediction of organizational effectiveness. These researchers focused on identifying employee's perceptions of the organization's context. They were less concerned with evolution but more concerned with the impact that organizational systems have on the effectiveness of the organization, specific groups, and individuals (e.g. Koys & Decotiis, 1991; Joyce & Slocum, 1984). Hence, the study of organizational climate emphasizes the perceptions, perceptual processes, cognitions and cues applied by individuals to comprehend the "observable" practices that are closer to the surface of organizational life. These practices and perceptions are then characterized into analytic dimensions (Moran & Volkwein, 1992; James & Jones, 1974; Guion, 1973).

Distinct Temporal Foci of Organizational Culture and Climate

Culture and climate also have distinct temporal foci. Culture researchers are mostly concerned with the evolution of social systems that remain very stable over time (e.g. Mirvis & Sales, 1999; Schein, 1990). Because culture refers to the embedded structure of the organization that is based in the values, beliefs, and assumptions held by its members, it refers to a symbolic world, which is very stable and static over time. In contrast, climate researchers are mostly concerned with employees' perceptions of social systems. Because climate refers to individuals' views of different aspects of their social environment ("how things are done around here"), it refers to a perceived world, which is more temporary and less stable over time (Reichers & Schneider, 1990).

Synopsis

In conclusion, organizational climate research has a much longer history than organizational culture research. My review of the evolution of both suggests, from a theoretical perspective, that organizational culture encompasses deeper and different dimensions than organizational climate (see Table 1 above). "Organizational climate reflects the prevalent norms, values, and attitudes of the organization's culture (Moran & Volkwein, 1992, p.21)." Organizational culture exists at a higher level of abstraction than climate. While the organizational culture researcher studies the manifestation of the phenomena through its forms (e.g. artifacts, legends and symbols), which reveal shared values, the organizational climate researcher studies the process by which these shared values are attended to (Moran & Volkwein, 1992). However, both constructs address a common phenomenon: the creation and influence of social contexts in organizations.

Organizational Climate: A Closer Look

Now that I have clarified how organizational climate relates to, and is distinct from, organizational culture, I will analyze the theoretical development of organizational climate in more depth. Once I began to review the climate literature, it became apparent that I had opened “Pandora’s box.” Three particular issues, including how to define, conceptualize, and measure the construct in particular, seem to introduce much disagreement and confusion among climate researchers. I will discuss these issues in more depth since they have implications for the study of climate in general and EWC in particular.

Definitions of Organizational Climate

Reichers and Schneider (1990) explained that defining organizational climate is like “nailing Jell-O to the wall.” While everyone can agree that organizational climate encompasses the character (Even, 1968), personality (Steers, 1979), or psychological atmosphere (Pritchard & Karasick, 1973) of an organization’s internal work environment, individual definitions of the construct vary in content and specificity.

Verbeke, Volgering, and Hessels (1998) identified 32 different definitions of organizational climate. One of the earliest definition of climate states that organizational climate is a “relatively enduring quality of the total environment that is experienced by the occupants, influences their behavior, and can be described in terms of the values of a particular set of characteristics, or attributes of the environment (Tagiuri & Litwin, 1968, p. 25).” Poole (1985) defines climate more broadly as “the belief and value structure members employ as they act in the organization (p.101).” Payne (1990) defines organizational climate as a molar concept reflecting the content and strength of the prevalent values, norms, attitudes, feelings, and

behaviors of the members of a social system. Schneider (1975) first defined climate more specifically as a shared and enduring molar perceptions of the psychologically important aspects of the work environment. Later he defined climate more broadly as the shared perception of “the way things are done around here (Schneider, 1990).”

These examples of definitions illustrate a lack in conceptual clarity, and as a result, climate emerges as a fuzzy phenomenon with unclear boundaries; it is an ambiguously defined construct, which is easily misspecified. This is problematic because it affects the measurement of the construct and potentially biases research results.

In the next section, I will take a closer look at the key conceptualizations of climate to further demonstrate this problem.

Conceptual Development of Organizational Climate

Lewin and colleagues (Lewin, 1951; Lewin, Lippitt and White, 1939) first talked about organizational climate, when they studied different leadership styles. These researchers found that different leadership styles lead to distinct climates including democratic, autocratic, and laissez-fair climates. However, researchers’ awareness and interest in the construct did not increase until the first books on climate appeared (Tagiuri & Litwin, 1968). Tagiuri and Litwin’s (1968) book was a collection of essays on different climate perspectives. From those perspectives, two dominant one’s emerged. One proposed climate as a “shared set of conditions” while the other proposed climate as a “shared set of perceptions.” These opposing positions resulted in a strong debate, which remains active and unsettled today and has led to much confusion in the literature.

Organizational climate as a shared set of conditions

This perspective identifies organizational climate as an attribute of the work environment. Glick (1985) defined organizational climate as “a broad class of organizational, rather than psychological variables that describe the organizational context of individual’s actions (p.613).”

Glick (1985, 1988) proposed that organizational climate emerges from social/organizational processes because employees of the same organization interact and are exposed to the same organizational characteristics. He suggested that social interaction processes such as social constructions of reality, and intersubjective developments of meaning lead to climate. Also, structural characteristics such as the nature of technology, and the degree to which rules and policies are centralized or decentralized are considered climate dimensions (e.g. Inkson, Pugh, & Hickson, 1970; Lawler, Hall & Oldham; 1974).

In order to assess the shared set of conditions, Glick (1985, 1988) suggested three methodologies: longitudinal studies of any kind, studies of newcomer socialization (e.g. Reichers & Schneider, 1990), and network analysis to map communication and interaction patterns associated with different climates (e.g. Jablin, 1980).

Organizational climate as a shared set of perceptions

This perspective identifies organizational climate (also labeled collective climate) as the aggregate of the psychological climate. Psychological climate is defined as “a set of perceptions that reflect how work environments including organizational attributes, are cognitively appraised and represented in terms of their meaning to and significance for individuals (James, Joyce, & Slocum, 1988, p.129).” The aggregate scores of individuals’ psychological climate are regarded as indicators of organizational climate (also called collective climate), because they allow the

description of organization settings in psychological terms, yielding an understanding of how these individuals in general impute meaning to, and respond to environments.

Climate may be aggregated by factors such as workgroup, division, hierarchical position, or demographics. James and Jones (1974) suggested that prior to aggregating to a macro level-of-analysis, agreement among individuals' climate perceptions has to be demonstrated. Three specific criteria have to be satisfied in order to aggregate to a higher order climate: (1) discrimination, or demonstrable differences between mean perceptions between climates, (2) predictable relationships to organizational or individual criteria, and (3) internal consistency, or agreement in perceptions within aggregate climates.

James and colleagues (James & Sells, 1981, Joyce & Slocum, 1979; James & Jones, 1974) proposed that factors such as communication, influence, leadership, and decision-making patterns are individual level attributes that can be used to determine climate. For example, Jones and James (1979) empirically validated several specific and stable climate factors including conflict and ambiguity, job challenge, importance, and variety; leader facilitation and support; workgroup cooperation, friendliness, and warmth; and professional and organizational esprit.

One important limitation of this perspective is that no explanation is provided for the process by which individuals' perceptions are transformed into a homogeneous perspective of sufficient durability so that it can be construed as an organizational attribute. Instead, James and colleagues (James & Sells, 1981, Joyce & Slocum, 1979; James & Jones, 1974) identified relatively small numbers of clusters of climate dimensions within organizations and propose that individuals of similar psychological traits can be classified according to these clusters.

The inability of researchers to agree on what climate is and how it should be assessed has resulted in a multitude of methodological problems including confusion about the level-of-analysis, the assessment of shared perceptions, content of climate scales and climate dimensions.

Methodological Problems Related to the Study of Organizational Climate

Level-of-analysis

The lack of conceptual clarity has led to disagreement between researchers about its level-of-analysis at which organizational climate exists (Dansemau & Alutto, 1990). This problem appeared early in climate research as a direct result of the two conceptual positions: Is organizational climate an attribute of the organization, and therefore, should it be operationalized at the organization level (Glick, 1985, 1988), or an attribute of the individual, and therefore, should it be operationalized at the individual level (James, Joyce & Slocum, 1988)?

The first climate researchers considered and studied the construct at the organizational level-of-analysis because the organization was specified as the unit of theory and therefore, measurement (e.g. Litwin & Stringer, 1968; Leavitt, 1964; Argyris, 1958). These researchers conceptualized climate as an objective manifestation of the organization's structure. Climate was proposed to emerge because employees of the same organization experience the same structural characteristics such as organizational size and centrality of decision-making. For example, Forehand and Gilmer (1964) described and assessed climate in terms of environmental attributes including structure and actual reward/punishment procedures.

James and colleagues (James & Sells, 1981; Joyce & Slocum, 1979, 1988; James, 1982; James & Jones, 1974) questioned this position and proposed that the correct level-of-analysis should be the individual since only individuals develop an awareness of their surroundings, not

organizations. They suggested that organizational climate was a psychological construct defined by the perceptual agreement of individuals. These researchers assumed that individuals within a given social system should have similar perceptions about their climate. Organizational climate (or collective climate) emerged as a result of aggregating similar individual level climate perceptions.

An example will clarify the fundamental problem. James et al. (1988) argue that the processes that describe climate need to have an individual level referent. For example, to assess the climate dimension of pay equity, the authors argue that it is impossible to obtain reliable and valid information by asking individuals if salaries in their organization are generally equitable. Especially if pay information is confidential, employees will not know what fellow employees in the organization earn. Therefore, James et al. (1988) suggest that each organizational incumbent should be asked whether his/her salary is equitable. Then, a form of interrater reliability analysis is required to which the individual is the unit of analysis. Finally, satisfactory interrater reliability scores permit climate researchers to aggregate to higher levels of analysis (e.g. subsystem, group, organization). Using the earlier example, if individuals in the organization share perceptions (satisfactory interrater reliability) regarding pay equity in the organization, it is possible to aggregate their psychological climate scores to determine general perception of pay equity, because perceptual agreement implies a shared assignment of meaning (James, 1982).

Glick (1985, 1988) opposed this methodology and proposed that organizational climate should be studied at the organizational level-of-analysis. He suggested to measure variables that describe the organizational context such as high pressure to produce, selection, attraction, and attrition of organizational members (resulting in a homogeneous set of members), and social interactions leading to shared meanings. In addition, he proposed that perceptual measures used

to assess climate at the organizational level-of-analysis should be carefully designed. For example, a questionnaire item should read “this organization encourages employees to try new methods,” instead of “I am encouraged to try new work methods. (James et al., 1988, p.130).”

Two key issues contribute to the level-of-analysis problem. First, organizational climate data cannot be collected directly from the organization. Questionnaires are distributed to individuals *in* organizations, not organizations directly. Hence, individuals answer questionnaires and provide the data for analysis, not organizations. As a result, the question whether the organization can be the correct level-of-analysis seems valid. Second, questionnaire items can have different referents inducing different levels-of-analysis. For example, descriptors can refer to the individual (e.g. I do...), peers (e.g. they do...), or the organization (in this organization it is customary...). As a result, if questionnaires confuse or mix referents, level-of-analysis problems arise and taint the analysis and interpretation of data.

Solving the level-of-analysis puzzle

Organizations are inherently multilevel and are comprised of a hierarchy of individual employees, dyads, work groups and departments. As a result, studying organizations is rather complex and researchers need to be careful not to confuse levels-of-analyses. Two specific suggestions can help researchers avoid level-of-analysis problems. First, researchers need to be concerned with the theoretical or conceptual level at which organizational phenomena are defined to exist or operate. In orthodox usage personality is an individual level construct, group cohesiveness is a group level construct, and organizational climate is an organization level construct. It is key that the level at which researchers theorize the existence of a specific phenomenon (e.g. climate) and predict relationships needs to drive the entire study: once the

level-of-analysis has been theoretically defined, the questionnaire has to be designed to reflect this level-of-analysis and the sample needs to be representative at the specified level-of-analysis.

For example, if the unit of theory for a climate study is the *organization*, the unit of observation needs to be the *organization*. If the unit of theory for a climate study is the *department* (e.g. studying differences between climates at the department level), the unit of observation needs to be the *department*. More specifically, if researchers make predictions about the organizational climate, the sample needs to include a cross sample of individuals from the entire organization, or various organizations if climates of two or more organizations are compared. If theoretical predictions are made about climates at the department level (e.g. climate of department A is more ethical than climate of department B), data need to be collected at the department level representing different functions/positions within each department. Most importantly, the theoretical prediction needs to drive the level at which questionnaire items are defined, and interpreted. Failure to apply this logic threatens the validity of climate studies that, for example, sample either few individuals or a limited number of departments in one or two organizations (see Glick, 1985).

However, the level of measurement of the phenomenon does not necessarily need to correspond to the level at which it is analyzed. For example, in studying work group productivity, a researcher might add the productivity of individual group members to produce an index for various groups. In this case, the level of measurement is the individual, but the level of analysis is the group. It is most important that researchers need to justify very clearly the logical linkage between the chosen level of measurement, the mechanical level of analysis, and the theoretical level of analysis.

Second, it is important to develop questionnaires that induce objective responses at the correct level-of-analysis. If organizational climate is assessed using perceptual measures, the accuracy and construct validity of these questions can be increased by asking descriptive rather than affective questions. Also, to induce the correct level-of-analysis, questions need to focus on specific units with recognized boundaries, not an ambiguous work environment. For example, to assess climate at the department level questions need to make reference to the department (“In your department, ...”) to assess climate at the organization level, questions need to make reference to the organization (“In your organization, ...”).

Level-of-analysis problems have plagued organizational climate research (Schneider & Reichers, 1990) and remain problematic today (Denison, 1996). The suggestions discussed above are useful for avoiding level-of-analysis problems with regard to studying organizational climate in general and EWC in particular. I followed these suggestions carefully in the design of my new EWC measure.

Shared perceptions

Johannesson (1973) pointed out that unless individuals’ perceptions are shared, “there are potentially as many climates as there are people in the organization (p.30).” Especially the operationalization of shared perceptions has raised many concerns and climate researchers have debated the use of perceptual measures to assess climate without coming to agreement. The most common form to assess shared perceptions has been the use of aggregate measures. Yet, aggregation is not without problems. For example, it is unclear what proportion of the population has to agree with a particular description of the climate to justify describing the climate in that way.

When using aggregate measures of climate, it is especially important to apply adequate reliability statistics since many reliability statistics reported in the organizational climate literature apply the wrong unit of analysis (e.g. Drexler, 1977; James, Demaree & Hater, 1980; Joyce & Slocum, 1984). Three indices of reliability are useful: interitem consistency based on aggregates of raters, mean rater reliability based on items and mean rater reliability based on scale scores.

All three of these should exceed at least .6 to justify the use of aggregate perceptual measures. Also, while the computation and interpretation of aggregate level interitem consistency is straightforward (Schneider, Parkinson & Buxton, 1980), the computation and interpretation of mean rater reliability is more complex. When different respondents observe each organization, a helpful index of mean rater reliability is a Spearman-Brown formula based on intraclass correlation from a one-way analysis of variance (see Glick, 1985).

Many researchers avoid the aggregation issue and use mean scores to assess shared perceptions of climate. For example, Schneider (1972) proposed the use of multi-item scales and taking the mean score (average of the individuals' psychological climate scores) as an indicator of organizational climate. Shared perceptions are represented by mean responses to questionnaire items that have low variance. Nevertheless, this method disguises the existence of wide variations in perceptions among organizational members. This raises validity concerns, which become apparent by looking at the standard deviation and mean score variations by hierarchical, functional, or departmental level.

Joyce and Slocum (1984) tried to avoid the aggregation problem by using the clustering technique to define subgroup climates (based on shared perceptions). Yet, as Payne (1990) explains, this method is only justified if the subgroup has some other meaningful socio-

psychological identity (e.g. same department, same work team). Also, cluster analysis (Joyce & Slocum, 1984) is not always accurate: defining unit boundaries with cluster analysis ignores the more accepted criterion of selecting unit boundaries that reflect hypothesized interdependence of elements within-units (Campbell, 1958).

Aggregate measures are useful in the study of perceptual agreement and convergence of opinion of organizational climate in general and EWC in particular. The procedures and reliability statistics discussed above should be used when aggregating individual responses. I will follow these suggestions when I aggregate individual questionnaire responses and determine perceptual agreement of individual responses.

Content of climate scale

Another methodological concern is that climate scales frequently resemble job satisfaction scales. This leads to redundancy in research and empirical convergence of constructs that are theoretically distinct (Johannesson, 1973; Guion, 1973). Several reasons have attributed to the overlap of organizational climate and job satisfaction. The first and most obvious reason for the overlap is that researchers frequently take descriptors from satisfaction scales to develop descriptors for organizational climate scales. This problem can easily be avoided.

Second, the perception of a situation, e.g. organizational climate, is directly tainted by affective responses, e.g. one's satisfaction with the situation because attitudes, values and motives play an important role in the perceptual process. Organizational climate scales should evoke perceptual responses *describing* work environments while job satisfaction scales should evoke attitudinal or affective responses *evaluating* the work environment. More specifically, perceptual climate measures are supposed to stimulate the respondents to orient themselves with specific facts and express their opinions as to how they perceive the facts, not whether they like

them or not. As noted earlier, it is difficult to separate the description of a perceived reality from the emotions connected with the perception of that reality. The description of the environment is inherently subjective and therefore immediately affected by one's satisfaction with that environment. For example, the JDI (Job Description Index) is used to describe (not evaluate) the job. Yet, an examination of the scale reveals that the items are primarily affective, not descriptive, in nature and it is frequently interpreted as a measure of employee satisfaction (Vroom, 1964, Johanneson, 1973).

Nevertheless, climate and job satisfaction are distinct constructs. Individuals describe organizational climate different from job satisfaction (Howe, 1977) and employ divergent measures to assess each construct (LaFollette & Sims, 1975). Furthermore, while individuals may share climate perceptions, they are not necessarily equally satisfied (they agree more on what they see than on how they feel about it) (Schneider & Snyder, 1975), and organizational climate and job satisfaction are distinctly related to other construct, such as organizational effectiveness (Downey, Hellriegel & Slocum, 1975; LaFollette & Sims, 1975, Schneider & Snyder, 1975). For example, Litwin and Stringer (1968) found job satisfaction to be highest in affiliation-induced climate, relatively high in achievement-induced climate and low in power-induced climate. This supports the hypothesis that employee satisfaction is differentially related to various types of climates.

It is important to consider this issue when developing organizational climate measures or EWC measures. I will carefully select items and phrase descriptors to avoid convergence between EWC and satisfaction.

Dimensions

The conceptual ambiguity surrounding the climate construct has led to the emergence of an extensive number of climate dimensions. As a result the climate construct has been labeled “fuzzy,” and many researchers have gone so far as to argue that the broad list of diverse dimensions makes the climate concept useless (Guion, 1973; James & Jones, 1974; Johanneson, 1973). For example, most factors that originally defined other constructs have appeared as climate dimensions, including equity (James, 1982), centrality (Joyce & Slocum, 1979), and reward orientation (Schneider, 1975). Other examples include leadership characteristics such as leader’s psychological distance (Payne & Mansfield, 1973), as well as communication characteristics, such as open-mindedness (Payne & Mansfield, 1973) and warmth (Downey, Hellriegel & Slocum, 1975). Organizational climate seems to overlap with most organizational behavior constructs. The question whether the study of climate can contribute anything to organizational behavior seems valid. As Glick (1985) put it:” saying that everything is related to everything else does not provide much of an explanation (p.606)”.

Issues regarding the dimensionality of organizational climate introduce methodological problems. For example, Schneider and Bartlett (1968) developed and tested the Agency Climate Questionnaire (ACQ), an interactional conceptualization that brings about a merger between measures of individuals and measures taken from situational characteristics in organizations. Instead of clearly defining the dimensions of the measure using theoretical arguments, the dimensionality of the scale was determined using factor analysis. This is the methodological “fallacy” that emerges directly from the vaguely defined dimensionality that plagues this construct. Dimension of a construct should be defined by theory not factor analysis.

Glick (1985, 1988) offered a solution to the dimensionality problem, which is widely accepted and implemented today. Instead of trying to assess the broad and complex construct of organizational climate, he recommended to use sub-climates. To limit the number of dimensions, he proposed to define dimensions employing criterion-referenced variables. Criterion-referenced variables are those that are used to study the criteria of interest. Examples include the safety climate (Zohar, 1980), the service climate (Schneider & Bowen, 1985), the climate for sexual harassment (Fitzgerald, Drasgow, Hulin, Gelfand & Magley, 1997) and the climate for procedural justice (Naumann & Bennett, 2000), and the climate for innovation (Anderson & West, 1998).

Measures of these sub-climates are shorter and less complex than the original organizational climate measures (e.g. Halpin & Croft, 1962; Litwin & Stringer, 1968; Likert, 1967; Margulies, 1965). For example, Anderson and West's (1994) Team Climate Inventory is used to assess four factors of innovation resulting from team activities: team member vision, participative safety, task orientation, and support for innovation. The survey has demonstrated robust psychometric properties with acceptable levels of reliability and validity. Naumann and Bennett (2000) introduced a short procedural justice climate scale, nine descriptors, and found acceptable reliability and validity.

This discussion is important to the development of my EWC model. Following Glick's (1985, 1988) suggestion, I defined the EWC used to predict ethical behavior employing criterion-references variables (variables that define ethical behavior). An example of criterion-references variables of EWC used to predict ethical conduct is the Four-Component model by Rest (1983). Chapter three discusses this model and its contribution to the assessment of EWC in more depth.

Conclusion

Organizational climate and its sub-climates, such as EWC, are important to understanding the functioning of organizations. Climate informs us about organizational processes and adds to our understanding of organizations and human behavior in organizations. For example, climate as an independent variable has been found to predict satisfaction (Johnson, 1996; Schmidt & Allschied, 1995; Schneider, 1972; Litwin & Stringer, 1968), performance (Mudrack, 1989; Moss-Kanter, 1983; Hall & Lawler, 1969), individual work attitudes (Glisson & James, 2002), and motivation and behavior of individuals (Bowers, 1976; Schneider & Snyder, 1975; Litwin & Stringer, 1968). Climate has been used as a dependent variable where organizational structure was the independent variable and perceptions of climate varied among employees at different levels in the managerial hierarchy (e.g. Schneider & Bartlett, 1970; Hall & Lawler, 1969; Litwin & Stringer, 1968).

However, it is important to keep in mind that the climate construct is rather messy and complex. The social world is not easily divided into environment, individual, and behavior as Lewin suggested. While the environment is created by the individual, individual's behaviors and attitudes are directly affected by the environment. This reciprocal relationship between individuals and their environment affects the study of climate and contributes to its complexity. Members of social systems are best regarded as agents and subjects simultaneously.

Other issues that add to the complexity of the climate construct include the vague conceptualization of the construct, which has implications for its theoretical and empirical evolution. In particular it has resulted in the emergence of various perspectives of climate and a multitude of different definitions and dimensions used to describe the construct. It has also

caused various methodological problems including the confusion of levels-of-analysis, assessment of shared perceptions, and content of climate scales.

Regardless of its complexity, the study of organizational climate and its sub-climates, such as the EWC, are important for understanding the organization's context. This is one of the reasons why my dissertation is committed to developing a theory and measure of EWC. In order to develop a well-grounded theory and valid measure of EWC, I reviewed the broader organizational climate literature first. This review revealed numerous problems related to the study of climate and led me to search for solutions to these problems.

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Tables in Chapter 1

Table 1. Culture vs. Climate

Table 1

Culture vs. Climate

Differences	Culture	Climate
Conceptual Origin	Anthropology	Psychology
Definitions	Property of the work unit: A system of shared norms and behaviors that is learned by members of the organization and shapes their way of doing.	Property of the individual: A set of characteristics, which members of the organization perceive and come to describe in a shared way.
Research foci/goals	Comparison and description with no implicit or explicit value judgments about which culture is more effective	Helps in understanding why some organizations experience more effective functioning than others
Temporal focus	Historical evolution: Evolves slowly and remains highly stable and enduring over time	Snap shots: Emerges and changes more quickly, relative unstable over time.
Methodology	Qualitative, emic (native point of view); contextualized, idiographic designs	Quantitative, etic (researcher's interpretation); comparative, nomothetic designs

CHAPTER 2

ETHICAL WORK CLIMATE: A CRITICAL REVIEW

Abstract

Now that I have reviewed the pertinent conceptual and methodological developments related to organizational climate in general, I will focus on the more specific topic of my dissertation, the EWC. In this chapter, I will review the evolution of the EWC construct in depth. This review includes a discussion of the theoretical development related to EWC as well as a critical analysis of all empirical studies to date. At the end of this chapter, I will discuss the methodological and conceptual concerns that emerged from this in depth literature review.

This literature review was especially pertinent to my dissertation, because I was able to identify theoretical shortcomings as well as methodological problems that needed to be corrected and improved. These issues are addressed in chapter three, the final chapter of my dissertation proposal.

Ethical Work Climate: Fresh Breeze in Sight

Long before the Enrons and Worldcoms shattered our confidence in corporate America, researchers identified the ethical work climate (EWC) of the organization as its moral foundation. Today, since these ethical corporate failures have made headlines, corporations feel the pressure to improve ethical conduct and moral values. Corporate leaders as well as researchers have a renewed interest in the EWC of the organization. Therefore, a comprehensive review of what we have learned and assessment of what needs to be explored could not come at a better time. It offers an insightful platform from which we can develop research programs that serve practitioners needs and address important questions such as: How can we create an ethical work climate? And, does it matter?

The review moves through three sections. First, I briefly discuss the most prevalent theories that relate to the EWC construct. This offers a systemic view of the phenomenon while reviewing proposed relationships among variables used to explain and predict EWC. Second, a critical review of articles that have assessed the EWC and its relationship to other variables and concepts will identify what we have learned and where we need to focus our energies to fill gaps in the literature. Third, I will look more closely at the measurement of the construct to identify potential shortcomings that need to be addressed.

Today, after 30 years of research on EWC, it is time to “take stock” of what we know. Only then can we develop meaningful research streams that fill important gaps in the literature and create actionable knowledge for practitioners.

Conceptual Models Related to Ethical Work Climate

Despite the increasing attention to ethics in organizations, few theories have emerged in the literature describing how the ethical context of the organization relates to other organizational variables. Of those theories that have emerged across the various domains related to the study of organizations (eg. psychology, marketing, management), most are ethical decision-making theories. These theories including Rest's (1986) four-component model, Dubinsky and Loken's (1989) theory of ethical-decision making in marketing, Ferrell and Gresham's (1985) contingency framework, Hunt and Vitell's (1986) general theory of marketing ethics, Treviño's (1986) person-situation interactionist model and Jones's (1991) issue-contingent model. More recently, the construct of ethical culture has been introduced to the literature on the ethical context of the organization (Treviño, 1990).

Only two EWC theories have emerged over the last 30 years. These theories include the pioneering theory of EWCs by Victor and Cullen (1987, 1988), and a more recent theory, the Moral Climate Continuum, proposed by Vidaver-Cohen (1995; 1998). However, only the EWC theory by Victor and Cullen has resulted in empirical research on the phenomenon and therefore has been the "driving force" of ethical climate research.

An EWC Theory: The Moral Climate Continuum by Vidaver-Cohen

Vidaver-Cohen (1995, 1998) proposed that the EC of the organization could be more or less conducive to ethical behavior depending on where it falls along the "moral climate continuum." At one end of the continuum is the ethical climate, where organizational norms always promote moral behavior, and at the other end of the continuum is the unethical climate,

where organizational norms never promote moral behavior. The proposed five dimensions that define the EWC including goal emphasis (prevailing norms for selecting organizational goals), means emphasis (prevailing norms for determining how organization goals should be attained), reward orientation (prevailing norms regarding how performance is rewarded), task support (prevailing norms regarding how resources are allocated to perform specific tasks), and socio-emotional support (prevailing norms regarding the type of relationships expected in the firm).

Vidaver-Cohen (1995) directly links the ethical climate of the organization to the behavior of employees. Ethical behavior is defined in terms of the climate dimensions as “intentionally responsible actions honoring implicit and explicit social contracts and seeking to prevent and avoid or rectify harm. Specifically in the organizational context, this conduct also includes promoting long-term goodwill within and across group boundaries and respecting the needs of others both within and outside the organization (Vidaver-Cohen, 1995, p.319).”

Therefore, a climate at the positive end of the ethical climate continuum is characterized by strong norms with regard to fulfilling social constructs, considering potential harmful consequences to others during problem solving, rewarding intentionally responsible actions, allocating resources to promoting long-term goodwill, and promoting interpersonal respect in intra-firm and boundary-spanning relationships.

Vidaver-Cohen (1995) defined the antecedents of a positive ethical climate. The organization that is characterized by a positive ethical climate takes a socio-economic perspective and observes communitarian principles. These principles affect and are affected by organizational processes such as political processes, technical processes and cultural processes. Political processes that lead to a positive ethical climate include equitable power distribution, democratic decision processes and a stakeholder-oriented strategy. Technical processes that lead

to a positive ethical climate are characterized by socio-economic production and an integrated structure. Finally, cultural processes that lead to a more ethical climate include formalized attention to moral concern and an informally reinforcing moral perspective. These processes affect and are affected by the positive ethical climate. The author proposes that inclusive social integration mediates this relationship.

The model is interesting and has face validity, yet the operationalization of it is complex and difficult. Today only one study has tested the model (Vidaver-Cohen, 1998). More research is needed to assess where organizations fall along the continuum and how different positions affect organizational outcomes.

The Theory of Ethical Work Climates by Victor and Cullen

Victor and Cullen defined EWC as “the shared perceptions of what is ethically correct behavior and how ethical issues should be handled (Victor & Cullen, 1987: pp.51-52).” This theory is built on the assumption that employee perceptions of ethical events, ethical practices and ethical procedures depend on two dimensions: the ethical criteria, used for organizational decision-making, and the loci of analysis, used as a referent in ethical decision-making. The authors cross-tabulate the loci of analysis dimension and ethical criteria dimension to obtain nine different climate types (see Chapter 1).

The Ethical Criterion Dimension

This dimension is grounded in cognitive moral development (CMD) theory (Kohlberg, 1967). Kohlberg developed a CMD framework and proposed that individuals’ moral reasoning skills (judgments of how moral dilemmas ought to be resolved) change and develop depending

on person and situation specific factors. The framework includes three broad levels of cognitive moral reasoning - preconventional, conventional and postconventional - each composed of two stages. Individuals move forward through an invariant sequence of stages, each representing a qualitatively different model of moral thought.

At level one of moral reasoning, the preconventional level, a person views rules as imposed and external to him-/herself. Moral decisions are justified in terms of one's own hedonistic interests and in terms of rewards and punishment. Stage one individuals form moral judgments guided by obedience for its own sake and to avoid punishment. Stage two moral judgments are guided by a "you scratch my back, I'll scratch yours" reciprocity.

At level two, the conventional level, the individual internalizes the shared moral norms of society or a group of the society (e.g. family). What is considered morally right is explained in terms of living up to roles and what is expected of the individual by others, and fulfilling duties, rules and laws. Stage three individuals find ethical behavior to be what pleases and helps others. Stage four individuals' perspectives broaden to consider the society of which they are part. At this stage, moral judgments consider the rules and laws of social, legal, or religious systems that are designed to promote the common good.

At level three, the postconventional level, the individual has gone beyond identification with others' expectations, rules and laws. Stage five individuals recognize the relativism of personal values. They still emphasize laws and rules because they represent the social contract, but they understand the laws can be changed for socially useful purposes. Stage six individuals are guided by self-chosen ethical principles of justice and human rights (Colby, Kohlberg, & Gibbs, 1983). Kohlberg claimed that higher stage moral judgments are better and more desirable than lower stage judgment.

Victor and Cullen (1987, 1988) use the three levels of cognitive moral reasoning to define the ethical criteria dimension of their model. The EWCs at the egoism level (Kohlberg's preconventional level) are characterized by employees' desires to maximize self-interest. The EWCs at the benevolence level (Kohlberg's conventional level) are characterized by employees' desires to maximize the joint interest of the organization. The EWCs at the principled level (Kohlberg's postconventional level) are characterized by employees' adherence to principle.

The Locus of Analysis Dimension

Victor and Cullen borrowed from Kohlberg's (1969, 1981) theory of cognitive moral development (CMD) to develop this dimension. Kohlberg (1969) defined three stages of CMD. At the individual level (preconventional level) the climate is defined by ethical decisions centered on "me and my benefit." At the local level (conventional level) the climate is defined by ethical decisions centered on reciprocal relationships. At the cosmopolitan level, (postconventional level) the climate is defined by ethical decisions centered on the person's concern for humanity and society.

The cross-tabulation of the ethical criteria and locus of analysis dimension define the 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. A team interest EWC is defined by a focus on the organization and peers that are close to the employee when making ethical decisions. The 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 when making ethical decisions.

How is the Weather: The Development of a Thermostat

Various measures of EWC have appeared. Yet, most of the empirical studies of EWC are grounded in a single theory of EWCs (Victor & Cullen, 1987, 1988) and the Ethical Climate Questionnaire (ECQ), the measure developed by Victor and Cullen to assess the EWCs. Only 27% of the 64 EWC studies published today use other measures.

Measures Of EWC

Several measures of EWC that emerged alternative to the ECQ were adapted from pre-existing scales used to measure other constructs. For example, Verbeke, Ouwerkerk and Peelen (1996) define ethical climate as the standard of ethicality and adapted a measure developed by Ruch and Newstrom (1975). The measure uses the appraisals of colleagues as standards of an employee's ethicality. These appraisals are graded on a scale from very ethical to not ethical at all. The use of the term "colleague" implies that climate is concerned with a part of the company where employees spend most of their time (e.g. the department or work group).

Schwepker and colleagues (Schwepker, Ferrell, & Ingram, 1997, 1999; Schwepker & Good, 1999; Schwepker, 2001) developed a research program assessing ethical climate. They used a measure of perceived ethical climate based on the work of Qualls and Puto (1989). The measure consists of 7 Likert-type statements previously used to measure the presence and enforcement of codes of ethics, corporate policies on ethics, and top-management actions related to ethics. Higher scores are interpreted as respondents' perceptions of more ethical climates. Singhapakdi assessed EC twice. First, Singhapakdi and colleagues (1996) developed the Perceived Role of Ethics and Social Responsibility scale (PRESOR) as a compilation of other measures. The instrument was developed to assess the perceived role of ethics and social

responsibility in achieving organizational effectiveness. It emerged from two dimensions of ethical ideology: (1) the Ethics Position Questionnaire (EPQ) which includes two 10-item scales that measure ethical idealism and ethical relativism (Forsyth, 1980) and (2) the Social Responsible Attitude scale (Hunt, Kieker & Chonko, 1990). Nevertheless, Etheredge (1999) found the PRESOR to have an instable factor structure. Second, Singhapakdi, Karande, Rao and Vitell (2001) used a 5-item corporate ethical value scale (CENS) developed by Hunt and colleagues (Hunt, Wood, & Chonko, 1989)(1989) to reflect a composite of individual ethical values of managers and formal and informal policies on ethics of the organization. Finally, McKendall and Wagner, III (1997) used a 47-item questionnaire to assess ethical climate based on the ethical practices questionnaire (EPQ) originally developed by Bentley College's Center for Business Ethics.

Four other measures of EWC have been developed to assess EC using various definitions and philosophies related to the construct. First, the Attitude Toward Business Ethics Questionnaire (ATBEQ) developed by Neumann and Reichel (1987), was constructed using philosophies such as Social Darwinism, Machiavellian, Objectivism, and Ethical Relativism. Second, Bartels, Harrick, Martell and Strickland (1998) defined EWC as the strength of organization norms regarding ethical behavior and organizational characteristics associated with ethical conduct and designed a 7-item scale to assess the strength of EC. Third, Luther, DiBattista, and Gautschi (1997) defined ethical climate as ethical attitudes. The authors developed a 20-item survey to assess ethical attitudes in two different ways: (1) student perceptions of what the current ethical climate is, and (2) what the ideal ethical climate should be. Finally, Bourne and Snead (1999) developed a 36-item survey to assess the ethical perceptions of workers along multiple dimensions including determinants of ethical values,

workplace fairness, issues involving one's position within the organization, general organizational climate and the general ethical climate existing in today's business environment.

Neither one of these measures, adapted or newly developed, has found reception in the literature. Therefore, the validity of these studies is questionable and in most cases cannot be assessed.

The Development of the ECQ

The ECQ emerged from Victor and Cullen's (1987, 1988) theory of EWCs and is the most widely recognized and applied measure of EWC. It was designed to collect individual employee perceptions of how the members of their respective organizations typically make decisions with regards to "events, practices and procedures" requiring ethical criteria (Victor & Cullen, 1987, 1988). The measure was developed under the assumption that organizations and their sub-groups develop different institutionalized systems, which are known to employees sufficiently well to be perceived as a type of EWC.

In its original form, the ECQ consisted of 36 descriptors, four Likert-type items for each one of the nine theoretical climate types proposed by Victor and Cullen (1987). To avoid perceptual biases, items were designed as descriptive indicators of the general ethical work climate of the organization and respondents were asked to act as observers (assess the actual climate) instead of evaluators (assess the preferred climate). The 36 climate descriptors were pre-tested with a sample of 35 university faculty, which resulted in a revised 25-item questionnaire.

In a consecutive study, Victor and Cullen (1987) used this 25-item ECQ to validate the measure and identify nine theoretical climate types. The authors sampled working MBA students (n=75), faculty from various departments and colleges of a university (n=25), military personnel

(students enrolled in a service-sponsored MBA program) (n=29), and managers from a multi-state trucking firm (n=17). Using factor analysis, the authors identified six of the nine theoretical EWCs.

These findings lend support to the authors' framework because different EWCs emerged across sub-samples. Interestingly, EWCs for the sample of MBA students had very low consistency compared to the other sub-samples. This led Victor and Cullen (1987) to conclude that a sample consisting of employees from multiple organizations (without aggregating by organization) was not a valid predictor of ethical climate. This fact is frequently disregarded by ethical climate researchers who use multiple organization samples without aggregating.

Shortly after, Victor and Cullen (1988) published a follow-up study to re-validate the measure and assess whether EWCs within organizations differed by position, tenure, and workgroup membership. The sample consisted of a small printing company (n=33), a savings and loan (n=450), a manufacturing plant (n=500), and a local telephone company (n=200) (Response Rate (RR): 74%). The authors used the 1987 ECQ with the exception of adding one descriptor and changing the wording of several other descriptors (e.g. one of the negatively worded items was changed to a positively worded item). This time, factor analysis revealed five distinct EWCs.

Results confirmed the existence of different EWCs across sub-samples. However, factor loading for this version of the ECQ differed from those of the first study (Victor & Cullen, 1987). Also, efficiency descriptors were particularly unstable. Victor and Cullen interpreted these findings to be the result of the sample composition and concluded that the efficiency EWC was more embedded in a manufacturing plant than another organization type.

In 1993, Cullen, Victor and Bronson conducted a third study to validate a newly revised version of the ECQ (36 items, four descriptors for each one of the nine theoretical EWCs) on a sample of four accounting firms (N= 149). The new 36-item ECQ included 26 items from the 1988 ECQ (with small changes in the wording of several items) and ten newly developed items. Factor Analysis revealed 27 usable items and revealed seven distinct climate types. Four of the newly developed items loaded on the “social responsibility” factor, an EWC never identified before.

After comparing results from the three studies (Cullen, Victor & Bronson, 1993; Victor & Cullen, 1987, 1988) Cullen et al. (1993) concluded that EWCs at the organizational level were less stable than at the individual level. They interpreted this to be the result of the small number (n=4) of organizations versus individuals (n=1,167) surveyed across the three studies. Cullen and colleagues called for more research to sample and analyze larger numbers of organizations and to validate the ethical climate at the organizational level. Also, while these studies support the existence of different EWCs, the ECQ seems to include unstable descriptors that do not consistently load on the same factor. As a result, the emerging factor structure differs from one study to the next (see Appendix A, Figure 2, Figure 3, and Figure 4).

Validity of the ECQ

The EWC studies that used the ECQ reported multiple factors and varying factor structures. Several of those studies report more in depth on the validity of the ECQ and its emergent factor structure. These studies will be discussed below.

Vaicy and Barnett (1996) evaluated the factor structure of the 1993 ECQ using a sample of 1,000 members of the American Marketing Association (RR=20.7%). Factor analysis of the

36 descriptors yielded six EWC dimensions defined by only 26 of the items. These EWCs were labeled team spirit, rules and code, social responsibility, self-interest, efficiency, and personal morality. Again, various of the ECQ descriptors did not load according to theoretical predictions. Four of the EWCs, social responsibility, self-interest, efficiency, and personal morality, concurred with climates identified by Victor and Cullen. Two additional climates, team spirit and rules and codes were composed of the remaining ECQ descriptors. None of the items from the company profit climate loaded on any of the six factors.

Treviño, Butterfield and McCabe (1998) conducted a field study to assess convergent and divergent validity of two related constructs, ethical culture and EWC, using a sample of 1200 alumni from two private colleges who worked across various industries and organizations (RR=27%). EWC was operationalized using the 1988 ECQ and ethical culture was operationalized using an ethical culture questionnaire developed for this study. The measures includes 8 ethical culture factors: the extent to which (a) norms support ethical conduct, (b) ethical behavior is rewarded, (c) unethical behavior is punished, (d) organizational leaders act as models of ethical conduct, (e) organization leaders act as models of ethical conduct, (f) employees are expected to obey authority figures without question, (g) employees report unethical behavior when it occurs, and (h) peer behavior. Factor analysis of the ECQ and the ethical culture items revealed ten factors, from ethical culture items and seven from ethical climate items. Results support discriminant validity of the two constructs, yet also suggests that EWC and ethical culture are strongly related.

More recently, Peterson (2002a, 2002b) searched for the best fitting model from five different factor models that had emerged across various EWC studies (Agarwal & Mallow, 1999; Cullen, Victor & Bronson, 1993; Treviño, Butterfield, & McCabe, 1998; Vaicys et al., 1996;

Victor & Cullen, 1987, 1988; Wimbush, Shepard, & Markham, 1997a). The author randomly selected 700 alumni from a business school (RR=29%) between 1983 and 1995. Confirmatory factor analysis revealed the original nine-factor model (Victor & Cullen, 1987) to be the best fitting one. While Peterson noted problems with the factor structure (e.g. descriptors did not load on the factors) as predicted, the data that emerged reveal distinct EWCs within and across organizations.

Wimbush, Shepard and Markham (1997a) assessed the multi-dimensionality of EWC in organizations using a sample from a broader study on ethics of employees in a national, multiple operating unit, retail, commissioned-sales organization. Of the 4,400 surveys sent to employees of three organizational subunits 639 were returned (RR=14%). Ethical climate was measured using the 1988 ECQ. The authors identified three of the factors identified by Victor and Cullen (1988), including the laws and rules, independence, and instrumental EWCs. One other never before identified factor, labeled service EWC, emerged in this study as the most dominant EWC for the organization. Findings lend only partial support to the hypothesis that different organizational units are characterized by different EWCs.

Research using the ECQ reveals the existence of different EWCs and generally supports its validity. Nevertheless, several issues are of concern, including the inconsistent factor structure and incorrect use of the measure (sampling multiple organizations without aggregating). These issues will be discussed in more detail later.

A Weather Report: Empirical Research Evidence

A review of all empirical studies published on EWC over the last 17 years reveals that the construct has been studied in various contexts assessing a multitude of diverse relationships. I

critically analyzed these studies to identify key concepts that have been related to EWC. This approach allowed me to better assess what we know and don't know about the construct. The empirical investigation of the EWC began with the study of its antecedents. This stream of research began with the investigation of the contextual influences that attribute to the emergence of distinct EWCs.

Contextual Influences on EWC

The context of the organization, such as the characteristics of the organization, social norms, and cultural norms, has led to some interesting findings that warrant a more in depth discussion.

Characteristics of the organization

EWCs have been studied in the context of manufacturing, service, for profit and not-for-profit organizations findings reveal some consistencies across organizational forms. Victor and Cullen (1988) first suggested that the form of the organization affected the emergence of specific EWCs. They sampled four organizational forms including a small printing company (n=33 employees), a savings and loan (n=450 employees), a manufacturing plant (n=500 non-union employees), and a local telephone company (n=200 managers) (RR=74%) to compare EWCs by organization and found the law and code climate to be the dominant EWC in the savings and loan and manufacturing plant.

Victor and Cullen (1988) interpreted these findings using transaction-cost theory and bureaucratic theory. Ouchi (1980), who proposed transaction-cost theory, identified three organizational transaction forms: markets, bureaucracies, and clans. Markets are characterized by price mechanisms, bureaucracies by norms of reciprocity and legitimate authority, and clans by

common values and traditions enforced by reciprocal monitoring of group members. Costs of transactions increase when organizations move from market structures to clan structures as a result of increasing difficulty in assessing exchanges between the individual and the group. Based on this theory, Jones (1983) suggested that market structures would be characterized by more instrumental behaviors. As transactions become more complex, bureaucratic structures emerge characterized by rules and policies. Highly specialized organizations (clans) are characterized by shared norms and values. Hence, the savings and loan, telephone and manufacturing operations represent market structures and should be characterized by a rules or law and code type of EWC.

Bureaucratic theory (Blau, 1970) may be another reason for the emergent factor structure. The theory predicts a relationship between the normative and technological/structural characteristics of an organization. For example, structural differentiation increases the problem of coordination and control. Rules or law and code EWCs in geographically separated subsidiaries, such as savings and loans, bank branches, and manufacturing organizations, may substitute personal control by management and increase centralized decision-making.

EWC studies of manufacturing plants (Vardi, 2001; Victor & Cullen, 1988) and financial institutions, including savings and loans, and bank branches (VanSandt & Shepard, 2003; Victor & Cullen, 1988; Weber, 1995, Weber & Seger, 2002) support transaction cost theory and bureaucratic theory explanations and revealed dominant rules or law and code EWCs for those organizational forms.

Nevertheless, contradictory evidence exists. Wimbush, Shepard and Markham (1997a) directly assessed the influence of different forms of organizational governance and control as defined by Ouchi (1980) on the emergence of EWCs. The data was derived from a broader study

on ethics of employees in a national, multiple operating unit, retail, commissioned-sales organization. Surveys were sent to 4,100 employees in 440 retail stores (market), 200 employees at the central office (bureaucracy), and 100 employees at each one of the customer credit offices (clan). A total of 628 surveys were returned from 525 retail store employees, 50 credit center employees, and 64 central office employees. The authors identified four EWCs labeled law and rules, independence, service, and instrumental EWCs.

Against expectations, the law and rules EWC had the highest mean score for the customer credit offices, a clan structure, instead of the hypothesized independence or caring EWC. Also, the service EWC had the highest mean score for the stores, a market structure, instead of the hypothesized instrumental EWC. These findings directly contradict expectations from transaction cost and bureaucratic theory

The EWCs of manufacturing plants

Some inconsistencies with regard to EWCs of manufacturing plants have surfaced, too. For example, VanSandt and Shepard (2002) studied seven organization types including a manufacturing plant. The plant, a market structure, was characterized by a dominant self-interest EWC instead of the predicted/expected rules or law and code EWC.

Weber (1995) offered an alternative explanation for the link between structural characteristics and EWCs. He used Thompson's model (1967) to predict that departmental tasks and stakeholder relationships influence and contribute to the appearance of specific EWCs. Thompson distinguished three department types based on the functions they served in the organization and their relationships to the external environment. The technical core departments serve basic production activities of the organization and are the most protected from external influences, shielded by the buffer departments. The buffer departments surround the technical

core and enable the technical core to function efficiently. These departments are specialized to perform customized tasks and service the entire organization. They are accountable to multiple stakeholders. The boundary-spanning departments are concerned with reducing uncertainty in the external environment and link the organization with external environment individuals and groups.

Weber explored the effect of these three types of departments using the 1987 ECQ on a sample of 167 employees from seven departments of a large Midwestern financial institution: (1) technical core department: 33 employees from large processing department (RR=83%), (2) buffer department: 73 employees from systems development, information service and technical writing departments (RR=96%), (3) boundary-spanning department: 56 employees from commercial lending, branch banking, and business services departments (RR=90%). Results support the hypotheses that technical core departments are characterized by instrumental EWCs, buffer departments by caring EWCs, and boundary-spanning departments by law and code EWCs.

Nevertheless, Weber and Seger (2002) were unable to replicate these findings in a longitudinal study using a sample of a U.S. based steel manufacturer. In 1995, the authors collected surveys from 106 employees from five departments including 45 employees (RR=84%) from the engineering and maintenance departments (technical core), 45 employees (RR=90%) from the relations and computer support departments (buffer), and 15 employees (RR=94%) from the purchasing department (boundary-spanning). The second sample in 1999 included 223 employees from eleven departments including 91 employees (RR=92%) from the water processing, mechanical, hot mill operations, coal mine operations, and coal mill maintenance departments (technical core), 117 employees (RR=95%) from structure repair, electrical, system

process, and last furnace management departments (buffer) and 15 employees (RR=94%) from the customer sales department (boundary-spanning). The authors used the 1987 ECQ, yet modified it to include a ranking procedure. Weber (1995) noticed that respondents seem to have a tendency to rate a majority of the value statements included on the questionnaire very high. Therefore, Weber and Seger forced respondents to differentiate between their preferences for value statements, to minimize the effects for any social desirability biases.

Findings were mixed and rather discouraging. The first sample (1995) revealed a link between the technical core departments and the instrumental EWC; these findings were replicated in 1999. Nevertheless, the other departments revealed mixed or no statistically significant results. For example, buffer departments exhibited more instrumental EWCs instead of the predicted law and code EWC. The second sample (1999) showed a dominant instrumental EWC in the technical core (except for the water processing department which was more caring), three of the five buffer departments (the two others exhibited dominantly caring EWCs), and the boundary-spanning department.

Weber and Seger (2002) attributed these unexpected findings to industry specific differences since Weber (1995) had collected data from the finance industry and Weber and Seger (2002) had collected data from the steel industry. Also, it is possible that the organization's overall ethical climate may be more indicative of the ethical sub-climate than departmental tasks.

The EWCs of service organizations

Empirical support linking service organizations to one dominant EWC has been mixed, too. Findings from studies of retail stores appear to link those organizations to service EWCs. For example, Wimbush et al. (1997a) found the highest mean for retail stores to be a service

EWC and VanSandt and Shepard (2003) found the dominant climate for a grocery store to be a service EWC. Wimbush et al. attribute these findings to the form of organizations and explained that service organizations seem to be using utilitarian bases for ethical decision-making.

Other studies of EWC from the lodging industry do not lend clear support to the link between service organizations and service EWC (Upchurch & Ruhland, 1995, 1996; Upchurch, 1998). The first two studies (Upchurch & Ruhland, 1995, 1996) employed the 1988 ECQ and a sample of 207 lodging operations from Missouri ranging from budget service to full service hotels (RR=31%). The authors found that the benevolence criteria dominated other EWC criteria and that the local level of analysis dominated other levels of analyses. Benevolence criteria are representative of utilitarian decision-making. Hence, these two studies further suggest that service organizations, e.g. lodging operations, have dominant service EWCs.

However, when Upchurch (1998) sampled 1500 bed and breakfast/country inn operations (RR=40%), he found these organizations to employ predominantly egoistic ethical criteria. Upchurch interpreted these counterintuitive findings to be sample specific. The dominant egoistic ethical criteria that emerged for bed and breakfast and country inn operations may be due to the fact that these organizations are generally owner operated and these owners may focus more on their self-interest. Managers of limited and full-service lodging operations are agents of a larger organization and are not primarily motivated by self-interest but a focus on providing service to customers and the organization.

Upchurch's (1998) explanation reminds us of agency theory. Agency theory differentiates between interest of the owner and the employee, the agent, of an organization. Following Upchurch's suggestion, agents may be more motivated by benevolence and utilitarian bases of ethical decision-making while owners may be more motivated by self-interest.

However, more theory development and research is needed to explain how agency theory may explain the emergent EWC factor structure.

EWCs of not-for-profit organizations

Findings for dominant EWCs of not-for profit organizations appear to be more consistent than those for other forms of organizations. Not-for-profit organizations generally reflect higher benevolence factors and more caring EWCs than for-profit organizations. For example, Agarwal and Malloy (1999) assessed the EWC structure of a not-for-profit organization using a sample of 148 members (mostly executives, technical directors, board of directors, and coaches) of a provincial sport federation in Canada (RR=37%). They used a slightly modified version of the 1988 ECQ to fit the context of a provincial not-for-profit business organization. Factor analysis revealed five usable factors labeled individual caring (personally concerned for the well being of the individual), machiavellian (competitive and careerist environment where the strongest survive), independence (individual freedom and responsibility in the organizational setting), social caring (organization concerned with the welfare of the commonwealth and not just its own survival) and law and code (structured, driven by formal policy and procedure). Results revealed a more discriminating perception of a benevolence climate in not-for-profit companies than in for-profit companies. Malloy and Agarwal (2001) confirmed these findings in a later study.

Also, Brower and Shrader (2000), who investigated differences in moral reasoning and ethical climate between not-for-profit and for-profit board members, found evidence to support findings by Agarwal and Malloy (1999). They sampled 38 board members representing six for-profit organizations (RR=60%), and 136 board members representing seven not-for-profit organizations (RR=44%). The authors used a slightly modified version of the 1988 ECQ and

extracted three factors, which agree with the three ethical criteria – egoism, benevolence, and principled - developed by Victor and Cullen (1987).

The EWCs for the two boards were significantly different. For-profit-boards had climates higher in egoism than not-for-profit boards. Not-for-profit boards reflected higher benevolence factors and had somewhat higher mean scores on the principled factor than for-profit boards.

Nevertheless, contradictory evidence was provided by Deshpande (1996), who studied the impact of ethical climate on various facets of job satisfaction using a national sample of 252 middle level managers (RR=82%) from a large not-for-profit charitable organization. The author identified six EWCs including professional EWC (mean = 3.79), rules EWC (mean = 3.14), instrumental EWC (mean = 2.73), caring EWC (mean = 2.66), independence EWC (mean = 2.26), and efficiency EWC (mean = 2.06). These mean scores reveal a more dominant professional EWC for not-for-profit organization versus the hypothesized dominant caring EWC.

Also, Joseph and Deshpande (1997) who examined the impact of ethical climate types on different aspects of job satisfaction using a sample of 226 nurses (RR=50%) of a large not-for-profit private hospital. The authors modified the 1988 ECQ using one EWC descriptor for each one of the six climates including professionalism, caring, rules, instrumental, efficiency and independence. Most of the respondents identified a professional climate followed by a rules, caring, instrumental, and independence EWC (the efficiency climate was not identified). Again, results contradict prior evidence that not-for-profit organizations are characterized by a dominant caring EWC.

In summary, researchers have been intrigued by the proposition that the emergence of EWCs could be related to specific structural characteristics of the organization. While this link has face validity, findings are mixed and do not consistently support explanations for linking

EWCs with specific characteristics of the organizations. For example, transaction cost theory (Ouchi, 1980) and bureaucratic theory (Blau, 1970) offer reasonable explanations for dominant rules or law and code EWCs in retail stores and manufacturing plants. However, contradictory evidence linking retail organizations more strongly to service or caring EWCs and manufacturing plants to instrumental or self-serving EWCs give reason to question transaction cost theory and bureaucratic theory explanations.

Nevertheless, there is little doubt that the EWC is related to the context in which it emerges. However, the nature of the relationship is still unclear. It appears that various contextual factors or combinations of factors are accountable for the emergence of dominant EWCs. Using alternative methodology, Verbeke, Ouwerkerk and Peelen (1996) explored the effect of various factors, including contextual and individual factors, on ethical decisions of sales people. Results showed that ethical decisions are influenced by a combination of factors including organizations structure, climate, and personality traits of individuals.

Also, factors more directly related to the immediate operation of the specific organization under investigation, such as whether the organization is undergoing change such as restructuring, mergers or acquisitions may be more reliable predictors of EWC. For example, Victor and Cullen (1988) attributed differences in caring climate across job levels to firm specific factors because interviews with top managers revealed that recent management firings had inhibited the development of a more caring climate for managers. Also, the lower rule emphasis at the manufacturing plant was attributed to the reorganization shortly before the study. This seems to be reasonable, since organizational climate is a rather temporal, more volatile phenomenon. We should expect that changes - long-term, short-term, or temporal - in the organization's

environment affect the EWC. Morris and colleagues (Morris, 1997; Morris, Schindehutte, Walton & Allen, 2002) have begun to look at this.

Morris (1997) introduced a research program looking at specific characteristics of the organization, such as stakeholder management devices (SMDs) and their effect on EWCs. SMDs are means for a firm to meet its responsibilities to stakeholders including ethics committees on board of directors, written codes of ethics, and corporate sponsorship of community affairs. Morris sampled 500 individuals from Who's Who in HR (RR=22.4%) to collect data on two of the EWCs, caring and law and code, using those descriptors from the 1988 ECQ. Results suggest that an organization's SMDs affect the perceived EWCs of the organization as well as managers' expectations of the consequences of good corporate social performance.

More recently, Morris et al. (2002) proposed and tested a model for assessing the ethical context of entrepreneurship. The authors proposed that interlinking factors including the entrepreneur's psychological profile (nature of the entrepreneur), lifecycle stage of the business, and descriptive characteristics of the venture (nature of the venture) influenced the firm's environment for ethical decision-making, which in return would influence the perceptions of ethical norms and standards. Furthermore, the authors proposed that the implementation of ethical structures would impact perceptions of the clarity and adequacy of the ethical standards of the firm and the firm's preparedness to deal with ethical challenges. Morris and colleagues sampled 800 businesses with 500 or fewer employees identified by the Ohio Chamber of Commerce Industry Directory (RR=28.4%) and used a set of four descriptors from the 1987 ECQ to assess the importance of ethics within the firm, including ethical perceptions and norms. Factoring the four items on values and ethical issues produced a single-factor solution (one item was deleted because of a poor loading, and another due to low item-total correlation).

Four distinct clusters of firms, representing four distinct growth stages along a continuum emerged (more ethical ↔ less ethical). Superlatives placed a priority on ethics. Deficients were at the other end of the continuum, defining firms that lacked in almost every area. Managers in these firms did not view motivating ethical behavior as a function of their job responsibility. The Core Proponents and the Pain and Gain companies were between the two continuums. The Core Proponents pursued basic and more formal elements of ethics. The Pain and Gain companies differed from the Core Proponents because they did not provide ethics codes, value statements, or ethics training. Yet, they reinforce the more interventionist types of activities.

I call on researchers to continue this endeavor and identify other characteristics of the organizations such as whether the organization is going through a merger or acquisition, whether it is foreign based or U.S. based, and the size of the organization. Obviously we cannot simply link a certain organizational structure or form of organization with a dominant EWC.

Cultural and social norms

Other factors besides structural characteristics of the organization affect the EWC, too. Victor and Cullen (1988) first noted that the dominant law and code EWC of the savings and loan most likely reflected the regulated environment in which the company operated. They inferred that one source of ethical climate in an organization seemed to be the socio-cultural environment of the organization. Further evidence for the influence of socio-cultural norms has been found by Bourne and Snead (1999). They sampled 343 employees from 32 companies in the southeastern U.S. For this study, the authors developed a 36-item survey to assess ethical perceptions of workers along multiple dimensions including determinants of ethical values, workplace fairness, issues involving one's position within the organization, general organizational climate and the general ethical climate existing in today's business environment.

Results indicated that the existence of a community-based micro-culture potentially moderates an organization's ability to create homogeneous organizational ethical cultures.

The emergence of EWCs also seems to be influenced by country differences. For example, it appears that the rules and code EWCs are the most common EWCs in Israel and Russia (Rosenblatt & Peled, 2002; Vardi, 2001; Desphande, George & Joseph, 2000). Also, EWC appears to have different effects on employees according to their cultural backgrounds (e.g. Herndon, Fraedrich, & Yeh, 2001).

Vardi (2001) studied the relationship between selected personal and organizational attributes and work related misbehavior (intentional acts that knowingly violate organizational norms) using a sample of 97 employees (RR=70%) of an Israeli metal production plant. The author adopted a translated version of the 1988 ECQ, and identified only three EWCs including a dominant law and code climate (labeled rules and regulations, mean=3.43), followed by an instrumental climate (mean=2.99), and a caring climate (mean=2.88). Organizational climate and EWCs were significantly related with organizational misbehavior such that activities of misbehavior reported by managers and employees were negatively related to rules, instrumental, and caring EWCs. This lead Vardi to conclude that employees, who strongly perceive ethics in terms of behavioral guidance will report lower organizational misbehavior.

Rosenblatt and Peled (2002) investigated the effect of school ethical climate on parental involvement (cooperation-based and conflict-based). Perceived parental influence, trust and parental socioeconomic (SES) level were hypothesized to mediate the relationship. The sample included 157 teachers and 936 parents (516 from high SES schools and 420 from low SES schools) from 20 elementary schools in Israel. The authors used the 1988 ECQ to assess teachers' perceptions of the schools' ethical climate. Factor analysis revealed 5 factors, of which

only the two dominant ones, rules and code and caring EWC, were used in this study. Influence was assessed measuring the parents' perception of their influence, and organizational trust was assessed measuring parents' perception of their trust in the school using the organizational trust inventory (Cummings & Bromiley, 1996).

Results revealed that a climate characterized by rules and professional codes was more common and more strongly related to parental involvement than a caring climate. The Israeli schools apparently emphasize the values of being law abiding, and adhering to bureaucratic rules and procedures, more than the value of caring. Trust did not correlate with either one of the EWCs. The rules and code EWC was negatively and weakly correlated with both types of involvement and only with cooperation-based involvement for the high SES group. Caring EWC did not correlate with either one of the involvement types, but did correlate negatively and weakly with cooperation-based involvement for the low SES group.

Structural equation modeling revealed that the two EWCs contributed to parental involvement through the mediation effect of perceived influence and trust. High SES parents exhibited less overall involvement (cooperation and conflict) in schools affiliated with rules and code EWCs. Low SES parents in a dominant rules and code EWC displayed less conflict based involvement, mediated by influence and trust. Low SES parents in dominant rules and code EWCs displayed higher cooperation based involvement mediated by influence only. Low SES parents, in high caring EWCs, displayed higher conflict based involvement and lower cooperation based involvement. The authors concluded that high SES parents were less involved than low SES parents when the school climate was perceived as more ethical.

Deshpande, George, and Joseph (2000) studied the relationship between ethical climate and behaviors believed to characterize successful Russian managers. The sample included 200

managerial employees (RR=68%) of state run educational, research and scientific institutes in the Sakha Republic of Russia. The authors used the 1988 ECQ and identified four ethical climates including the rules climate (89% of respondents identified this climate), the instrumental climate (57%), the efficiency climate (53%), and the independence climate (45%). The ethical optimism scale was used to determine the extent of perceived ethical behavior by successful managers. A high score on the scale was interpreted as the presence of a link between ethics and success and a low score was interpreted as the absence of the same. The authors found that those who believed that their organization had a caring climate perceived a strong positive link between success and ethical behavior and those who believed that their organization had an instrumental climate perceived a strong negative link between success and ethical behavior. They concluded that a stronger link between ethics and success emerged when respondents perceived greater levels of caring and lower levels of instrumentality in decision-making. No other ethical climate type was related to ethical optimism. Also, three out of four respondents indicated that successful managers in their organization withheld information that was detrimental to their self-interest.

Herndon, Fraedrich and Yeh (2001) conducted a study to assess Person-Organization ethical value congruence (congruence of individual's moral values and perceived ethical content of the corporate culture) and its affect on employee satisfaction, commitment and turnover intentions using a sample of Taiwanese and U.S. sales people. Individual moral development was assessed using the Reidenbach and Robin (1988) scale and corporate ethics was assessed using the 1988 ECQ. For the purpose of testing the ethical value congruence, the authors classified people into three groups: high/low individual moral values, high/low perceived corporate ethics and groups matched/mismatched between individual moral values and perceived corporate

ethics. Contrary to the hypotheses, the authors did not find that congruence between individual moral values and the perceived ethical content of the corporate culture influenced organizational commitment or job satisfaction. There was only partial support for the hypothesis that congruence between individual moral values and the perceived ethical content of the corporate culture influenced turnover intentions because turnover intentions between sales people in match/mismatch groups was significant and sales people in the matched group had less tendency to leave the organization than those in the mismatched group. It is noteworthy, that in the U.S., a high level of corporate ethics perception seems to have a positive effect on an individual's moral values and may result in decreased turnover, increased satisfaction and increased commitment. Nevertheless, in Taiwan, a high level of perceived corporate ethics does not seem to influence employees' moral values, job satisfaction, or turnover intentions directly.

Singhapakdi and colleagues (2001) assessed the importance of ethics and social responsibility using a sample of marketing professionals from Australia, Malaysia, South Africa, and the USA. The authors proposed that country differences, organizational ethical climate and selected demographic characteristics (age and gender) should explain differences in perceptions regarding importance of ethics and social responsibility as determinants of organizational effectiveness. The authors use Hofstede's (1980) typology to explain that cultural dimensions contribute to differences in the perceived importance of ethics and social responsibility, yet they did not suggest how the typology may affect the emergence of different ethical organizational climates. Ethical climate was assessed using a 5-item corporate ethical value scale (CENS) developed by Hunt et al. (1989). The scale was originally designed to reflect a composite of the individual ethical values of managers and both the formal and informal policies on ethics of the organization. Results support gender differences, but not age differences in the perceived

importance of ethics and social responsibility in achieving organizational effectiveness. Country differences exist in the perceived importance of ethics and social responsibility in achieving organizational effectiveness. Also, the organization ethical climate positively influences managers' perceived importance of ethics and social responsibility.

In summary, initial findings support that country differences exist and affect the emergence of ethical work climates. However, much more work needs to be done to identify the cause(s) of these differences. These causes should be based in theory. For example, Hofstede (1980) defined various explanations for country and culture differences. He defined collectivist cultures, such as Asian and South American cultures, as peer oriented. Hence, we could anticipate that these cultures would use EWCs grounded in utilitarian and benevolence ethical decision-making. I encourage researchers to use Hofstede's cultural dimensions and other theories to hypothesize and assess culture specific influences on the emergence of EWCs.

The Influence of Demographic Characteristics on EWC

Few empirical studies investigated demographic characteristics and their effects on the emergence of EWCs, even though demographic variables such as age, gender and education have been found to affect ethical attitudes, judgments and behaviors (e.g. Kohlberg, 1981; Rest, 1979, 1994). Nevertheless, no one of these variables has been consistently related to moral characteristics or the ethical climate of the organization. Victor and Cullen (1988) were the first to find that tenure affected the emergence of ethical work climates. Except for a few employees, perceptions of a caring climate increased with tenure. The authors interpreted this to indicate a perceived feeling of fit between employees and their organizations for longer tenured individuals.

Luther, DiBattista, and Gautschi (1997) studied ethical attitudes and perceptions of 691 undergraduate seniors and freshmen in a college of business. Ethical climate was defined as ethical attitudes. The authors used a newly developed 20-item survey to assess ethical attitudes in two different ways: (1) student perceptions of what the current ethical climate is, and (2) what the ideal ethical climate should be. The authors found that female subjects generally had a more favorable attitude towards ethical behaviors than males.

Nevertheless, Upchurch and Ruhland (1995, 1996) did not find any significant overall relationship between the demographic variables of gender, years of management experience, and education level.

In summary, it is apparent that findings with regard to the influence of demographic variables on the emergence of EWC is mixed. I call on researchers to further investigate these relationships and inform us about demographic factors that affect the emergence of EWC.

Supervisor Influence on The Emergence of EWCs

Some theories have emerged discussing the effect of leaders and supervisors on the emergence of ethical climate. For example, Dickson and colleagues (2001) argued that the ethical climate of the organization is an outgrowth of the personal values and motives of organizational founders and other early leaders. Wimbush and Shepard (1994) developed a “continuance” model of ethical climate where supervisors are proposed to moderate the relationship between organizational policies and procedures and the emergence of different EWCs. Nevertheless, neither one of these theories have been empirically validated. Many studies sample leaders, yet they do not assess the leader’s influence on the emergence of EWCs or vice versa.

The only study directly assessing the effect of leaders on EWCs was conducted by Malloy and Agarwal (2001). The authors used the theory of social modeling/differential association (Bandura, 1977) and role-set configuration (Merton, 1957) to assess the influence that leaders have on the perception of ethical climate in a Canadian not-for profit organization. They predicted that the frequency of interaction with supervisors would not influence ethical perceptions in not-for-profit organizations because the locus of analysis dimension of EWCs for those organizational forms was individual or cosmopolitan. Yet results did not support their predictions. Frequency of interactions with leaders influenced the perception of climate in a negative manner, such that the only climate dimension identified was oriented toward self-serving and careerist (Machiavellian). The authors explained that maybe members' perceptions of increased interaction with leaders lead to controlling and manipulative behavior. Furthermore, if members identify their locus of analysis as personal or cosmopolitan, it may be that leaders who gear behaviors in terms of local-based interactions may be perceived as using an inappropriate style of leadership for the not-for-profit context. The authors conclude that leadership in not-for-profit environments should re-assess management strategies that may be based on for-profit environments and move toward behaviors that are more consistent with what could be a unique paradigm of the not-for-profit organizations. However, the behavior of the leader did not affect the perception of ethical climate at all.

Koh and Boo (2001) indirectly assessed the influence of leaders on EWC. They investigated the effect of ethical climate on various facets of job satisfaction moderated by top management support for ethical behavior. The authors found that top management support is necessary for ethical climate to affect job satisfaction. This suggests that top management can make a difference by creating ethical organizations.

In summary, while several studies have used leader samples (e.g. Barnett & Schubert, 2002; Mallow & Agarwal, 2001; Brower & Shrader, 2000; Koh & Boo, 2001; Elm & Nichols, 1993; DeConinck and Lewis, 1997) only two studies have assessed the influence of leaders on the emergence of EWCs. Most of the other studies examine the influence of EWC on leader's decision-making and behavior. Hence, the support for the influence of EWC on leader behaviors and decisions remains rather mixed. I call on researchers to take advantage of existing theories (e.g. Dickson et al., 2001; Wimbush & Shepard 1994) or develop new theory to further investigate the relationship between EWC and leaders including leader behaviors, decisions, and attitudes.

In the previous section, I discussed the antecedents of EWCs studied since the emergence of the EWC theory developed by Victor and Cullen (1987). Since then, researchers have also begun to investigate the effect of EWCs on organizational outcomes such as employee attitudes and behaviors. These studies will be discussed in the following section.

The Influence of Ethical Value Congruence on Organizations and Employees

Schneider (1972) suggested that congruence between the values of the organization and its employees positively influenced employee attitudes and performance. The effect of *ethical* value congruence on organizations and their employees was first discussed by Victor and Cullen (1988). The authors suggested that longer tenured employees perceived a fit between their ethical values and the EWC of the organization and that this link positively affected other organizational outcomes. Since then more evidence supporting these relationships has emerged.

The first study to directly assess the effect of Person-Organization (P-O) ethical value congruence on organizational commitment, job satisfaction and turnover intentions was

conducted by Sims and Kroeck (1994). They sampled 94 full-time, first shift employees (RR=70%; 88% female) of five different departments of a medium-sized hospital. P-O ethical value fit was measured matching employees' preferred and actual EWCs. Preferred EWC was assessed using a modified version of the 1988 ECQ: 15 EWC descriptors, three for each one of five EWCs including the instrumental, caring, law and code, rules and independence climates. Respondents were instructed to think about their preferred EWC when answering the questionnaire. Actual EWC was assessed using the same modified version of the ECQ but respondents were asked to think about their current (instead of their preferred) EWCs.

Factor analysis resulted in five EWCs including the instrumental, caring, law and code, rules and independence climates. Strong positive correlations between the employees' preferred and present EWCs lead the authors to conclude that these employees currently worked in an environment with EWCs similar to their ethical values. The authors found that the absolute differences between employees preferred and actual EWC decreased with tenure, except for the instrumental EWC. This climate had a positive relationship with tenure. Sims and Kroeck explained these counterintuitive findings to be the result of the longer time it takes employees to discover the extent of the instrumental climate.

Findings were somewhat mixed for the effect of P-O ethical value fit on attitudinal outcomes. The absolute difference between preferred and present EWCs was not significantly related to turnover intentions except for the independence climate. Affective commitment was significantly related to the absolute difference in caring and independence EWC and continuance commitment was significantly related to the absolute difference in instrumental EWC.

In 1997, Sims and Keon conducted a follow-up study collecting data from 98 working business students (RR=88%) from two different universities. They assessed the effect of P-O

ethical value congruence on organizational commitment and job satisfaction. P-O ethical value fit was measured using the same methodology from Sims and Kroeck (1994). The authors identified five EWCs including the instrumental, caring, law and code, rules and independence climates. The hypothesis that individuals are most attracted to organizations which display ethical values similar to their own was based on the assumption that individuals at higher stages of moral development would prefer principled EWCs and individuals at lower stages of moral development would prefer instrumental EWCs. This hypothesis was only supported for the instrumental EWC.

Results also indicated that as absolute differences between preferred and present EWCs increased, satisfaction was lower in all cases, except the law and code EWCs and independence EWCs. As absolute differences between preferred and present EWCs increased, satisfaction was lower, except for the law and code or independence climates, which were not significantly correlated with satisfaction. No significant relationship between the absolute differences in any of the five climate areas and intentions to turnover was found.

Arnaud, Ambrose and Schminke (2002) conducted a similar study to assess the effect of P-O fit on organizational commitment, job satisfaction and turnover intentions. They sampled 73 organizations using 5 to 25 surveys per organization (RR=73%). Employees' individual level of moral development was assessed using the DIT (Rest, 1979) and the EWC of the organization was assessed using the 1988 ECQ. Arnaud and colleagues collapsed EWCs across loci of analysis and confirmed the existence of three EWCs in accordance with the three ethical criteria: instrumental, caring (Victor and Cullen's (1987) benevolence EWC), and independence (Victor and Cullen's (1987) principled EWC). P-O ethical value fit was determined matching

employees' moral development with corresponding EWCs. Data was aggregated by organization to identify dominant EWCs across organizations and EWC differences between organizations.

The authors found strong support for the hypotheses that P-O ethical value fit was related to higher levels of affective commitment (not normative commitment), and partial support for a link between P-O ethical value fit and satisfaction. Employees were more satisfied with their jobs when there was a better fit between their level of moral development and a caring ethical climate. The authors found only moderate support that P-O ethical value fit resulted in lower employee turnover intentions.

These studies linking P-O ethical value congruence to attitudinal outcomes show mixed results, yet overall support a positive relationship between P-O ethical value fit and satisfaction and affective commitment and a negative relationship between P-O ethical value fit and turnover intentions. However, this relationship does not appear to hold across cultures.

Herndon, Fraedrich and Yeh (2001) assessed P-O ethical value congruence for Taiwanese and U.S. sales people. For the purpose of testing the ethical congruence hypotheses, the authors classified people into three groups: high/low individual moral values, high/low perceived corporate ethics and groups matched/mismatched between individual moral values and perceived corporate ethics. Contrary to the hypotheses, the authors did not find that congruence between individual moral values and the perceived ethical content of the corporate culture influenced organizational commitment or job satisfaction. Also, there was only partial support for a link between P-O value congruence and turnover intentions because turnover intentions between sales people in match/mismatch groups was significant and sales people in the matched group had less tendency to leave the organization than those in the mismatched group.

While these inconsistent findings may be related to the alternative methodology used by the authors, they warrant further investigation. It is possible, that P-O ethical value fit is important for U.S. employees, yet it may not influence employee attitudes in other cultures. Also, P-O ethical value fit may be less important for sales people in general compared to employees in other professions. We need to conduct more studies to identify whether P-O ethical value fit is culture specific or job specific. Furthermore, studies have emphasized a link between P-O ethical value fit and attitudinal outcomes, yet we do not know whether this relationship will translate to behavioral outcomes such as illegal behavior (e.g. stealing) or lying and aggressive behavior of employees.

The Influence of EWCs on Employee Attitudes

As discussed, studies of the effect of P-O ethical value congruence on attitudinal organizational variables offer mixed support (Arnaud et al., 2002; Herndon et al., 2001; Sims & Keon, 1997; Sims & Kroeck, 1994). For example, evidence reveals a strong support for the link between P-O ethical value fit and affective commitment but not normative commitment. Also, the effect of P-O ethical value congruence on satisfaction and turnover intentions has been rather mixed.

Evidence from research on the direct link between EWC and attitudinal outcome variables supports these results. In 2001, Schwepker studied the effect of ethical climate on job satisfaction, organizational commitment, and turnover intentions using a sample of 314 sales people from 33 organizations (RR=48.4%). Ethical climate was assessed using a measure of perceived ethical climate based on the work of Qualls and Puto (1989). The measure consisted of 7 Likert-type statements previously used to measure the presence and enforcement of codes of

ethics, corporate policies on ethics, and top-management actions related to ethics (e.g. Ferrell & Skinner, 1988; Hunt, Chonko, & Wilcox, 1984). Results suggest that the organization's ethical climate influences salespeople's attitudes. Perceptions of a positive ethical climate were positively associated with employees' job satisfaction and organizational commitment. This study further supports the effect of EWCs on attitudinal outcomes in general.

In a cross cultural study, Koh and Boo (2001) measured the effect of three measures of organization ethics (top management support for ethical behavior, EWC, and the association between ethical behavior and career success) on job satisfaction including satisfaction with pay, promotions, co-workers, supervisors, work and overall satisfaction with the organization based on organizational justice and cognitive dissonance theory. They administered the 1988 ECQ to 400 MBA students in a university in Singapore (RR=59%). The authors conducted multiple regression analysis with egoistic EWC as the reference group and benevolence and principled EWC as dummy variables and found that ethical climate had a significant effect on job satisfaction. Due to the numerical sign of the "principled" EWC coefficient, the authors inferred that a "more favorable" ethical climate was associated with higher levels of job satisfaction.

Even though evidence is growing, supporting a positive link between EWCs and satisfaction, contradictory findings have emerged. For example, Deshpande (1996) studied the impact of ethical climates on various facets of job satisfaction including satisfaction with pay, promotions, co-workers, supervisors, and work in general. Respondents (RR= 82%) were participants of a management development program sponsored by a large non-profit charitable organization. Results showed respondents were most satisfied with their work (mean = 3.2), followed by satisfaction with their co-workers (mean = 2.97), and supervisors (mean = 2.96). They were less satisfied with promotions (mean = 2.5) and pay (mean = 2.49).

Nevertheless, none of the climate types were significantly related with pay satisfaction. The professional climate was significantly related to satisfaction with promotion, supervisors, and the overall job. The caring climate was related to satisfaction with supervisors and the instrumental climate was negatively related to promotions, co-workers, supervisors, and overall job satisfaction. Rules, efficiency and independence climate types did not significantly affect any facets of job satisfaction. Deshpande concluded that these findings support evidence from a study by Vitell and Davis (1990), that satisfaction with pay does not appear to be affected by ethical actions of managers and the extent of unethical behavior in the organization.

In a consecutive study, Joseph and Deshpande (1997) examined the impact of ethical climate types on different aspects of job satisfaction using a sample of 226 nurses in a large non-profit private hospital (RR=50%). The authors used an abbreviated version of the 1988 ECQ and identified a professional climate followed by a rules, caring, instrumental, and independence climate (the efficiency climate was not identified). They measured satisfaction with pay, promotions, coworkers, supervisors, and work itself using an adapted scale by Cellucci and DeVries (1978). Regression results revealed that professional, instrumental, and independence climate types had no impact on any facet of job satisfaction. A caring climate significantly influenced overall job satisfaction and satisfaction with pay and supervisors. Also, nurses that perceived a dominant rules climate were more satisfied with pay, promotion, and supervisors and the overall job. The efficiency climate had a significant negative influence on satisfaction with supervisors. None of the climate types significantly affected work or co-worker satisfaction.

In summary, evidence for the link between EWC and attitudinal variables is rather mixed. The strongest and most consistent link has been found for EWC and affective commitment. The weakest link has been found for the effect of EWC on normative commitment and turnover

intentions. Also, the effect of EWC on the various facts of job satisfaction appears to be rather mixed. These results suggest that other factors, f. ex. moderators or mediators, may influence the relationship between EWC and attitudinal outcomes. Nevertheless, no study has looked at influences on the relationship between EWC and employee attitudes.

Furthermore, the study of the effect of EWCs on employee attitudes has been limited to commitment, satisfaction and turnover intentions. I call on researchers to hypothesize and assess the effect of EWC on other important attitudinal variables such as perceived organizational support.

The Influence of EWCs on Ethical Behavior

Victor and Cullen (1987,1988) proposed the theory of EWCs as a descriptive framework of ethical decision-making instead of a normative model of more or less ethical climates and more or less ethical behaviors. Hence, Victor and Cullen's framework may not offer the best foundation for investigating the effect of EWCs on ethical behavior. However, research to date has exclusively relied on the ECQ and Victor and Cullen's theory to explain and assess the link between EWC and ethical behavior.

Wimbush and Shepard (1994) proposed a "continuance" model. The authors suggest that EWCs differ across subunits (e.g. departments) and therefore ethical behaviors should differ across subunits, too. The model explains that organizational subunits that are high on either one of four "positive" EWCs (caring, law and rules, service, and independence) should display more ethical behaviors, which ultimately should lead to more positive performance. Subunits that are high on the "negative" EWC (instrumental) should display more unethical behavior, which ultimately should lead to negative performance. Finally, performance (negative or positive) is

linked back to organizational policies and procedures, which in return affects the emergence of either positive or negative EWCs.

In 1997 (b), Wimbush and Shepard assessed part of the model using a sample from a broader study on ethics of employees in a nation-wide retail, commissioned-sales organizations. EWCs were measured using the 1993 ECQ and ethical behavior was measured using vignettes from the work situation questionnaire (Shepard & Hartenian, 1991). Factor analysis revealed five EWCs: independence, caring, instrumental, law and rules, and service. The relationship between EWCs and ethical behavior was considered at the individual and the district levels of analyses.

Results of the individual level analysis revealed that independence, caring, and law and code EWCs were negatively related to being an accomplice, disobedient, and lying. The service EWC was negatively related to stealing and lying. Overall, high perceptions of the climate were associated with low reports of the behaviors. The only positive significant relationship was found between instrumental climate and being an accomplice. Results of the district level of analysis reveal no significant differences on the emergence of EWCs. Since neither the individual nor district levels proved to be appropriate, the authors concluded that ethical climate must occur at a store level of analysis. The study could have offered more insight with an evaluation of EWC and ethical behavior data at the store level of analysis.

Some of the most conclusive evidence of a link between EWC and behavior has been found by Peterson (2002a, 2002b). He investigated the relationship between unethical employee behavior and the various dimensions of the ECQ collecting data of 700 alumni from a business school (RR=29%). The 1993 ECQ was used to assess the EWCs and 12 ethical issues were used to measure frequency of unethical behavior (e.g. not reporting others for violating company

policies and lying to conceal one's errors). The author identified seven EWCs that were labeled rules, law, employee focus, company focus, personal ethics, self-interest and efficiency EWC.

Peterson assessed the relationship between the seven dimensions of EWCs and deviant/unethical behavior. He found that organizations with high concern for employees (dominant employee focus EWC) were less likely to experience incidences of employees working on personal matters during company time. Organization with climates in which employees are primarily concerned about themselves (self-interest EWC) were more likely to have problems associated with employees working on personal matters during company time. Employee focus, personal ethics, and self-interest were negatively related to production deviance. The employee focus EWC was negatively related to experiencing deviant political behavior. Rules and laws EWCs were negatively related to property deviance. The efficiency climate was also found to be a significant predictor of taking company property without permission. Personal aggression did not show any clear pattern with respect to its relationship with EWC. None of the ethical climates were significant predictors of cursing at someone at work. Also, law and employee focus EWC were negatively related to ethnic or sexually harassing remarks, while personal ethics EWC was negatively related to physical intimacy. Results differ by EWC and deviant behavior, yet overall findings support the hypothesis that EWCs affect the emergence of deviant behavior.

Peterson (2002a) used an aggregate measure of unethical behavior to examine the relationship between EWCs and behavior. The rationale for using an aggregate measure of behavior was that some EWCs had been linked to certain types of unethical behavior but not necessarily all unethical behaviors (Cullen, Victor & Stephens, 1989; Trevino, Butterfield & McCabe, 1998). Thus, aggregating individual behaviors rather than correlating EWCs for each

ethical issue should lead to stronger support for the criterion validity of the ECQ. Results of this study support this hypothesis. Also, organizations with a code of ethics displayed less unethical behavior than organizations without a code.

In a cross-cultural study, Vardi (2001) studied the relationship between selected personal and organizational attributes and work related misbehavior (intentional acts that knowingly violate organizational norms). He collected data from 97 employees (RR=70%) of an Israeli metal production plant. The author adopted a translated version of the 1988 ECQ, which revealed only three EWCs: law and code, caring, and instrumental. Organizational climate and EWC were negatively and significantly related with organizational misbehavior such that activities of misbehavior reported by managers and employees were negatively related to rules, instrumental, and caring EWCs. This leads the authors to conclude that employees who strongly perceive ethics in terms of behavioral guidance will report lower organizational misbehavior.

Treviño, Butterfield and McCabe (1998) conducted a field study to assess the relationships between ethical climate and ethical culture and their effect on unethical behavior. The sample included 1200 alumni of two private colleges (RR=27 %). Ethical climate was measured using the 1988 ECQ and ethical culture was measured using the ethical culture scale. Unethical behavior was assessed using observed unethical behavior (adapted from Akaah, 1992). Control variables included job satisfaction (single item measure), and impression management (adapted from (Paulhus, 1989).

Ethical culture was more strongly associated with ethical conduct than ethical climate for organizations with ethics codes. In organizations without ethics codes, ethical climate emerged as a better predictor of ethical conduct with self-interest EWC being the strongest predictor (36% variance) of unethical behavior. In non-code settings, a focus on adhering to laws and

professional standard was also associated with unethical behavior. Four of the seven ethical climate dimensions (employee focus, community focus, personal ethics, efficiency) had no significant association with observed unethical conduct. The authors interpreted these findings to mean that aspects of the ethical context are unrelated to conduct, although they may be related to attitudes.

DeConinck and Lewis (1997) examined the influence of EWCs on sales managers' intentions to intervene when unethical behaviors were encountered using a sample of 900 sales managers (RR=20.3%). EWC was measured as a covariate using the 1988 ECQ. They employed a 2x2 design to manipulate deontological ethical or unethical perception of behavior of salespeople and consequences of salespeople's behavior toward the company (teleological evaluation). While most of the sales managers believed ethical behavior should be rewarded and unethical behavior should be punished, positive or negative consequences of the salespersons' behavior impacted the intentions to reward or punish the behavior. This happened regardless of whether the behavior was ethical or unethical. Hence, the consequences of the behavior determined supervisor's actions (punish or reward), not the behavior itself (ethical or unethical).

Bartels, Harrick, Martell and Strickland (1998) assessed the relationship between the strength of an organization's ethical climate and ethical problems involving human resource (HR) managers. They collected data from 1078 HR managers (RR=17%) and designed a 7-item scale to assess EWC. EWC was defined as the strength of organization norms regarding ethical behavior and organizational characteristics associated with ethical conduct. Results indicated a statistically significant relationship between the strength of an organization's ethical climate and the seriousness of ethical violations and a statistically significant positive relationship between an organization's ethical climate and success in responding to ethical issues.

Contradictory evidence was found by McKendall and Wagner, III (1997) who analyzed the pathological conditions that breed illegal corporate actions and ethical climates that lead to violations of U.S. environmental laws. The authors collected data from the largest 1,000 public corporations in the United States (RR=22.2%) and assessed ethical climate using a 47-item measure based on the ethical practices questionnaire (the EPQ was developed by Bentley College's Center for Business Ethics). The study's findings were weak and did not produce support for a link between ethical climate and illegal corporate actions.

In a study remotely related to employee behavior, Barnett and Schubert (2002) investigated the effect of EWCs on employee perceptions about the nature of the relational contract between themselves and their employer (covenantal relationships). Covenantal relationships are characterized by mutual commitment to the welfare of both parties and a shared set of values. The authors predicted that benevolence and principled EWCs would be associated with covenantal relationships while an egoistic EWC would make it less likely that covenantal relationships emerged. The 1993 ECQ was distributed to 270 employees of a large retail department store (RR=72%) and factor analysis of the data revealed three dominant factors including egoism, benevolence and principled EWCs. The authors' predictions were supported and lead to the interpretation that employees who perceived egoistic EWCs might have more difficulty developing covenantal relationships with employers because egoistic EWCs are associated with self-interest and not the covenant relationship based on commitment to mutual welfare and shared values. Conversely benevolence and principled EWCs were found to be more indicative of covenant relationships due to their emphasis on sharing and caring for the welfare of peers and society at large.

In summary, the link between EWC and behavior is mixed and rather weak. This may be the result of the framework and measure used to assess EWC. As mentioned before, Victor and Cullen did not develop a model and measure to differentiate between more or less ethical climates but to identify and describe the EWCs that exist in organizations. We may have to develop different measures to better predict ethical behavior and link EWC to ethical or unethical organizational behavior. Also, while research has used misbehavior, illegal actions and deviant behavior as outcome variables, no research has linked EWC to other organizational outcomes such as organizational citizenship behaviors, absenteeism or performance.

The Influence of EWCs on Ethical Decision-Making

The only study assessing the relationship between ethical climates and ethical dimensions of decisions was conducted by Fritzsche (2000). The author used 414 managers from a well-established high technology firm (RR=69%) to collect data on EWCs using the 1993 ECQ and data on ethical issues including bribery, coercion, deception, theft and unfair discrimination using ethics vignettes. Since the factor structure that emerged from the 1993 ECQ was too complex for analysis, Fritzsche used the original 26 items from the 1988 ECQ to factor analyze the data. This resulted in six factors: independence, rules, law and code, caring, and efficiency climates. The analysis also yielded a distinctive “company” factor, which represented a combination of the theoretical self-interest and company profit climates. The most dominant climate was the law and code climate. Results showed no significant link between EWCs and unethical decisions. Only the efficiency climate was found to have an equal likelihood of ethical and unethical decisions for three of the four vignettes. Overall, the results provided weak support for the link between ethical climates and unethical decisions.

More indirectly, Flannery and May (2000) investigated the effect of attitudes toward environmental behavior, subjective norms about environmental behavior, three perceived behavioral control factors (self-efficacy, financial cost, and ethical climate), and personal moral obligation for environmental consequences on the environmental ethical decision intentions of managers. The authors used a sample of 696 members of the National Association of Metal Finishers (RR=20%) and found that the instrumental EWC contributed marginally to the variance in decision intentions. Furthermore, the magnitude of consequences moderated the relationships between the antecedents and the environmental ethical decision intentions of managers.

Verbeke et al. (1996) studied the effect of ethical climate and personality of 950 sales managers (RR=19.5%) on ethical decision-making. The authors defined ethical climate as the standard of ethicality and adapted a measure developed by Ruch and Newstrom (1975), which takes the appraisals of colleagues as standards of an employee's ethicality to measure ethical climate. These appraisals were graded on a scale from very ethical to not ethical at all. Results show that ethical climate was affected by the control system and the career orientation of sales people. Also, ethical climate had a direct effect on ethical decision-making, and discouraged Machiavellian people from entering the organization.

In summary, findings are mixed with regard to the relationship between EWC and ethical/unethical decisions. This may be due to social desirability biases (respondents may be more willing to identify positive ethical decisions and intentions than negative ethical decisions) or other situation or firm specific differences. More research is needed to confirm a consistent link between EWC and ethical or unethical decisions.

The Influence of EWC on Moral Reasoning

The theory of EWCs by Victor and Cullen (1997, 1988) and the ECQ are largely grounded in the theory of moral reasoning (Kohlberg, 1969). Hence, EWC theory as defined by Victor and Cullen and cognitive moral reasoning as defined by Kohlberg (1969) should be related. Several studies have assessed this relationship.

For example, Elm and Nichols (1993) examined whether the moral reasoning level of managers used to solve ethical problems is affected by the interaction of the ethical climate of the organization and managers self-monitoring propensity. The authors sampled 372 middle managers from four manufacturing firms (RR=65%) and collected data on the 1988 ECQ, the extent and individual focus on the situation was assessed using the self-monitoring scale (Snyder, 1974), and moral reasoning was assessed using the DIT (Rest, 1979). Three EWCs emerged: instrumental, caring, and principled. Results showed that average moral reasoning was at the conventional level. Yet the authors did not find support for the hypothesis that the level at which a manager reasons about ethical issues was influenced by the ethical climate of the organization.

Results provided relatively strong support for the moderating effect of EWC. The general pattern of results suggests that employees' perceptions of the organizational ethical climate may not directly affect their behavioral intentions regarding ethically questionable activities. Only the social responsibility and the rules and codes climates were significantly correlated with expressed behavioral intentions. The authors interpret the findings to suggest that the likelihood that an individual will engage in morally questionable behavior when they themselves do not find the behavior unethical may be affected by the ethical climate that they perceive. Also, climates perceived as emphasizing social responsibility and the rules and codes moderated the individual ethical judgment – behavioral intentions relationship. Individuals were less likely to

declare that they would engage in questionable selling practices even when they did not believe the practice to be unethical. Respondents were more likely to form intentions consistent with their judgments that the questionable practice was morally acceptable when the ethical climate was characterized by an emphasis on team friendship.

Finally, it appears that the form of the measure to assess moral reasoning affects the results. Brower and Shrader (2000) investigated differences in moral reasoning and ethical climate between not-for-profit vs. for-profit board members. While the DIT results show that hypothetical individual levels of moral reasoning do not differ between the two types of boards, moral response survey results indicated that for-profit directors utilize higher levels of moral reasoning than not-for-profit directors a greater percentage of the time.

In summary, initial research supports the link between EWC and moral reasoning. As suggested, this link is surprising and should be strong. Nevertheless, I have not looked at the effect of moral reasoning levels on the emergence of EWCs. Especially, since the theory of EWC by Victor and Cullen and the ECQ are grounded in the theory of moral reasoning the moral reasoning of employees should have a direct impact on the emergence of EWCs as defined by this framework. Future research will have to test this relationship.

Moderators and EWC

Only three studies have assessed the moderating effect of EWCs. Barnett and Vaicys (2000) investigated the moderating effect of individuals' perceptions of EWC on ethical judgments and behavioral intentions using a sample of 1000 randomly selected AMA professionals (RR=20.7%). EWC was assessed using the 1993 ECQ. The authors found four interpretable factors including the self-interest climate, two benevolence factors including the

team/friendship climate and the social responsibility climate, and the rules and code climate. From the significant intercorrelations between factors, the authors concluded that companies with egoistic climates are not likely to have high levels of other ethical climate characteristics, but that characteristics of utilitarian and deontological climates can co-exist in organizations.

Using different methodology, Schwepker and Good (1999) conducted a study to assess the impact of sales quotas on moral reasoning in the financial services industry. It was hypothesized that salespeople who operated under an outcome based control system would be motivated by self-interest and that sales-quotas would drive salespeople to perform unethical behavior, particularly if this behavior was deemed necessary to achieve the quota. Ethical climate and consequences for not making the quota were predicted to moderate the relationships. The sample included 1975 financial services salespeople (RR= 9.2 %). When the climate was perceived as ethical, the relationship between quota difficulty and moral judgment was not significant even when negative consequences for failing to make quota were present. When climate was perceived as unethical and negative consequences were likely to result from failing to achieve quota, there was a statistically significant negative relationship between quota difficult and moral judgment. Hence, results show that a more difficult quota does not result in poorer moral judgment when an ethical climate exists.

VanSandt and Shepard (2003) tested the moderating effect of sex, age, and exposure to formal ethics training on the EWC - moral awareness relationship. The authors used a sample of 196 employees from 7 different organizations including a publicly traded regional bank, a small engineering/survey firm, a manufacturing plant, a non profit organization, a police department a large utility company, and a retail grocer. The 36-item ECQ (Cullen, Victor & Bronson, 1993) was used to identify EWCs. Results revealed seven ethical climate types including self-interest,

efficiency, caring, service, independence, rules, and law and code EWCs. The relationship between EWC and moral awareness was significant, yet no moderating effects were found, except for formal education.

Initial evidence supports the moderating effect of EWCs. However, it is surprising that not more studies have appeared including EWC as a moderating effect to predict and assess important organizational relationships. Organizational climate is widely recognized as a contextual factor influencing employee attitudes and behaviors in organizations. As a sub-climate of the organizational climate, EWC should have a similar impact. For example, leaders can influence employee behavior and performance more or less depending on the context in which they operate. One contextual factor that may affect how leaders influence employee behavior and performance is the ethical climate of the organization. Yet, this has never been investigated.

It is most surprising to note that even though organizational climate represents a “natural” moderating variable for other organizational relationships, empirical research has not used ethical climate as such.

Mostly Sunny, but Cloudy: Methodological Issues

As promised, in the third phase of this review, I will take a critical look at the measurement of the construct. Since the ECQ has been the dominant measure of EWC, and our knowledge of the construct is based on the validity and reliability of this measure, I will critically analyze the measure’s reliability and validity. I will discuss four key issues related to the ECQ, instable factor structure, problems with survey items, the incorrect use of the survey, and problems with the theory used to develop the ECQ.

Instable Factor structure

Descriptor loadings

The factor structure of the ECQ has lacked stability across most of the dimensions. Already, Victor and Cullen (1987, 1988) noted that descriptors did not consistently load on the same factors and that not the same factors emerged in every study. To further illustrate the problem, Appendix B shows the ECQ descriptors developed by Victor and Cullen and the factor structure that emerged with each one of their studies. It is apparent that some of the descriptors consistently explain the same factor (e.g. law and code descriptors PC 1 through PC 4) while other descriptors are much less stable (e.g. PI 3, PI 4, EL2, and EC1 through EC4).

Other researchers have noted these inconsistencies, too. For example, Wimbush et al. (1997a, 1997b) found only four of the five EWCs documented by Victor and Cullen (1988) – caring, law and rules, independence, and instrumental – along with a new EWC never identified before, labeled “service EWC.” The caring EWC appeared as a mixed factor: 3 caring items from Victor and Cullen’s instrumental EWC, 7 caring items from the 1993 ECQ (2 egoism scale items and 5 utilitarian scale items). The law and rules EWC that emerged in the Wimbush et al. (1997a, 1997b) study, combined two of Victor and Cullen’s EWCs: law EWC and code and rules EWC. The new factor included 2 items from Victor and Cullen’s caring climate and 2 newly revised items. Since the content of these items referred mostly to customer service, this EWC was labeled “service.” The independence EWC coincided with the independence EWC of Victor and Cullen. Finally, four of the five items that comprised the instrumental EWC were included on Victor and Cullen’s instrumental EWC and one item was from the egoism scale.

Barnett and Schuber (2002) noted factor structure problems when they found that only 15 of the 36 items of the 1993 ECQ explained the four interpretable factors. The first factor, labeled

benevolence 1-SR, consisted of 4 items: 3 related to social responsibility and 1 to team interest. The second factor, labeled benevolence 2-Team, included 5 factors: 2 related to friendship and 3 to team interest. The third factor, labeled “principle-law and codes,” included 3 items which all related to law and professional codes. The fourth factor, labeled “egoism-self-interest,” included 3 descriptors from the egoistic climate of self-interest.

Fritzsche (2000), who used the 1993 ECQ was surprised by a complex factor structure which included 8 climates. For example, one factor consisted of a combination of the theoretical benevolence climates of friendship and team interest plus the egoism climate of company profit. Another factor appeared to mix the egoistic climate of self-interest and the benevolence climate of team interest and a third factor described the egoistic climate of company profit and another one-item factor focused on profit. As a result, Fritzsche reverted to analyzing the original 26-items from the 1988 ECQ. Still, one factor, labeled “company EWC,” had never emerged in any of the earlier studies. This factor included 4 descriptors: 3 items from the self-interest scale and 1 item from the instrumental scale. Finally, Vaicys and Barnett (1996) and Peterson (2002a/b) compiled tables comparing various studies that had used the ECQ, and found discrepancies between factor loadings and studies.

A review of these studies leads us to conclude that the rules EWC and law and codes EWC appear to be the most stable factors while the efficiency EWC is one of the most unstable factors which does not appear to contribute much to the explanation of EWCs.

Locus of Analysis Dimension

Many researchers (Arnaud et al., 2002; Koh & Boo, 2001; Elm & Nichols, 1993; Wimbush, Shepard & Markham, 1997a, 1997b; Brower & Shrader, 2002) have found that factors appear to be very unstable across the locus of analysis. As a result, they have begun collapsing

EWCs across the locus of analysis dimension considering only three EWCs: independence, benevolence and principled. These EWCs agree with Kohlberg's (1969) three stages of moral development.

In summary, it is apparent that the factor structure of the ECQ is not stable across different environments and contexts and that one of the dimensions of the survey, the locus of analysis, is problematic across many of the studies. These findings need to be investigated further since they affect the validity and reliability of the ECQ.

Problems with survey items

The descriptors of the ECQ dimensions do not always seem to align with the factors they are intended to define. For example, the difference between “in this company people are expected to follow their own personal and moral beliefs,” a PI-descriptor*, and “in this company, people protect their own interests above all else,” an EI-descriptor*, is not necessarily very clear to respondents unfamiliar with the EWC literature and construct. Similarly, the difference between “the most important concern in this company is each person's own sense of right or wrong,” a PI-descriptor*, and “there is no room for one's own personal morals or ethics in the company,” an (inverse) EI-descriptor,* is not very clear to the unfamiliar respondent. Furthermore, the descriptors of the egoism-cosmopolitan dimension relate to efficiency, a factor that lacks theoretical linkage to this dimension. And the BI-, BL- and BC-descriptors are obviously utilitarian/benevolence items, yet their distinction across loci of analysis is unclear.

The validation of the ECQ becomes more difficult, too, since Victor and Cullen change several of the descriptors from one survey to the next. For example, in the 1987 ECQ, Victor and Cullen use two descriptors never used in later versions of the questionnaire. These two descriptors include BC2: “The major concern is the public's good,” and PI3: “The most

important concern in this company is what is best for each individual.” In 1987, the PC1 descriptor reads: “The law or ethical code of their profession is the major consideration.” In 1988, this descriptor reads: “In this company, the first consideration is whether a decision violates any law,” and in 1993, the PC1 descriptor reads: “The first consideration is whether a decision violates any law.” The EI4 descriptor in 1987 reads: “You are expected to only do what benefits yourself,” in 1988 it was not included in the survey, and in 1993 this descriptor reads: “People in this company are very concerned about what is best for themselves.”

In summary, descriptors of the nine EWCs do not always seem to align with the factors they are intended to define and the wording of ECQ descriptors changes from one study to the next. These problems potentially contribute to inconsistencies in the factor structure of the ECQ from one study to the next and further raise concerns about the validity of the instrument.

Incorrect use of the survey

As mentioned earlier, Victor and Cullen (1987) were very specific about the use of the survey. The authors noted that EWCs for the sample of MBA students - in Victor and Cullen’s (1987) first published study of the ECQ - had very low consistency compared to the other sub-samples. This led Victor and Cullen (1987) to conclude that a sample consisting of employees from multiple organizations (without aggregating by organization) was not a valid predictor of ethical climate. This important issue has been recognized by various researchers (e.g. Arnaud et al., 2002; Elm and Nichols, 1993; VanSandt & Shepard, 2002), yet it is generally ignored in the literature.

Many EWC researchers collect data from alumni or students or use samples including one representative per organization (e.g. Barnett & Vaicys, 2000; Peterson 2002a, 2002b; Vaicys and Barnett, 1996; Wimbush et al., 1997a, 1997b). Others use samples including multiple

representatives from various organizations without aggregating by organization (e.g. Deshpande et al., 2000; Rosenblatt & Peled, 2002; Upchurch & Ruhland, 1996; Upchurch, 1998). I need to consider, very carefully, what the data from these samples reveal. For example, the emergent EWCs from these studies do not represent organizational climates but climates across a group of unrelated employees. How can we interpret these results?

I am very concerned about the validity of studies where researchers interpret ethical climate using inappropriate samples or methodology (not aggregating by organization, department, or unit of analysis) and call on researchers to use appropriate samples and aggregate as needed. Only then can we interpret the data and obtain valid information about ethical work climate.

Theoretical problems

The theory of EWC by Victor and Cullen (1987, 1988) is widely accepted by ethics researchers. Since this theory defines the foundation for the ECQ, problems with the theory directly impact the validity of the measure. It is surprising that researchers have not questioned the theoretical development of this framework and its components. I propose that two important issues require our attention, the dimensionality of EWC and how existing dimensions are defined.

Dimensionality

Victor and Cullen (1987, 1988) explain that the EWC construct is multidimensional, however, their theory and the ECQ are limited to two dimensions, the ethical criterion and the locus of analysis. The authors do not explain other possible dimensions of EWC or why the locus of analysis and the ethical criteria are the only, or the most critical, dimensions of this construct.

It is plausible to consider other dimensions of ethical climate and researchers have done so, yet this work has not resulted in much empirical research (f. ex., see Treviño, 1988, Treviño; Butterfield & McCabe, 1998, Vidaver-Cohen, 1995).

Definition of dimensions

Victor and Cullen (1988) explain that “the relationship of the loci of analysis with the ethical criteria differ somewhat for each criterion (p.106).” This seems to reduce the consistency of the locus of analysis dimension across ethical criteria. The problem becomes more obvious when the authors explain that for the ethical criteria of egoism and benevolence, the locus of analysis is defined by who the agent/respondent considers when thinking about an ethical issue, yet, for the ethical criteria of principle, the locus of analysis is defined by the source of principles used in organizations (see Victor and Cullen, 1988, p.107). The “source of an ethical criterion” and the “ethical criterion considered with regard to an ethical issue” define two different factors not different levels of the same factor. This may be the cause for some of the problems that have been identified with the locus of analysis dimension.

In summary, I have identified two problems with the theory of EWCs by Victor and Cullen. These problems may further decrease the validity of the ECQ and need to be addressed. Researchers should carefully consider other dimensions of EWC and ensure that these dimensions are defined adequately.

Conclusion: A Weather Forecast

The purpose of this review was to assess what we have learned about the ethical climate of the organization and what we still need to explore. During the process of writing the

manuscript it became very clear that even though we have made advances in some areas, much more work needs to be done.

While various ethical decision-making theories have appeared across disciplines (Dubinsky & Loken, 1989; Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Jones, 1991; Rest, 1986; Treviño, 1986) only two EWC theories have emerged (Victor & Cullen, 1987, 1988; Vidaver-Cohen, 1995; 1996); and only the theory of EWCs by Victor and Cullen (1987, 1988) drives empirical research and knowledge of the phenomenon. It is the single most tested theory of EWC and the ethical organizational context in general. I call on researchers to advance theory and develop alternative approaches for understanding and investigating EWC.

The context of the organization should influence the emergence of EWCs, yet the nature of this influence, while widely discussed and assessed, is still unclear. It appears that various contextual factors or combinations of factors are accountable for the emergence of dominant EWCs (e.g. Verbeke et al., 1996).

Also, initial findings support that country differences exist and affect the emergence of ethical work climates. However, more work needs to be done to identify the cause(s) of these differences. A reasonable point of departure could be Hofstede's cultural dimensions and their effect on the emergence of EWC.

Research on the effect of leaders/leadership on the emergence of EWC is particularly weak. While several studies have used leader samples, only one study has assessed the influence of leaders on the emergence of EWCs. I call on researchers to take advantage of existing theories (e.g. Dickson et al., 2001; Wimbush and Shepard, 1994) or develop new theory to assess the relationship between EWC and leader behaviors, decisions, and attitudes.

Findings are generally supportive of a link between P-O ethical value congruence and attitudinal outcomes. Overall, P-O ethical value fit affects satisfaction and affective commitment positively, and turnover intentions negatively. However, this relationship does not appear to hold across cultures. This warrants further investigation.

Evidence for the link between EWC and attitudinal variables is rather mixed. The strongest and most consistent link has been found for EWC and affective commitment. The weakest link has been found for the effect of EWC on normative commitment and turnover intentions. More research has to investigate factors that may alter the influence of EWC on attitudinal outcomes.

Also, the link between EWC and behavior is mixed and rather weak. This may be the result of the framework and measure used to assess EWC. We may have to develop different measures to better predict ethical behavior and link EWC to ethical or unethical organizational behavior. Also, while research has used misbehavior, illegal actions and deviant behavior as outcome variables, no research has linked EWC to other organizational outcomes such as organizational citizenship behaviors, absenteeism or performance.

Only three studies have used EWC as a moderator to predict and assess other organizational relationships. Organizational climate is widely recognized as a contextual factor influencing employee attitudes and behaviors in organizations. The moderating affect is generally supported, yet more work needs to be done. For example, leaders can influence employee behavior and performance more or less depending on the context in which they operate. One contextual factor that may affect how leaders influence employee behavior and performance is the ethical climate of the organization.

It is obvious that we can further advance the knowledge of EWC as it relates to other organizational variables in every area identified. However, I recommend to address methodological issues first in order to improve the reliability and validity of this research. For example, the factor structure of the ECQ has lacked stability across most of the dimensions. A review of EWC studies leads us to conclude that the rules EWC and law and codes EWC appear to be the most stable factors while the efficiency EWC is one of the most unstable factors. This issue needs to be addressed and corrected.

Problems with various descriptors of the ECQ may contribute to the inconsistent factor structure of the ECQ since items do not always align with the factors they define. For example, the descriptors of the egoism-cosmopolitan dimension relate to efficiency, a factor that lacks theoretical linkage to this dimension.

Most problematic though is the incorrect use of the ECQ. Victor and Cullen (1987) were very specific about the use of the survey when they defined that a sample consisting of employees from multiple organization was not a valid predictor of ethical climate unless data were aggregated by organization. I am very concerned about the validity of studies where researchers interpret ethical climate using inappropriate samples or methodology (not aggregating by organization, department, or unit of analysis) and call on researchers to use appropriate samples and aggregate as needed. Only then can we interpret the data and obtain valid information about ethical work climate.

In this chapter, I reviewed the evolution of the EWC construct in depth. In particular, I discussed theoretical developments and empirical research related to EWC. I concluded this chapter with an assessment of the methodological and conceptual concerns that emerged from the in depth literature review. I was able to identify theoretical shortcomings as well as

methodological problems that need to be corrected and improved. These issues are addressed in the following chapter.

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CHAPTER 3

ETHICAL WORK CLIMATE: FRESH BREEZE IN THE SIGHT

Abstract

This chapter offers a new conceptualization of ethical work climate, one aimed explicitly at providing better explanatory power of the ethical behavior of organizational members. Building on Rest's (1986) "Four Component" model of individual-level ethical decision-making and behavior, I specify four dimensions of EWC necessary for the emergence of ethical behavior: moral sensitivity, moral judgment, moral motivation, and moral character. In particular, I elevate Rest's four components to the social-system-level at which work climates exist, creating what I term the Psychological Process Model of ethical work climate. By presenting this new theory of EWC I hope to provide a foundation for better understanding how this key component of the ethical context of the organization might influence the behavior of those operating inside its boundaries.

Ethical Work Climate: Fresh Breeze in Sight

The demise of companies such as Enron and WorldCom has stimulated renewed interest among researchers and practitioners concerning the ethical values and norms of organizations. These shared norms and values represent the ethical work climate (EWC) of organizations, and provide the moral foundation and ethical context for decision-making and behavior.

Previous research examining the EWC of organizations has centered primarily on a framework developed by Victor and Cullen (1988, 1987). This model has provided the basis for many productive insights regarding the structure of EWCs, as well as their antecedents and consequences. However, as evidenced in our review below, it also faces a number of serious limitations. Principal among these is that it has been consistently weak in its ability to predict or explain the ethical activity of individuals in organizations.

I view this as a critical limitation. Thus, the purpose of this paper is to offer a new conceptualization and theory of EWC, one aimed explicitly at providing better explanatory power of the ethical behavior¹ of organizational members. In doing so, I draw on the work of Rest (1986) and his “Four Component” model of individual ethical decision-making and behavior. In particular, I elevate Rest’s four components to the social-system-level at which work climates exist, creating what I term the Psychological Process Model (PPM) of ethical work climate. By presenting this new theory of EWC I hope to unfreeze current thinking about the structure of EWCs in organizations and to provide a foundation for better understanding how this key component of the ethical context of organizations might influence the behavior of those operating inside their boundaries.

Existing Theories of Ethical Work Climate

Despite the increasing attention to ethics in organizations, only a handful of theories have emerged in the literature describing how the ethical context of the organization relates to other key organizational variables. Only two of these have explicitly addressed the concept of EWC. The first—and still dominant in the literature—is that of Victor and Cullen (1988, 1987). A more recent conceptualization has been proposed by Vidaver-Cohen (1998, 1995). I will review the strengths and weaknesses of each.

The Theory of Ethical Work Climates by Victor and Cullen (1988, 1987)

Victor and Cullen's theory of EWC represents the current "gold standard" in EWC research, providing the basis for over three quarters of all papers published in the area since it first appeared in 1987. They define EWC as "the shared perceptions of what is ethically correct behavior and how ethical issues should be handled (1987: 51-52)." The theory is built on the assumption that employee perceptions of ethical events, ethical practices, and ethical procedures depend on two dimensions: the *ethical criteria* used for organizational decision-making, and the *loci of analysis* used as a referent in ethical decision-making.

The Ethical Criteria Dimension

This dimension of EWC is grounded in Kohlberg's (1984, 1981) theory of cognitive moral development. Kohlberg suggests that individuals' moral reasoning skills (judgments of how moral dilemmas ought to be resolved) evolve over time, reflecting three distinct categories

of moral judgment processes, which he termed preconventional, conventional, and postconventional moral reasoning.

At the preconventional level, individual moral decisions are justified in terms of rewards and punishments and one's own interests. What is right is what is good for me and what is wrong is what is bad for me. At the conventional level, the individual recognizes and internalizes the shared moral norms of his or her social groups, such as family, peers, and society. What is right is explained in terms of living up to roles and social expectations such as fulfilling duties, rules, and laws. This reasoning requires that individuals broaden the egoistic reasoning evident in preconventional thinking, to consider the social-system in which they exist. At the postconventional level, individuals go beyond self-interest or prevailing social norms in determining morality. Here, universalistic principles dominate one's ethical reasoning. For example, postconventional reasoning would affirm that slavery was wrong even in times and places in which it was both legal and socially condoned. At this highest level of moral reasoning, individuals are guided by self-chosen ethical principles of justice and human rights (Colby, Kohlberg, Gibbs & Lieberman, 1983).

Victor and Cullen (1988, 1987) draw on these three levels of cognitive moral reasoning to define the ethical criteria dimension of their model. They termed these three criteria egoism, benevolence, and principle, corresponding to Kohlberg's (1981) preconventional, conventional, and postconventional moral reasoning, respectively. The egoistic ethical criterion is characterized by employees' desires to maximize self-interest. The benevolence ethical criterion is characterized by employees' desires to maximize the collective interest of the organization. The principle ethical criterion is characterized by employees' adherence to broader principles of society and humanity.

The Loci of Analysis Dimension

The second dimension of Victor and Cullen's (1988) framework borrows from Kohlberg (1984, 1981) who defines three loci of concern at which the three ethical criteria are to be considered. In doing so, they refer to sociological theory of roles and reference groups (Merton, 1957), which notes that individuals' behaviors and attitudes are differentially influenced according to reference groups (i.e., locals and cosmopolitans) and the roles they assume within that group. Gouldner (1957) suggested that these differential roles apply to organizational participants as well, providing the foundation for the locus of analysis dimension of the EWC. Victor and Cullen extended the traditional distinction between locals and cosmopolitans to include an individual locus of analysis as well. Thus, they propose three possible loci of analysis: individual (the self), local (the organization), and cosmopolitan (extraorganizational).

Crossing the three ethical criteria and loci of analysis dimensions gives rise to nine different theoretical climate types, illustrated in Figure 1. Confirmation of the existence of these nine theoretical climate types has been elusive, however, as different clusters of climate types have emerged in different empirical examinations.

As attention to business ethics has increased over the past two decades, this theoretical framework has dominated the literature both theoretically and empirically. By our estimates it provides the basis for over 75 percent of all EWC research over the past 28 years. However, research has also revealed a number of critical shortcomings related to the theory and its ability to provide insights about the ethical behavior of individuals in organizations.

Issues and shortcomings

The theory represents the two dimensions (ethical criteria and loci of analysis) as distinct concepts. However, a closer look calls this assumption into question. The ethical criteria

dimension, grounded in Kohlberg's (1984, 1981) theory of CMD, spans individual, collective, and universal ethical criteria. Likewise, the loci of analysis dimension also represents the three loci as involving individual, collective, and universal concerns. Therefore, these two may not represent two distinct dimensions, but rather, a single, unified concept.

I will illustrate this with an example. The individual-level ethical criterion dimension (egoism) is defined as an employee's desire to maximize his or her self-interest. The individual-level locus of analysis dimension (individual) is defined as using the self as the referent in ethical decision-making and moral reasoning. Thus, these two components may not be distinct, in that employees who desire to maximize their self-interest naturally see themselves as the referent in moral reasoning.

The same is true for the collective-level ethical criterion (benevolence) and locus of analysis (local). That is, employees whose desire it is to maximize the collective interest of the organization naturally see the "local" organization as the referent in moral reasoning. The universal-level ethical criterion (principle) and the locus of analysis (cosmopolitan) enjoy a similar hand-in-glove relationship. That is, employees who desire to maximize the interest of humanity and adhere to broader principles of society naturally engage in a more cosmopolitan worldview as providing a referent for moral reasoning. Hence, both the ethical criteria and loci of analysis dimensions of Victor and Cullen's (1988, 1987) framework share a single dimension. This dimension parallels Kohlberg's (1984, 1981) concept of cognitive moral development, which progresses from individualistic (preconventional) to collective (conventional) to universalistic (postconventional) ethical concerns. Thus, I suggest that EWC, as defined by Victor and Cullen, is a one-dimensional construct that captures the shared moral judgment

(CMD) of employees. More specifically, it taps employees' perceptions of the CMD of the organization; the norms for making judgments about which course of action is morally right.

Further exacerbating this problem is the fact that Victor and Cullen (1988: 106) suggest that the relationship between the factors of the loci of analysis dimension and the ethical criteria dimension differ somewhat for each criterion. For example, the authors explain that for the ethical criteria of egoism and benevolence, the loci of analysis is defined by who the agent considers when thinking about an ethical issue. However, for the ethical criteria of principle, the loci of analysis is defined by the source of principles used in organizations (Victor & Cullen, 1988: 107). Yet, the "source of an ethical criterion" and the "ethical criterion considered with regard to an ethical issue" define two different factors, rather than different levels of the same factor.

These problems combine to reduce the consistency of the loci of analysis dimension across ethical criteria and contribute to the inconsistent factor structure frequently observed in empirical research of Victor and Cullen's (1988, 1987) theory. In fact, although Victor and Cullen were the first to recognize that the EWC types did not emerge consistently across studies, other researchers have noted these inconsistencies; also, as different numbers of factors or climate types have emerged across various studies. For example, Vardi (2001) and Arnaud, Ambrose and Schminke (2002) each identified three factors, Wimbush, Shepard and Markham (1997a, 1997b) and Barnett and Schubert (2002) identified four, Agarwal and Malloy (1999), Joseph and Deshpande (1997), Schminke, Ambrose and Neubaum (in press), Sims and Kroeck (1994) and Sims and Keon (1997) utilized five, Deshpande (1996), Fritzsche (2000) and Vaicys, Barnett and Brown (1996) found six, Treviño, Butterfield and McCabe (1998) and VanSandt and

Shepard (2003) identified seven, and Peterson (2002a, 2002b) embraced the entire original nine-factor framework.

Interestingly, various researchers (Arnaud et al., 2002; Brower & Shrader, 2002; Elm & Lippitt, 1993; Koh & Boo, 2001; Wimbush et al., 1997a, 1997b) have found that the empirically emerging factors appear to be especially unstable across the loci of analysis dimension. As a result, consistent with our arguments here, some researchers have collapsed EWCs across the loci of analysis dimension, thus considering only three factors of a one-dimensional EWC construct (egoism, benevolence, and principle), which relate to Kohlberg's (1984, 1981) three levels of CMD (preconventional, conventional, and postconventional).

These are critical points, both theoretically and empirically. If Victor and Cullen's (1988, 1987) model of EWC is, in reality, reflective of a (unidimensional) perception of the collective moral judgment (CMD) of a social-system (i.e., department or organization), then it is not surprising that it has been limited in its ability to predict ethical behavior of organizational members. For example, I know from the literature on individual-level ethical decision-making that moral judgment, in and of itself, is not sufficient to guarantee moral behavior. Rather, four factors (moral sensitivity, moral judgment, moral motivation, and moral character) must combine in order for moral behavior to occur (Rest, 1986). Thus, for all of its impact on the study of EWC, the Victor and Cullen framework appears to be theoretically underspecified for accurately predicting ethical behavior.

The Ethical Climate Continuum by Vidaver-Cohen (1998, 1995)

A more recent attempt to conceptualize the EWC of organizations was proposed by Vidaver-Cohen (1998, 1995). She proposed that the ethical climate of an organization can be

more or less conducive to ethical behavior depending on where the ethical climate falls along an “ethical climate continuum.” At one end of this continuum is the ethical climate, where organizational norms *always* promote ethical behavior. At the other end of the continuum is the unethical climate, where organizational norms *never* promote ethical behavior. According to the theory, five dimensions define the ethical climate. These include goal emphasis (prevailing norms for selecting organizational goals), means emphasis (prevailing norms for determining how organization goals should be attained), reward orientation (prevailing norms regarding how performance is rewarded), task support (prevailing norms regarding how resources are allocated to perform specific tasks), and socio-emotional support (prevailing norms regarding the type of relationships expected in the firm).

Vidaver-Cohen (1995) proposed that the ethical climate of the organization directly influences ethical behavior. The author explains that ethical behavior in organizations includes promoting long-term goodwill within and across group boundaries and respecting the needs of others, both within and outside the organization. Therefore, a climate at the positive end of the ethical climate continuum is characterized by strong norms with regard to fulfilling social contracts, considering potential harmful consequences to others during problem solving, rewarding intentionally responsible actions, allocating resources to promoting long-term goodwill, and promoting interpersonal respect in intra-firm and boundary-spanning relationships.

Issues and shortcomings

This theory provides some interesting new perspectives on the EWC construct. It represents a fresh angle on the structure of EWCs, and is explicitly oriented toward providing insights about how the organizational context could influence individual behavior. However, several important issues remain unclear. First, although it defines the extreme end-points of the

continuum—absolutely ethical and absolutely unethical climates—it is less explicit in defining the nature of other points along the continuum. More specifically, the theory does not specify how the five dimensions of EWC combine to form more or less EWCs at various points along the continuum. In that it is questionable whether absolutely ethical or unethical organizational climates actually exist, I view this as a critical weakness. If most organizations tend to fall along the body of the continuum rather than at its endpoints, the usefulness of the framework will depend largely on its ability to describe the processes at work along the middle ranges of the continuum.

Finally, I am aware of no empirical evidence supporting the theory and its dimensions. Of course, empirical exploration often lags new theoretical development by some period of time. However, the preliminary version of this framework has been present in the literature for more than ten years. In our view, this has provided ample opportunity for scholars to engage in empirical examination, and I can only speculate about the dearth of empirical evidence. It may be that the theoretical framework has proven, in practice, difficult to operationalize. Alternatively, it may have been adequately operationalized, but results may not have emerged consistent with the theory. Finally, it may have simply been overlooked, as EWC researchers elected to build upon other, more established, frameworks (i.e., Victor and Cullen's (1988, 1987) framework). Whether the reason is one of these or some other, I view this lack of empirical examination and support as evidence that this theory may not represent the best opportunity for researchers to understand better the relationship between EWC and individual ethical behavior in organizations.

Summary

Each one of the two EWC theories has limitations. Most importantly, the only theory that has led to a significant stream of research on EWC (Victor & Cullen, 1988, 1987), contains a serious theoretical shortcoming (i.e., its unidimensionality) that fosters important empirical weaknesses as well (i.e., unstable factor structure, limited predictive validity). Research on EWC has decreased in recent years, and many scholars have raised concerns about the Theory of EWCs as a possible reason. For example, at the 2004 conference of the International Association for Business and Society, a session on “Revisiting Victor And Cullen’s Theory And Measure Of EWCs,” concluded with a call for new EWC theory and measurement. Similar comments pervaded a symposium at the 2004 Academy of Management meetings titled “Reviewing Victor and Cullen’s Ethical Work Climate Construct.” These sessions support other calls in the literature for the need to consider more comprehensive models of EWC (i.e., Arnaud & Schminke, in press), ones more capable of linking EWC to the actual ethical behavior of employees, by considering the multiple factors involved in ethical decision making, rather than the single moral judgment dimension emphasized by Victor and Cullen (1988, 1987).

I answer these calls and suggestions with the development of a new theory of EWC. This framework, which I label the “Psychological Process Model” of EWC, specifies four distinct dimensions of EWC, each grounded in one of the four components of Rest’s (1986, 1983) model of individual ethical decision-making. In the following sections, I briefly review Rest’s model and define each one of its components. Then, I discuss each of these components and how they contribute to constructing a new theory of EWC.

A New Theory of EWC

Theoretical Foundation for the PPM: Rest's Four Component Model

Rest's (1986, 1983) Four Component model is the preeminent framework conceptualizing and assessing ethical decision-making in the literature (Jones, 1991). It suggests that before an individual engages in an ethical act, he or she must perform four basic psychological processes: moral sensitivity, moral judgment, moral motivation and moral character.

Moral sensitivity

This involves empathy and role taking on the part of the ethical actor. It consists of recognizing that an ethical dilemma exists and how the dilemma and our responses to the dilemma affect other people. It involves being aware of possible alternative courses of actions and determining how each one of these actions could affect others. For example, consider the case of a production line employee in a computer assembly plant. The employee might be focused almost exclusively on production quotas, so as to maximize her production bonus. Thus, he/she might be largely unaware or unattentive to the fact that allowing a poorly assembled product to be sold could involve considerable frustration on the part of the customer. Further, in cases of, say, medical or transportation applications, the health or safety of those depending on a quality product might be at risk. In this case, the employee is lacking moral sensitivity. He/she is not interpreting the situation as one in which the welfare of others is at stake, thus defining the situation as one with ethical implications.

Moral judgment

This involves bringing one's moral decision framework to bear on the problem, to determine the ethical course of action. More specifically, after a person becomes aware of how people would be affected by courses of action (moral sensitivity), he/she employs a personal moral code to make in order to make judgments about which line of action is most moral. Kohlberg's (1984, 1981) theory of CMD provides an example of one such framework for assessing individual moral judgment frameworks. Consider two individuals, James and Julie, both of whom have demonstrated moral sensitivity in recognizing an illegal action on the part of their employer that could have severe negative consequences for customers and shareholders. Both possess adequate moral sensitivity to trigger the moral judgment process. However, James may decide to report the illegal actions because he fears being caught and punished if he does not. Julie may decide to report the illegal actions because she recognizes a responsibility to her peers and community to uphold the law. In this case, each utilized a different form of moral reasoning (James preconventional, Julie conventional) to arrive at similar outcomes.

Moral motivation

This concerns the degree to which ethical values dominate other potentially competing values in a situation. That is, even if an actor recognizes that a moral dilemma exists, and utilizes his/her moral judgment to determine the correct course of action from a moral perspective, ethical action may not occur. The moral values involved in the ethical course of action may be trumped by other values such as individual's need for power, economic security, and so on. In order for moral behavior to occur, the actor must assign priority to moral values such as fairness, honesty, and integrity. Deficiencies in moral motivation occur when a person is not sufficiently motivated to put moral values above other personal values. For example, John Dean was the

special council to President Nixon and admitted that his professional activities and actions were motivated by his ambition to succeed in the Nixon administration. Questions of morality and justice were preempted by wanting to convince everyone that he had power and could stand his ground.

Moral character

This relates to whether an individual possesses the personal fortitude and implementation skills to follow through on what he/she has determined to be the correct ethical course of action. It involves the ability to control one's actions without being distracted and to self regulate one's behavior. Specific factors of moral character include perseverance and courage, but most of all self-control (i.e. assuming responsibility for one's actions, self-efficacy, self-esteem and internal locus of control). Good intentions do not necessarily result in good actions. For example, I may want to report the illegal actions of my organization, but unless I have the self-control to act—to speak up and report the actions, especially when such actions might result in negative consequences for me—my moral intent will not result in moral action.

Rest (1986) explained that all four components need to be present in order for ethical activity to occur. As a result, the Rest framework is capable of explaining the relatively weak correlations in the literature (about .20) between stand-alone measures of individual moral reasoning (i.e., CMD) and ethical behavior, because moral judgment represents only a single part of the four-part process required for ethical action to occur. I suggest that the same is true at the level of the social-system (i.e., the workgroup, the department or the organization). That is, higher levels of collective moral judgment (such as reflected in Victor and Cullen's (1988, 1987) theory of EWC), cannot, on their own, be expected to predict moral behavior especially well. Rather, EWC must be understood in terms of all four processes involved in the Four Component

model. In the following sections, I develop such a model of EWC, and present a series of propositions that emanate from such a perspective.

The New EWC Theory: The Psychological Process Model

Payne (1990) defined organizational climate as a molar concept reflecting the content and strength of the prevalent values, norms, attitudes, feelings, and behaviors of the members of a social-system (i.e. workgroup, department, or organization). Because the EWC represents a subset of the broader construct of organizational climate, it is useful to define it correspondingly as *a molar concept reflecting the content and strength of the prevalent ethical values, norms, attitudes, feelings, and behaviors of the members of a social-system.*

The social-system refers to any group of individuals that works toward a common goal and engages in social interaction and develops shared values and norms. Within the context of the organization, a social-system may be a specific workgroup (including cross-departmental workgroups such as project groups), department or the entire organization. This leads us to suggest that:

Proposition 1: EWCs exist at the social-system-level and may differ from one social-system to the other such that an organization may have one or more EWCs.

The organizational climate and EWC climate literature assume that shared perceptions exist of ethical values, norms, attitudes, feelings, and behaviors. If that is true, and I believe that it is, then shared perceptions of all four of Rest's components should also exist and further, these shared perceptions should exert a collective influence on the ethical decisions and actions of individuals in the organization. In other words, just as individual ethical actions are dependent on the existence of all four components at the individual-level, actions taken by organization

members may relate to the organizational climate reflecting each of the four components. Based on this definition, I can conceptualize EWC by raising Rest's (1986, 1979) Four Component model, which is conceptualized at the individual-level, to the social-system-level, to provide the foundation for our Psychological Process Model (PPM) of EWC.

The Four Dimensions of the PPM

Collective moral sensitivity

This involves the prevalent mode within the social unit of imagining what alternative actions are possible and evaluating the consequences of those actions in terms of how these actions affect others and who would be affected by those actions. More specifically, collective moral sensitivity includes the prevalent norms of (a) moral awareness and (b) empathy/role-taking that exist in a social-system.

Collective moral judgment.

This reflects the prevalent form of moral reasoning used to decide which course of action is morally justifiable. More specifically, collective moral judgment includes the collective norms for moral reasoning and judging which course of action is morally right.

Collective moral motivation

This involves assessing whether ethical concerns dominate other concerns when determining actions and reflect whether the organization generally intends to do what is morally right. More specifically, collective moral motivation involves the prevalent values of the social-system and whether moral values are commonly prioritized over other values.

Collective moral character

This involves the prevailing levels of perseverance and courage of members of a social-system. More specifically, collective moral character includes the norms for implementing a planned course of action as represented by the norms of self-control (assuming responsibility for one's actions, locus of control, self-efficacy, and self-esteem).

Therefore, I propose that:

Proposition 2a: The concepts of moral sensitivity, moral judgment, moral motivation and moral character are individual-level concepts, which can be defined and assessed at the social-system-level.

Proposition 2b: The EWC of a social-system includes the four dimensions of collective moral sensitivity, collective moral judgment, collective moral motivation, and collective moral character.

A Closer Look: Each Dimension's Contribution

In the following sections, I review the literature pertaining to each one of the four dimensions. In doing so, I explain the contribution of each component to the PPM and offer additional propositions related to each one.

Collective moral sensitivity

Collective moral sensitivity as a dimension of EWC refers to the norms of moral awareness and empathy that exist in a social-system. To date, I am aware of no research that conceptualizes moral sensitivity at the social-system-level. Hence, no research evidence exists regarding this construct at the workgroup, department, or organization level-of-analysis. However, considerable research at the individual-level exists, and I build upon that research here.

This research has, in the main used the term ethical sensitivity instead of moral sensitivity. In addition, ethical sensitivity is generally conceptualized as moral awareness², the individual's ability to recognize a moral issue.

Collective moral sensitivity: Moral awareness

Most of the research on moral awareness has been conducted in the context of specific situations (i.e. dentistry, accounting, marketing, and medicine) using scenario-based instruments (i.e. Bebeau, Rest & Yamoor, 1985). The empirical research on moral awareness has focused primarily on the study of its antecedents. Results suggest that individual differences like the ethical orientation of individuals such as relativism (i.e. Shaub, Finn & Munter, 1993) and individual standards (Treviño & Weaver, 1996).

One of the most robust findings has been that moral awareness can be learned through socialization processes. For example, Treviño and Weaver (1996) found that the moral awareness of practitioners from the competitive intelligence field was guided by the broader social context including the media, law, family and prior work experiences. Later, Butterfield, Treviño, and Weaver (2000, 1997) identified that company and industry norms supported ethics, and framing that used moral language increased moral awareness.

Similarly, Sparks and Hunt (1998) demonstrated that the moral awareness of marketing researchers was a positive function of organizational socialization, and Sirin, Brabeck, Satiani, Rogers-Sirin (2003) found that teaching a course on multiculturalism and ethics (a form of socializing individuals to ethical standards) increased moral awareness. Research in dentistry further supports the effect of socialization on moral awareness. For example, beginning and first year dental students consistently scored lower on moral awareness than senior students. As students became more aware of professional norms, codes, and rules, they became more

socialized into the profession, and thus, became more morally aware (Bebeau, Rest & Yamoor, 1985). These findings suggest that:

Proposition 3: Collective moral sensitivity (norms of moral sensitivity of a social-system) can be improved by socializing its members to ethical standards of the organization and profession.

Collective moral sensitivity: Empathy

Although most empirical work related to moral sensitivity has involved moral awareness, empathy plays a fundamental role as well. Rest and Narvaez (1994) state that “moral sensitivity is the awareness of how our actions affect other people...it involves empathy and role-taking skills (23).”

I am aware of no research on empathy at the social-system-level. However, at the individual-level, empathy is defined as the responsiveness and sensitivity to the experience of another person. An empathetic person can understand and predict another person’s thoughts, feelings and actions. He/she responds affectively to another person’s condition and can feel what the other person is feeling or would be expected to feel (Eisenberg, 2000). Most importantly, individuals show significant differences in their sensitivity to the needs and welfare of others and this difference influences their behaviors.

Collective moral sensitivity and ethical behavior

Although the link between individual moral sensitivity and individual ethical behavior has been crafted in the theoretical literature, little empirical research has explicitly looked at moral sensitivity as such and its effect on ethical behavior. However, I found one study that linked moral awareness, a component of moral sensitivity, to ethical behavior. Cohen, Pant and Sharp (2001) found that moral awareness predicted the intention to behave ethically. More

specifically, students with higher levels of moral awareness had more intention to behave ethically than those with lower levels of moral awareness.

More work has linked empathy, the other component of moral sensitivity, to ethical behavior. Empathy has been linked to ethical behavior such as helping and volunteering (i.e. Davis, Hall, Meyer, 2003; Davis, Mitchell, Hall, Lother, Snapp & Meyer, 1999; Eisenberg, 2000; Reynolds, Scott, & Austin, 2000). For example, empathetic individuals were more committed to following through with helping behavior (Davis, 1983) and displayed more organizational citizenship behaviors such as altruism Kidder (2002). Markers of empathy (i.e. smiles, behavioral and psychological reactions) have been associated with situational and dispositional prosocial behavior among children (Denham, Renwick-DeBardi & Hewes, 1994).

Research also shows a relationship between empathy and unethical behavior. For example, lower levels of empathy have been linked to increased aggression (Hastings & Zahn-Waxler, 1998) and delinquent behavior (Hackenberg-Culotta, 2002). Also, lack of empathy has been linked to individuals convicted of crimes (Hogan, 1973), adolescents committing crimes (Cohen & Strayer, 1996), and bullying behavior among prisoners (Ireland, 1999).

In all, these findings suggest that:

Proposition 4: Higher collective moral sensitivity (stronger norms of moral sensitivity at the social-system-level) will be positively related to ethical behavior and negatively related to unethical behavior.

Collective moral judgment

At the EWC level, collective moral judgment is conceptualized as the norms of moral reasoning (CMD) used to judge which course of action is morally right. The work by Victor and Cullen (1988, 1987) on EWC speaks to this concept. An analysis of Victor and Cullen's theory

(see above) reveals that the model is grounded in the theory of CMD by Kohlberg (1984, 1981) and reflects the norms for moral judgment at the social-system-level. This directly corresponds to our conceptualization of moral judgment at the social-system-level. Therefore, I use findings from research on Victor and Cullen's model to assess the evidence regarding a link between collective moral judgment at the social-system-level and other constructs.

Collective moral judgment and ethical behavior

Some of the more conclusive evidence of a link between norms of moral reasoning (as conceptualized by Victor and Cullen (1988, 1987) and behavior has been found by Peterson (2002a, 2002b). He found that in general, EWCs characterized by norms of postconventional and conventional moral reasoning (higher levels of CMD) were negatively related to unethical behaviors such as property deviance, ethnic or sexually harassing remarks, production deviance, deviant political behavior, and employees working on personal matters during company time; EWCs characterized by norms of preconventional moral reasoning (lowest level of CMD) were positively associated with employees working on personal matters during company time and taking company property without permission (Peterson 2002a). When he used an aggregate measure of behavior, all of the EWC dimensions correlated negatively with unethical behavior; only EWCs characterized by norms of preconventional levels of moral reasoning (the lowest level of CMD) were positively correlated with unethical behavior. In addition, Wimbush et al. (1997b) found a positive relationship between the instrumental EWC (characterized by norms of preconventional moral reasoning) and being an accomplice to unethical activity and Treviño et al. (1998) found self-interest EWC (characterized by norms of preconventional moral reasoning) being the strongest predictor of unethical behavior.

Research has also linked individual-level CMD with moral behavior, although the relationships have tended to be weak to moderate (typical correlations are 0.2) (Rest & Narvaez, 1994). Thoma, Rest, and Barnett (1986) reviewed studies across a variety of literatures that linked moral reasoning to various forms of behavior and found that CMD was related to delinquency, cheating, cooperative behavior, whistle blowing on misdeeds at work, and ratings of aggression among athletes.

All this evidence from the EWC level and individual-level regarding the link between moral reasoning and ethical behavior leads us to propose that:

Proposition 5: Collective moral judgment (norms of moral judgment of a social-system) are related to ethical behavior such that higher levels of collective CMD (at the social-system-level) will induce ethical behavior and lower levels of collective CMD (at the social-system-level) will induce unethical behavior.

Collective moral judgment: Person-organization fit

The effect of congruence between individual and organizational ethics was explicitly noted by Victor and Cullen (1988), as they suggested that longer-tenured employees may perceive a better fit between their personal ethical and the EWC of the organization, and that this link may affect other organizational outcomes. The underlying assumption is that individuals are most attracted to organizations that display ethics similar to their own. That is, individuals at higher levels of CMD should prefer EWCs characterized by higher levels of collective CMD, and individuals utilizing lower levels of moral development should prefer EWCs characterized by lower levels of CMD. Some empirical evidence supports this possibility, at least indirectly. For example, Sims and Kroeck (1994) found that in the main, the absolute differences between employees' preferred and actual EWC decreased with tenure. Arnaud et al. (2002) identified that

fit between employee CMD and the organization's collective level of CMD was related to higher levels of affective commitment and job satisfaction, and moderately related to lower employee turnover intentions. In all, these findings suggest that:

Proposition 6: Fit between the CMD of individuals and collective moral judgment (the norms of moral judgment of the social-system) will positively affect employee attitudes.

Collective Moral Motivation

Collective moral motivation at the EWC level is defined as the prevalent values of a social-system and whether moral values (i.e. honesty, honor, integrity) are generally prioritized over other values (i.e. power, dominance, economics). I am unaware of any studies in which researchers have conceptualized moral motivation at the social-system-level. Hence, no empirical evidence exists regarding this construct being applied at the workgroup, department, or organization level-of-analysis.

Even empirical research at the individual-level of analysis has been scarce. However, in one study, Damon (1977) conducted an experiment asking children first to explain how candy bars ought to be distributed as a reward. He then asked the children to actually distribute the rewards. He found that the children deviated from their original plan (equal distribution of the candy) and gave themselves more candy than the other children. Thus, the children knew what the right thing to do was, but their moral motivation was compromised by other values.

In a second study related to moral motivation, Thoma, Bebeau and Born (1997) defined moral motivation as the commitment to professional values over personal values. They found that graduating dentistry students were generally more committed to professional values over other personal values, than were junior dentistry students.

At the core of moral motivation is the prevalence of a specific form of values, those involving morals. Hence, the literature on individual values is relevant to our discussion on this dimension because climates are shaped by the values of their members. That is, values serve as guiding principles in a person's life and in a social-system, and individuals' values give rise to the normative value system of the social-systems themselves. For example, Miles (1987) argued that personal values become part of the general philosophy of managers, which permeates an organization and to some extent characterizes it.

Some evidence exists linking the individual's emphasis on moral values above other personal values to ethical and unethical behaviors. For example, values such as equality, peace, freedom, or a comfortable life have been found to predict unethical or illegal behavior (Brief, Brown, Dukerich, & Brett, 1993; Lincoln, Pressley, & Little, 1982; Vitell & Festevand, 1987).

Of particular relevance to our concern with a values perspective on EWC is Schwartz's (1992) theory of values, inasmuch as Schwartz suggested that people who are morally motivated will place moral values above other values in life. Schwartz's framework identifies ten value types, including power (societal prestige and controlling of others), achievement (personal competence according to social norms), hedonism (pleasure and satisfaction of sensual needs), stimulation (excitement, novelty, and challenge in life), self-direction (independent action, thought, and choices), universalism (understanding, tolerance and protection for the welfare of all people and for nature), benevolence (protecting the welfare of close others in everyday interaction), tradition (respect, commitment, acceptance of customs/ideas that one's culture/religion impose), conformity (restraint of actions, inclinations, impulses likely to upset, harm others or violate social norms), and security (safety, harmony, stability of society, of

relationships and of self). Universalism and benevolence are values that motivate the promotion of the welfare of others. Hence, they are considered moral values (Myyry & Helkama, 2002).

Empirical evidence linking Schwartz's (1992) values to ethical behavior is limited, but some does exist. For example, Gaerling (1999) found universalism to be related to prosocial behavior. In addition, individuals who identified benevolence and universalism values as guiding principles in their lives engaged in more socially desirable behaviors such as helping than individuals who identified other values as guiding principles in their lives (i.e. Franc, Sakic & Ivicic, 2002). Also, relationships between values related to benevolence and universalism and moral behavior have been identified, as have relationships between values that serve the collective interest and moral behavior (i.e. Schwartz, 1992; Schwartz & Bilsky, 1987).

Therefore, I suggest that:

Proposition 7: Collective moral motivation of a social-system characterized by prevalent moral values such as benevolence and universalism will be positively linked to ethical behavior.

Collective Moral Character

Collective moral character at the EWC level is defined as the prevailing collective perseverance and courage of members of a social-system. More specifically, it involves norms for actually carrying out and implementing a planned ethical course of action.

Rest (1986, 1983) notes that individuals with high moral character possess high self-control. Hence, self-control is at the core of moral character. Self-control includes one's ability to assume responsibility (in committing and implementing a planned course of action), as well as other factors such as high self-efficacy, self-esteem, and an internal locus of control.

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

(Staub, 1978). It requires that individuals feel some capability to control the action enjoined and its outcomes, that they feel some personal responsibility toward them.

Self-efficacy is defined as individuals' beliefs in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives; resilient self-belief in one's capabilities to exercise control over events to accomplish deserved goals (Bandura, 1991).

The literature refers to self-efficacy as one of two core component of self-esteem (the other being self-worth) (Judge, Locke, Durham, & Kluger, 1998). Self-esteem is defined as the attitude people have about themselves as a good or bad person and the extent to which people like themselves. Baron and Byrne (1991) found that increased self-esteem was linked to coping with failure and criticism as well as performance. Brockner (1988) found that people with low self-esteem were concerned with social approval, more susceptible to social influence and pressure to conform to group norms.

Locus of control is defined as individuals' sense of autonomy, and their generalized expectancies for control of outcomes. *Internals* (people with an internal locus of control) believe they can control the outcome of their actions while *externals* (people with an external locus of control) believe fate, luck and other people control outcomes. Also, internals have a higher expectancy that they can perform a task and have been associated with higher initiative and performance at work (i.e. Levenson, 1981; Rotter, 1966).

The nature of these latter three factors (self-efficacy, self-esteem, and locus of control) unifies them because they describe the global evaluation individuals make of themselves. Judge and colleagues (1998) developed a theory and measure of core-self-evaluations: a model including self-esteem, self-efficacy, locus of control (and neuroticism as a fourth factor). The

authors explain that these factors interlink and refer to the global evaluations individuals make of themselves.

Collective moral character and ethical behavior

I am aware of no research that conceptualizes moral character at the social-system-level. Thus, no research evidence exists regarding this construct at the workgroup, department or organization level of analysis. However, some evidence does exist at the individual-level that links moral character and self-control (i.e., a strong sense of responsibility, self-efficacy, self-esteem, and locus of control) with ethical action.

For example, with respect to self-control, Krebs (1969) notes that individuals with the ability to self-regulate their actions cheat less than subjects who lack this ability. Also, Gottfredson and Hirschi (1990) demonstrated that crimes were committed by individuals with low self-control.

Empirical evidence exists to support the assertion that assuming responsibility is linked to ethical behavior. For example, Schwartz (1973) hypothesized that the impact of norms on behavior was a function of the tendency to deny or ascribe responsibility to the self (AR). As part of a national survey of public attitudes toward organ transplants, he asked whether individuals would be willing to donate organs. Three months later he appealed to the respondents to actually join a pool of bone marrow donors. Results revealed that those who volunteered had higher personal norms for ascribing responsibility to self. People high in responsibility denial tended to ignore standard norms and rationalized their behavior by blaming depersonalized others, such as organizations. In addition, Schwartz and David (1976) and Zuckerman, Siegelbaum and Williams (1977) found that individuals who had high personal

norms for assuming responsibility (AR, low responsibility denial) were more likely to engage in prosocial behaviors such as helping others and volunteering.

Empirical evidence has linked general self-efficacy and its sub-factors such as self-regulatory self-efficacy to moral behavior. For example, empirical evidence revealed an inverse relationship between self-efficacy and violent behavior (Caprara, Regali & Bandura, 2002). Self-regulatory self-efficacy deterred unethical behavior both directly and by fostering prosocial behavior and adherence to moral self-sanctions for harmful conduct (Bandura, Caprara, Barbaranelli, Pastorelli & Regalia, 2001). Also, self-efficacious high school students in Italy were more likely to engage in prosocial behavior, less antisocial behavior and less depressive social withdrawal (Caprara, Scabini, Barbaranelli, Pastorelli, Regalia & Bandura, 1999). Finally, Pastorelli, Caprara & Bandura (1998) demonstrated that self-efficacy was negatively related to emotional instability, physical and verbal aggression and depression.

Evidence also suggests that locus of control may influence ethical behavior. For example, externals have been found to engage in counterproductive and unethical behavior (e. g., aggression against others, sabotage, starting arguments, and stealing) in response to frustration (Perlow & Lathem, 1993). Research also shows that an external locus of control is related to delinquent behavior (Andrew, 1996; Jessor & Jessor, 1977; Simourd & Andrews, 1994).

In all, these findings suggest that:

Proposition 8: Collective moral character including norms of internal locus of control, strong self-efficacy, strong self-esteem and assuming responsibility, will be positively linked to ethical behavior.

Linking the Dimensions of the PPM

Some evidence exists linking the four components to each other. For example, research has linked moral judgment and moral sensitivity. Chang (1994) found that at more complex moral reasoning levels, teachers were more democratic, sensitive and responsive to student perspectives. Maddox (1996) identified that individuals at higher levels of CMD also displayed higher levels of empathy. Both Thies-Sprinthall (1984) and Reiman and Gardner (1995) found that as moral maturity increased (higher levels of CMD), adults became more aware of their environments and their effects on others. Raboteg-Saric (1997) identified an interaction effect when they studied young adolescents: moral sensitivity and moral reasoning were positively related such that higher levels of CMD led to a stronger correlation between empathy and prosocial behavior. Finally, VanSandt and Shepard (2003) discovered that EWCs grounded in conventional and post conventional norms of moral reasoning were associated with higher levels of moral awareness; and organizations with EWCs characterized by egoism ethical criteria (based in pre-conventional moral reasoning) were associated with the lowest degree of moral awareness among its members. This suggests that:

Proposition 9: EWCs characterized by higher levels of collective moral judgment will also be characterized by higher levels of collective moral sensitivity.

There is some evidence supporting a relationship between moral motivation and moral sensitivity. For example, Myyry and Helkama (2001) demonstrated that benevolence and universalism were related to increased moral sensitivity. In a follow up study they (Myyry & Helkama, 2002) found that individuals with higher regard for power, hedonism and stimulation were lower on moral sensitivity and that individuals with higher regard for universalism were higher on moral sensitivity. This suggests that:

Proposition 10: EWCs characterized by stronger collective moral motivation (prevalent moral values such as benevolence and universalism) will also be characterized by higher collective moral sensitivity.

Moral motivation represents the incentive for generating ethical behavior, and moral judgment represents a competence or capacity for generating ethical behavior. Hence, the two factors are related, and collectively affect the emergence of the actual ethical behavior (Mischel & Mischel, 1976).

Therefore, I propose that:

Proposition 11: EWCs characterized by stronger collective moral motivation (prevalent moral values such as benevolence and universalism) will be positively linked to EWCs characterized by higher levels of collective moral judgment.

The PPM and Ethical Behavior

The preeminent theory of EWCs by Victor and Cullen (1988, 1987) has not proven to be a strong predictor of ethical behavior. As noted above, the reason for the weak predictive power of Victor and Cullen's model may be that it is grounded in only a single component of the ethical decision process (moral judgment), which typically explains less than 20% of the variance in ethical behavior (Rest, Narvaez, Bebeau & Thoma, 1999: 101). Building upon Rest's (1986) conceptualization of the ethical decision-making process, our proposed model of EWC recasts the four components of moral sensitivity, moral judgment, moral motivation, and moral character at the social-system-level to define the EWC. Following Rest, our belief is that these four psychological processes together give rise to outwardly observable behavior. Therefore, all four

components need to be assessed in order to identify the ethical attitudes and behavior of individuals in a given situation.

Proposition 12: The EWC, as defined by collective moral sensitivity, collective moral judgment, collective moral motivation and collective moral character, will predict the ethical behavior of its members.

Discussion

It seems that every day another article is published regarding “yet another” organization being investigated or ruined due to corrupt and unethical behavior of members of the organization. Many of these organizations lack the ethical values and norms to prevent such activities. The EWC defined these ethical values and norms and hence is an important construct for researchers and practitioners to understand the factors that attribute to ethical and unethical activities in organizations.

In this paper I developed a new EWC theory by elevating Rest’s (1986, 1983) four components to the social-system-level at which work climates exist, creating what I term the Psychological Process Model (PPM) of ethical work climate. I proposed that each one of the dimensions of EWC – collective moral sensitivity, collective moral judgment, collective moral motivation and collective moral character – affects the ethical behavior of individuals. For example, higher norms of moral sensitivity in the organization should lead to more ethical conduct of its members and lower norms of moral sensitivity should lead to more unethical conduct. However, the most promising and hopeful proposition is that these four dimensions combine to co-determine behavior: by combining information from the four components the

prediction of behavior should become more powerful and precise. This has significant implications for researchers and practitioners alike.

Implications for Researchers

As explained above, the new theory of EWC, the PPM, addresses this shortcomings of earlier theories and offers researchers a better framework for assessing and understanding the ethical-context of the organization. Because it is more complete and includes all the dimensions necessary to determine behavior and decision-making, it should help researchers to better predict organizational outcomes related to ethics (i.e. ethical behavior and decision-making).

Even though the literature suggests that these four dimensions are interrelated, I do not know much about these relationships. Therefore, besides studying the influence of the entire model on ethical behavior I need to investigate each one of the dimensions individually and in combinations. I need to identify the antecedents (i.e. leadership, organizational structures and reward systems) and outcomes (i.e. employee attitudes and behaviors) of EWC. Also, I can study combinations of the four dimensions to assess how they interact and affect organizational outcomes. For example, it may be that organizations characterized by strong collective moral character and collective moral sensitivity may lead to ethical behavior even though the norms for moral judgment are pre-conventional (and should lead to more unethical behavior). These issues warrant explorations.

I proposed that EWCs could exist at the social-system-level characterized by the workgroup, department or the entire organization. It is likely that the various EWCs are inter-related and combine to effect the organization. Hence, I should define and assess EWC at

different social-system-levels of the organization and assess how these different EWCs interrelate and affect the overall organization and the behavior and attitudes of its members.

Finally, the proposed theory is grounded in an individual-level model of ethical-decision-making and behavior. The individual-level dimensions and the social-system-level dimensions are interrelated because organizational norms and values are determined by the members of the organization. The literature on Person-Organization fit suggests that this fit (i.e. value fit) affects employee attitudes. For example, P-O Fit increases satisfaction and commitment and reduces turnover intentions (i.e. O'Reilly III & Chatman, 1991). This suggests that a fit between individual and organizational norms for each one of the dimensions should lead to increased satisfaction and commitment and reduced turnover intentions of employees. For example, the fit between the collective moral judgment (norms for CMD) of the organization and the CMD level of the individual has been found to increase satisfaction and commitment (i.e. Arnaud et al., 2002; Sims & Keon, 1997; Sims & Kroeck, 1994).

The new theory of EWC offers many avenues for future research besides the propositions suggested in this paper. In addition, it offers some insightful information for practitioners, too.

Implications for Practitioners

Ethical work climate matters. Although more research is needed to understand the nature and relationships of the specific dimensions of EWC, and the boundary conditions under which they operate, EWCs have been found to influence important organizational outcomes like employee attitudes and behaviors (i.e. Arnaud & Schminke, in press; VanSandt & Shepard, 2003).

The PPM suggests that organizations can improve employee and organizational welfare, by focusing on the development of specific EWC dimensions. For example, EWCs should include values and norms high in collective moral sensitivity, collective moral judgment (norms of conventional and post-conventional CMD), collective moral motivation (prevalent values of benevolence and universalism) and collective moral character (norms of assuming responsibility for one's actions, high self-efficacy, high self-esteem, and internal locus of control).

In addition, organizations need to develop reward systems and training programs to promote these ethical work climate dimensions. For example, training programs are capable of raising the moral sensitivity among employees (Brabeck, Rogers, Seluk, Henderson, Benvenuto, Weaver, Ting, 2000; Clarkeburn, 2002) as well as raising the average level of moral reasoning among employees, and that if enacted correctly, those improvements “stick” (Rest, 1986, 1994).

Finally, it is well supported that leaders influence the emergence of organizational climate (Schein, 1985). Lewin and colleagues (Lewin, 1951; Lewin, Lippitt and White, 1939) first talked about organizational climate when they studied different leadership styles. They found that different leadership styles led to distinct climates including democratic, autocratic, and laissez-fair climates. It stands to reason that the same is true for the ethical work climate. Leaders influence and shape the ethical work climate of their organizations. In 2003, fifty executives from six companies pled guilty or were criminally indicted (Watkins, 2003). What does this suggest about the current and future state of the ethical work climates of these organizations? Because the personal values of managers become part of their general philosophy, which permeates and characterizes the organization (Miles, 1987) it is most important that leaders “lead” the organization effectively. Leaders have to set an example and promote the creation of an ethical work climate characterized by high ethical values and norms.

Ethical behavior and ethical decision-making is about evaluating choices and resolving moral dilemmas. The key to building and maintaining ethical organizations is to develop a strong ethical foundation, a highly ethical work climate, throughout the organization and each one of its social-systems. Only then can we reduce corrupt and illegal activities and influence and manage the ethical behavior of individuals in organizations.

ENDNOTES

¹ The terms ethical behavior and moral behavior are considered equivalent and will be used interchangeably in this paper. Ethical behavior refers to intentionally responsible actions honoring implicit and explicit social contracts and seeking to prevent and avoid or rectify harm (Vidaver-Cohen, 1995). Therefore, unethical behavior refers to intentionally irresponsible actions violating implicit and explicit social contracts and seeking to inflict harm or not preventing harm that could have been prevented. Unethical behavior is illegal and morally unacceptable to society and humanity.

² The terms ethical sensitivity, and moral awareness are considered equivalent and will be used interchangeable depending on context.

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Figures in Chapter 3

Figure 1. Theoretical Ethical Work Climates Types

		Loci of Analysis		
		Individual (I)	Local (L)	Cosmopolitan (C)
Ethical Criteria	Egoism (E)	Self-Interest (EI items)*	Company Profit (EL items)*	Efficiency (EC items)*
	Benevolence (B)	Friendship (BI items)*	Team Interest (BL items)*	Social Responsibility (BC items)*
	Principle (P)	Personal Morality (PI items)*	Company Rules and Procedures (PL items)*	Laws and Professional Codes (PC items)*

Figure 1

Theoretical Ethical Work Climates Types

CHAPTER 4

**CONCEPTUALIZING AND MEASURING ETHICAL WORK
CLIMATE: DEVELOPMENT AND VALIDATION OF THE
ETHICAL CLIMATE INDEX (ECI)**

Abstract

This study describes the development of a new theory and measure of ethical work climate. The author conducted 3 studies to construct the Ethical Climate Index (ECI) to 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). Study 1 and 2 resulted in parsimonious and reliable scales for each of the four dimensions. Results of the 3rd 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 behavior. Implications and suggestions for the use of this measure in future research are discussed.

Introduction

Newspaper headlines continuously bombard us with allegations of systemic organizational transgressions like embezzlement, insider trading, and fraud. Who has not heard of the demise of companies such as WorldCom, Tyco, Enron and Anderson? In his 2005 keynote address delivered at the Executive Summit of the Center for Business Intelligence, Brian Atchison, executive director of the Insurance Marketplace Standard Association, said, “honesty,

integrity, and ethical standards are essential to a company's long-term success." Clearly, the importance of maintaining high standards of ethics and ethical behavior¹ has become one of the most important issues facing organizations today!

Not surprising then is the surge in ethics research regarding issues such as ethical leadership (e.g. Aronson, 2001; Kanungo & Mendonca, 2001; Mendonca, 2001; Schminke, Ambrose & Neubaum, 2005) and ethical/unethical behavior (e.g. Keith, Pettijohn, & Burnett, 2003; Peterson, 2002a/b; Román & Munera, 2005; Weber, Kurke, & Pentico, 2003). In particular, researchers are focusing on macro-level influences such as organizational strategy (e.g. Husted & Allen, 2000), organizational size and structure (e.g. Schminke, 2001), and codes of ethics (e.g. Cassell, Johnson & Smith, 1997; Cowton & Thompson, 2000; Schwartz, 2001).

Macro-level influences are key to ethical conduct. For example, William J. Pesce, co-chair of the Business Higher Education Forum Ethical Initiative explained that ethics and ethical behavior cannot be legislated, but companies can create and sustain environments that reject unethical behavior. Research supports the important role the ethical environment, including the ethical climate and culture, plays in ethical conduct and attitude (e.g. Cohen, 1993; Treviño, 1990; Treviño, Butterfield, McCabe, 1998; Treviño, Weaver, Gibson & Toeffler, 1999). Of these two context variables, ethical work climate (EWC) has emerged as the prominent construct investigated in the literature (for a review, see Arnaud & Schminke, forthcoming).

The preeminent framework and measure for understanding and assessing EWC has been developed by Victor and Cullen (1987, 1988). Approximately 75 percent of the empirical research on EWCs has been grounded in their theory and used their measure, the Ethical Climate Questionnaire (ECQ). However, Victor and Cullen's theory and measure have critical

shortcomings that limit their effectiveness in understanding the influence of ethical context on the behavior of individuals.

This paper addresses these shortcomings by developing a new theory and measure of EWC. First, I provide some background on the ECQ and review the shortcomings of the measure and its theoretical framework. Second, I develop a new theory of EWCs, which I term the Psychological Process Model of EWCs; also, I explain the rationale for using Rest's (1984) *Four Component* model as the platform for this new theory. Third, I describe the development and validity testing of the Ethical Climate Index used to assess the four dimensions of the Psychological Process Model. Finally, I discuss the implications of the new theory and measure for future research.

The Theory of EWCs: A Construct is Born

Beginning with the publication of Victor and Cullen's *A Theory and Measure of Ethical Climate in Organizations* (1987) there has been a proliferation of research on ethical work climate. Victor and Cullen defined EWC as "the shared perceptions of what is ethically correct behavior and how ethical issues should be handled (1987: 51-52)." The theory is built on the assumption that collective employee perceptions of ethical events, ethical practices, and ethical procedures 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. Crossing the loci of analysis and ethical criteria gives rise to nine theoretical EWC types, illustrated in Figure 1.

The Ethical Criteria Dimension

The ethical criteria dimension of Victor and Cullen's (1987) model is grounded in Kohlberg's (1981, 1984) theory of cognitive moral development (CMD). Kohlberg suggests that individuals' moral reasoning² skills (judgments of how moral dilemmas ought to be resolved) can be categorized into three distinct moral judgment processes: preconventional, conventional, and postconventional moral reasoning. Victor and Cullen label these dimensions egoism (preconventional), benevolence (conventional), and principled (postconventional).

The Loci of Analysis Dimension

This dimension borrows from sociological theory of roles and reference groups (Merton, 1957), which notes that individuals' behaviors and attitudes are differentially influenced according to reference groups (e.g., locals and cosmopolitans) and the roles they assume within that group. Gouldner (1957) suggested that these differential roles apply to organizational participants as well and provide the foundation for the loci of analysis dimension of the EWC. Victor and Cullen extended the traditional distinction between locals and cosmopolitans to include an individual loci of analysis and propose three possible loci of analysis: individual (the self), local (the organization), and cosmopolitan (extraorganizational).

Criticism of the Theory of EWCs

The key concern with Victor and Cullen's (1987, 1988) model is that the ethical criteria and loci of analysis dimensions, as originally defined, do not represent independent dimensions. The ethical criteria dimension, grounded in Kohlberg's (1984, 1981) theory of CMD (cognitive moral development), spans individual, collective, and universal ethical criteria. Likewise, the

loci of analysis dimension represents the three loci as involving individual, collective, and universal concerns. Victor and Cullen (1988: 106) themselves make note of this nonindependence, remarking in a footnote that the loci of analysis dimension is also related to Kohlberg's stages of CMD. Arnaud and Schminke (forthcoming) suggest that not only are these dimensions not completely independent, they actually represent a single, unitary conceptualization of EWC, one that reflects the shared moral reasoning of individuals, the norms for moral judgment, in an organization.

A specific example helps to illustrate the problem. The individual-level ethical criteria dimension (egoism) is defined as an employee's desire to maximize his or her self-interest. Similarly, the individual-level loci of analysis dimension (individual) is defined as using the self as the referent in ethical decision-making and moral reasoning. Thus, these two components are not distinct, in that employees who desire to maximize their self-interest logically see themselves as the referent in moral reasoning. It becomes apparent that both the ethical criteria and loci of analysis dimensions of Victor and Cullen's (1987, 1988) framework appear to share a single dimension. Furthermore, this dimension directly parallels Kohlberg's (1984, 1981) concept of CMD, which progresses from individual (preconventional) to collective (conventional) to universal (postconventional) ethical concerns. Thus, I suggest that EWC, as defined by Victor and Cullen, captures a very important—but single—element of EWC: the shared moral reasoning (shared CMD) of individuals. More specifically, it defines employees' perceptions of the CMD of the organization: the norms of making judgments about which course of action is morally right.

As such, Victor and Cullen's (1987, 1988) work represents a very fruitful start for investigating and understanding ethical climates of organizations. However, there is more to

EWC and ethical behavior than moral reasoning. (In fact, the individual-level decision-making literature finds that the average correlation between moral judgment and moral behavior is only about 0.20 (Rest & Narvaez, 1994).) Victor and Cullen's model appears to be underspecified, which may explain the weak relationship between EWCs and individual ethical behavior. A more completely specified model, like the one proposed in this paper, may shed more light on the effect of EWC on organizational outcomes and individual behavior in particular.

The Ethical Climate Questionnaire

To date, most researchers have used Victor and Cullen's (1987, 1988) Ethical Climate Questionnaire (ECQ) for measuring ethical work climates. Originally, the ECQ contained 4-items for each of the theoretically defined ethical climates (Figure 1), for a total of 36 items. However, after factor analysis and reliability testing, only 26 items were retained for the most frequently used version of the ECQ (Victor & Cullen, 1988). It is the most widely used measure of EWC – according to my estimation 75 percent of empirical research on this construct uses the ECQ - and has resulted in a consistent stream of EWC research. Although, over the last 18 years researchers appeared to have readily accepted Victor and Cullen's ECQ as a sound instrument, more recently, the heavy reliance on this scale has been questioned (e.g. Arnaud & Schminke, forthcoming). Most of the criticism concerns the ECQs theoretical shortcomings, addressed earlier in the manuscript, and psychometric deficiencies, which I will address in the next section.

Criticism of the Ethical Climate Questionnaire

In addition to the theoretical concerns about Victor and Cullen's (1987, 1988) Theory of Ethical Work Climate, the ECQ itself has also been the subject of criticism. Two psychometric

weaknesses of the ECQ include its unstable factor structure and problems regarding its level-of-analysis.

First, the factor structure of the ECQ has lacked stability across most of its dimensions. Already early in their research, Victor and Cullen (1988, 1987) noted that descriptors did not consistently load on the same factors and that not the same factors emerged across studies. The unstable factor structure of the ECQ has not gone unnoticed. Several researchers (e.g. Barnett & Schubert, 2002; Fritzsche, 2000; Vaicys, Barnett & Brown, 1996; Wimbush, Shepard & Markham, 1997) have discussed problems with the emerging factor structure. These problems reduce the validity and reliability of the instrument.

Second, during an analysis of various sub-samples, Victor and Cullen (1987) noticed that the sample of MBA students had very low internal consistency compared to the other sub-samples. This led the authors to conclude that a sample consisting of single organizational representatives, such as a group of MBAs, did not represent a valid predictor of ethical climates because aggregation by organization or department was impossible. The authors suggested, that to make valid predictions about EWCs, data needed to be collected from various members of each organization (or department, if the department is the unit-of-analysis); and, before interpreting ethical climates, individual responses needed to be aggregated by organization (or department).

Although some researchers have adhered to these recommendations (e.g. Arnaud et al., 2002; Elm & Lippitt, 1993; VanSandt & Shepard, 2003), others have not. Various studies include samples of university alumni, students, or other single organization representatives (e.g. Peterson 2002a/b; Barnett & Vaicys, 2000; Wimbush, Shepard & Markham, 1997a/b; Vaicys & Barnett, 1996). Some researchers use samples of multiple organizations including multiple

representatives per organization, yet they do not aggregate by organization (e.g. Deshpande, George & Joseph, 2000; Rosenblatt & Peled, 2002; Upchurch, 1998; Upchurch & Ruhland, 1996). Results from these studies need to be interpreted with caution. For example, the EWCs discussed in these studies do not represent organizational climates but climates across a group of unrelated individuals. Based on the definition for EWC, can I call the emerging groups ethical climates? The use of inappropriate sampling and methodology reduces the validity of these investigations.

In summary, the theory of EWCs and its measure, the ECQ, have both theoretical and empirical shortcomings that raise strong concerns regarding its ability to assess accurately the ethical climates of organizations. In recent years, many scholars have raised concerns about the theory and measure. At the International Association for Business and Society meeting in 2004, a session termed: “Revisiting Victor and Cullen’s theory and measure of EWCs,” concluded with a call for new theory and measurement of EWC.

Answering the Call for New Theory and Measurement: The Psychological Process Model and Ethical Climate Index

Even if we resolved the psychometric deficiencies of the ECQ, such as stabilizing its factor structure, we would still be using a scale based on an underspecified theory. Thus, for all of its impact on the study of EWC, Victor and Cullen’s (1987) framework appears to be theoretically underspecified for accurately predicting ethical behavior, in that it only informs us about one of the ethical decision-making components: moral judgment. A more fully specified model of EWC should include all of the dimensions of the ethical decision-making process. The Psychological Process Model developed by Arnaud and Schminke (forthcoming) introduced

such an ethical climate theory, one grounded in the ethical decision-making model by Rest (1986).

Rest's Four Component Model

Rest's (1986) framework explains that moral judgment is one important component of ethical-decision-making, which ultimately leads to behavior. Yet, in order to predict behavior, four components must be understood. In particular, Rest states that before individuals engage in ethical acts, they must perform four basic psychological processes, which Rest terms moral sensitivity, moral judgment, moral motivation, and moral character. Hence, the current model of EWC, which is grounded in only one of the components of the ethical-decision making process (moral judgment) is limited in scope.

Rest (1986) defines each component of the ethical-decision making process. First, *moral sensitivity* involves recognizing that an ethical dilemma exists and evaluating how one's actions affect others (empathy). *Moral judgment* involves bringing one's moral decision-making framework (as reflected in one's cognitive moral development) to bear on the problem, to determine the ethical course of action. *Moral motivation* concerns the degree to which ethical values dominate other potential values (e.g., power or economic values) in a particular situation. *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. For moral behavior to occur, these four factors must all occur: they specify the complete ethical decision-making process and serve as the foundation for understanding ethical decision-making of individuals (Jones, 1991). Raised to the social system-level (e.g. work group, department or organization), they give rise to what I term the *Psychological Process Model*.

A New Conceptualization of EWC: The Psychological Process Model

Derived from Payne's (1990) definition of organizational climate, EWC can be defined as a molar concept reflecting the content and strength of the prevalent ethical values, norms, attitudes, feelings, and behaviors of the members of a social system (e.g. workgroup, department or organization). Climate research assumes and supports that shared perceptions exist of ethical values, norms, attitudes, feelings, and behaviors. If that is true, then shared perceptions of all four of Rest's (1983, 1986) components should also exist. Further, these shared perceptions should exert a collective influence on the ethical decision-making and behavior of individuals in the organization. In other words, just as individual ethical behavior is dependent on the existence of all four components at the individual level, actions taken by organization members may relate to the ethical climate reflecting each of the four components.

Hence, I conceptualize EWC by raising Rest's (1983, 1986) Four Component model to the social system-level, to provide the foundation for a new model of EWCs: the Psychological Process Model (PPM) of EWC (Arnaud & Schminke, forthcoming). This model includes the four dimensions of *Collective Moral Sensitivity*, *Collective Moral Judgment*, *Collective Moral Motivation*, and *Collective Moral Character*

Collective Moral Sensitivity

This dimension of EWC involves two factors including the prevalent mode (within the social system) of imagining what alternative actions are possible, and evaluating the consequences of those actions in terms of how they affect others and who would be affected by them. More specifically, collective moral sensitivity includes the prevalent norms of (a) moral awareness and (b) empathy/role-taking that exist in a social system.

Collective Moral Judgment

This dimension of EWC reflects the prevalent form of moral reasoning (within a social system) used to decide which course of action is morally justifiable. More specifically, collective moral judgment is defined as the norms of moral reasoning (CMD) used to judge which course of action is morally right. The work by Victor and Cullen (1987, 1988) directly speaks to this concept. As discussed earlier, Victor and Cullen's theory of EWCs captures the norms of moral reasoning at the social system-level.

Collective Moral Motivation

This dimension of EWC involves assessing whether ethical concerns dominate other concerns when determining actions and reflect whether individuals in a social system generally intend to do what is morally right. More specifically, collective moral motivation involves the prevalent values of the social system, and whether moral values, such as honesty, honor, or integrity, are generally prioritized over other values, such as power, dominance, or economics.

Collective Moral Character

Finally, this dimension of EWC involves the norms for implementing a planned course of action characterized by the norms of self-control and assuming responsibility. Collective moral character is defined as the norms for carrying out a planned course of action characterized by the norms of self-control and assuming responsibility.

Rest (1986, 1983) notes that individuals with high moral character possess high self-control and assume responsibility for their actions. Hence, these factors are at the core of moral character. Self-control includes the ability to control one's actions and assume responsibility (in committing and implementing a planned course of action) for one's actions. In addition,

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.

Defining Ethical Climates

Each of the four dimensions of the PPM (collective moral sensitivity, collective moral judgment, collective moral motivation and collective moral character) contributes to the overall EWC of the organization and thus in turn to the ethical and unethical behavior therein. More ethical work climates should encourage more ethical behaviors while less ethical work climates should be associated with less ethical behaviors. It is important to determine how each of the dimensions and its factors contribute to the emergence of more or less ethical work climates and ultimately affect individuals' behaviors. (Because chapter three offers a more in-depth discussion on the proposed composition of more or less ethical work climates, I discuss this subject rather briefly here).

Collective Moral Sensitivity

This dimension is composed of two factors, norms of moral awareness and norms of empathetic concern. With regard to moral awareness, little empirical evidence exists to show its effect on ethical behavior. Cohen, Pant and Sharp (2001) found that students with higher levels of moral awareness had more intention to behave ethically. Also, empathy, the other component of moral sensitivity, has been linked to positive outcomes. For example, empathetic individuals have been found to be more committed to following through with helping behaviors (Davis, 1983) and displayed more organizational citizenship behaviors such as altruism (Kidder, 2002). Lower levels of empathy have been linked to increased aggression (Hastings & Zahn-Waxler, 2000) and delinquent behavior (Hackenberg-Culotta, 2002).

Based on this evidence, higher levels of collective moral sensitivity, including higher levels of norms of moral awareness and norms of empathetic concern, should define more ethical work climates and give rise to more ethical behaviors.

Collective Moral Judgment

Some of the more conclusive evidence of a link between norms of moral judgment (ethical work climate as conceptualized by Victor and Cullen, 1987, 1988) and ethical behavior has been found by Peterson (2002a, b). Peterson identified that in general, EWCs characterized by norms of postconventional and conventional moral reasoning (norms of moral judgment focusing on the benefits of others such as peers and society in general) were negatively related to unethical behaviors such as property deviance, ethnic or sexually harassing remarks, production deviance, and deviant political behavior. EWCs characterized by norms of preconventional moral judgment (norms of moral judgment focusing on the benefit for oneself) were positively associated with employees working on personal matters during company time and taking company property without permission.

This evidence suggests that norms of collective moral judgment with a focus on others such as peers and the society should characterize more ethical work climates and give rise to more ethical behaviors. Norms of collective moral judgment with a focus on oneself should characterize less ethical work climates and negatively affect ethical behaviors of employees.

Collective Moral Motivation

Evidence exists linking individuals' emphasis on moral values above other personal values to ethical behaviors. Gaerling (1999) found universalism to be related to prosocial behavior. In addition, individuals who identified benevolence and universalism values as guiding principles in their lives engaged in more socially desirable behaviors such as helping

than individuals who identified other values as guiding principles in their lives (Franc, Sakic & Ivicic, 2002). Also, relationships between values related to benevolence and universalism and moral behavior have been identified, as have relationships between values that serve the collective interest and moral behavior (Schwartz, 1992; Schwartz & Bilsky, 1987).

These findings suggest that collective moral motivation characterized by prevalent moral values such as benevolence and universalism should characterize a more ethical work climate and should be positively linked to ethical behaviors.

Collective Moral Character

Some support exists at the individual-level linking moral character and self-control (i.e., a strong sense of responsibility and self-control) with ethical action. For example, Krebs (1969) notes that individuals with the ability to self-regulate their actions cheat less than individuals who lack this ability. Gottfredson and Hirschi (1990) demonstrated that crimes were committed by individuals with low self-control, and Schwartz (1973) found that individuals who volunteered had higher personal norms for ascribing responsibility to themselves. People high in responsibility denial tended to ignore standard norms and rationalized their behavior by blaming depersonalized others, such as organizations. In addition, Schwartz and David (1976) and Zuckerman, Siegelbaum and Williams (1977) found that individuals who had high personal norms for assuming responsibility were more likely to engage in prosocial behaviors such as helping others and volunteering.

These findings suggest that collective moral character including higher norms of self-control and assuming responsibility characterize more ethical work climates and should be positively linked to ethical behavior.

As mentioned earlier, these four dimensions of EWC combine to give rise to the PPM, a new more completely specified theory of EWC. In order to test this model, I developed a measure, the Ethical Climate Index (ECI), including scales for each one the dimensions defined above. In the following section of this paper, I describe the development and validity assessment of the ECI.

Synopsis of Research Strategy

Following the guidelines suggested by Nunally and Bernstein (1994), I assessed the construct and criterion (predictive) validity of the ECI. For this purpose, I conducted three studies. Study 1 was used to develop the preliminary version of the ECI by drawing upon a combination of existing scales for each of the dimensions at the individual level. These measures were modified to fit the social system-level of analysis. The result of Study 1 was the alpha version of the ECI containing items for each of the dimensions of the PPM. Study 2 was designed to refine the alpha version of the ECI; further reducing the item pool to design a more parsimonious ECI that offers reliable scales for assessing each of the dimensions of the PPM. Study 3 was designed to assess the ECI's construct validity, including its discriminant, convergent, and criterion-related validity. In addition, I conducted a CFA to cross-validate the factor structure of the ECI.

Study 1: Instrument Development

Phase 1: Developing the Item Pool for the ECI

Study 1 included the assembly of existing individual-level measures of each of the four components of the ECI and modification of items to reflect the social system-level of analysis that is the focus of the ECI. Then I narrowed the item pool of the ECI by having trained panelists complete a sorting exercise. Please refer to Appendix A for the list of original ECI items and instructions used in the sorting exercise.

Collective Moral Sensitivity Scale

This scale includes two factors: Norms of Empathetic Concern (role-taking) and Norms of Moral Awareness. The 10 items for the original Norms of Empathetic Concern factor of the Collective Moral Sensitivity Scale (Appendix A) were based on the *Empathetic Concern* and *Perspective Taking* dimensions of Davis's (1980) *Interpersonal Reactivity Index*. The items were adapted to reflect the respondents' perceptions of standards regarding empathy and role taking in the department. Psychometric properties of Davis's *Interpersonal Reactivity Index* have been satisfactory: test-retest reliabilities range from .61 to .81 and internal reliability coefficients range from .72 to .78 (Davis, 1983, 1980). The original Norms of Moral Awareness factor (Appendix A) of the Collective Moral Sensitivity Scale included 9 items specifically developed for the ECI. This factor had to be newly developed because no scale existed at the individual or social system-level, to assess this construct.

Collective Moral Judgment Scale

This scale is designed to assess the norms of moral reasoning. This concept was defined by Victor and Cullen (1987, 1988) and assessed with the ECQ. As discussed earlier, the ECQ differentiates between instrumental, caring, and principled levels of moral reasoning. Following Schminke et al. (2005), I included the 16 items from the ECQ that have loaded consistently on the three factors to reflect respondents' perceptions of the norms of moral reasoning in the department (Appendix A). Internal reliability coefficients range from .76 to .85 (Arnaud et al, 2002).

Collective Moral Motivation Scale

This scale is designed to assess the prevalent values that exist within a social system (e.g. department). More specifically, it involves determining whether ethical values take priority over other values such as power and achievement. This scale was assessed using an adapted version of Schwartz's 57-item Value Survey (Appendix A).

People who are morally motivated will place moral values above other values in life. Schwartz (1987) defined values as motivations that serve as guiding principles in people's lives. He developed the Value Survey including 57-items (values), which are categorized into 10 value types including power (societal prestige and controlling of others), achievement (personal competence according to social norms), hedonism (pleasure and satisfaction of sensual needs), stimulation (excitement, novelty, and challenge in life), self-direction (independent action, thought, and choices), universalism (understanding, tolerance and protection for the welfare of all people and for nature), benevolence (protecting the welfare of close others in everyday interaction), tradition (respect, commitment, acceptance of customs/ideas that one's culture/religion impose), conformity (restraint of actions, inclinations, impulses likely to upset,

harm others or violate social norms), and security (safety, harmony, stability of society, of relationships and of self).

The value types of universalism and benevolence are generally considered moral values and empirical evidence has linked these value types to ethical behavior (Myyry & Helkama, 2002) and prosocial behaviors (Franc et al., 2002; Gaerling, 1999). As a result, Schwartz's Values Survey provides a useful tool for assessing norms of moral motivation. Reliabilities (coefficient alpha) of the individual-level scale range from .58 to .78 (Schwartz, 1992).

Collective Moral Character Scale

This scale includes the factors of Norms of Responsibility and Norms of Self-Control. The 4 items for the Norms Of Self-Control factor were based on the *Core-Self Evaluations Scale* (Judge, Erez, Bono & Thoresen, 2003). Individual-level items were adapted to assess the respondents' perceptions of standards for self-control in their department. Psychometric properties of the individual-level scale are satisfactory with coefficient alpha averaging .84 across various samples and test-retest reliability of .81 (Judge et al., 2003).

The 14 items for the Norms of Responsibility factor (Appendix A) were based on items from the *Denial of Responsibility Scale* (Schwartz, 1977). Individual-level items were adapted to assess respondents' perceptions of norms of responsibility in their department (Appendix A). The individual-level scale has been found to be valid and reliable with coefficient alphas of .78 to .83 (Schwartz, 1973; Harrington, 1996).

Phase 2: Item Review and Sorting Exercise

Before I combined the scales for each of the dimensions to create the alpha version of the ECI for Study 1, I used a panel of five trained raters to conduct a sorting exercise. These raters

were trained on Rest's Four Component model and the definitions regarding each of the dimensions of the PPM (Appendix A). (The Collective Moral Motivation Scale was excluded from this sorting exercise because items include single words (values) only and are very easily identified as items from the Collective Moral Motivation Scale.) During the sorting exercise, the panel members were given a random list of the ECI items. Then, they were asked to sort these items according to the definitions of the ECI dimensions. After the judges sorted the initial item pool, I retained only items that were correctly sorted by three or more of the judges. This resulted in a more parsimonious set of items.

The resulting alpha version of the ECI (Appendix B) included 14 items for the Collective Moral Sensitivity Scale (8 norms of moral awareness items and 6 empathetic concern items), 14 items for the Collective Moral Judgment Scale (4 instrumental items, 5 caring items and 4 principled items), 11 items for the Collective Moral Character Scale (4 norms of self-control items and 7 norms of responsibility items), and 57 items for the Collective Moral Motivation Scale. Following the creation of the alpha version of the ECI, I conducted Study 1 to assess the reliabilities and factor structure for each scale.

Phase 3: Field Test and Instrument Refinement: The alpha version of the ECI

This study was designed to provide an initial assessment of the psychometric properties of the new measure and reduce the relatively large item pool of the alpha version of the ECI to a more parsimonious set of items. In phase 4, I assessed the reliability and the factor structures of the subscales of the ECI. Phase 5 was used to interpret and evaluated the subscales for further item reduction.

Sample

Two hundred sixty-four surveys were distributed among 173 MBA students from a large, state university as well as 101 entrepreneurs and employees from start-up, high tech companies, both in the Southeastern United States. Participation was voluntary and respondents were guaranteed confidentiality and anonymity for their participation. M.B.A. students completed and returned surveys during class. Organization participants received written instructions for the completion of the survey; completed surveys were returned in self-addressed, stamped envelopes provided by the researcher. The 174 individuals who responded to the questionnaires represented a response rate of 66%. Fifty-eight percent of the sample was male and had a mean age of 29 years ($SD=7.60$). Respondents averaged 3.2 years of tenure with their organizations ($SD=3.6$) and 2 years of tenure with their departments ($SD=1.7$).

Procedure and Measures

The questionnaire was composed of demographic questions regarding age, sex, education, and organization and department tenure, as well as the alpha version of the ECI (Appendix B). All of the ECI scales were rated on a 5-point Likert-type scale ranging from *describes my department very well* (1) to *does not describe my department at all* (5).

Alpha version of the ECI

The *Collective Moral Sensitivity Scale* of the alpha version of the ECI consisted of 14 items. Sample items include, "Others' misfortunes do not usually disturb people a great deal," and "People recognize a moral dilemma right away." The *Collective Moral Judgment Scale* consisted of 16 items. Sample items include, "Our major concern is always what is best for the other person in the department," and "People are mostly out for themselves." The *Collective*

Moral Motivation Scale consisted of 57 items. Sample items include “equality (equal opportunity for all),” and “social power (control over others).” The *Collective Moral Character Scale* consisted of 11 items. Sample items include “When people try to do what is right, they generally succeed,” and “No matter how much people are provoked, they are always responsible for whatever they do.”

Phase 4: Factor Analyses and Reliabilities

In this Phase I factor analyzed the items of the ECI for the first time, hence all of the factor analyses were exploratory in nature. However, because I had theoretical support for the existence of four distinct dimensions and I adopted existing measures, I used Maximum Likelihood Extraction with oblique rotation (Promax) for the factor analyses. I will present the results for each of the dimensions of the ECI in order.

Collective Moral Sensitivity

The factor analysis yielded two factors with eigenvalues greater than one. The first factor is identified by the highest loadings of items that describe perceptions of norms of moral awareness in the department and was labeled Norms of Moral Awareness. It explained 45.62% of the total variance of the collective moral sensitivity items. The second factor is identified by the highest loadings of items that describe perceptions of norms of empathetic concern such as pity for and sensitivity to others and was labeled Norms of Empathetic Concern. It explained 5.30% of the variance. Table 1 lists the descriptors presented in the questionnaire and their loadings.

Insert Table 1 about here.

Following the factor analysis, I assessed the reliabilities for each of the factors. Table 4 presents the scale reliabilities, means and SD of the scales. The coefficient alphas were .88 for Norms of Moral Awareness and .81 for Norms of Empathetic Concern.

Collective Moral Judgment

The factor analysis yielded two factors with eigenvalues greater than one. The first factor is identified by the highest loadings of items that describe perceptions of norms of moral judgment with a focus on oneself when engaging in moral reasoning in the department and was labeled Focus on Self. It explained 46% of the total variance of the collective moral judgment items. The second factor is identified by the highest loadings of items that describe perceptions of norms of moral judgment with a focus on others when engaging in moral reasoning in the department and was labeled Focus on Others. It explained 11.8% of the variance. Table 2 lists the descriptors presented in the questionnaire and their loadings.

Insert Table 2, 3, and 4 about here.

Following the factor analysis, I assessed the reliabilities for each of the factors. Table 4 presents the scale reliabilities, means and SDs of the factors. The coefficient for both subscales of collective moral judgment were satisfactory with coefficient alphas of .91 for the Focus on Self Scale and .89 for the Focus on Others Scale.

Collective Moral Motivation

The factor analysis yielded a total of 14 factors with eigenvalues greater than 1. However, none of these factors was interpretable. More specifically, only the first four factors combined three or more items. A closer look at these factors revealed that none of them combined items

that related to a specific value dimension. For example, Factor 1 included values such as ambitiousness, success, responsibility, capability, intelligence, independence, choosing own goals, helpfulness, honesty, broadmindedness, creativity, equality, self-respect, health, and self-discipline. These items combine values from five of the ten value dimensions specified by Schwartz including achievement, benevolence, self-direction, universalism, and conformity. Because they do not represent a single, dominant value dimension or combination of related value dimensions, this factor was considered not interpretable. Factor 2 included exciting life, true friendship, enjoying life, and forgiveness. These values represent the values domains of benevolence, hedonism, and stimulation. These are unrelated value dimensions, as well. Hence, the factor was considered not interpretable. Similar results emerged for the other two factors. Thus none of the four emergent factors was considered adequate as a foundation for a measure of collective moral motivation. I address this below and outline an alternative strategy for creating the Moral Motivation Scale in Study 2.

Collective Moral Character

The factor analysis yielded a total of three factors with eigenvalues greater than 1. However, only one of these factors was interpretable and explained 10.25% of the variance in the Collective Moral Character Scale. Table 3 lists the descriptors presented in the questionnaire and their loadings. Factor 1 includes two items related to feelings of guilt and one item related to control over outcomes. Because one of the items did not relate to the other two items, the factor was considered not interpretable. Factor 2 is identified by the highest loadings of items that describe perceptions of responsibility over outcomes. Hence, I labeled this factor Norm of Responsibility. Factor 3 represents a single item and is not interpretable.

Following the factor analysis, I assessed the reliability for the only interpretable factor of collective moral character: Norms of Responsibility. Table 4 presents the scale reliabilities, means and SDs of the scales. The internal consistency for the Norms of Responsibility Scale is .67.

Phase 5: Interpretation of Emerging Subscales

Results from Study 1 were mixed. Overall, the factor analyses and reliability assessments of the emergent scales revealed reliable scales for two of the four dimensions of the ECI: collective moral sensitivity and collective moral judgment. The scales for the other two dimensions, collective moral motivation and collective moral character, did not emerge as cleanly and required additional scale development.

Never before has the construct of collective moral sensitivity been conceptualized or assessed. I specified the construct theoretically defining two factors, Norms of Moral Awareness and Norms of Empathetic Concern. Factor analyses and reliability assessments support the existence of these two factors that combine to comprise the Collective Moral Sensitivity Scale. These results suggest that individuals are indeed able to identify the prevalent norms of moral awareness in their work environments; they are capable of assessing whether individuals in their departments are more or less aware of ethical issues. Furthermore, individuals are able to identify the prevalent norms of ethical concern in their departments; they can quantify the level of empathetic concern in their work environments. It is noteworthy that, as suggested by the PPM, individuals actually do distinguish between the norms of moral awareness and norms of empathetic concern in their departments.

Above, I explained that the theory of EWCs by Victor and Cullen (1987, 1988) was representative of the norms of moral judgment dimension of the ECI. I used an adapted version of the ECQ, originally developed to assess Victor and Cullen's theory, to measure the perceptions of norms of moral reasoning in the department. Factor analyses and reliability assessments support the existence of two distinct factors: Focus on Self and Focus on Others. Individuals appear to be capable to differentiate the norms of moral reasoning in their departments; individuals form perceptions about whether people in their department overall focus more on maximizing some self-interest when reasoning a moral issue or whether people focus more on maximizing the joint interest of the department and adhere to principles when reasoning a moral issue.

It was interesting to find that individuals do not seem to distinguish between a focus on maximizing the joint interest of the department and a focus on adhering to principles. Kohlberg's theory suggests the existence of three levels of moral reasoning: At the preconventional level of moral reasoning, moral decisions are justified in terms of one's own hedonistic interests. At the conventional level of moral reasoning, what is considered morally right is explained in terms of living up to the norms and expectations of the social groups one belongs to, such as the department or organizations. At the postconventional level of moral reasoning, individuals are guided by self-chosen ethical principles of justice and human rights (Colby, Kohlberg, Gibbs & Lieberman, 1983).

Findings from this analysis do not support the existence of three levels of moral reasoning at the social system-level of analysis, but reveal that individuals, when forming perceptions about their work environments and departments, only differentiate between the focus is on the self and a focus on others (including the department, organization and society overall).

It may be that this finding is sample specific. The sample for Study 1 may not include individuals that work in departments where a clear distinction is made or exists between maximizing the interest of the departments and adhering to principles of society. However, research suggests that, overall, very few individuals are post-conventional (principled) moral decision-makers (Treviño, 1986; Weber, 1990). This could explain why few work environments exist where principled moral reasoning is the dominant decision-making paradigm. However, people are capable of identifying that a focus on maximizing some self-interest in moral-decision making is distinct from a focus on others regardless of whether this may be the department or society in general. Further research in this area is needed.

Factor analyses of the scales adapted for the third and fourth dimensions of the ECI, collective moral motivation and collective moral character, did not result in interpretable factors. The Moral Motivation Scale adapted from Schwartz's (1992) Values Scale included 57 items (values) that respondents ranked according to the perceived importance of these values in their departments. It was expected that factors would emerge according to value dimensions discussed and assessed by Schwartz (1992), yet that did not happen. It is difficult to say with certainty what the cause of this was. However, the nature of the scale may have contributed to the problem. For example, the scale was long and did not force participants to choose ethical values over other values. The resulting factors did not reveal common value dimensions and therefore were not interpretable; they did not reveal information regarding the prevalence of ethical values over other values in the organization. Hence, I concluded that this scale was not the correct approach for assessing the perceptions of whether ethical values are more prevalent than other values in the department.

The Collective Moral Character Scale was adapted from the individual-level scales of core self-evaluations and responsibility denial. The emergent factors were not interpretable. I cannot say with certainty why this happened, but it may be that self-control is a true individual-level construct and that overall norms of self-control cannot be identified. It is possible that individuals within a specific department vary largely in their levels of self-control so that no standard for self-control in the department can emerge or exist. Findings may also be sample specific. This requires future attention and study. However, two items adapted from the individual-level Responsibility Denial Scale (Schwartz, 1973) loaded together on one factor (factor 2) labeled Norms of Responsibility. This was a promising result, but requires further development.

Based on these findings I decided to conduct a second study, with two goals in mind. First, I wanted to reduce the number of items of the Norms of Moral Awareness factor and increase the number of items for the Norms of Empathetic Concern factor of the Collective Moral Sensitivity Scale. I wanted to create a more parsimonious set of items for each dimension without compromising scale reliability. Second, I had to use another approach to developing a Collective Moral Motivation Scale and refine the Collective Moral Character Scale.

Study 2: Instrument Refinement and Further Development

This study was designed to refine the alpha version of the ECI. In Phase 1, I refined the item pool of the scales for collective moral sensitivity and developing scales for assessing collective moral motivation and collective moral character. In Phase 2, I assessed the psychometric properties of these and the newly developed scales.

Phase 1: Scale Refinement and Development: The Beta Version of the ECI

Collective Moral Sensitivity

The 14 items from the alpha version of the ECI represented 8 items for norms of moral awareness and 3 items for norms of empathetic concern. In order to decrease the number of items for the Norms of Moral Awareness factor, I evaluated inter-item correlations and item-total correlations. I eliminated three items from the Norms of Moral Awareness factor. The 5 remaining items represented a more parsimonious but still very reliable factor (Cronbach $\alpha=.87$). The Norms of Empathetic Concern factor, while reliable, only included 3 negatively worded items. I added four positively worded items to this scale. These items were analogous to the existing negatively worded items. This resulted in a 7-item factor assessing the norms of ethical concern (Appendix C).

Collective Moral Motivation

The purpose of this scale was to assess whether ethical values take priority over other values in ethical decision-making in the department. Hence, instead of simply assessing prevalent values in the department, I decided to present individuals with opposing values and ask them to decide which one represented the more prevalent value in their department. I used Schwartz's (1992) Value Scale as a base for developing these items. For example, the value dimensions of benevolence and universalism included in Schwartz's Value Scale correspond to typical ethical values (e.g. honesty, social justice) and are presented as opposite to the value dimensions of power and achievement. Based on this representation, I designed an 18-item scale asking people to assess on a 5-point Likert-type scale, which of these opposing values were more prevalent in their departments (Appendix C). Sample items are, "Around here people are willing

to tell a lie if it means advancing in the company,” and “In my department people strive to obtain power and control even if it means to compromise ethical values.”

Collective Moral Character

The scale for this dimension had to be refined as well. For example, the Norms of Self-Control factor did not emerge as a reliable factor. Items for this scale had been adapted from the Core-Self Evaluations Scale (Judge et al., 2003), which is grounded in four factors including self-esteem, self-efficacy, locus of control and neuroticism. Two of these factors, self-efficacy and locus of control, have been directly linked to moral character at the individual-level (Rest, 1986). Based on this information, I developed new items to assess Norms of Self-Control by adapting 2 items from the individual-level Self-Efficacy Scale (Bandura, 1991), and 11 items from the individual-level Locus of Control Scale (Rotter, 1966). These items were adapted to represent the norms of the department with regard to each of the dimensions. Sample items include, “Generally people in my department feel in control over the outcomes when making decisions that concern ethical issues,” and “When necessary, people in my department take charge and do what is morally right.”

In addition, a 2-item factor, labeled Norms of Responsibility, had emerged from Study 1 with insufficient internal consistency. Therefore, I adopted 9 additional items from the original Responsibility Denial Scale (Schwartz, 1973) and modified them to fit the collective level in order to obtain a more reliable representation of this factor. Sample items include, “People in my department feel it is better to assume responsibility for a mistake,” and “People I work with would feel they had to help a peer even if that person were not a very helpful person.”

Phase 2: Field Test Using the Beta Version of the ECI

Sample

Two hundred seventy surveys were distributed among MBA students from a large, state university in the Southeastern United States. All of the participants were guaranteed confidentiality and anonymity. The 261 individuals who responded to the questionnaires corresponded to a response rate of 96%. Fifty-three percent of the sample was male and had a mean age of 32 years (SD= 10.11). Respondents averaged 4.52 years of tenure with their organizations (SD=5.25).

Procedures and Measures

The questionnaire was composed of demographic questions regarding age, sex, education, and organization and department tenure as well as the beta version of the ECI (Appendix C). All of the ECI scales were rated on a 5-point scale ranging from *describes my department very well (1) to does not describe my department at all (5)*.

Beta version of the ECI

The *Collective Moral Sensitivity Scale* included 12 items: 5 items for norms of moral awareness and 7 items for norms of empathetic concern. The *Collective Moral Motivation Scale* included 18 items assessing whether ethical values are more prevalent than values such as achievement and power in the department. The *Collective Moral Character Scale* included a 27-items: 15 items for norms of self-control and 12 items for norms of responsibility.

Phase 3: Factor Analyses and Reliabilities

I factor analyzed the items for each of the scales of the beta version of the ECI. Because all of the scales included new items the nature of the factor analyses was still exploratory. However, as mentioned before, because I had theoretical support for the existence of each dimension and adapted existing measures, I use Maximum Likelihood Estimation with oblique rotation (Promax). I will present and discuss the results for each of the dimensions of the ECI separately.

Collective Moral Sensitivity

The factor analysis yielded a total of two factors with eigenvalues greater than one. Factor 1, Norms of Empathetic Concern, is identified by the highest loadings of items that describe perceptions of norms of empathetic concern in the department and explained 44.73% of the variance of the collective moral sensitivity items. Factor 2, Norms of Moral Awareness, is identified by the highest loadings of items that describe perceptions of norms of moral awareness in the department and explained 6.26% of the variance. Table 5 lists the descriptors presented in the questionnaire and their loadings.

Insert Table 5 about here.

Following the factor analysis, I assessed the reliabilities for each of the subscales. Table 8 presents the scale reliabilities, means and SD of the scales. The coefficient for both subscales of collective moral sensitivity were satisfactory with coefficient alphas of .82 for Norms of Moral Awareness and .88 for Norms of Empathetic Concern.

Collective Moral Motivation

The factor analysis yielded a total of three factors with eigenvalues greater than 1. Factor 1 is identified by the highest loadings of items that include the prevalence of achievement and power values over ethical values and was labeled Achievement/Power Over Ethics. This factor explained 39.55% of the total variance of the collective moral motivation items. Factor 2 is identified by the highest loadings of items that describe the value of serving others over satisfying personal needs and was labeled Other Benefit Over Benefit for Self. This factor explained 5.07% of the variance. Factor 3 is identified by the highest loadings of items that describe ethical values over achievement/power values and was labeled Ethics over Power/Achievement. This factor explained 3.1 % of the variance. Table 6 lists the descriptors presented in the questionnaire and their loadings.

Insert Table 6, 7, and 8 about here.

Following the factor analysis, I assessed the reliabilities for each of the subscales. Table 8 presents the scale reliabilities, means and SDs of the scales. The reliabilities of the three factors of collective moral motivation were satisfactory with coefficient alphas of .89 for Achievement/Power Over Ethics, .75 for Other Benefits Others Benefit for Self, and .71 for Ethics Over Power/Achievement.

Collective Moral Character

The factor analysis yielded a total of five factors with eigenvalues over 1. However, only two of these factors included more than 2 items. Factor 1 is identified by the highest loadings of items that describe doing what is morally right and assuming responsibility for actions and outcomes. Therefore, this factor was labeled *Norms of Responsibility* and explains 31.8 % of the

total variance of the collective moral character items. Factor 2 is identified by the highest loadings of items that describe measuring own actions against others action. This factor was labeled *Compared Action* and explains 3.7% of the variance. Table 7 lists the descriptors presented in the questionnaire and their loadings.

Following the factor analysis, I assessed the reliabilities for each of the subscales. Table 8 (Appendix E) presents the scale reliabilities, means and SD of the scales. The coefficient for both factors of collective moral character had satisfactory coefficient alphas of .84 for Norms of Responsibility and .72 for Compared Action.

Phase 4: Interpretation of Emerging Subscales

Results from Study 2 further advanced the scale development of the ECI. The outcome of the study was an ECI with parsimonious and reliable subscales for each of its dimensions. The results put me in a position to assess each of the dimensions of EWC as defined by the PPM.

The refined Collective Moral Sensitivity Scale represents an improvement over its original version because it includes a smaller number of items (5 items) for the Norms of Moral Awareness factor and a larger number of items (7 items) for the Empathetic Concern factor. Study 2 further supported the notion that individuals are capable of identifying the prevalent norms of moral awareness and ethical concern in their work environments, and that they can distinguish between the two.

The results for the newly developed Collective Moral Motivation Scale were promising. The new items still reflected the values from Schwartz's (1992) Value Scale, yet items represented opposing values, which respondents rated as more or less prevalent in their departments. The result of this approach was a three-factor solution including the factors of

Achievement/Power Over Ethics, Other Benefit Over Benefit for Self, and Ethics Over Power/Achievement. Each of the factors had satisfactory internal consistency. However, only two of the factors directly related to the construct of collective moral motivation. The *Other Benefit Over Benefit for Self* did not accurately relate to the construct of collective moral motivation, as described by Rest (1986). . Instead, items from this factor focus on sacrificing some individual benefit in order to benefit the social system (e.g. department, organization). Therefore, it was omitted from the final ECI scale.

The remaining two factors (*Achievement/Power Over Ethics* and *Ethics Over Power/Achievement*) both included information regarding the prevalence of ethical values over other values in the department. A closer look at the items reveals that both factors include similar items. However, one factor includes items that define ethical values taking precedence over other values and the other factor defines other values taking precedence over ethical values. Therefore, in order to include a parsimonious set of items that had satisfactory internal consistency, I decided to omit the less reliable factor that assessed ethics over power/achievement. Factor 1, *Achievement/ Power Over Ethics*, included a reliable set of items each representative of the underlying construct of collective moral motivation.

The results for the Collective Moral Character Scale revealed two interpretable factors, Norms of Responsibility and Compared Action, with satisfactory internal reliabilities. The results seemed to confirm the findings from Study 1, norms of self-control did not emerge as an interpretable factor, even though I included a new set of items to assess this factor. It appears that standards for self-control in the department do not emerge or cannot be identified.

Only one of the two interpretable collective moral character factors that emerged in Study 2 specifically refer to the construct of collective moral character, as described by Rest (1986).

The factor referenced Compared Action included items that described perceptions of outcome dependency: individuals engage in ethical behavior based on the likelihood of other individuals to omit in the same or similar behaviors. Although this is an interesting factor, it only indirectly relates to collective moral character. Also, inter-item correlations revealed a rather unstable factor with low inter-item correlations. Therefore, to include the most parsimonious and reliable set of items only, I retained the factor Norms of Responsibility for the ECI. This factor includes items that represent the underlying construct of collective moral motivation.

Final Version of the ECI

I concluded Study 1 and Study 2 with reliable and parsimonious factors for each of the dimensions of the final ECI (Appendix D). Collective moral sensitivity is assessed with a 12-item scale including 5 items for the factor Norms of Moral Awareness, and 7 items for the factor Empathetic Concern. Collective moral judgment is assessed with a 10-item scale including 5 items for the factor Focus on Self and 5-items for the factor Focus on Others. Collective moral motivation is assessed with an 8-item scale, Power/Achievement Over Ethics, assessing the prevalence of ethical values over achievement and power values. Collective moral character is assessed with a 6-item scale, Norms of Responsibility, assessing the prevalent levels of outcome responsibility and control.

Study 3: Instrument Validation

After developing an internally consistent scale, the next step is to confirm the scales dimensionality and proceed with construct validation testing (Spector, 1992b). Construct validity includes convergent validity (the extent to which a scale measures what it is intended to measure), discriminant validity (the extent to which a scale measurement differs from

measurement of dissimilar constructs), and criterion-related validity (the extent to which the scale is related to its theoretical causes, correlate and effects) (Nunnally & Bernstein, 1994).

Sample

Participants in Study 3 included 652 employees from 113 different departments and 101 different organizations in the southeast United States. The 652 individuals who responded to the questionnaires corresponded to a response rate of 98%. All of the participants were guaranteed confidentiality and anonymity. Fifty-one percent of the sample was male and had a mean age of 30 years (SD= 10.94). Respondents 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

MBA students from a large public university in the southeast United States assisted with the data collection effort. They identified organizational departments with six or more members (including the department supervisor), and solicited the department's participation in the study. Students were asked to identify departments with 6 or more members (including one supervisor) and solicit their participation in a study on organizations. Each student received a package containing surveys for all members of the department as well as specific, written instructions regarding the completion of the surveys.

All of the questionnaires were composed of demographic questions regarding age, sex, education, organization and department tenure, an abbreviated (9 items) of the Crowne and Marlowe *Social Desirability Scale* (Ballard, 1992), and the final version of the ECI (Appendix E). All of the ECI scales were rated on a 5-point scale ranging from *describes my department*

very well (1) to *does not describe my department at all* (5) and were subsequently coded such that higher values reflected higher degrees of collective moral sensitivity (norms of moral awareness and norms of empathetic concern), collective moral judgment (focus on self and focus on others), collective moral motivation, and collective moral character.

In addition to these scales, employee surveys included multiple scales to assess convergent and discriminant validity (Appendix E). 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 might be expected to relate to organizational ethics. In particular, I used an abbreviated 4-item version (Ehrhart, 2004) of the original 7-item version of the *Procedural Justice Climate Scale* (Colquitt, 2001) to measure the perceived fairness of reward procedures in the department, the *Perceptions of General Justice Scale* ($\alpha=.82$; Ambrose & Schminke, 2000) to measure the perceived level of general justice in the department, and the 10-item *Climate for Safety Scale* including 5 items for overt supervisory reactions to subordinates initiation of action concerning safety issues ($\alpha=.90$; Action Safety) and 5 items for supervisory expectations focusing on productivity versus safety issues ($\alpha=.87$; Safety Expectation; Zohar, 2000).

To assess discriminant validity, I identified four constructs that were expected not to be related very strongly to organizational ethics. In particular, discriminant validity was assessed using a 7-item *Organizational Structure Scale* ($\alpha=.83$; Khandwalla, 1977) to assess whether the organization is more organic or mechanistic, the 3-item *Perceived Functional Dependence Scale* ($\alpha=.78$; Morris & Steers, 1980) to assess the degree to which an employee is directly dependent upon the work of others as inputs to and/or influences on his or her work, the 7-item *Climate for*

Initiative Scale ($\alpha=.84$; Frese, Fay, Hilburger, Leng & Tag, 1997) to measure those actions at work that are not formally required at work, and the 5-item *Problem-Solving Demand Scale* ($\alpha=.76$; Wall et al., 1995) to assess the more active, cognitive processing required to prevent or recover errors.

Employee surveys also included scales for employee attitudes because they have been found to relate to ethical climate (Arnaud et al., 2002) and therefore are part of the nomological net of the ethical climate construct. I used three common job attitudes: job satisfaction, organizational affective commitment and turnover intentions. Overall job satisfaction was assessed using a 4-item version of the *Job Satisfaction Index* ($\alpha=.91$; Brayfield & Rothe, 1951). Organizational commitment was measured using a 6-item version of the *Affective Commitment Scale* ($\alpha=.86$; Meyer & Allen, 1984). A 3-item scale was used to measure turnover intentions ($\alpha=.81$; Cropanzano, James & Konovsky, 1993).

In order to assess criterion-related validity, I collected data from department supervisors and employees. The scales for criterion-related validity included the 2-item *General Political Behavior Scale* from the 14-item *Perception of Politics Scale* ($\alpha=.88$; Kacmar & Carlso, 1997), and the 10-item *Ethical Behavior Scale* used to assess unethical or illegal behaviors employees may use in reaction to perceived unfair treatment ($\alpha=.91$; Akaah, 1992), the 7-item *Perceived Department Performance Scale* used to measure the department's performance to that of other departments that do the same kind of work ($\alpha=.85$; Delaney & Huselid, 1996), the 9-item *Interpersonal Deviance Scale* used to measure the deviant behavior toward a co-worker ($\alpha=.78$; Bennett & Robinson, 2000), the 4-item *Ethics Program Follow-Through Scale* measures the extent to which a department's ethics program is perceived to follow up on reports of ethical problems and respond to ethical lapses with appropriate discipline ($\alpha=.88$; Trevino & Weaver,

2001) and the 5-item *Organizational Citizenship Behavior Helping Scale* used to measure extra-role helping behaviors ($\alpha = .76$; Moorman & Blakely, 1995).

All scales were assessed on a 5-point Likert-type scale and were coded such that higher scores represented higher degrees of the construct and lower scores represented lower degrees of the construct.

Phase 1: Dimensionality – Confirmatory Factor Analysis

I performed CFAs to cross-validate the six-factor solution obtained in the exploratory factor analysis in Study 2. I compared the six-factor solution with a one-factor solution. LISREL 8 (Jöreskog & Sörbom, 1993) was used to evaluate the fit of the two models. The covariance matrix was used as input for the CFA. I followed Bollen's (1989) and Hu and Bentler's (1995) recommendation to interpret multiple indexes of fit. I examined LISREL fit statistics, including the chi-square test and the root mean square error of approximation (RMSEA). In addition, I examined the normed fit index (NFI; Bentler & Bonnet, 1980), the goodness of fit index (GFI; Jöreskog & Sörbom, 1986) and the comparative fit index (CFI, Bentler, 1990).

Insert Table 9 about here.

The CFA of the six-factor model was a good fit to the individual level data, $\chi^2(579, N = 640) = 2115.76, p < .01, RMSEA = 0.07, GFI = 0.82, CFI = 0.97, IFI = 0.97, NFI = .96$. The alternative one-factor model provided a poorer fit to the data, $\chi^2(594, N = 640) = 6279.72, p < .01, RMSEA = 0.19, GFI = 0.45, CFI = 0.88, IFI = 0.88, NFI = .87$. A difference in Chi-square tests indicates that the six-factor model provides a significantly better fit than the one-factor model

($p < .05$). Fit statistics for the two models are presented in Table 9. Also, results support the theoretical prediction that the six ECI factors are distinct and confirm the findings from Study 2.

Phase 2: Aggregation Analysis and Factor Correlations

Aggregation Analysis

Ethical work climate is a molar concept reflecting the content and strength of the prevalent ethical values, norms, attitudes, feelings, and behaviors of the members of a social system. It exists at the social system-level (e.g. workgroup, department, organization) and therefore, it is reasonable to assess convergent and discriminant validity at the social system-level; in this study at the department level.

The climate literature suggests that aggregate scores of individuals' psychological climates (individuals' perceptions of their work climates) are indicators of collective climates such as the ethical work climate of a department. Before aggregating the individual responses to the department level, I examined the statistical adequacy of aggregation by within-group (here within-department) agreement, using the r_{wg} statistic (George, 1990; George & James, 1993). This index is appropriate for establishing the validity of a measurement model (Bliese, 2000). The r_{wg} statistic measures the degree to which individual ratings within a department are interchangeable, with mean r_{wg} values of .70 or greater providing evidence of acceptable agreement among member responses on a scale (George, 1990; Janz, Colquitt & Noe, 1997). Following recommendations by Bliese (2000) and George (1990), I reported the range of r_{wg} values and the percentage of values above and below .70.

I assessed r_{wg} scores for each of the six subscales of the ECI. The average r_{wg} of the subscales was .73, with 70% of the estimates falling above .70 and 86% of the estimates falling

above .50. Fifty-one percent of the r_{wg} values were above .80 and 27% of the estimates were above 90%. I also computed median r_{wg} values across departments per Lindell and Brandt (1999). The median r_{wg} was .84 for Norm of Moral Awareness, .85 for Norms of Empathetic Concern, .73 for Collective Moral Judgment Focus on Others, .71 for Collective Moral Judgment Focus on Self, .74 for Collective Moral Motivation and .80 for Collective Moral Character. These results indicate that department member responses on the subscales are generally homogeneous and that aggregating members' scores to the department level of analysis is statistically justified.

ECI Factor Correlations

I reviewed correlations, represented in Table 12, between the ECI factors to assess their strength and direction (Scale reliabilities, means and standard deviations are reported in the front of the table). Because the four dimensions of collective moral sensitivity, collective moral judgment, collective moral motivation and collective moral character combine to define one underlying construct, ethical work climate, I expect correlations to be significant and high for each of the dimensions and subdimensions. Furthermore, I expect that all of the factors correlate positively except for Collective Moral Judgment Focus on Self.

As expected, correlations for the six factors are all significant and strong (see Table 12). The average correlations for all of the EWC factors is .59 ($p < .01$) with no correlation less than .4. Norms of Moral Awareness and Norms of Empathetic Concern are strongly and positively correlated ($r = .73$, $p < .01$). This is not surprising because the two factors together define the EWC dimension Collective Moral Sensitivity. Collective Moral Motivation and Collective Moral Judgment Focus on Self are strongly and negatively correlated ($r = -.77$, $p < .01$). This confirms my expectations. Ethical climates with higher norms of moral motivation are characterized by

prioritizing values such as benevolence and utilitarianism over values such as power and achievement (self focused values). Therefore, ethical climates high on collective moral motivation should depict lower levels of collective moral judgment with a focus on the self when making moral judgments about what is ethical. In addition, all of the correlations for Collective Moral Judgment Focus on Self are negatively correlated with the other ECI factors.

These correlations suggest that ethical climates are characterized by levels of collective moral sensitivity (norms of moral awareness and norms of empathetic concern), collective moral character, collective moral motivation and collective moral judgment with a focus on others which are all positively related (all high or all low) with each other and negatively related to collective moral judgment with a focus on self. The ECI factors all correlate in strength and direction according to my expectation.

Phase 3: Convergent and Discriminant Validity Assessment

Convergent validity is the degree to which concepts that should be related theoretically are interrelated in reality. Discriminant validity is the degree to which concepts that should not be related theoretically are, in fact, not interrelated in reality. Following Campbell and Fiske (1959), I assessed convergent and discriminant validity comparing the correlations of the ECI scales to measures of other constructs. Correlation Tables are included in Table 12 and Table 13 (Complete Correlation Tables are included in Appendix F).

Insert Tables 12 and 13 about here.

Convergent Validity

To assess convergent validity of the P.P.M. of ethical work climates, I reviewed the correlations of collective moral sensitivity (Norms of Moral Awareness Scale and Norms of Empathetic Concern Scale), collective moral judgment (Moral Judgment Focus on Self Scale and Moral Judgment Focus on Others Scale), collective moral motivation (Collective Moral Motivation Scale), and collective moral character (Collective Moral Character Scale) to perceptions of general justice (at the aggregate level), the climate for procedural justice, climate for safety, and employee attitudes including job satisfaction, commitment and turnover intentions.

All scale scores were checked for adequacy regarding aggregation to the department level before the scales were accepted for aggregation. The average for all of the climate subscales was .71, an acceptable level according to George and James (1993). According to Lindell and Brandt (1999), I computed the median r_{wg} values across departments. The median r_{wg} was .80 for Perceived General Justice, .82 for Climate for Safety (Action), .78 for Climate for Safety (Expectation), .70 for Climate For Procedural Justice. These results suggest that member responses on the subscales are homogeneous and that aggregating members' scores to the department level of analysis is statistically justified for all of the climate scores.

To investigate convergent validity I am going to review the correlations between the six ethical climate scales and the justice scales, safety scales, and employee attitude scales.

Justice. It is generally accepted that justice and ethics are closely related constructs (Rawls, 1999). Specifically, the literature suggests a strong relationship between procedural justice and moral judgment as well as procedural justice and moral sensitivity (e.g. Rest & Narvaez, 1994).

Evidence for convergent validity would be demonstrated if scores on justice scales were relatively highly correlated with scores on the ECI. For this purpose, I will look at two specific justice scales: Perceived General Justice Scale and Climate for Procedural Justice Scale. Mean correlation between general justice perceptions and the ECI scales was .33. Scores on the General Justice Perceptions Scale (aggregate level) are positively and significantly correlated with scores on the Norms of Moral Awareness Scale ($r = .36, p < .01$), Norms of Empathetic Concern Scale ($r = .28, p < .01$), Collective Moral Judgment Focus on Others Scale ($r = .28, p < .01$), Collective Moral Motivation Scale ($r = .45, p < .01$) and Collective Moral Character Scale ($r = .28, p < .01$). Perceived General Justice at the aggregate level is negatively and significantly correlated with Collective Moral Judgment Focus on Self ($r = -.35, p < .01$).

Mean correlation between climate for procedural justice and ECI scales was .58. Scores on the Climate for Procedural Justice Scale were positively and significantly correlated with scores on the Norms of Moral Awareness Scale ($r = .44, p < .01$), Norms of Empathetic Concern Scale ($r = .60, p < .01$), Collective Moral Judgment Focus on Others Scale ($r = .56, p < .01$), Collective Moral Motivation Scale ($r = .64, p < .01$) and Collective Moral Character Scale ($r = .58, p < .01$). Climate of Procedural Justice is negatively and significantly correlated with Collective Moral Judgment Focus on Self ($r = -.66, p < .01$).

Safety. Environments that prioritize safety are concerned about their employees' mental and physical well being above productivity and efficiency goals (Zohar, 2000). These work environments should also be characterized by higher levels of caring and concern for the well being of co-workers, awareness of ethical concerns (such as safety concerns), a focus on ethical and safety values above other values and being responsible and following through with important actions and behaviors that involve the well-being of others in the organization. Evidence for

convergent validity would be demonstrated if correlations between Climate for Safety and the ECI scales were relatively high. For this purpose, I looked at two specific climates for safety scales: the Climate for Safety Action Scale and the Climate for Safety Expectation Scale. I expect to find relatively high correlations between the ECI scales and the two safety scales.

The mean correlation between Climate for Safety Action and Ethical Work Climate was .54. The correlations between the Climate for Safety Action Scale are positively correlated with scores on the Norms of Moral Awareness Scale ($r = .57, p < .01$), Norms of Empathetic Concern Scale ($r = .60, p < .01$), Collective Moral Judgment Focus on Others Scale ($r = .45, p < .01$), Collective Moral Motivation Scale ($r = .59, p < .01$) and Collective Moral Character Scale ($r = .46, p < .01$). The Climate for Safety Action Scale is negatively and significantly correlated with scores on Collective Moral Judgment Focus on Self ($r = -.56, p < .01$).

The mean correlation between Climate for Safety Expectations and Ethical Work climate was .39. The pattern and strength of the correlations between the Climate For Safety Expectation Scale and ECI scales is very similar with positive and significant correlations between climate for safety expectation and Norms of Moral Awareness ($r = .38, p < .01$), Norms of Empathetic Concern ($r = .44, p < .01$), Collective Moral Judgment Focus on Others ($r = .38, p < .01$), Collective Moral Motivation ($r = .40, p < .01$) and Collective Moral Character ($r = .39, p < .01$). The climate for safety expectation is negatively and significantly correlated with Collective Moral Judgment Focus on Self ($r = -.35, p < .01$). These results suggest that, as expected, ethical climate and climate for safety are significantly and highly related constructs.

Discriminant Validity

To assess discriminant validity of the ECI, I reviewed the correlations of collective moral sensitivity (Moral Awareness Scale and Empathetic Concern Scale), collective moral judgment

(Moral Judgment With A Focus on Self Scale and Moral Judgment With A Focus on Others Scale), collective moral motivation (Collective Moral Motivation Scale), and collective moral character (Collective Moral Character Scale) to perceived functional dependence and problem-solving demand, organizational structure (at aggregate level) and the climate for initiative.

Before aggregating scores of the Organizational Structure Scale and Climate for Initiative Scale, I checked for adequacy of aggregation. The inter-department agreement (r_{wg}) for each of the scales was above .5, and the average for all of the climate subscales was .70, suggesting that member responses on the subscales are homogeneous and that aggregating members' scores is statistically justified for all of the climate scores (Georges, 1990).

Perceived Functional Dependence. Perceived functional dependence defines the degree to which an employee is directly dependent upon the work of other employees as inputs to and/or influences on his or her work (Morris & Steers, 1980). The Perceived Functional Dependence Scale assesses the interdependence of functional processes required to perform specific tasks. Functional dependence should be relatively independent of the ethical context in which tasks are performed. Therefore, I expect perceived functional dependence to be weakly related to ethical climate.

The mean correlation between perceived functional dependence and the ethical climate scales was .18. Perceived Functional Dependence correlated .14 with Norms of Moral Awareness, .18 with Norms of Empathetic Concern, .17 with Collective Moral Judgment Focus on Others, .22 with Collective Moral Motivation, and .20 with Collective Moral Character. Perceived Functional Dependence was negatively and significantly correlated with Collective Moral Judgment Focus on Self ($r = -.17, p < .01$). Although each of these correlations is

statistically significant ($p < .05$), their magnitudes are much weaker than the convergent validity scales above.

Problem-Solving Demand. The Problem-Solving Demand Scale assesses the more active, cognitive processing required to prevent or recover errors (Wall et al., 1995). Individual cognitive processes at work such as those required to avoid errors should exist independent of the context, such as the ethical climate, in which it occurs. Therefore, I expect the Problem-Solving Demand Scale to be only weakly correlated to the ECI.

Results confirmed my expectations. Scores on the Problem-Solving Demand Scale were not significantly correlated with scores on the scales of Collective Moral Judgment Focus on Others, Collective Moral Judgment Focus on Self, Collective Moral Motivation, and Collective Moral Character. Problem-Solving Demand Scale was weakly (albeit significantly) correlated with Norms of Moral Awareness Scale ($r = .19, p < .01$) and Norms of Empathetic Concern Scale ($r = .15, p < .05$).

Organizational Structure. Researchers have discussed the difference between organizational structure and organizational climate (e.g. Schneider, 1990). Both of these constructs include factors that define the organization's context for employee behavior and decision-making, yet they describe different phenomena and encompass distinct organizational factors. Therefore, I expect that the ECI scales, will not be strongly correlated with the Organizational Structure Scale.

Aggregate scores on the Organizational Structure Scale were not significantly correlated with scores on the Norms of Moral Awareness Scale, Norms of Empathetic Concern Scale, and Collective Moral Judgment Focus on Others Scale. Weak to moderately weak correlations were found between Organizational Structure and Collective Moral Character ($r = -.15, p < .01$), and

Collective Moral Motivation ($r = -.28, p < .01$). The correlation was somewhat stronger between Organizational Structure and Collective Moral Judgment Focus on Self ($r = .42, p < .01$).

Although these correlations are statistically significant ($p < .05$), the mean correlation was only .17 and therefore much weaker than the correlations of the convergent validity scales above.

Climate for Initiative. The Climate for Initiative scale measures task-oriented initiative that is not formally required at work. Baer and Freese (2003) found that some environments display more initiative and are more proactive than others. Previous work has discussed that different organizational subclimates exist and that many of these subclimates define distinct constructs (e.g. Schneider, 1990). Initiative and proactive concerns are distinct from ethical concerns. Therefore, I do not expect the Climate for Initiative scale and the ECI to be strongly correlated.

Surprisingly, all of the ECI scales were fairly strongly and significantly correlated with the Climate for Initiative Scale. Scores on the Climate for Initiative Scale were positively and significantly correlated with scores on the Norms of Moral Awareness Scale ($r = .54, p < .01$), Norms of Empathetic Concern Scale ($r = .57, p < .01$), Collective Moral Judgment Focus on Others Scale ($r = .42, p < .01$), Collective Moral Motivation Scale ($r = .58, p < .01$) and Collective Moral Character Scale ($r = .53, p < .01$). Climate for Initiative is negatively and significantly correlated with Collective Moral Judgment Focus on Self ($r = -.58, p < .01$). These results suggest that more ethical work environments are also characterized by higher levels of initiative.

Attitudes. Previous research has linked individuals' attitudes such as job satisfaction, commitment and turnover intentions to ethical climate. These correlations have been weak or not significant for attitudes such as turnover intentions and stronger for attitudes such as affective commitment (e.g. Arnaud et al., 2002; Deshpande, 1996; Joseph & Deshpande, 1997; Koh &

Boo, 2001; Schwepker, 2001). In this study, I included scales for job satisfaction, affective commitment and turnover intentions to identify whether correlation patterns for the ECI would be similar to those previously identified. As expected, scores on the Affective Commitment Scale were positively and significantly correlated with scores on the Norms of Moral Awareness Scale ($r = .397, p < .01$), Norms of Empathetic Concern Scale ($r = .39, p < .01$), Collective Moral Judgment Focus on Others Scale ($r = .31, p < .01$), Collective Moral Motivation Scale ($r = .41, p < .01$) and Collective Moral Character Scale ($r = .39, p < .01$). Affective Commitment was negatively and significantly correlated with scores on Collective Moral Judgment Focus on Self ($r = -.32, p < .01$).

Job satisfaction was positively and significantly correlated with Norms of Moral Awareness ($r = .24, p < .01$), Collective Moral Motivation ($r = .19, p < .01$) and Collective Moral Character ($r = .40, p < .01$). Job satisfaction was negatively and significantly correlated with Collective Moral Judgment Focus on Self ($r = -.13, p < .05$). For this sample, satisfaction is not significantly correlated with Norms of Empathetic Concern or Collective Moral Judgment Focus on Others. While this may be surprising it confirms mixed findings regarding the link between job satisfaction and ethical climate.

Turnover intentions were not significantly related to any of the ethical work climate dimensions. This may be surprising, but is consistent with findings in previous ethical climate studies, in which turnover intentions were not related to ethical work climate (Arnaud et al., 2002; Herndon, Fraedrich & Yeh, 2001; Sims & Keon, 1997).

Phase 4: Criterion-Related Validity

One element of construct validation is the assessment of criterion-related validity of the scales under investigation (Spector, 1992b). For this purpose, I conducted multiple regression analyses. The results of these analyses are presented in Table 10.

I examine if and how the ethical work climate dimensions predict various behaviors and outcomes including ethical behavior, general political behavior, organizational citizenship behavior, interpersonal deviance and perceived performance of the department.

Ethical Behavior. Ethical behavior was defined and measured as unethical or illegal behaviors employees may use in reaction to perceived unfair treatment (Treviño & Weaver, 2001). The ethical climate of the department should be predictive of the ethical behavior observed in the department. Three of the six variables were significant: Collective Moral Motivation ($\beta = .34, p < .05$) and Collective Moral Character ($\beta = .26, p < .05$) positively affected ethical behavior of employees while Norms of Empathetic Concern ($\beta = -.32, p < .05$) negatively affected ethical behavior. Overall, ethical climate variables explained 22% of the variance in employee ethical behavior.

Ethics Program Follow-Through. Ethics Program Follow-Through is defined as the department's perceived follow up on reports of ethical problems and responses to ethical lapses with appropriate discipline (Treviño & Weaver, 2001). It is expected that in departments with more ethical climates more follow up and responses should take place when ethical problems are reported. Collective Moral Character ($\beta = .33, p < .05$) was predictive of Ethics Programs Follow-Through such that higher levels of Collective Moral Character were related to higher levels of follow-through regarding ethics programs. Overall the model explained 9% of the variance in Ethics Program Follow-Through.

Interpersonal Deviance. Interpersonal deviance refers to the deviant behavior of one employee to another (Robinson & Bennett, 2000). I predicted that less ethical climates would be predictive of higher levels of interpersonal deviance. Norms of Moral Awareness ($\beta = -.32$, $p < .05$) was a significant predictor of interpersonal deviance. Norms of Moral Awareness was predictive of Interpersonal Deviance such that higher levels of Norms of Moral Awareness negatively affected levels of perceived interpersonal deviance. Overall, the model explained 31% in the variance of interpersonal deviance.

Organizational Citizenship Behavior. I included Organizational Citizenship Behavior Helping subscale on the supervisor surveys to assess the effect of ethical climate on prosocial, extra-role behaviors such as helping. It was expected that more ethical climates would lead to more helping behaviors. Collective Moral Motivation and Collective Moral Character represented significant predictors of helping behavior. Higher levels of Collective Moral Motivation ($\beta = .46$, $p < .01$) and higher levels of Collective Moral Character ($\beta = .50$, $p < .01$) positively affected Organizational Citizenship Behaviors such as helping someone at work. Overall the model explained 20% of the variance in helping behaviors.

Political Behavior. General political behavior includes building oneself up by tearing others down and having influential groups in the department (Kacmar & Carlson, 1997). It was expected that more ethical climates would be predictive of less political behaviors in the department. Four of the six variables were significant predictors of general political behavior. Higher levels of Norms of Moral Awareness ($\beta = .16$, $p < .05$), and Collective Moral Judgment Focus on Self positively ($\beta = .16$, $p < .05$) affected general political behavior. Lower levels of Norms of Empathetic Concern ($\beta = -.48$, $p < .01$) and Collective Moral Judgment Focus on Others

($\beta = -.22, p < .01$) were related to higher levels of general political behavior. Overall the model explained 42% of the variance in general political behavior

Performance. Perceived department level performance refers to the perceived performance of the department compared to another similar department (Husted & Allen, 2000). I predicted that more ethical climates would lead to higher levels of perceived performance. Lower Norms of Empathetic Concern ($\beta = -.40, p < .05$), higher levels of Collective Moral Motivation ($\beta = .43, p < .05$) and higher levels of Collective Moral Character ($\beta = .32, p < .05$) were related to higher levels of perceived performance. Overall the model explained 12% of the variance in perceived performance.

Phase 5: Interpretation of Results

The purpose of Study 3 was to assess the dimensionality and construct validity of the final version of the ECI that resulted from Study 2. Results indicate that this was accomplished and 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.

CFA 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 measures by the ECI.

In addition, aggregation analyses further supports my proposition that shared perceptions of ethical values, norms, attitudes, feelings, and behaviors exist. Department members have shared perceptions regarding the norms for moral sensitivity, moral judgment, moral motivation and moral character that exist in their social system. This is further evidence of the validity of the PPM of EWCs.

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) and 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.

The moderately high correlation of the Climate for Initiative Scale with the ECI was unexpected. Findings suggest that climates with higher initiative are also characterized by higher levels of collective moral sensitivity, collective moral judgment with focus on self, collective moral motivation and collective moral character. At first, the close relationship seems unusual. However, it is reasonable that departments that promote climates where initiative is desired and encouraged, where individuals enjoy taking charge of and solve problems and get actively involved in the organization, also promote more ethical climates as defined by the Psychological Process Model. To actively seek and solve problems, requires enhanced awareness of the work environment including its members; this awareness is likely to increase an awareness of ethical problems and concerns (moral awareness) as well as peoples' needs, problems and concerns

(empathetic concern) and a focus on the needs of others and the organization in decision-making (moral judgment with focus on others). Also, work environments that prioritize higher levels of initiative and encourage employees to focus on problems at work likely prioritize more benevolent and utilitarian values above power and achievement values (moral motivation). Future research is needed to fully understand the nature of these relationships.

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. In addition 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 in order to identify which factor of the PPM of EWCs influences the particular behaviors and outcomes most strongly.

Overall, the model including all ethical work climate 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 (Focus on Self and Focus on Others) significantly influenced ethical behavior. This is noteworthy because the current model most frequently used to assess the influence of ethical work climate on ethical behaviors, Victor and Cullen's (1988) framework, is grounded on the

theory of CMD (moral judgment). Therefore, it is not surprising that to date the influence of ethical work climate on the ethical behavior of employees has not been clearly identified and that findings have been rather mixed (Arnaud & Schminke, forthcoming).

It is also interesting to find that norms of empathetic concern negatively affects ethical behavior. This suggests that employees who work in environments that promote sympathy, understanding and concern for others in the department are more prone to engage in unethical behavior. One explanation for this counterintuitive finding may be related to the specific form of unethical behavior that was assessed: unethical or illegal behaviors employees may use in reaction to perceived unfair treatment. It may be that environments where employees sympathize and care strongly for peers encourage a rather “retaliatory” behavior when unfair treatment of those peers is observed. Employees may engage in unethical conduct such as concealing errors or lying to supervisors in order to recuperate equity from perceived unfair treatment against others in the department. The rationale may be: “My supervisor forces Julie to work overtime without paying her and that is not right. I empathize with her and therefore feel that this injustice gives me the right to treat the company poorly, too. I will be taking a day off here and there. That will show them...” This argument presents a potential explanation and offers avenues for further investigation.

The link between EWC and political behavior is significant and strong. Ethical work climate dimensions explain 42% of the variance in general political behavior of the department. Ethical work climates 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 four 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 ethical work climate and department or organizational performance. Higher levels of moral motivation and moral character in the department are related to higher levels of perceived performance as reported by supervisors. However, norms of empathetic concern seems 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 impact perceived performance. Future research should investigate this issue in more depth.

Social Desirability. Ethical concerns are often sensitive ones and questions regarding ethical concerns may raise questions about the potential influence of social desirability effects. Therefore, my survey included an abbreviated version of Crowne and Marlowe Social Desirability Scale (Ballard, 1992) to assess the relationship between the climate types and social desirability. The correlations were modest: .15 for Collective Moral Judgment Focus on Others, -.20 for Collective Moral Judgment Focus on Self, .30 for Norms of Moral Awareness, .20 for Norms of Empathetic Concern, .28 for Collective Moral Motivation, and .26 for Collective Moral Character (Table 12). These correlations are modest, yet that is not as unexpected as one might think, in that I asked individuals to report on “how things are and how they work” around

the department, rather than on what they personally do. Therefore, questions about ethical climate might not be as sensitive to social desirability influences as one's own ethical actions.

I ran the multiple regressions once without controlling for social desirability and again with controlling for social desirability (Table 10 and Table 11). In both cases, the patterns of results were similar. However, controlling for social desirability resulted in more significant relationships between ECI scales and the outcome variables. In order to be conservative in my analysis, I decided to report the regression results without controlling for social desirability. Social desirability did not emerge as significant in either one of the regressions except for interpersonal deviance.

Insert Tables 10 and 11 about here.

General Discussion: What is the Climate of the Future?

The main purpose of this paper was to present a new theory of EWCs, the Psychological Process Model of EWCs, and develop a measure capable of assessing the four dimensions of the model. This goal was accomplished. Findings from three independent studies suggest that the ECI composed of the six factors of Collective Moral Awareness, Norms of Empathetic Concern, Collective Moral Judgment Focus on Self, Collective Moral Judgment Focus on Others, Collective Moral Motivation and Collective Moral Character represents a valid and reliable measure of ethical climate.

This research has significant implications for future research on the ethical context of the organization. I have established a more specified model of EWCs, one capable of identifying the important and widely recognized elements of ethical-decision making. Using a well specified model is important to identify the true effect of the construct under study on other constructs.

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 (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.

This research has potentially important implications for practice, as well. For example, understanding the differential effects of the EWC dimensions on important organizational outcomes is especially important in order to develop effective ethics training and development programs. Organizations and their social systems are likely to vary in strength with regard to each one of the dimensions of the PPM. As a result, training needs will differ depending on the strength with which these four dimensions exist in the organization. The ECI leads to a more thorough understanding of the existing weaknesses and strengths with regard to each one of the components of the PPM and will permit organizations to develop more effective ethics training programs and develop more ethical work climates.

In addition, it is likely that the various dimensions of the PPM interact. Individual level research supports an interaction effect for moral sensitivity and moral reasoning. Raboteg-Saric (1997) identified that moral sensitivity and moral reasoning were positively related such that higher levels of Cognitive Moral Development led to a stronger correlation between empathy and prosocial behavior. This suggests that interaction effects at the social system level may be

present, too. Therefore, I suggest that future research should investigate possible interaction effects for the various factors of the ECI.

As identified by the correlation analyses, ethical climate is significantly related to many other organization-specific constructs. This is not surprising because the EWC defines an element of the larger environment within which organizations and its employees operate. Because the environment of the organization influences most of its processes and activities, it represents an interesting and important moderator in research (Pfeffer & Davis-Blake, 1990). Future investigations should apply ethical work climate as a moderator in organizational behavior research.

The PPM is a model grounded in the individual-level Four Component model by Rest (1986). Although this model has been theoretically specified and is widely accepted as the preeminent framework for understanding ethical decision-making at work (Jones, 1991), thus far only moral sensitivity and moral judgment have been empirically assessed. Moral motivation and moral character as defined by Rest have not been empirically studied at the individual level and no measures of these constructs exist. The ECI represents system level scales for all of the dimensions. Therefore, a fruitful avenue for future research would be to convert the scales of the ECI to the individual level to assess these theoretically defined constructs empirically.

Finally, the construct of ethical work climate is complex. For example, findings from Study 3 suggest that collective moral awareness may not always lead to positive outcomes. It is possible that raising the moral awareness of employees may lead them to identify more instances of unethical conduct in the organization. As a result, they may perceive this conduct as acceptable and engage in it, too. Also, higher norms of empathetic concern may lead to more care and concern for fellow workers and result in more groupthink, reduced productivity and

performance and even more unethical behavior. These are merely speculations, yet they raise interesting questions for future research: Is it desirable to have higher norms of each one of the dimensions of the PPM? How does climate strength affect outcomes? How do the climate dimensions interact do affect outcomes? It is clear that the road ahead offers many opportunities for research in this area. Let's roll up our sleeves, pick a path, and begin!

Limitations and Conclusion

All studies have limitations and these studies are no exception. Even though this paper makes numerous contributions several limitations must be noted and should be addressed in future validity testing. First, all data were collected by survey. Although participants represented a wide array of demographic background and I included both employee and supervisor assessments of both individual and organizational constructs, common method variance still exists as a potential concern. Future research could for example collect different outcome data regarding ethical behavior that is obtained directly from the departments (e.g. shrinkage rate records, sexual harassment complaints and ethical violation reports).

A second possible limitation is that the results were entirely based on self-reports. Respondents may attempt to "fake good," thus biasing the results. However, One's et al.'s (1993) meta-analysis of integrity measures suggests that self-report criteria tend to result in higher estimates of validity than external measures of deviance. They explain that (a) many unethical (deviant) behaviors go undetected, and therefore limit the validity of external measures and (b) there is substantial evidence that the correlation between admission and actual behavior is substantial. When studying ethical climates, self-reports present a useful tool for understanding the perceptions employees form with regard to the ethical and unethical values, attitudes, and

behaviors in their social system such as the department. I assured participants anonymity and did not ask them to disclose unethical conduct they may have committed, but share their perceptions of the environment they work in. However, regardless of the significant evidence which supports the validity of self-reports in general (Spector, 1992a), researchers need to be alert to fact that self reports are vulnerable to social desirable responding.

A third limitation may be that I restricted the discriminant, convergent, and predictive validity comparison constructs to seven, five, and six scales respectively. While these scales represent a diverse set of constructs and scales, each of the validity assessments could benefit from additional comparison constructs, in order to fill out the picture of the nomological net of EWC. The process of validating a construct is never complete; no measure can ever be said to be validated in any final sense. Only over time and numerous studies can it be argued that the evidence leans toward supporting or not supporting the validity of a particular measure (Nunnally, 1978; Schwab, 1980). The results of this research represent a first step suggesting construct and criterion validity of the ECI scales. However, future research is necessary to lend additional support to these conclusions.

A fourth limitation is that I assessed direct, main effects for the different climate scales on the outcomes. As mentioned above, this work represents a first step in the development of a new EWC measure. The existence of this measure will now allow scholars to pursue more complex models including mediating and moderating influences of climate on outcomes, the effect of climate strength on outcomes, and antecedent effects on climate types.

A final limitation may be that all of the participants were from one region of the US. Although the three studies utilized participants from over 250 different departments across more than 200 organizations, all were located in the southeastern part of the U.S. Therefore, I cannot

be sure that the results generalize across other parts of the U.S. Future research will have to include sample from other regions of the U.S.

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 ethical work climates. 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.

ENDNOTES

- ¹ The terms ethical behavior and moral behavior are considered equivalent and will be used interchangeably in this paper. Ethical behavior refers to intentionally responsible actions honoring implicit and explicit social contracts and seeking to prevent and avoid or rectify harm (Vidaver-Cohen, 1995). Therefore, unethical behavior refers to intentionally irresponsible actions violating implicit and explicit social contracts and seeking to inflict harm or not preventing harm that could have been prevented. Unethical behavior is illegal and morally unacceptable to society and humanity.
- ² The terms moral reasoning and moral judgment are considered equivalent and will be used interchangeable depending on context.

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Figure 1. Theoretical Ethical Work Climates Types

		Loci of Analysis		
		Individual (I)	Local (L)	Cosmopolitan (C)
Ethical Criteria	Egoism (E)	Self-Interest (EI items)*	Company Profit (EL items)*	Efficiency (EC items)*
	Benevolence (B)	Friendship (BI items)*	Team Interest (BL items)*	Social Responsibility (BC items)*
	Principle (P)	Personal Morality (PI items)*	Company Rules and Procedures (PL items)*	Laws and Professional Codes (PC items)*

Figure 1

Theoretical Ethical Work Climates Types

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Table 1

Factor Loadings for Collective Moral Sensitivity Items (Alpha Version of the ECI)

Collective Moral Sensitivity Items	Norms of Moral Awareness	Norms of Empathetic Concern
1. People are really aware of ethical issues. (Item 1)	.776	-.048
2. People are really sensitive to ethical problems. (Item 14)	.755	-.006
3. People are really sensitive what ethical issues are concerned. (Item 5)	.738	-.151
4. People don't pay attention to ethics.(RC) (Item 13)	.688	.161
5. If a rule or law is broken, people are quick to notice. (Item 12)	.673	-.082
6. People recognize a moral dilemma right away. (Item 10)	.632	.119
7. People wouldn't recognize an ethical dilemma unless it concerns breaking the law. (RC) (Item 6)	.539	.131
8. Sometimes people try to understand a person better by imagining how things look from the other person's perspectives. (Item 2)	.544	.148
9. When people see someone being treated unfairly, they sometimes don't feel much pity for them. (RC) (Item 8)	-.094	.893
10. Others' misfortunes do not usually disturb people a great deal.(RC) (Item 9)	-.123	.820
11. Sometimes people do not feel very sorry for others who are having problems.(RC) (Item 11)	.093	.679
The items below did not load clearly on either one factor:		
12. People do not notice when unethical events occur. (RC) (Item 3)	.423	.345
13. When people see someone being taken advantage of, they feel kind of protective towards them. (Item 7)	.378	.307
14. People sometimes find it difficult to see things from the "other person's" point of view. (RC) (Item 4)	.225	.298

Table 2

Factor Loadings for Collective Moral Judgment Items (Alpha Version of the ECI)

Collective Moral Judgment Items	Focus on Self	Focus on Others
1. People's primary concern is their personal benefit. (Item 12)	.948	.065
2. People think of their own welfare first when faced with a difficult decision. (Item 10)	.927	.145
3. People are very concerned about what is best for themselves. (Item 8)	.924	.146
4. People protect their own interest above other considerations. (Item 1)	.723	-.026
5. People are mostly out for themselves. (Item 5)	.651	-.209
6. What is best for everyone in the department is the major consideration. (Item 9)	-.042	.747
7. It is expected that you will always do what is right for society. (Item 2)	.076	.709
8. People have a strong sense of responsibility to society and humanity. (Item 4)	-.113	.691
9. People in my department are actively concerned about their peers' interests. (Item 13)	-.123	.659
10. The most important concern is the good of all the people in the department. (Item 7)	-.222	.644
11. People in my department look out for each other's good. (Item 3)	-.250	.627
12. Professional obligations can never justify neglecting the welfare of others. (Item 11)	.055	.626
The items below did not load clearly on either one factor:		
13. People decisions and actions are guided by their own personal and moral beliefs. (Item 14)	.342	.589
14. Our major concern is always what is best for the other person in the department. (Item 6)	-.197	.442

Table 3

Factor Loadings for Collective Moral Character Items (Alpha Version of the ECI)

Collective Moral Character Items	A	Norms of Responsibility	B
1. People wouldn't feel that they had to do their part in a group project if everyone else were lazy. (RC) (Item 6)	.556	-.003	-.009
2. In my department, if a machine was broken by someone through mishandling, others would feel less guilty if it were already damaged before. (RC) (Item 10)	.547	-.188	.035
3. Sometimes, people don't feel in control over the outcome when making decisions that concern moral issues. (RC) (Item 2)	.536	-.034	.100
4. No matter how much people are provoked, they are always responsible for whatever they do. (Item 9)	-.058	.730	.029
5. People around here are confident that they can do the right thing when faced with moral dilemmas. (Item 1)	.023	.649	.139
6. When people try to do what is right (e.g. what is ethical), they generally succeed. (Item 5)	-.017	.121	.939
The items below did not load clearly on either one factor:			
7. If people would hurt someone unintentionally they would feel almost as guilty as if they had done the same thing intentionally. (Item 7)	.031	.327	.063
8. Given how hard it is for an honest person to get ahead, it is easier to forgive those who deceive others in business. (RC) (Item 11)	.406	.246	-.084
9. In my department, extenuating circumstances never completely remove peoples' responsibilities for their actions. (Item 8)	-.173	.211	.156
10. In my department, when a person is nasty to anyone else, people feel very little responsibility to treat that person well. (RC) (Item 3)	.401	.283	-.187
11. People around here feel that even if they try to do the morally right thing, they may not succeed. (RC) (Item 4)	.372	-.018	.404

Table 4

Scale Reliabilities, Means and SDs (Alpha Version of the ECI)

Scales	Reliabilities	Means	SD
Collective Moral Sensitivity			
1. Norm of Empathetic Concern	.81	6.89	2.640
2. Norms of Moral Awareness	.88	18.73	6.22
Collective Moral Judgment			
1. Focus on Self	.91	13.96	4.89
2. Focus on Others	.89	18.58	5.89

Table 5

Factor Loading for Collective Moral Sensitivity Items (Beta Version of the ECI)

Collective Moral Sensitivity Items	Norms of Moral Awareness	Norms of Empathetic Concern
1. People in my department are very sensitive to ethical problems. (Item 9 [14] ¹)	.876	-.048
2. If a rule or law is broken, people around here are quick to notice. (Item 8 [12])	.678	-.149
3. People around here are aware of ethical issues. (Item 3 [1])	.644	.111
4. People in my department recognize a moral dilemma right away. (Item 6 [10])	.574	.149
5. People around here do not pay attention to ethical issues. (RC) (Item 11 [13])	.506	.221
6. People in my department sympathize with someone who is having difficulties in their job. (Item 1)	.003	.810
7. For the most part, when people around here see that someone is treated unfairly, they feel pity for that person. (Item 2 [8])	-.094	.762
8. When people in my department see someone being treated unfairly, they sometimes don't feel much pity for them. (RC) (Item 10 [8])	-.019	.745
9. In my department people feel sorry for someone who is having problems. (RC) (Item 12 [11])	.092	.729
10. Sometimes people in my department do not feel very sorry for others who are having problems. (RC) (Item 4 [11])	-.023	.652
11. Others' misfortunes do not usually disturb people in my department a great deal. (RC) (Item 7 [9])	.025	.625
12. People around here feel bad for someone who is being taken advantage of. (Item 5)	.195	.532

¹Numbers in brackets indicate the item number as it appeared in the previous version of the ECI.

Table 6

Factor Loading for Collective Moral Motivation Items (Beta Version of the ECI)

Collective Moral Motivation Items	Achievement/ Power Over Ethics	Other Benefit Over Benefit For Self	Ethics Over Power/ Achievement
1. Around here people are willing to tell a lie if it means advancing in the company. (Item 12)	.895	-.089	.006
2. In my department people strive to obtain power and control even if it means to compromise ethical values. (Item 9)	.878	-.088	.034
3. Around here power is more important than honesty. (Item 11)	.857	.101	-.115
4. In my department people are willing to break the rules in order to advance in the company. (RC) (Item 1)	.719	-.183	.156
5. In my department authority is considered more important than fairness. (Item 7)	.626	.189	-.119
6. In my department personal success is more important than helping others. (Item 10)	.607	.203	.024
7. In order to control scarce resources, people in my department are willing to compromise their ethical values somewhat. (Item 6)	.569	-.082	.148
8. Around here achievement is valued more than commitment and loyalty. (Item 5)	.419	.035	-.127
9. People in my department value wisdom over wealth. (Item 4)	.066	.616	-.017
10. People around here would prefer to use environmentally friendly products even if it meant that they might have to settle for slightly lower pay. (Item 3)	-.130	.575	-.026
11. People in my department feel strongly about keeping their promise to others even if it means foregoing an opportunity to make more money. (Item 2)	.122	.551	-.055
12. People in my department would give up some power and control if it meant more equality and social fairness. (Item 13)	-.104	.548	.231
13. In my department social fairness is considered more important than social power. (Item 8)	.157	.534	.028
14. People around here would be willing to take a pay cut if necessary if it meant saving someone's job. (Item 14)	-.005	.418	.073
15. People in my department people would not cheat to move up the corporate ladder. (Item 17)	.045	-.074	.884

16. People around here would not be willing to compromise ethical values to gain control over important resources. (Item 18)	.132	.068	.511
17. People in my department would not be willing to break the rules to get a bonus or a promotion. (Item 15)	-.188	.206	.505
The item below did not load clearly on either one factor:			
18. People in my department value fairness more than power. (Item 16)	.305	.328	.340

¹Numbers in brackets indicate the item number as it appeared in the previous version of the ECI.

Table 7

Factor Loading for Collective Moral Character Items (Beta Version of the ECI)

Collective Moral Character Items	Norms of Responsibility	Compared Action	A	B	C
1. When necessary, people in my department take charge and do what is morally right. (Item 15)	.915	-.047	-.056	-.007	-.030
2. Generally people in my department feel in control over the outcomes when making decisions that concern ethical issues. (Item 14)	.817	-.210	.220	-.015	-.173
3. People in my department feel it is better to assume responsibility for a mistake. (Item 19)	.774	.200	-.071	-.257	-.002
4. People around here are confident that they can do the right thing when faced with moral dilemmas. (Item 1 [1])	.667	-.206	-.114	.302	.112
5. No matter how much people around here are provoked, they are always responsible for whatever they do. (Item 9 – ECI 1 [9])	.528	.089	-.227	.151	.141
6. People I work with would feel they had to help a peer even if that person were not a very helpful person. (Item 17)	.509	.149	-.095	.026	-.012
7. If someone got away with stealing in my department, others would be more likely to steal, too. (RC) (Item 7)	-.041	.764	-.072	.091	-.140
8. People around here feel that they don't have to do their part in a group project if everyone else is lazy, too. (RC) (Item 12 [6])	.141	.603	.027	.159	-.086
9. In my department, if a machine were broken by someone through mishandling, people would feel less guilty if it already had been damaged before. (Item 13 [10])	-.095	.555	.155	.022	-.027
10. People around here would agree that what is going to happen is going to happen, no matter what. (RC) (Item 20)	-.173	-.010	.696	-.040	.065
11. People in my department would agree that doing the morally right thing is often determined by chance and circumstance. (Item 18)	-.122	.043	.697	.036	.119
12. People in my department would not think that it is their responsibility to stop a peer from doing something illegal. (RC) (Item 2)	-.047	.014	-.082	.671	-.080
13. People in my department would agree that because no business is 100% ethical, it is o.k. to do something unethical once in a while. (RC) (Item 4)	.054	.148	.144	.576	-.043

14. People in my department would agree that trusting fate never turns out as well as making a decision to take a definite course of action. (Item 23)	.123	-.068	.305	-.100	.527
The items below did not load clearly on either one factor:					
15. People around here frequently avoid assuming responsibility for their actions. (RC) (Item 3)	.347	.216	.097	.114	-.095
16. People around here would feel that it is their duty to try to stop a peer from doing something unethical. (Item 5)	.287	.150	.064	.045	.030
17. For the most part, people in my department doubt they can do the right thing when faced with moral dilemmas. (RC) (Item 6)	-.007	.023	.278	.489	.080
18. People in my department are not likely to assume responsibility for their actions. (RC) (Item 8)	.471	.388	-.017	-.001	-.063
19. People in my department would agree that failing to return money when given too much change is the same as stealing. (Item 10)	.292	.375	-.020	-.262	.184
20. Sometimes, people around here don't feel in control over the outcome when making decisions that concern moral issues. (RC) (Item 11 [2])	.333	-.046	.389	.025	-.261
21. People around here would agree that if there are no ethical standards for the industry, their company does not need to adhere to ethical standards either. (RC) (Item 16)	.228	.278	.230	.029	-.146
22. People in my department would agree that doing what is right is usually determined by our actions. (Item 21)	.471	.388	-.017	-.001	-.063
23. Around here people would agree that doing the right thing is a matter of careful thinking; luck has little or nothing to do with it. (22)	.160	.086	.061	.199	.360
24. Employees around here can have an influence on decisions regarding the ethical standards of the department. (Item 24)	.181	.104	.372	-.083	.298
25. People around here intend to do what is right, but other circumstances often determine the outcome. (RC) (Item 25)	.093	.130	.041	-.003	-.317

¹Numbers in brackets indicate the item number as it appeared in the previous version of the ECI.

Table 8

Scale Reliabilities, Means and SDs (Beta Version of the ECI)

Scales	Reliabilities	Means	SD
Collective Moral Sensitivity			
1. Norms of Empathetic Concern	.87	16.89	5.50
2. Norms of Moral Awareness	.82	11.33	3.79
Collective Moral Motivation			
1. Achievement/Power Over Ethics	.89	19.64	6.74
2. Other Benefit Over Benefit For Self	.75	18.59	4.17
3. Ethics Over Power/Achievement	.71	8.13	2.74
Collective Moral Character			
1. Norms of Outcome Responsibility	.84	14.07	4.38
2. Compared Action	.72	7.27	2.50

Table 9

Confirmatory Factor Analysis: Fit Indices

Model	χ^2	<i>df</i>	SRMR	RMSEA	CFI	GFI	NFI	IFI
Six Factor Model	2115.76	579	.08	.07	.97	.82	.96	.97
One Factor Model	6279.72	594	.16	.19	.88	.45	.87	.88

Table 10

Regression Results for Study 3

Variable	Ethical Behavior	OCB Helping	E.P. Follow Through	Interpers. Deviance	Perceived Performance	Political Behavior
N	110	110	109	110	109	306
Norms of Moral Awareness	.16	-.13	.21	-.32*	.03	.16*
Norms of Empathetic Concern	-.31*	-.10	-.20	.04	-.39*	-.48***
CMJ (Focus On Others)	-.06	-.11	-.22	.10	-.04	-.22**
CMJ (Focus On Self)	-.07	.284	.12	-.03	.19	.17*
Collective Moral Motivation	.34*	.465**	.08	-.24	.43*	-.01
Collective Moral Character	.26*	.497**	.33*	-.21	.32*	-.04
Full model R ²	.22***	.15***	.09	.31***	.07*	.42***
				*p<.05	**p<.01	***p<.001

Table 11

Regression Results Controlling for Social Desirability

Dependent variable	Ethical Behavior	OCB Helping	E. P. Follow Through	Interpers. Deviance	Perceived Performance	Political Behavior
N	628	628	622	628	622	628
Norms of Moral Awareness	.162**	-.16**	.18**	-.27***	.02	.15*
Norm of Empathetic Concern	-.28***	-.07	-.18**	.08	-.36***	-.48***
Collective Moral Judgment (focus on others)	-.07	-.10*	-.22***	.06	-.04	-.22**
Collective Moral Judgment (focus on self)	-.08	.27***	.11	-.03	.18**	.17*
Collective Moral Motivation	.31***	.44***	.06	-.18**	.42***	-.01
Collective Moral Character	.25***	.47***	.32***	-.27***	.32***	-.03
Social Desirability	.05	.08*	.05	-.09*	.03	.01
Full model R ²	.27***	.20***	.09***	.29***	.12***	.42***

*p<.05 **p<.01 ***p<.001

Table 12

Correlations For Aggregate Ethical Climate Factors and Aggregate Level Constructs

	∇	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Age				1.00										
2. Sex				-0.03	1.00									
3. Education				.17**	0.02	1.00								
4. Tenure in Organization				.59**	-0.04	.13**	1.00							
5. Tenure in Department				.51**	-0.06	0.01	.81**	1.00						
6. Norms of Moral Awareness	.76	12.38	3.83	.11**	-0.12**	0.02	.08*	.10*	1.00					
7. Norms of Empathetic Concern	.79	17.82	5.10	0.05	-.09*	-0.04	-0.03	0.04	.73**	1.00				
8. Collective Moral Judgment -Other focus	.82	13.28	4.32	-0.01	-0.06	-.12**	-0.05	0.00	.57**	.58**	1.00			
9. Collective Moral Judgment - Self focus	.89	15.53	4.96	-.10*	0.06	0.05	-0.03	-.08*	-.37**	-.52**	-.28**	1.00		
10. Collective Moral Motivation	.93	18.20	8.00	.10*	-.11**	-0.06	0.06	.12**	.62**	.66**	.45**	-.77**	1.00	
11. Collective Moral Character	.87	15.20	4.96	.08*	-0.06	-0.05	-0.03	0.04	.65**	.65**	.64**	-.45**	.52**	1.00
12. Aggregate General Justice	.87	20.72	5.70	0.03	-0.01	0.08	0.06	0.07	.36**	.28**	.28**	-.35**	.45**	.28**
13. Aggregate Climate Initiative	.88	23.26	5.73	.23**	-0.04	0.10	0.02	0.02	.54**	.57**	.42**	-.58**	.58**	.53**
14. Aggregate Safety Climate (A)	.80	16.94	4.25	0.07	-0.01	-0.03	-0.03	-0.05	.57**	.60**	.45**	-.56**	.59**	.46**
15. Aggregate Safety Climate (E)	.84	17.99	4.40	.36**	-0.10	-0.02	0.06	-0.05	.38**	.44**	.38**	-.35**	.40**	.39**
16. Aggregate Gen. Political Behavior	.74	4.87	2.18	-.19**	0.02	-0.01	-0.02	0.06	-.42**	-.60**	-.50**	.39**	-.45**	-.49**
17. Aggregate Org. Structure	.82	22.00	5.76	.16**	-0.09	0.11	.120*	0.09	0.02	-0.08	-0.10	.42**	-.28**	-.15**
18. Agregate Climate Procedural Justice	.86	12.65	3.83	.12*	-.10*	-.270**	-0.07	0.01	.44**	.60**	.56**	-.66**	.64**	.58**

*p<.05 **p<0.01

Table 13

Correlations For Aggregate Ethical Climate Factors and Individual Level Constructs

Variable	∇	Mean	SD	Norms of Moral Awareness	Norms of Empathetic Concern	Collective MJ Other Focus	Collective MJ. Self Focus	Collective Moral Motivation	Collective Moral Character
1. Ethical Behavior	.91	22.50	7.87	.31**	.22**	.18**	-.35**	.40**	.34**
2. OCB Helping	.88	18.85	3.76	.21**	.22**	.19**	-.19**	.30**	.37**
3. E.P. Follow Through	.95	15.88	4.65	.15**	0.04	-0.02	-0.03	0.06	.17**
4. Interpersonal Deviance	.89	18.16	6.96	-.47**	-.38**	-.30**	.32**	-.41**	-.45**
5. Performance	.89	27.01	4.80	.14**	0.03	.09*	-.12**	.21**	.20**
6. Social Desirability	.70	14.71	2.31	.30**	.20**	.15**	-.20**	.28**	.26**
7. Perceived Functional Dependence	.74	7.19	2.19	.14*	.19**	.17**	-.17**	.22**	.20**
8. Problem-Solving Demand	.80	16.37	4.48	.19**	.15*	0.09	-0.07	0.04	-0.01
9. Satisfaction	.78	20.37	4.51	.24**	0.12	0.12	-.13*	.19**	.21**
10. Commitment	.72	17.18	4.36	.40**	.39**	.31**	-.32**	.41**	.39**
11. Turnover Intentions	.74	5.71	2.35	-0.08	0.00	0.02	0.09	-0.08	0.01

*p< .05 **p< .01

APPENDIX A
PRELIMINARY SCALE DEVELOPMENT

Collective Moral Sensitivity Items

Empathetic Concern

1. In our department, if people are sure they are right about something, they do not listen to other people's opinions or ideas.
2. Sometimes people in our department try to understand others better by imagining how things look from their perspectives.
3. People in our department believe that there are two sides to every question and try to look at them both.
4. People in our department sometimes find it difficult to see things from the "other person's" point of view.
5. People in our department try to look at everybody's side of a disagreement before they make a decision.
6. When people in our department are upset at someone, they usually try to put "themselves in the other person's shoes" for a while.
7. When people in our department see someone being taken advantage of, they feel kind of protective towards them.
8. When people in our department see someone being treated unfairly, they sometimes don't feel much pity for them.
9. Sometimes people in our department do not feel very sorry for others who are having problems.
10. Others' misfortunes do not usually disturb people in our department a great deal.

Moral Awareness

1. People in our department wouldn't recognize an ethical dilemma unless it concerns breaking the law.
2. In our department people recognize a moral dilemma right away.
3. People are very aware of ethical issues in our department.
4. People don't pay attention to ethics in our department.
5. People in our department are really sensitive what ethical issues are concerned.
6. People do not notice when unethical events occur.
7. Ethics related issues are immediately brought to everyone's attention.
8. If a rule or law is broken, people in our department are quick to notice.
9. People are really sensitive to ethical problems in our department.

Collective Moral Judgment Items

Instrumental

1. In our department, people are mostly out for themselves.
2. People in this department are very concerned about what is best for themselves.
3. In this department, people protect their own interest above other considerations.
4. People's primary concern in this department is their personal benefit.
5. In this department, people think of their own welfare first when faced with a difficult decision.

Caring

1. People in this department view team spirit as very important.
2. In this department our major concern is always what is best for the other person.
3. The most important concern is the good of all the people in the department.
4. In our department, what is best for everyone is the major consideration.
5. In this company, people look out for each other's good.
6. People in this department are actively concerned about their peers' interests.

Principled

1. How decisions and actions affect society are a primary concern in our department.
2. The most important consideration in this department is each person's sense of right and wrong.
3. In this department, people are expected to follow their own personal and moral beliefs.
4. It is expected that you will always do what is right for society.
5. People in this company have a strong sense of responsibility to society and humanity.

Collective Moral Character Items

Self Control

1. People in our department are confident that they can do the right thing when they are faced with moral dilemmas.
2. When people in our department try to do what is ethical, they generally succeed.
3. People in our department feel that even if they try to do the morally right thing, they may not succeed.
4. Sometimes, people in our department do not feel in control over the outcome when making decisions that concern a moral issues.

Assuming Responsibility

1. In our department, people don't blame basically good people who are forced by their environment to be inconsiderate of others.
2. In our department, people feel that when considering how hard it is for an honest person to get ahead, it is easier to forgive those who deceive others in business.
3. People in our department wouldn't feel that they had to do their part in a group project if everyone else was lazy.
4. When a person is nasty to anyone else, people in our department feel very little responsibility to treat that person well.
5. People in our department are not expected to act differently from everyone else.
6. If people in our department would hurt someone unintentionally, they would feel almost as guilty as if they had done the same thing intentionally.
7. In our department, extenuating circumstances never completely remove peoples' responsibilities for their actions.
8. In our department, no matter how much people are provoked, they are always responsible for whatever they do.
9. As long as people in our department do not break laws, they should feel free to do their work whatever way possible.
10. People in our department wouldn't feel badly about giving offense to others if their intentions had been good.
11. People in our department feel that no matter what one person has done to another person, there is no excuse for taking advantage of another person.
12. Professional obligations can never justify neglecting the welfare of others.
13. If a machine was broken by someone through mishandling, people in our department would feel less guilty if it was already damaged before.
14. People in our department feel that if they have a job to do, it is impossible to look out for everybody's best interests.

INSTRUCTIONS FOR PANEL JUDGES

Dear participants:

Thank you for volunteering to help with the development of a new measure of ethical work climate (EWC). On the next page you find a definition of EWC and a description of each one of its four dimensions. The Ethical Climate Index (ECI) is the measure used to assess each one of the four dimensions of EWC. More specifically, the ECI consists of four scales: a scale for collective moral sensitivity, a scale for collective moral judgment, a scale for collective moral motivation, and a scale for collective moral character. Envelope A contains the items from three of the four scales: collective moral sensitivity, collective moral judgment and collective moral character. Please sort these items according to the dimensions they describe (the dimensions are defined on the next page).

For the purpose of sorting the items, I provided you with three envelopes labeled collective moral sensitivity, collective moral judgment, and collective moral character (the items that describe moral motivation are excluded from this exercise because they include single words only and therefore easily identifiable as collective moral motivation items). Please use your best judgment to sort the items and place them in the corresponding envelopes. Feel free to suggest improvements and/or changes to the items as you see fit.

Thank you again for participating!

Ethical Work Climate: Ethical work climate is a molar concept reflecting the content and strength of the prevalent *ethical* values, norms, attitudes, feelings, and behaviors of the members of a social-system such as a work group, department or organization. The prevalent ethical values, norms, attitudes, feeling and behaviors of members of a social-system are defined by the level of perceptual agreement individuals possess with regard to four specific dimensions: collective moral sensitivity, collective moral judgment, collective moral motivation and collective moral character.

The EWC literature assumes that shared perceptions exist of ethical values, norms, attitudes, feelings, and behaviors. If that is true, then shared perceptions of each of the four components should also exist and further, these shared perceptions should exert a collective influence on the ethical activities of individuals in the social-system.

Collective Moral Sensitivity: This involves the prevalent mode of imagining what alternative actions are possible and evaluating the consequences of those actions in terms of how these actions affect others and who would be affected by those actions. More specifically, collective moral sensitivity includes the prevalent norms of empathy and role taking present in a social-system as well as the general ability of members of the department to identify moral issues and moral dilemmas.

Collective Moral Judgment: This involves the prevalent form of moral judgment used to decide which course of action is morally justifiable. More specifically, collective moral judgment includes the prevalent form by which judgments are made about which course of action is morally right. This dimension is grounded in cognitive moral development (CMD) theory (Kohlberg, 1969). CMD theory proposes that individuals' moral reasoning skills (judgments of how moral dilemmas ought to be resolved) change and develop depending on person and situation specific factors. The theory suggests three broad levels of cognitive moral reasoning - preconventional, conventional and postconventional. At the preconventional level, people view rules as imposed and external to themselves. Moral decisions are justified in terms of rewards and punishment. At the conventional level, people internalize the shared moral norms of society or a group of the society (e.g. department). What is considered morally right is explained in terms of living up to roles and what is expected of people by others, such as fulfilling duties, rules and laws. At the postconventional level, people have gone beyond identification with others' expectations, rules and laws. At the highest level of CMD, individuals are guided by self-chosen ethical principles of justice and human rights (Colby, Kohlberg, Gibbs & Lieberman, 1983).

Collective Moral Motivation: This involves the prevalent values of a social system and whether moral values are generally prioritized over other values. More specifically, collective moral motivation includes the assessment of whether ethical decisions and actions are generally made with the intention to do what is morally right. (No items for this dimension are included in the sorting exercise.)

Collective Moral Character: This involves the prevalent level of self-control and norms for assuming responsibility in a social-system. More specifically, collective moral character includes the prevalent level of self-efficacy and self-control individuals have with regard to overcome obstacles and implement a planned course of action.

APPENDIX B
ALPHA VERSION OF THE ECI



Management Department

Thank you for considering participating in our study! This study is being conducted for academic research purposes only in an effort to better understand some of the issues that affect people at work. This is a survey that asks you a variety of questions about how things work in your department or workgroup. We have found that most people are able to complete the survey in 30 minutes or less. We realize that your time is precious and appreciate your efforts — your answers will contribute a lot to our study.

There are no right or wrong answers on the questionnaire. We are just interested in your view on a number of topics. Some of the questions may seem similar to one another, but please think carefully about your response to each question. And please note you do not have to answer any question you do not wish to answer.

All of the responses will be held in strict confidence and anonymity is assured; you and your individual responses cannot be identified in any way. Although we have included some questions on demographics (age, sex, years with your organization), no questions ask for any specific identifying information. Your responses will be combined with over one hundred others and all results will be presented as “40% of respondents said X” or “60% said Y.” Therefore, no one other than the researchers will see your individual survey nor will anyone ever be able to tell one individual from another in the results.

Participation in this research is voluntary. If you do not want to participate, we appreciate your consideration, nonetheless. If you decide to participate, completion of this survey will constitute your consent.

The survey is made up of several short parts. Please complete them all, and when you are done just drop it in the mail back to me in the attached envelope. If you have any questions at all about the survey or the study, just give us a call at the number below or drop me an email. And thanks again for your help on this. It is important, and we really do appreciate it!

Sincerely,

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First, we'd like to know a little bit about you, your company, and your position in the company.

	Circle correct answer or fill in appropriate blank in the column below:
1. What is your age?	_____ Years
2. What is your sex?	Male Female
3. What is your highest level of education completed? (Circle one.)	Some High School High School Some College College Degree Some Graduate School Masters Degree Doctoral Degree
4. What is the name of your organization?	
5. What department do you work in?	
6. How long have you been with this organization?	_____ Years _____ Months
7. How long have you been in your current department?	_____ Years _____ Months
8. What is your formal work title?	
9. Is your position a supervisory or nonsupervisory one?	Supervisory Nonsupervisory
10. Approximately how many people work in your department?	
11. Approximately how many employees work for your organization overall? (If you don't know for sure, make your best estimate.)	

Next, we have several questions about how things work in your organization. Remember, we're most interested in how things work in your specific work group or department.

<i>These questions ask about the things people focus on in your workplace. How well does each statement describe your department?</i>	Describes my department very well					Does not describe my department at all
1. People are really aware of ethical issues.	1	2	3	4	5	
2. Sometimes people try to understand a person better by imagining how things look from the other person's perspectives.	1	2	3	4	5	
3. People do not notice when unethical events occur.	1	2	3	4	5	
4. People sometimes find it difficult to see things from the "other person's" point of view.	1	2	3	4	5	
5. People are really sensitive what ethical issues are concerned.	1	2	3	4	5	
6. People wouldn't recognize an ethical dilemma unless it concerns breaking the law.	1	2	3	4	5	
7. When people see someone being taken advantage of, they feel kind of protective towards them.	1	2	3	4	5	
8. When people see someone being treated unfairly, they sometimes don't feel much pity for them.	1	2	3	4	5	
9. Others' misfortunes do not usually disturb people a great deal.	1	2	3	4	5	
10. People recognize a moral dilemma right away.	1	2	3	4	5	
11. Sometimes people do not feel very sorry for others who are having problems.	1	2	3	4	5	
12. If a rule or law is broken, people are quick to notice.	1	2	3	4	5	
13. People don't pay attention to ethics.	1	2	3	4	5	
14. People are really sensitive to ethical problems.	1	2	3	4	5	

<i>The following questions refer to how things work in your department. How well does each statement describe your department?</i>	Describes my department very well					Does not describe my department at all				
1. People protect their own interest above other considerations.	1	2	3	4	5					
2. It is expected that you will always do what is right for society.	1	2	3	4	5					
3. People in my department look out for each other's good.	1	2	3	4	5					
4. People have a strong sense of responsibility to society and humanity.	1	2	3	4	5					
5. People are mostly out for themselves.	1	2	3	4	5					
6. Our major concern is always what is best for the other person in the department.	1	2	3	4	5					
7. The most important concern is the good of all the people in the department.	1	2	3	4	5					
8. People are very concerned about what is best for themselves.	1	2	3	4	5					
9. What is best for everyone in the department is the major consideration.	1	2	3	4	5					
10. People think of their own welfare first when faced with a difficult decision.	1	2	3	4	5					
11. Professional obligations can never justify neglecting the welfare of others.	1	2	3	4	5					
12. People's primary concern is their personal benefit.	1	2	3	4	5					
13. People in my department are actively concerned about their peers' interests.	1	2	3	4	5					
14. People decisions and actions are guided by their own personal and moral beliefs.	1	2	3	4	5					

This section describes values that many people think are important in life. We are interested in finding out whether these values are present in your workplace, too. To what degree does each of these describe a guiding principle in your department? (Note: If an item is simply not an issue in your department, mark “3” for “Not Applicable.”)

	Opposed to my department’s values		NA	Consistent with my department’s values	
1. Equality (equal opportunity for all)	1	2	3	4	5
2. Inner Harmony (being at peace with oneself)	1	2	3	4	5
3. Social Power (control over others)	1	2	3	4	5
4. Pleasure (gratification of desires)	1	2	3	4	5
5. Freedom (freedom of action/thought)	1	2	3	4	5
6. A Spiritual Life (emphasis on spiritual things)	1	2	3	4	5
7. Sense of Belonging	1	2	3	4	5
8. Social order (the stability of society)	1	2	3	4	5
9. An Exciting Life (stimulating experiences)	1	2	3	4	5
10. Meaning in Life (a purpose in life)	1	2	3	4	5
11. Politeness (courtesy, good manners)	1	2	3	4	5
12. Wealth (material possessions)	1	2	3	4	5
13. National Security	1	2	3	4	5
14. Self Respect (belief in one’s own worth)	1	2	3	4	5
15. Return of Favors (avoid indebtedness)	1	2	3	4	5
16. Creativity (uniqueness, imagination)	1	2	3	4	5
17. A World at Peace (free of war and conflict)	1	2	3	4	5
18. Respect for Tradition	1	2	3	4	5
19. Mature Love (emotional/spiritual intimacy)	1	2	3	4	5
20. Self-Discipline (resistance to temptation)	1	2	3	4	5
21. Privacy	1	2	3	4	5
22. Family Security (safety for loved	1	2	3	4	5

ones)					
23. Social Recognition (approval by others)	1	2	3	4	5
24. Unity with Nature (fitting into nature)	1	2	3	4	5
25. A Varied Life (filled with novelty/change)	1	2	3	4	5
26. Wisdom (mature understanding of life)	1	2	3	4	5
27. Authority (the right to lead or command)	1	2	3	4	5
28. True Friendship (close, supportive friends)	1	2	3	4	5
29. A World of Beauty (beauty of nature/arts)	1	2	3	4	5
30. Social Justice (care for the weak)	1	2	3	4	5
31. Independence (self-reliant, self-sufficient)	1	2	3	4	5
32. Moderate (avoiding extreme feeling/action)	1	2	3	4	5
33. Loyal (faithful to our friends, group)	1	2	3	4	5
34. Ambitious (hard-working, aspiring)	1	2	3	4	5
35. Broadminded (tolerant of different ideas)	1	2	3	4	5
36. Humble (modest, self-effacing)	1	2	3	4	5
37. Daring (seeking adventure, risk)	1	2	3	4	5
38. Protecting the Environment	1	2	3	4	5
39. Influential (impact people and events)	1	2	3	4	5
40. Honoring Parents and Elders (respect)	1	2	3	4	5
41. Choosing Own Goals (selecting own purpose)	1	2	3	4	5
42. Healthy (not sick physically or mentally)	1	2	3	4	5
43. Capable (competent, effective, efficient)	1	2	3	4	5
44. Accepting my Portion in Life	1	2	3	4	5
45. Honest (genuine, sincere)	1	2	3	4	5
46. Preserving My Public Image (protecting face)	1	2	3	4	5

47. Obedient (dutiful, meeting obligations)	1	2	3	4	5
48. Intelligent (logical, thinking)	1	2	3	4	5
49. Helpful (working for the welfare of others)	1	2	3	4	5
50. Enjoying Life	1	2	3	4	5
51. Devout (holding to religious faith and belief)	1	2	3	4	5
52. Responsible (dependable, reliable)	1	2	3	4	5
53. Curious (interested in everything, exploring)	1	2	3	4	5
54. Forgiving (willing to pardon others)	1	2	3	4	5
55. Successful (achieving goals)	1	2	3	4	5
56. Clean (neat, tidy)	1	2	3	4	5
57. Self-indulgent (doing pleasant things)	1	2	3	4	5

<i>This set of questions asks about things people do and how they feel.. To what extent does each of these describe your department?</i>	Describes my department very well					Does not describe my department at all				
1. People around here are confident that they can do the right thing when faced with moral dilemmas.	1	2	3	4	5					
2. Sometimes, people don't feel in control over the outcome when making decisions that concern moral issues.	1	2	3	4	5					
3. In my department, when a person is nasty to anyone else, people feel very little responsibility to treat that person well.	1	2	3	4	5					
4. People around here feel that even if they try to do the morally right thing, they may not succeed.	1	2	3	4	5					
5. When people try to do what is right (e.g. what is ethical), they generally succeed.	1	2	3	4	5					
6. People wouldn't feel that they had to do their part in a group project if everyone else were lazy.	1	2	3	4	5					
7. If people would hurt someone unintentionally they would feel almost as guilty as if they had done the same thing intentionally.	1	2	3	4	5					
8. In my department, extenuating circumstances never completely remove peoples' responsibilities for their actions.	1	2	3	4	5					
9. No matter how much people are provoked, they are always responsible for whatever they do.	1	2	3	4	5					
10. In my department, if a machine was broken by someone through mishandling, others would feel less guilty if it were already damaged before.	1	2	3	4	5					
11. Given how hard it is for an honest person to get ahead, it is easier to forgive those who deceive others in business.	1	2	3	4	5					

APPENDIX C
BETA VERSION OF THE ECI



Management Department

Thank you for considering participating in our study! This study is being conducted for academic research purposes only in an effort to better understand some of the issues that affect people at work. This is a survey that asks you a variety of questions about how things work in your department or workgroup. We have found that most people are able to complete the survey in 30 minutes or less. We realize that your time is precious and appreciate your efforts — your answers will contribute a lot to our study.

There are no right or wrong answers on the questionnaire. We are just interested in your view on a number of topics. Some of the questions may seem similar to one another, but please think carefully about your response to each question. And please note you do not have to answer any question you do not wish to answer.

All of the responses will be held in strict confidence and anonymity is assured; you and your individual responses cannot be identified in any way. Although we have included some questions on demographics (age, sex, years with your organization), no questions ask for any specific identifying information. Your responses will be combined with over one hundred others and all results will be presented as “40% of respondents said X” or “60% said Y.” Therefore, no one other than the researchers will see your individual survey nor will anyone ever be able to tell one individual from another in the results.

Participation in this research is voluntary. If you do not want to participate, we appreciate your consideration, nonetheless. If you decide to participate, completion of this survey will constitute your consent.

The survey is made up of several short parts. Please complete them all, and when you are done just drop it in the mail back to me in the attached envelope. If you have any questions at all about the survey or the study, just give us a call at the number below or drop me an email. And thanks again for your help on this. It is important, and we really do appreciate it!

Sincerely,

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First, we'd like to know a little bit about you, your company, and your position in the company.

	Circle correct answer or fill in appropriate blank in the column below:
1. What is your age?	_____ Years
2. What is your sex?	Male Female
3. What is your highest level of education completed? (Circle one.)	Some High School High School Some College College Degree Some Graduate School Masters Degree Doctoral Degree
4. What is the name of your organization?	
5. What department do you work in?	
6. How long have you been with this organization?	_____ Years _____ Months
7. How long have you been in your current department?	_____ Years _____ Months
8. What is your formal work title?	
9. Is your position a supervisory or nonsupervisory one?	Supervisory Nonsupervisory
10. Approximately how many people work in your department?	
11. Approximately how many employees work for your organization overall? (If you don't know for sure, make your best estimate.)	

Next, we have several questions about how things work in your organization. Remember, we're most interested in how things work in your specific work group or department.

<i>These questions ask about the things people focus on in your workplace. How well does each statement describe your department?</i>	Describes my department very well			Does not describe my department at all	
1. People in my department sympathize with someone who is having difficulties in their job.	1	2	3	4	5
2. For the most part, when people around here see that someone is treated unfairly, they feel pity for that person.	1	2	3	4	5
3. People around here are aware of ethical issues.	1	2	3	4	5
4. Sometimes people in my department do not feel very sorry for others who are having problems.	1	2	3	4	5
5. People around here feel bad for someone who is being taken advantage of.	1	2	3	4	5
6. People in my department recognize a moral dilemma right away.	1	2	3	4	5
7. Others' misfortunes do not usually disturb people in my department a great deal.	1	2	3	4	5
8. If a rule or law is broken, people around here are quick to notice.	1	2	3	4	5
9. People in my department are very sensitive to ethical problems.	1	2	3	4	5
10. When people in my department see someone being treated unfairly, they sometimes don't feel much pity for them.	1	2	3	4	5
11. People around here do not pay attention to ethical issues.	1	2	3	4	5
12. In my department people feel sorry for someone who is having problems.	1	2	3	4	5

<i>The following questions refer to the values in your department. How well does each statement describe your department?</i>	Describes my department very well		Does not describe my department at all		
1. In my department people are willing to break the rules in order to advance in the company.	1	2	3	4	5
2. People in my department feel strongly about keeping their promise to others even if it means foregoing an opportunity to make more money.	1	2	3	4	5
3. People around here prefer to use environmentally friendly products even if it means that they have to forego some pay.	1	2	3	4	5
4. People in my department value wisdom over wealth.	1	2	3	4	5
5. Around here achievement is valued more than commitment and loyalty.	1	2	3	4	5
6. In order to control scarce resources people in my department are willing to compromise their ethical values somewhat.	1	2	3	4	5
7. Authority is considered more important than fairness.	1	2	3	4	5
8. In my department social fairness is considered more important than social power.	1	2	3	4	5
9. In my department people strive to obtain power and control even if it means to compromise ethical values.	1	2	3	4	5
10. In my department personal success is more important than helping others.	1	2	3	4	5
11. Around here power is more important than honesty.	1	2	3	4	5
12. Around here people are willing to tell a lie if it means advancing in the company.	1	2	3	4	5
13. People in my department would give up some power and control if it meant more equality and social fairness.	1	2	3	4	5
14. People around here would be willing to take a pay cut if necessary if it meant saving someone's job.	1	2	3	4	5
15. People in my department would not be willing to break the rules to get a bonus or a promotion.	1	2	3	4	5
16. People in my department value fairness more than power.	1	2	3	4	5
17. People in my department people would not cheat to move up the corporate ladder.	1	2	3	4	5
18. People around here would not be willing to compromise ethical values to gain control over important resources.	1	2	3	4	5

<i>This set of questions asks about things people do and how they feel. To what extent does each of these describe your department?</i>	Describes my department very well					Does not describe my department at all				
1. People around here are confident that they can do the right thing when faced with moral dilemmas.	1	2	3	4	5					
2. People in my department would not think that it is their responsibility to stop a peer from doing something illegal.	1	2	3	4	5					
3. People around here frequently avoid assuming responsibility for their actions.	1	2	3	4	5					
4. People in my department would agree that because no business is 100% ethical, it is o.k. to do something unethical once in a while.	1	2	3	4	5					
5. People around here would feel that it is their duty to try to stop a peer from doing something unethical.	1	2	3	4	5					
6. For the most part, people in my department doubt they can do the right thing when faced with moral dilemmas.	1	2	3	4	5					
7. If someone got away with stealing in my department, others would be more likely to steal, too.	1	2	3	4	5					
8. People in my department are not likely to assuming responsibility for their actions.	1	2	3	4	5					
9. No matter how much people around here are provoked around here, they are always responsible for whatever they do.	1	2	3	4	5					
10. Failing to return money when given too much change is the same as stealing.	1	2	3	4	5					
11. Sometimes, people <i>around here</i> don't feel in control over the outcome when making decisions that concern moral issues.	1	2	3	4	5					
12. People around here don't feel that they have to do their part in a group project if everyone were lazy.	1	2	3	4	5					
13. In my department, if a machine were broken by someone through mishandling, others would feel less guilty if it were already damaged before.	1	2	3	4	5					
14. Generally people in my department feel in control over the outcomes when making decisions that concern ethical issues	1	2	3	4	5					
15. When necessary, people in my department take charge and do what is morally right.	1	2	3	4	5					
16. People around here would agree that if there are no ethical standards for the industry, their company does not need to adhere to ethical standards either.	1	2	3	4	5					
17. People I work with would feel they had to help a peer even if that person were not a very helpful person herself.	1	2	3	4	5					
18. People in my department would agree that doing the morally right thing is often determined by chance and circumstance.	1	2	3	4	5					

<i>This set of questions asks about things people do and how they feel. To what extent does each of these describe your department?</i>	Describes my department very well					Does not describe my department at all				
19. People in my department feel it is better to assume responsibility for a mistake.	1	2	3	4	5	1	2	3	4	5
20. People around here would agree that what is going to happen is going to happen.	1	2	3	4	5	1	2	3	4	5
21. People in my department would agree that doing what is right is usually determined by our actions.	1	2	3	4	5	1	2	3	4	5
22. Around here people would agree that doing the right thing is a matter of careful thinking, luck has little or nothing to do with it.	1	2	3	4	5	1	2	3	4	5
23. People in my department would agree that trusting fate never turns out as well as making decisions to take a definite course of action.	1	2	3	4	5	1	2	3	4	5
24. Employees around here can have an influence on decisions regarding the ethical standards of the department.	1	2	3	4	5	1	2	3	4	5
25. People around here intend to do what is right, but other circumstances often determine the outcome.	1	2	3	4	5	1	2	3	4	5
26. People in my department usually prefer to cover up a mistake.	1	2	3	4	5	1	2	3	4	5
27. People around here believe that people's misfortunes are the result of the mistakes they make.	1	2	3	4	5	1	2	3	4	5

APPENDIX D

FINAL ECI

ECI – Collective Moral Sensitivity Scale

These questions ask about the things people focus on in your workplace. How well does each statement describe your department?	Describes my department very well					Does not describe my department at all
1. People in my department sympathize with someone who is having difficulties in their job.	1	2	3	4	5	
2. People around here are aware of ethical issues.	1	2	3	4	5	
3. For the most part, when people around here see that someone is treated unfairly, they feel pity for that person.	1	2	3	4	5	
4. People in my department recognize a moral dilemma right away.	1	2	3	4	5	
5. People around here feel bad for someone who is being taken advantage of.	1	2	3	4	5	
6. Sometimes people in my department do not feel very sorry for others who are having problems.	1	2	3	4	5	
7. If a rule or law is broken, people around here are quick to notice.	1	2	3	4	5	
8. Others' misfortunes do not usually disturb people in my department a great deal.	1	2	3	4	5	
9. People in my department are very sensitive to ethical problems.	1	2	3	4	5	
10. When people in my department see someone being treated unfairly, they sometimes don't feel much pity for them.	1	2	3	4	5	
11. People around here do not pay attention to ethical issues.	1	2	3	4	5	
12. In my department people feel sorry for someone who is having problems.	1	2	3	4	5	

ECI - Collective Moral Judgment Scale

<p>This set of questions asks about things people do and how they feel. To what extent does each of these describe your department?</p>	Describes my department very well					Does not describe my department at all				
1. People around here protect their own interest above other considerations.	1	2	3	4	5					
2. In my department it is expected that you will always do what is right for society.	1	2	3	4	5					
3. People around here have a strong sense of responsibility to society and humanity.	1	2	3	4	5					
4. What is best for everyone in the department is the major consideration.	1	2	3	4	5					
5. People in my department are very concerned about what is best for them personally.	1	2	3	4	5					
6. The most important concern is the good of all the people in the department.	1	2	3	4	5					
7. People around here are mostly out for themselves.	1	2	3	4	5					
8. People in my department think of their own welfare first when faced with a difficult decision.	1	2	3	4	5					
9. In my department people's primary concern is their own personal benefit.	1	2	3	4	5					
10. People in my department are actively concerned about their peers' interests.	1	2	3	4	5					

ECI – Collective Moral Character Scale

<p>The following questions refer to how things work in your department. How well does each statement describe your department?</p>	<p align="center">Describes my department very well Does not describe my department at all</p>				
	1	2	3	4	5
1. People around here are confident that they can do the right thing when faced with moral dilemmas.	1	2	3	4	5
2. People I work with would feel they had to help a peer even if that person were not a very helpful person.	1	2	3	4	5
3. People in my department feel it is better to assume responsibility for a mistake.	1	2	3	4	5
4. No matter how much people around here are provoked, they are always responsible for whatever they do.	1	2	3	4	5
5. Generally people in my department feel in control over the outcomes when making decisions that concern ethical issues.	1	2	3	4	5
6. When necessary, people in my department take charge and do what is morally right.	1	2	3	4	5

ECI - Collective Moral Motivation Scale

The following questions refer to the values in your department. How well does each statement describe your department?	Describes my department very well					Does not describe my department at all				
1. In my department people are willing to break the rules in order to advance in the company.	1	2	3	4	5	1	2	3	4	5
2. Around here, power is more important than honesty.	1	2	3	4	5	1	2	3	4	5
3. In my department authority is considered more important than fairness.	1	2	3	4	5	1	2	3	4	5
4. Around here, achievement is valued more than commitment and loyalty.	1	2	3	4	5	1	2	3	4	5
5. In my department personal success is more important than helping others.	1	2	3	4	5	1	2	3	4	5
6. In my department people strive to obtain power and control even if it means compromising ethical values.	1	2	3	4	5	1	2	3	4	5
7. Around here, people are willing to tell a lie if it means advancing in the company.	1	2	3	4	5	1	2	3	4	5
8. In order to control scarce resources, people in my department are willing to compromise their ethical values somewhat.	1	2	3	4	5	1	2	3	4	5

APPENDIX E

SCALES FOR ASSESSING CONSTRUCT VALIDITY

Social Desirability Scale (Ballard, 1992)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.	True	False
1. I sometimes feel resentful when I don't get my way.	1	2
2. There have been times when I feel like rebelling against people in authority even though I knew they were right.	1	2
3. There have been occasions when I took advantage of someone.	1	2
4. I'm always willing to admit it when I make a mistake.	1	2
5. I sometimes try to get even rather than forgive and forget.	1	2
6. I am always courteous, even to people who are disagreeable.	1	2
7. There have been times when I was quite jealous of the good fortune of others.	1	2
8. I am sometime irritated by people who ask favors of me.	1	2
9. I have never deliberately said something that hurt someone's feelings.	1	2

Ethical Behavior Scale (Akkah, 1992)					
Over the past year, how often have you observed the following types of behaviors in your department?					
	Never	Occasionally			Very Frequently
1. Unauthorized personal use of department materials or services	1	2	3	4	5
2. Padding an expenses account	1	2	3	4	5
3. Taking longer than necessary to do a job	1	2	3	4	5
4. Misuse of on-the-job time	1	2	3	4	5
5. Concealing errors	1	2	3	4	5
6. Falsifying time/quality/quantity reports	1	2	3	4	5
7. Calling in sick just to take a day off	1	2	3	4	5
8. Lying to supervisors	1	2	3	4	5
9. Stealing from the department	1	2	3	4	5
10. Dragging out work in order to get overtime	1	2	3	4	5

Perceptions Of Ethics Program Follow-Through (Trevino & Weaver, 2001)					
Evaluate whether the statements below accurately represent your organization's ethics procedures and policies.					
	Strongly Disagree	Strongly Agree			
1. If ethics or compliance concerns are reported in this department, action is taken to resolve them.	1	2	3	4	5
2. This department follows up on ethical concerns that employees raise.	1	2	3	4	5
3. Employees who are caught violating the department's ethics or compliance policies are disciplined.	1	2	3	4	5
4. If employees are caught breaking the department's ethics or compliance rules, they are disciplined.	1	2	3	4	5

Helping Behavior Scale of the Organizational Citizenship Behaviors Scale (Moorman & Blakely, 1995)										
Listed below is a series of statements that represent possible behaviors of your subordinates. With respect to your subordinates, please indicate the most appropriate response.	Never					Always				
	1. They go out of their way to help co-workers with work-related problems.	1	2	3	4	5	1	2	3	4
2. They voluntarily help new employees settle into the job.	1	2	3	4	5	1	2	3	4	5
3. They frequently adjust their work schedule to accommodate other employees' requests for time off.	1	2	3	4	5	1	2	3	4	5
4. They always go out of their way to make newer employees feel welcome in the work group.	1	2	3	4	5	1	2	3	4	5
5. They show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations.	1	2	3	4	5	1	2	3	4	5

Interpersonal Deviance Scale (Bennett & Robinson, 2000)										
Over the past year, how often have you observed the following types of behaviors in your department? One of my employees...	Never		Occasionally		Very frequently					
	1. Stole from a coworker.	1	2	3	4	5	1	2	3	4
2. Made an ethnic, racial, or sexually harassing remark/joke at work.	1	2	3	4	5	1	2	3	4	5
3. Said something hurtful to someone at work.	1	2	3	4	5	1	2	3	4	5
4. Cursed at someone at work.	1	2	3	4	5	1	2	3	4	5
5. Physically threatened someone at work.	1	2	3	4	5	1	2	3	4	5
6. Publicly embarrassed or threatened someone at work.	1	2	3	4	5	1	2	3	4	5
7. Showed favoritism for a fellow employee or subordinate employee.	1	2	3	4	5	1	2	3	4	5
8. Blamed someone else or let someone else take the blame for a mistake.	1	2	3	4	5	1	2	3	4	5
9. Repeated gossip about a co-worker.	1	2	3	4	5	1	2	3	4	5

Perceived Performance Scale (Delaney & Huselid, 1996)					
How would you compare your department's performance over the past 3 years to that of other departments that do the same kind of work?(If you haven't been in your department for 3 years, evaluate its performance based on your experience. What about...	Much worse		Much Better		
1. Quality of products, services, or programs?	1	2	3	4	5
2. Development of new products, services, or programs?	1	2	3	4	5
3. Ability to attract essential employees?	1	2	3	4	5
4. Ability to retain essential employees?	1	2	3	4	5
5. Satisfaction of costumers or clients?	1	2	3	4	5
6. Relations between management and other employees?	1	2	3	4	5
7. Relations among employees in general?	1	2	3	4	5

Procedural Justice Climate (Ehrhardt, 2004)					
For the following items, think about the procedures used to arrive at rewards in your department. With regard to those procedures, to what extent...	To a very small extent		To a very great extent		
1. Have those procedures been applied consistently in your department?	1	2	3	4	5
2. Have those procedures been free of bias in your department?	1	2	3	4	5
3. Have people in your department been able to express their views and feelings about those procedures?	1	2	3	4	5
4. Have those procedures in your department upheld ethical and moral standards?	1	2	3	4	5

Organizational Structure Scale (Khandwalla, 1976)

Instructions: In general, the operating management philosophy in my department favors...

1. Highly structured channels of communication and a highly restricted access to important financial and operating information.	1	2	3	4	5	Open channels of communication with important financial and operating information flowing quite freely throughout the business unit.
2. A strong insistence on a uniform managerial style throughout the business unit.	1	2	3	4	5	Managers' operating styles allowed to range freely from the very formal to the very informal.
3. A strong emphasis on giving the most say in decision making to formal line managers.	1	2	3	4	5	A strong tendency to let the expert in a given situation have the most say in decision making even if this means temporary bypassing of formal line authority.
4. A strong emphasis on holding fast and true management principles despite any changes in business conditions.	1	2	3	4	5	A strong emphasis on adapting freely to changing circumstances without too much concern for past practices.
5. A strong emphasis on always getting personnel to follow the formally laid down procedures.	1	2	3	4	5	A strong emphasis on getting things done even if it means disregarding formal procedures.
6. Tight formal control of most operations by means of sophisticated control and information systems.	1	2	3	4	5	Loose, informal control; heavy dependence on informal relationships and norms of cooperation for getting work done.
7. A strong emphasis on getting line and staff personnel to adhere closely to formal job descriptions.	1	2	3	4	5	A strong tendency to let the requirements of the situation and the individual's personality define proper on-job behavior.

Safety Climate (Zohar, 2000)					
The following questions refer to the environment in which you work. Use the rating scale to indicate whether you agree or disagree with the statements below.	Completely Agree			Completely Disagree	
1. My supervisor says a good word whenever he sees a job done according to the safety rules.	1	2	3	4	5
2. My supervisor seriously considers any worker's suggestions for improved safety.	1	2	3	4	5
3. My supervisor approaches workers during work to discuss safety issues.	1	2	3	4	5
4. My supervisor gets annoyed with any worker ignoring safety rules, even minor rules.	1	2	3	4	5
5. My supervisor watches more often when a worker has violated some safety rule.	1	2	3	4	5
6. As long as there is no accident, my supervisor doesn't care how the work is done.	1	2	3	4	5
7. Whenever pressure builds up, my supervisor wants us to work faster, rather than by the rules.	1	2	3	4	5
8. My supervisor pays less attention to safety problems than most other supervisors in this department.	1	2	3	4	5
9. My supervisor only keeps track of major safety problems and overlooks routine problems.	1	2	3	4	5
10. As long as work remains on schedule, my supervisor doesn't care how this has been achieved.	1	2	3	4	5

Perceived Functional Dependence (Morris & Steers, 1980)					
Listed below are statements that represent possible feelings that people might have about their jobs or their department. For each statement, mark one of the five alternatives that best describes your degree of agreement or disagreement with the statement.	Strongly disagree		Strongly agree		
1. In order to do my job I am very much dependent on my fellow workers to do their jobs, too.	1	2	3	4	5
2. The kind of job I have requires that I work closely with others who have a hob similar to mine.	1	2	3	4	5
3. The way in which my fellow workers do their work has very little to do with whether or not I can do my job.	1	2	3	4	5
Problem Solving Demand (Wall et al., 1995)					
The following questions ask you to describe your work. Please answer all the questions, marking the answer that best describes the work you do most of the time:	Not at all		A great deal		
1. Are you required to deal with problems which are difficult to solve?	1	2	3	4	5
2. Do you have to solve problems which have no obvious correct answer?	1	2	3	4	5
3. Do you need to use your knowledge of the production process to help prevent problems arising in your job?	1	2	3	4	5
4. Do the problems you deal with require a thorough knowledge of the production process in your area?	1	2	3	4	5
5. Do you come across problems in your job you have not met before?	1	2	3	4	5

General Political Behavior Scale (Kacmer & Carlson, 1997)					
The following questions refer to the environment in which you work. Use the rating scale to indicate whether you agree or disagree with the statements below.	Strongly agree		Strongly disagree		
1. People in this department attempt to build themselves up by tearing other down.	1	2	3	4	5
2. There has always been an influential group in this department that no one ever crosses.	1	2	3	4	5

Satisfaction (Brayfield and Rothe, 1951), Commitment (Meyer & Allen, 1984) and Turnover Intentions (Cropanzano, James, Konovsky, 1993)

These questions address how you feel about your job and your department. For each item, circle the number that most closely matches your response to each statement.	Strongly agree					Strongly disagree				
1. Most days I am enthusiastic about my work.	1	2	3	4	5	1	2	3	4	5
2. I think that I could easily become as attached to another department as I am to this one.	1	2	3	4	5	1	2	3	4	5
3. I enjoy discussing my department with people outside of it.	1	2	3	4	5	1	2	3	4	5
4. I intend to remain with this department indefinitely.	1	2	3	4	5	1	2	3	4	5
5. I really feel as if this department's problems are my own.	1	2	3	4	5	1	2	3	4	5
6. I do not feel like "part of the family" at my department.	1	2	3	4	5	1	2	3	4	5
7. I would leave my job if a position were available in another department.	1	2	3	4	5	1	2	3	4	5
8. I do not feel a strong sense of belonging to my department.	1	2	3	4	5	1	2	3	4	5
9. I consider my job rather unpleasant.	1	2	3	4	5	1	2	3	4	5
10. This department has a great deal of personal meaning to me.	1	2	3	4	5	1	2	3	4	5
11. My job is pretty uninteresting.	1	2	3	4	5	1	2	3	4	5
12. I would be very happy to spend the rest of my career with this department.	1	2	3	4	5	1	2	3	4	5
13. I am disappointed I ever took this job.	1	2	3	4	5	1	2	3	4	5
14. I find real enjoyment in my work.	1	2	3	4	5	1	2	3	4	5

Climate for Initiative: Baer & Frese, 2003

For the following items, think about how problems are addressed in your department. Use the rating scale to decide whether the statement applies to your department or not.	Does not apply					Entirely applies				
1. People in our department actively attack problems	1	2	3	4	5					
2. Whenever something goes wrong, people in our department search for a solution immediately.	1	2	3	4	5					
3. Whenever there is a chance to get actively involved, people in our department take it.	1	2	3	4	5					
4. People in our department take initiative immediately – more often than in other departments.	1	2	3	4	5					
5. People in our department use opportunities quickly in order to attain goals.	1	2	3	4	5					
6. People in our department usually do more than they are asked to do.	1	2	3	4	5					
7. People in our department are particularly good at realizing ideas.	1	2	3	4	5					

Perceptions Of General Justice (Ambrose & Schminke, 2000)

The following questions refer to how fair you think your company is overall.	Strongly agree					Strongly disagree				
1. Overall, I am treated fairly by my organization.	1	2	3	4	5					
2. Usually, the way things work in this organization is not fair.	1	2	3	4	5					
3. In general, I can count on this organization to be fair.	1	2	3	4	5					
4. For the most part, this organization treats its employees fairly.	1	2	3	4	5					
5. In general, the treatment I receive around here is fair.	1	2	3	4	5					
6. Most of the people who work here would say they are often treated unfairly.	1	2	3	4	5					

APPENDIX F
COMPLETE CORRELATION TABLE

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	1.00												
2. Sex	-0.03	1.00											
3. Edu	.17**	0.02	1.00										
4. TO	.59**	-0.04	.13**	1.00									
5. TD	.51**	-0.06	0.01	.81**	1.00								
6. MA	.11**	-.12**	0.02	.08*	.10*	1.00							
7. EC	0.05	-.09*	-0.04	-0.03	0.04	.73**	1.00						
8. MJO	-0.01	-0.06	-.12**	-0.05	0	.57**	.58**	1.00					
9. MJS	-.10*	0.06	0.05	-0.03	-.08*	-.40**	-.52**	-.28**	1.00				
10. MM	.10*	-.11**	-0.06	0.06	.12**	.62**	.66**	.45**	-.77**	1.00			
11. MC	.08*	-0.06	-0.05	-0.03	0.04	.62**	.65**	.64**	-.45**	.52**	1.00		
12. EBR	.13**	-0.07	.11**	.10*	.11**	.31**	.22**	.18**	-.35**	.40**	.34**	1.00	
13. OCBH	.08*	-.08*	0.03	0.02	0.02	.21**	.22**	.19**	-.19**	.30**	.37**	.20**	1.00
14. EPFT	.09*	-0.07	.08*	0.03	-0.04	.15**	0.04	-0.02	-0.03	0.06	.17**	0.06	.39**
15. IDS	-.18**	.09*	-0.07	-.10*	-.12**	-.47**	-.38**	-.29**	.32**	-.41**	-.45**	-.56**	-.24**
16. PERF	0.02	-0.04	0.07	0.06	0.03	.13**	0.03	.094*	-.12**	.21**	.20**	.37**	.43**
17. SD	.25**	-.12**	.09*	.14**	.09*	.30**	.20**	.15**	-.20**	.28**	.26**	.21**	.19**
18. PGJ	0.03	-0.01	0.08	0.06	0.07	.36**	.28**	.28**	-.35**	.45**	.28**	0.08	.19**
19. CI	.23**	-0.04	0.10	0.02	0.02	.54**	.57**	.42**	-.58**	.58**	.53**	.12*	.25**
20. SCA	0.07	-0.01	-0.03	-0.03	-0.05	.57**	.60**	.45**	-.56**	.59**	.46**	.12*	-0.02
21. SCE	.36**	-0.1	-0.02	0.06	-0.05	.38**	.44**	.38**	-.35**	.40**	.39**	.28**	.15*
22. GPB	-.19**	0.02	-0.01	-0.02	0.06	-.42**	-.60**	-.50**	.39**	-.45**	-.49**	0.02	-.13*
23. PFD	0.09	-0.1	0.00	-0.03	0.02	.14*	.19**	.17**	-.17**	.22**	.20**	0.01	.17**
24. PSD	.18**	-0.06	.17**	0.1	.17**	.19**	.15*	0.09	-0.07	0.04	-0.01	0.02	-0.04
25. SAT	0.11	-0.02	.19**	.19**	0.12	.24**	0.12	0.12	-.13*	.19**	.21**	.26**	.17**
26. COM	0.06	-0.02	-0.05	.16*	.13*	.40**	.39**	.31**	-.32**	.41**	.39**	.23**	0.08
27. TI	-.33**	0.06	-0.11	-.36**	-.35**	-0.08	0	0.02	0.09	-0.08	0.01	-0.09	-0.01
28. OS	.16**	-0.09	0.11	.12*	0.09	0.02	-0.08	-0.1	.42**	-.28**	-.15**	-.27**	-0.04
29. CPJ	.12*	-.10*	-.27**	-0.07	0.01	.44**	.60**	.56**	-.66**	.64**	.58**	.19**	.18**

	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
14. EPFT	1.00															
15. IDS	-0.06	1.00														
16. PERF	.33**	-.12**	1.00													
17. SD	.11**	-.26**	.12**	1.00												
18. PGJ	0.08	-.21**	.16**	.14*	1.00											
19. CI	0.04	-.42**	.13*	.31**	.48**	1.00										
20. SCA	0.12	-.20**	-0.06	.20**	.33**	.56**	1.00									
21. SCE	.20**	-.19**	0.05	.28**	.17*	.44**	.52**	1.00								
22. GPB	0.08	.17**	0.08	-.15*	-0.12	-.63**	-.40**	-.56**	1.00							
23. PFD	.16**	-.19**	0.08	.16**	0.08	.32**	.30**	.23**	-.24**	1.00						
24. PSD	0.09	-.14*	0.01	0.11	0.07	.33**	0.07	0.05	-0.14	.12*	1.00					
25. SAT	0.00	-.16**	.23**	.29**	.46**	- ^a	.42**	.29*	-.35**	-	-	1.00				
26. COM	-0.09	-.26**	0.11	.30**	.46**	-	.46**	.31*	-.37**	-	-	.67**	1.00			
27. TI	0.07	.17**	0.05	-.18**	-.16*	-	0.04	0.1	0.01	-	-	-.35**	-.33**	1.00		
28. OS	.42**	.13*	-0.08	-0.05	-0.1	0.14	-	-	-	-0.01	.34**	-.22**	-.32**	-0.01	1.00	
29. CPJ	0.06	-.37**	0.04	0.09	-	.60**	.69**	.60**	-.54**	.31**	-0.06	-.21*	.42**	-0.1	-.24**	1.00

TO=Organizational Tenure, TD=Department Tenure, MA=Norms of Moral Awareness, EC=Norm of Empathetic Concern, MJO=Collective Moral Judgment Focus on Others, MJS=Collective Moral Judgment Focus on Self, MM=Collective Moral Motivation, MC=Collective Moral Character, PGJ=Perceived General Justice, CI=Climate for Initiative, SCA=Safety Climate (Action), SCE= Safety Climate Expectation, GPB=General Political Behavior, OS =Organizational Structure, CPJ= Climate of Procedural Justice, EBR=Ethical Behavior, OCBH=Organizational Citizenship Behavior Helping Scale, EPFT=Ethical Performance Follow-Through, IDS=Interpersonal Deviance, PERF= Performance, SD=Social Desirability, PFG=Perceived Functional Dependence, PSD=Problem Solving Demand, SAT=Satisfaction, COM=Commitment, TI=Turnover Intentions

* Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

^a Cannot be computed, the variables were not measured in the same survey

APPENDIX G
IRB APPROVAL LETTER



October 13, 2004

Anke Arnaud
Marshall Schminke, Ph.D.
University of Central Florida
Management, Business Administration
Room 346
Orlando, FL 32816-1400

Dear Mrs. Arnaud and Dr. Schminke:

With reference to your protocol entitled, "Organizational Climate and Employee Attitudes" I am enclosing for your records the approved, expedited document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have, any questions, please do not hesitate to call me at 407-823-2901.
Please accept our best wishes for the success of your endeavors.

Cordially,

Barbara Ward

Barbara Ward, CI
IRB Coordinator

Copies: IRB File