CHAPTER 11

MAKING ETHICAL CLIMATE A MAINSTREAM MANAGEMENT TOPIC

A Review, Critique, and Prescription for the Empirical Research on Ethical Climate

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The plethora of corporate scandals in recent years at companies such as Enron, Tyco, and Worldcom has thrust the issue of business ethics to center stage in the media and in the minds of many consumers. In the scientific literature,

Psychological Perspectives on Ethical Behavior and Decision Making, pages 181–213

there is growing acceptance of the notion that corporate indiscretions are the result of more than just a few "bad apples" and that the organizational environment has a strong influence on employees' unethical behavior (Treviño, Weaver, & Reynolds, 2006). With the importance of the organizational context in mind, approximately 20 years ago Victor and Cullen (1987, 1988) introduced the concept of *ethical climate* to describe how the organizational environment impacts unethical behavior. Victor and Cullen (1987) define ethical climate as "the shared perception of what is correct behavior, and how ethical situations should be handled in an organization" (p. 51). A premise of this construct is that the social context in organizations plays a pivotal role in determining whether employees will behave unethically.

Victor and Cullen's (1987, 1988) seminal work on ethical climate has been well received in the business ethics literature prompting over 70 empirical studies in the past 20 years. Interestingly, however, the vast majority of published articles on ethical climate are in business ethics journals as opposed to mainstream management journals. This is problematic because whereas research on other climate constructs such as service climate (Schneider, Bowen, Ehrhart, & Holcombe, 2000), safety climate (Zohar, 1980, 2000), and justice climate (Naumann & Bennett, 2000) is commonly found in top-tier mainstream management journals, ethical climate research has been relegated to niche journals thus limiting the visibility, impact, perceived scientific rigor, and attributed importance of the topic. In this chapter we argue that there are a number of conceptual, operational, methodological, and analytical issues that are largely responsible for the current state of empirical research on ethical climate. In general, we believe that although Victor and Cullen's (1987, 1988) initial conceptualization and operationalization of ethical climate was extremely useful in sparking interest in the topic, a number of changes are now necessary for ethical climate research to continue to prosper and to become a mainstream management topic like other well-known climate constructs.

The primary goal of this chapter is to provide a critique of the ethical climate literature and to highlight a number of ways future research can be improved. It should be noted that the primary purpose is not to simply review the extant literature on ethical climate. Although we do provide a brief review of the conceptualization, operationalization, and empirical work on ethical climate, our focus is more on where we believe the literature should go in the future as opposed to summarizing where it has been in the past. For more detailed information on the extant literature on ethical climate we suggest reading excellent qualitative (Arnaud & Schminke, 2007) and quantitative (Martin & Cullen, 2006) reviews that have been recently published.

This chapter is divided into the following four sections: (a) a brief description of the conceptualization and operationalization of ethical climate; (b) a short review of the antecedents and consequences of ethical climate;

(c) a critique of the extant literature; and (d) a prescription for where we believe the field should go in the future.

CONCEPTUALIZATION AND OPERATIONALIZATION OF ETHICAL CLIMATE

Conceptual Basis and Measurement of Ethical Climate

Victor and Cullen (1987, 1988) are known as the "fathers" of ethical climate. They utilized philosophical and sociological perspectives in developing a theoretical basis for creating a measure of ethical climate. More specifically, they used a two-dimensional theoretical perspective to describe the different types of ethical climates that exist in organizations. The first dimension, *ethical criterion*, maps on to the three major classes of ethical theory: egoism (i.e., maximizing self-interest), benevolence (i.e., maximizing joint interests), and deontology or principle (i.e., adhering to a principle) (Fritzche & Becker, 1984; Williams, 1985). The second dimension is referred to as the *locus of analysis* and draws heavily on the work by Merton (1957) on roles and reference groups. Locus of analysis relates to who the referent is for one's actions. The three loci of analysis include: self (i.e., oneself), local (i.e., one's organization or subunit), and cosmopolitan (i.e., the environment external to the organization).

This three (ethical criteria) by three (loci of analysis) matrix forms nine theoretical dimensions of ethical climate. These nine theoretical dimensions include: (a) self-interest; (b) company profit; (c) efficiency; (d) friendship; (e) team interest; (f) social responsibility; (g) personal morality; (h) company rules and procedure; (i) and laws and professional codes (see Victor & Cullen, 1987, 1988 for a detailed description of each dimension). However, the dimensionality across studies tends to yield different factor structures (a topic we return to in our critique). The five dimensions that have been most commonly examined include instrumental (includes self-interest and company profit), caring (includes friendship and team interest), personal morality, company rules and procedure, and laws and professional codes (Martin & Cullen, 2006).

Victor and Cullen (1987, 1988) wrote four items to tap each of these dimensions for a total of 36 items which make up the Ethical Climate Questionnaire (ECQ). Although other measures have been used as well (see Arnaud & Schminke, 2007 for a qualitative review), the ECQ has been by far the most commonly used measure of ethical climate (Martin & Cullen, 2006). In what follows, we briefly summarize the empirical literature examining antecedents and consequences of ethical climate—most of which draws on Victor and Cullen's (1987, 1988) conceptualization and measure of ethical climate.

EMPIRICAL RESEARCH REVIEW

Because other reviews of ethical climate have been recently conducted, our focus is primarily on providing a critique and prescription for the empirical research on ethical climate. However, we deemed it important to provide a brief summary of the extant empirical literature examining antecedents and consequences of ethical climate. To provide a succinct summary of the extant work, in addition to the following sections, we also provide a summary table (see Table 11.1). Table 11.1 provides the following information for each published empirical article on ethical climate: (a) author and year; (b) journal published in; (c) measure used; (d) level of analysis of the study; (e) antecedents examined; and (f) consequences examined. We chose to highlight these specific article characteristics in Table 11.1 because they provide a good summary of the key characteristics of the findings and highlight some of the limitations and inconsistencies in the research.

Antecedents of Ethical Climate

A considerable amount of research has examined antecedents of ethical climate. We categorize these antecedents into individual, organizational, and environmental antecedents.

Individual antecedents. Individual antecedents concern characteristics of both employees and leaders. First, few studies have examined *employee* characteristics. The studies that have examined characteristics such as demographics (e.g., gender and age) and personality variables (e.g., individual moral values and moral ethical development). Dawson (1992) and Luthar, Dibattista, and Gautschi (1997) found that females had a higher expectation about what the ethical climate of an organization should be. Luthar et al. (1997) found that older students were more cynical and that the more education an individual had about business ethics, the more they expected an ethical climate in any organization they would later work in. Only two studies have examined personality-related variables of employees and employees' ethical climate perceptions. Research has demonstrated a positive link between ethical climates and moral values (Herndon, Ferrell, LeClair, & Ferrell, 1999) and cognitive moral development (Weeks, Loe, Chonko, Martinez, & Wakefield, 2006).

There has been more research focusing on the relationship between the development of ethical climates and *leaders.* This includes some theoretical work linking leaders to the development of ethical climates (e.g., Dickson, Smith, Grojean, & Ehrhart, 2004; Logsdon & Yuthas, 1997; Sims & Brinkman, 2002), as well as empirical work. More specifically, researchers have examined variables such as demographic characteristics (e.g., age, tenure,

TABLE 11.1 Characteristics of Empirical Studies on Ethical Climate

Authors	Journal	Measure	Level of Analysis	Antecedents	Consequences
Agarwal & Malloy (1999)	*Journal of Business Ethics*	Ethical Climate Questionnaire (ECQ) (Individual caring, machiavellianism, independence, social caring, and law and code)	Psychological climate		
Ambrose, Arnaud, & Schminke (2007)	*Journal of Business Ethics*	ECQ (Instrumental, caring, and independence)	Organizational climate		*Job satisfaction, organizational commitment, turnover intention*
Aquino (1998)	*Journal of Conflict Management*		Psychological climate		*Deception, ethical behavior, personally favorable outcomes*
Aquino & Becker (2005)	*Journal of Organizational Behavior*		Psychological climate		Neutralization strategies in negotiation
Babin, Boles, & Robin (2000)	*Journal of the Academy of Marketing Science*	Own Measure (Responsibility/trust, peer behavior, ethical norms, selling practices)	Psychological climate		*Job satisfaction, organizational commitment, role conflict, role ambiguity*
Barnett & Schubert (2002)	*Journal of Business Ethics*	ECQ (Benevolence 1 – social responsibility, benevolence 2 – team, principle-laws and code, egoism-self interest)	Psychological climate		*Covenantal relationship*

(continued)

TABLE 11.1 Characteristics of Empirical Studies on Ethical Climate (continued)

Authors	Journal	Measure	Level of Analysis	Antecedents	Consequences
Barnett & Vaicys (2000)	*Journal of Business Ethics*	ECQ (Egoistic, utilitarian, deontological)	Psychological climate		*Ethical judgments*, ethical intentions
Bartels, Harrick, Martell, & Strickland (1998)	*Journal of Business Ethics*	Own measure	Psychological climate		*Seriousness of ethical problem within organizations, success in dealing with ethical issues*
Bourne & Snead (1999)	*Journal of Business Ethics*	Own Measure (Cultural environment, external stakeholder interaction, employee ethics, ethical conflict situations, determinant of ethical behavior)	Psychological climate		
Brower & Shrader (2000)	*Journal of Business Ethics*	ECQ (Principle, benevolence, egoism)	Psychological climate	*Organization type (for-profit versus not-for-profit)*	
Buchan (2005)	*Journal of Business Ethics*	ECQ (instrumental climate)	Psychological climate		Ethical intentions
Caldwell & Moberg (2007)	*Journal of Business Ethics*		Psychological climate		*Moral imagination*
Cullen, Parboteeah, & Victor (2003)	*Journal of Business Ethics*	ECQ (General egoistic, general benevolent, general principled, self interest, company profit, efficiency, friendship, personal morality, rules, standard operating procedures, laws, professional codes)	Organizational climate		*Organizational commitment*

Cullen, Victor, & Bronson (1993)	*Psychological Reports*	ECQ (Self-interest, company profit efficiency, friendship and team interest, social responsibility, rules, standard operating procedures, laws, professional codes)	Organizational climate	
Dawson (1992)	*Journal of Personnel Selling & Sales Management*	No Measure	*Gender*	
DeConinck (2003)	*The Marketing Management Journal*	Ethical Work Climate (Babin, Boles, & Robin, 2000) (Responsibility/ trust, peer behavior, ethical norms)	Psychological climate	*Perceptions of an ethical situation*, willingness to engage in ethical behavior, *moral intensity towards an unethical situation*
DeConinck & Lewis (1997)	*Journal of Business Ethics*	ECQ (Caring, law and code, rules, instrumental, independence)	Psychological climate	Managers' decisions to reward or punish unethical sales force behavior
Deshpande (1996a)	*Journal of Business Ethics*	ECQ (Professionalism, caring, rules, instrumental, efficiency, independence)	Psychological climate	*Job Satisfaction*
Deshpande (1996b)	*Journal of Business Ethics*	ECQ (Professionalism, caring, rules, instrumental, efficiency, independence)	Psychological climate	*Perceived ethical practices of successful managers*

(continued)

TABLE 11.1 Characteristics of Empirical Studies on Ethical Climate (continued)

Authors	Journal	Measure	Level of Analysis	Antecedents	Consequences
Deshpande, George, & Joseph (2000)	*Journal of Business Ethics*	ECQ (Professionalism, caring, rules, instrumental, efficiency, independence)	Psychological climate		Perceived ethical behavior by successful managers
Elm & Nichols (1993)	*Journal of Business Ethics*	ECQ (Egoism, utilitarianism, principled)	Psychological climate	Moral reasoning level	
Engelbrecht, van Aswegen, & Theron (2005)	*South African Journal of Business Management*	ECQ (Law and code, rules, independence, caring)	Psychological climate	*Transformational leadership, integrity*	
Erondu, Sharland, & Okpara (2004)	*Journal of Business Ethics*	Measure not specified (Self-interest, company profit, friendship, team interest, personal morality, rules & procedures)	Psychological climate		*Efficiency, social responsibility, law and professional codes*
Flannery & May (2000)	*Academy of Management Journal*	ECQ (dimensions not specified)			*Managers' environmental ethical decision intentions*
Forte (2004a)	*Journal of Business Ethics*	ECQ (Rule, caring, law and code, instrumental, independence)	Psychological climate	*Manager's age, management level*	Manager moral reasoning
Forte (2004b)	*Journal of Business Ethics*	ECQ (Caring, law and code, rules, instrumental, independence)	Psychological climate	Locus of control, *age*, work tenure, gender, *management levels*, SIC code	Manager moral reasoning

Fritzche (2000)	*Journal of Business Ethics*	ECQ (caring, law and codes, efficiency, rules, independence, company)	Psychological climate		*Ethical decision making*
Gonzalez-Padron, Hult, & Calantone (2008)	*Industrial Marketing Management*	Ethical dimension of corporate citizenship (Maignan & Ferrell, 2000)	Psychological climate		*Learning, entrepreneurial innovation, relationship quality, cycle time*
Hart (2005)	*Journal of Nursing Scholarship*	Hospital Ethical Climate Survey (Olson, 1995)	Psychological climate		*Positional turnover intentions, professional turnover intentions*
Herndon, Ferrell, LeClair, & Ferrell (1999)	*Research in Marketing*	ECQ (1 dimension)	Psychological climate	*Individual moral values*	*Job satisfaction, organizational commitment,* turnover intentions
Jaffe & Tsimerman (2005)	*Journal of Business Ethics*	ECQ (Law and codes, caring, rules, instrumental, efficiency, independence,)	Psychological climate		
Jaramillo, Mulki, & Solomon (2006)	*Journal of Personal Selling & Sales Management*	Schwepker's (2001) 7-item ethical climate scale	Psychological climate		*Role conflict, role ambiguity,* organizational commitment, *job satisfaction*
Joseph & Deshpande (1997)	*Health Care Management Review*	ECQ (Professionalism, caring, rules, instrumental, efficiency, independence)	Psychological climate		*Job Satisfaction*

(continued)

TABLE 11.1 Characteristics of Empirical Studies on Ethical Climate (continued)

Authors	Journal	Measure	Level of Analysis	Antecedents	Consequences
Kelley & Dorsch (1991)	*Journal of Personal Selling & Sales Management*	ECQ (Caring, rules, instrumental)	Psychological climate		*Organizational Commitment,* indebtedness (characterized by discomfort and *repayment*)
Koh & Boo (2001)	*Journal of Business Ethics*	Own measure adapted from ECQ (Egoistic, benevolent, principled)	Psychological climate		*Job Satisfaction*
Logsdon & Young (2004)	Book chapter in *Positive Psychology in Business Ethics and Corporate Social Responsibility*				
Luthar, DiBattista, & Gautschi (1997)	*Journal of Business Ethics*	No Measure	*Gender, age, Education Level,* Ethics Education		
Martin & Cullen (2006)	*Journal of Business Ethics*	ECQ	Meta-analysis		*Organizational commitment, job satisfaction, psychological well-being, lying, stealing, falsifying reports, accepting gifts and favors*
McKendall & Wagner (1997)	*Organization Science*	Bentley College Center for Business Ethics Questionnaire (no dimensions)	Psychological climate		*Corporate illegality, industry concentration of illegality*

Mulki, Jaramillo, & Locander (2006)	*Journal of Personal Selling & Sales Management*	Schwepker (2001)	Psychological climate		*Job satisfaction, organizational commitment, trust*
Neubaum, Mitchell, & Schminke (2005)	*Journal of Business Ethics*	ECQ (instrumental, caring, independence, rules, law & code)	Organizational climate	Entrepreneurial orientation, *firm newness, firm size*	
Parboteeah, Cullen, Victor, & Sakano (2005)	*Management International Review*	ECQ (egoism-individual climate, benevolent-local climate, benevolent-cosmopolitan climate, principle-cosmopolitan climate)	Psychological climate	*National culture (US vs Japanese)*	
Peterson (2002a)	*Journal of Business and Psychology*	ECQ (rules, law, employee focus, community focus, personal ethics, self-interest, efficiency)	Psychological climate		*Production deviance, political deviance, property deviance, personal aggression*
Peterson (2002b)	*Journal of Business Ethics*	ECQ (self-interest, company profit, efficiency, friendship, team interest, social responsibility, personal morality, rules, laws)	Psychological climate	*Code of ethics*	*Unethical behavior*
Ross & Robertson (2000)	*Business Ethics Quarterly*	Own Measure (no dimensions)	Psychological climate		*Lying, lying to competitors*
Rothwell & Baldwin (2006)	*Review of Public Personnel Administration*	ECQ (independence, instrumental, caring, rules, law & code)	Psychological climate		*Whistle blowing intentions, whistle blowing actions*
Rothwell & Baldwin (2007)	*Journal of Business Ethics*	ECQ (law & rules, friendship or team interest, social responsibility, company profit or efficiency, independence	Psychological climate		*Willingness to whistle blow (minor, major, misdemeanors, felonies), frequency of whistle-blowing*

(continued)

TABLE 11.1 Characteristics of Empirical Studies on Ethical Climate (continued)

Authors	Journal	Measure	Level of Analysis	Antecedents	Consequences
Ruppel & Harrington (2000)	*Journal of Business Ethics*	ECQ (individual interests, organizational interests, principled individual, principled organizational, principled cosmopolitan	Psychological climate		*Employee trust, atmosphere of trust, employee communication*
Schminke, Ambrose, & Neubaum (2005)	*Organizational Behavior and Human Decision Processes*	ECQ (instrumental, independence, rules, caring, law & code)	Organizational climate	*Leader moral development, moral development utilization, organizational age*	
Schwepker (2001)	*Journal of Business Research*	Own Measure (1 dimension)	Psychological climate		*Job satisfaction, organizational commitment, turnover intention*
Schwepker & Good (2007)	*Journal of Personal Selling & Sales Management*	Own Measure (1 dimension)	Psychological climate		*Unethical sales force, sales manager's ethical attitudes*
Schwepker, Ferrell, & Ingram (1997)	*Journal of the Academy of Marketing Science*	Own Measure (1 dimension)	Psychological climate		*Ethical conflict with sales managers, ethical conflict with TM*
Schwepker & Hartline (2005)	*Journal of Service Research*	Qualls & Puto (1989) and Herndon (1991)	Psychological climate	Enforcement of code of ethics, *internalization of code of ethics, punishment of ethical violations,* discussion of ethical issues	*Role conflict, job satisfaction, commitment to service quality*
Sims & Keon (1997)	*Journal of Business Ethics*	ECQ (instrumental, caring, law & code, rules, independence)	Psychological climate		

Sims & Kroeck (1994)	*Journal of Business Ethics*	ECQ (instrumental, caring, law & code, rules, independence)	Psychological climate	
Stone & Henry (2003)	*Journal of Business Ethics*	ECQ plus own items (cosmopolitan egoistic, cosmopolitan principle, organizational egoistic, organizational utilitarian/ individual utilitarian, organizational egoistic/ workgroup egoistic, workgroup principle, individual egoistic, individual principle)	Psychological climate	
Treviño, Butterfield, McCabe (1998)	*Business Ethics Quarterly*	ECQ (ethical environment, employee-focused, community-focused, self-interest, efficiency, rules & procedures, personal ethics, law & professional codes)	Psychological climate	*Organizational commitment*
Ulrich, O'Donnell, Taylor, Farrar, Danis, & Grady (2007)	*Social Science & Medicine*	Oldham's Hospital ethical climate scale	Psychological climate	*Job satisfaction, intentions to leave*

(continued)

TABLE 11.1 Characteristics of Empirical Studies on Ethical Climate (continued)

Authors	Journal	Measure	Level of Analysis	Antecedents	Consequences
Upchurch & Ruhland (1996)	*Journal of Business Ethics*	ECQ (egoism, benevolence, principle)	Psychological climate	Gender, years of management experience, educational level, *property classification, individual level, local level,* cosmopolitan level	
Vaicys, Barnett, & Brown (1996)	*Psychological Reports*	ECQ (team spirit, rules & codes, social responsibility, self interest, efficiency, personal morality)	Psychological climate		
VanSandt, Shepard, & Zappe (2006)	*Journal of Business Ethics*	ECQ (self-interest, company interest, efficiency, friendship, team play, social responsibility, personal morality, rules & procedures, law & code)	Psychological climate		*Moral awareness*
Vardi (2001)	*Journal of Business Ethics*	ECQ (caring, law & code, rules, instrumental, interdependence)	Psychological climate		*Organizational Misbehavior*
Verbeke, Ouwerkerk, & Peelen (1996)	*Journal of Business Ethics*	Ruch & Newstom (1975)	Psychological climate	*Control system, career orientation,* communication	*Ethical decision-making, attraction of lower Machiavellists*
Victor & Cullen (1988)	*Administrative Science Quarterly*	ECQ (instrumental, caring, independence, rules, law & code)	Type of company	Satisfaction	

Webber (2007)	*The Journal of Academic Librarianship*	RECQ (reflexive, peer directed, self-directed, rule-directed, patriotic, self-preserving, socially responsible	Psychological climate		
Weber (1995)	*Organizational Science*	ECQ (instrumental, caring, independence, rules, law & code)	Psychological climate	*Department Type (technical core, buffer, boundary spanning)*	
Weber, Kurke, & Pentico (2003)	*Business & Society*	ECQ (instrumental, caring, independence, rules & procedures, law & code)	Psychological climate	*Theft vs no theft groups*	*Morally preferred EWC*
Weber & Seger (2002)	*Journal of Business Ethics*	ECQ (instrumental, caring, independence, rules, law & code)	Psychological climate	*Department Type*	
Weeks, Loe, Chonko, & Wakefield (2004)	*Journal of Personal Selling & Sales Management*	Schwepker et al. (1997)	Psychological climate		*Commitment to quality, organizational commitment, individual performance*
Weeks, Loe, Chonko, Martinez, & Wakefield (2006)	*Journal of Personal Selling & Sales Management*		Psychological climate	*Moral ethical development*	*Commitment to quality, organizational commitment, sales performance*
Wimbush, Shepard, & Markham (1997a)	*Journal of Business Ethics*	ECQ (caring, law & rules, service, independence, instrumental)	Psychological climate	*Operating units*	
Wimbush, Shepard, & Markham (1997b)	*Journal of Business Ethics*	ECQ (independence, caring, instrumental, law & rules, service)	WABA (district level)		*Stealing, lying, disobeying company rules, being an accomplice*
Wittmer & Coursey (1996)	*Journal of Public Administration Research & Theory*	ECQ and Menzel (1991)	Psychological climate	Public vs private companies	
Wotruba, Chonko, & Loe (2001)	*Journal of Business Ethics*	Schwepker et al. (1997)	Psychological climate		*Usefulness of code of ethics*

Note: Significant relationships in *italics.*

gender, management level), personality characteristics (e.g., leader moral development, leader integrity, moral development utilization, locus of control), and types of leadership (e.g., transformational leadership).

Related to the demographics of leaders, Forte (2004a) found that younger managers perceived stronger ethical climates and top management perceived their organization to have a rules climate. They found no differences for work tenure, education, or gender.

In addition to demographic characteristics, researchers have found a positive relationship between personality characteristics of leaders such as moral development (Schminke, Ambrose, & Neubaum, 2005) and integrity (Englebrecht, van Aswegen, & Theron, 2005) and ethical climates. However, no support was found for the link between leader moral reasoning (Elm & Nichols, 1993) or locus of control (Forte, 2004b) on ethical climates.

Lastly, researchers have only just begun to examine how different types of leadership affect the development of ethical work climates. Englebrecht et al. (2005) found that transformational leadership is positively related to ethical climates.

Organizational antecedents. Most of the research examining antecedents of ethical climate has focused on organizational antecedents. This work includes type of department/unit, type of company, characteristics of the organization (e.g., firm newness, organizational age, entrepreneurial orientation, high theft organizations, and punishment of ethical violations), and structure (e.g., firm size, code of ethics, control orientation, and career goals).

Researchers have examined various types of organizations and departments and their relationship to ethical work climates. Wimbush, Shepard, and Markham (1997a) found that distinct ethical climates predominated in the various departments, suggesting that the structure of a department impacts the formation of ethical climates. However, Weber conducted two studies on the type of departments in organizations (Weber, 1995; Weber & Seger, 2002) and found that ethical subclimates may be determined by the strength of an organization's overall ethical climate, rather than the department's function.

Related to the types of organizations, Brower and Shrader (2000) found that boards of directors in not-for-profit organizations were more likely to describe their organizations' climate as "benevolent," whereas boards of directors from for-profit firms tended to view their organization as having an "egoistic" climate. Further, Wittmer and Coursey (1996) found that employees working at public institutions had less favorable perceptions of ethical climate than those working in private institutions. Finally, Upchurch and Ruhland (1996) found that different types of hotel properties affected ethical climate perceptions.

Some research has also been conducted on specific characteristics of the organization such as enforcement of ethical codes, internalization of ethi-

cal codes, high-theft companies, and firm newness. Schwepker and Hartline (2005) found that organizations that enforced and punished ethical codes had more positive ethical climates. Weber, Kurke, and Pentico (2003) found that organizations that reported no theft had higher rules and procedures, caring, and law and professional codes climates or what the authors label morally preferred climates. Finally, Neubaum, Mitchell, and Schminke (2004) examined the newness of organizations and found that new firms were more strongly related to independence climate, but exhibited weaker relationships to instrumental climate. Further, they found that the relationship between leader moral development and ethical climate was stronger in younger organizations for instrumental, caring, law and codes, and rules climates, and independence climate was stronger in older organizations.

More directly related to structure, Verbeke, Ouwerkerk, and Peelen (1996) examined different aspects of organizational structure and found that behavior-controlled oriented organizations had more positive ethical climates than outcome-focused organizations. Further, organizations that have a career orientation also had more favorable ethical climates. Also related to structure, Neubaum et al. (2005) found that smaller firms exhibited more positive ethical climates for caring, rules, and law and code.

Environmental antecedents. Finally, the impact of the outside environment on an organization's ethical climates has been studied. These environmental influences come from institutionalized societal norms such as regional differences, national culture, and type of industry.

Bourne and Snead (1999) found regional differences in ethical climates lending support for the important role of community norms in impacting the ethical components of an organization. Deshpande, George, and Joseph (2000) found that rules climate was most common and independence climate was least likely to be found within a Russian organization. Although there was no comparison made to other countries, they suggest that national culture may impact ethical climate. Parboteeah, Cullen, Victor and Sakano (2005) examined the effects of Japanese and U.S. national cultures on ethical climates in accounting organizations. They found that there were no differences in egoistic-individual climates, but that the U.S. employees had higher individual- and local-benevolent, and principled-cosmopolitan climates. Finally, Forte (2004b) did not find any differences between different industry types.

Summary of Antecedents

In sum, a number of individual, organizational, and environmental variables have been examined as antecedents of ethical climate. Unfortunately, there is not strong theoretical support for expecting many of these rela-

tionships and the results do not paint a clear picture of the factors that influence the perception of an ethical climate. The majority of studies are cross-sectional, correlational studies and they often use different measures of ethical climate. Thus, although there is considerable research on antecedents of ethical climate, the conceptual and methodological limitations of the extant research make it difficult to make definitive conclusions regarding the antecedents of ethical climate.

Consequences of Ethical Climate

In the previous section, we highlighted a number of empirical studies that examined antecedents of ethical climate. Beginning in the late 1990s, a body of research emerged focusing on the consequences of ethical climate. To date, research has primarily examined three major outcomes of ethical climate: (a) job attitudes and affect, (b) ethical behavior, and (c) miscellaneous ethical outcomes.

Job attitudes and affect. The first set of outcome variables that we examined includes job attitudes and affective reactions of organizational incumbents. Job satisfaction has received the most attention. In particular, a number of studies have demonstrated that certain dimensions of ethical climate lead to more satisfied employees (Ambrose, Arnaud, & Schminke, 2008; Babin, Boles, & Robin, 2000; Deshpande, 1996a; Herndon et al., 1999; Jaramillo, Mulki, & Solomon, 2006; Joseph & Deshpande, 1997; Koh & Boo, 2001; Martin & Cullen, 2006; Mulki, Jaramillo, & Locander, 2006; Schwepker, 2001; Schwepker & Hartline, 2005; Sims & Keon, 1997; Ulrich, O'Donnell, Taylor, Farrar, Danis, & Grady, 2007). However, although the relationship between types of ethical climate and job satisfaction appears to be robust, the mechanism(s) by which these two variables should be related have not been adequately enumerated or tested in the literature.

In addition to job satisfaction, organizational commitment is another variable that has been frequently examined in the literature. Extant research suggests that there is a relationship between various dimensions of ethical climate and organizational commitment (Ambrose et al., 2007; Babin et al., 2000; Cullen, Parboteeah, Victor, 2003; Herndon et al., 1999; Kelly & Dorsch, 1991; Martin & Cullen, 2006; Mulki et al., 2006; Schwepker, 2001; Treviño, Butterfield, & McCabe, 1998; Weeks, Loe, Chonko, & Wakefield, 2004; Weeks, Loe, Chonko, Martinez, & Wakefield, 2006). While construct validity concerns are abundant in that different climate measures were used across most of these studies, statistically significant relationships between ethical climate and commitment were consistently found.

Some studies have also found statistically significant relationships between ethical climate and turnover intentions (Ambrose et al., 2007; Hart,

2005; Schwepker, 2001; Ulrich et al., 2007). In addition, scholars have linked ethical climate and psychological well-being (Martin & Cullen, 2006). Finally, extant research suggests that ethical climate is related to affective reactions, including employee trust (Mulki et al., 2006; Ruppell & Harrington, 2000). Overall, these results lend support for the relationship between ethical climate and attitudinal and affective variables (e.g., job satisfaction, commitment, turnover intentions, trust).

Ethical behavior. A second set of consequences that have been systematically examined within the ethics literature includes (un)ethical behaviors. In particular, extant research has found relationships between ethical climate and a number of unethical behaviors including deception (Aquino, 1998), lying (Martin & Cullen, 2006; Ross & Robertson, 2000; Wimbush, Shepard, & Markham, 1997b), stealing (Martin & Cullen, 2006; Wimbush et al., 1997b), falsifying reports (Martin & Cullen, 2006), disobeying company rules, being an unethical accomplice (Wimbush et al., 1997b), production deviance, political deviance, property deviance, personal aggression (Peterson, 2002a), unethical sales (Schwepker & Good, 2007), organizational misbehavior (Vardi, 2001), and general unethical behaviors (Peterson, 2002b). Relationships have also been found between ethical climate and ethical or prosocial behaviors. Statistically significant relationships exist between various dimensions of ethical climate and ethical behavior (Aquino, 1998), perceptions of ethical management (Deshpande, 1996b; Deshpande, George, & Joseph, 2000) success in handling ethical issues (Bartels, Harrick, Martell, & Strickland, 1998), and whistle-blowing (Rothwell & Baldwin, 2007; Rothwell & Baldwin, 2006). Overall, the results of these empirical studies suggest that ethical climate is a predictor of a number of ethical and unethical outcomes.

Miscellaneous ethical and job/organizational outcomes. Within the ethics literature, ethical climate also emerged as a frequent predictor of miscellaneous ethical outcomes. For example, empirical findings suggest that ethical climate is related to ethical judgments (Barnett & Vaicys, 2000; Bartels et al., 1998; DeConinck, 2003), ethical intentions (Buchan, 2005), ethical decision-making (Fritzche, 2000; Verbeke, Ouwerkerk, & Peelen, 1996), moral imagination (Caldwell & Moberg, 2007), and moral intensity (DeConinck, 2003). Additionally, relationships have been found between ethical climate and a number of ethics-related job and organizational outcomes. Dimensions of ethical climate have been found to affect role conflict (Schwepker & Hartline, 2005), role ambiguity (Babin et al., 2000; Jaramillo et al., 2006), and levels of communication (Ruppel & Harrington, 2000). Results suggest that ethical climate is also related to organizational outcomes including efficiency, social responsibility, law and professional codes (Erondu, Sharland, & Okpara, 2004), managers' environmental ethical intentions (Flannery & May, 2000), learning, entrepreneurial innovation, inter-organizational

relationship quality, product cycle time (Gonzalez-Padron, Hult, & Calantone, 2008), corporate illegality, industry concentration of illegality (McKendall & Wagner, 1997), commitment to product quality, and performance (Weeks et al., 2004; Weeks et al., 2006).

Summary of Consequences

Considerably more empirical research has examined consequences of ethical climates compared to antecedents. Results provide fairly strong support for the relationships between ethical climates and job attitudes and (un)ethical behavior. However, this research suffers from many of the conceptual and methodological limitations noted for the antecedents. For example, it is unclear *why* ethical climate is associated with the various outcomes. Thus, although there is support for the relationship between ethical climate and the outcomes, there are some conceptual and methodological issues that limit the conclusions that can be confidently drawn from this research.

CRITIQUE OF EXTANT LITERATURE ON ETHICAL CLIMATE

Thus far we have outlined how ethical climate was initially conceptualized, the way it has been operationalized, and detailed empirically derived antecedents and consequences of ethical climate. Although there is clearly interest in ethical climate, we believe there are a number of limitations of the extant literature that has limited its broad appeal in the field of management. Below we highlight a number of important issues that should be addressed regarding the empirical research on ethical climate.

Issues in Ethical Climate Research

Definition. A major dilemma in ethical climate research is how this construct has been defined. Victor and Cullen (1988, p. 51) define ethical climate as the "shared perception of what is correct behavior and how ethical issues should be handled." This definition is problematic on at least two fronts. First, it is unclear from this definition whether the determination of what is "correct behavior" is specific to a particular organization or must also coincide with general societal norms. Dickson et al. (2001) highlight this point and instead choose the term "climate regarding ethics." They use this new terminology because it is difficult to describe an organization that has a shared perception about morality that does not fit general societal

values of what is right. One can imagine how a terrorist group such as Al Qaeda may meet Victor and Cullen's criteria for ethical climate because people in that group tend to agree on what is just behavior. However, this perception is not acceptable to the majority of society. Thus, the question is raised, does Al Qaeda have an ethical climate?

Second, this definition is not consistent with the generally accepted definition for organizational climate that focuses on employees' perceptions of the policies, practices, and procedures, that get rewarded, encouraged, and supported with regard to *something* (Schneider & Reichers, 1983). The definition used by Victor and Cullen (1987, 1988) does not say anything about policies, practices, and procedures and all are key components of climate.

Conceptualization. As discussed previously, Victor and Cullen (1987, 1988) draw on philosophical and sociological theories to develop the nine theoretical dimensions of ethical climate. Although some have argued for the marriage of philosophical and social science approaches to ethics (Treviño & Weaver, 2003), the fact that there has been so much difficulty establishing a consistent factor structure of the ECQ highlights the difficulty in trying to translate a philosophical theory to an empirical domain.

Measurement. Measurement in ethics research has been a long standing issue and the work on ethical climate is no exception (Babin et al., 2000). As evidenced by Table 11.1, it is clear that although the ECQ is the primary measure utilized in the literature, there is little consistency in terms of the items scholars have used. Scholars have used the measure in many different ways such as using the 36-item ECQ measure, a 26-item version of the ECQ, a 16-item version of the ECQ, or choosing specific items from the ECQ. In addition to the inconsistency in terms of the item used, there is inconsistency in terms of the factor structure of the ECQ. Although most ethical climate researchers agree that ethical climate is multidimensional, there is no consensus as to what these dimensions should be. In the literature there are anywhere from three (Wimbush, Shepard, & Markham, 1997a) to nine (Peterson, 2002b) dimensions of ethical climate with over 20 different ethical climate types discussed. Without a psychometrically sound measure, it is difficult to imagine the ethical climate field progressing.

Experimental designs and methodology. The predominate methodology in ethical climate research involves providing a cross-sectional survey to an organizational member who provides data on ethical climate and either an antecedent or consequence of ethical climate and then a correlation is calculated. A major problem with this correlational design is same source bias that may artificially inflate the magnitude of the relationships. Further, the use of strictly correlational designs does not allow for causal tests between variable—tests that have been called for by ethical climate researchers (Bourne & Snead, 1999). In addition, there is a dearth of research using structural equation modeling (SEM) to test theoretically-derived causal

relationships involving ethical climate. In addition, the response rates for many of the studies are between 10–20% which may call into question whether there is a systematic bias in the way the data are collected (Bartels et al., 1998; DeConinck & Lewis, 1997).

Organizational versus psychological climate. A point to keep in mind when reviewing the ethical climate literature is that most of the ethical climate research has been conducted at the psychological climate level, or in other words the measures were not aggregated (see Cullen, Parboteeah, & Victor, 2003; Neubaum, Mitchell, & Schminke, 2004; Schminke, Ambrose, & Neubaum, 2005 for exceptions). However, almost all of these studies use the term organizational climate. Given the focus on psychological climate, it is perhaps not surprising that the use of aggregation statistics has been largely ignored. Victor and Cullen (1987) define ethical climate as a "shared" perception of members of an organization or work group. However, the appropriate measure of within-group agreement, the r_{wg}, is generally not mentioned in the literature. Thus, the empirical research has not attempted to empirically examine within-group agreement in an effort to be consistent with the initial conceptualization of ethical climate. Further, a fundamental proposition put forth by Victor and Cullen (1987, 1988) is that there is more within-group agreement than between-group agreement. The statistical measure this statement describes is the ICC(1). The ICC(1) is a comparison between the within-group agreement and between-group variability and demonstrates whether there is a group or organizational level effect. Thus, if we want to statistically confirm the propositions set forth by Victor and Cullen (1987, 1988), then it is important to ensure that there is more agreement within an organization than between organizations. Unfortunately, research has generally not tested this proposition (see Cullen et al., 2003 for an exception).

Visibility of the Topic. Although ethical climate is a relevant construct for a mainstream management audience, the majority of articles have been published in business ethics journals. If research on ethical climate is published in more mainstream journals, it would add some more visibility to this area of research. Other forms of climate (e.g., service, safety, justice) have broken into mainstream management journals and it may provide more visibility to ethics in organizations if empirical research on ethical climate could do the same.

PRESCRIPTIONS FOR EMPIRICAL RESEARCH ON ETHICAL CLIMATE

The empirical research presented thus far has illustrated a number of antecedents and consequences of ethical climate. Despite these gains, in the

previous section we described a number of critical issues facing this body of research. To address some of these concerns, we now present a number of research ideas to help this burgeoning field to continue to grow.

Future Directions for Ethical Climate Research

Measurement of ethical climate. A number of measures of ethical climate have been used such as a measure of the ethical context (Treviño et al., 1998), ethical culture (Kaptein, 2008) moral climate (Vidaver-Cohen, 1995), and organizational ethical climate (Schwepker, Ferrell, & Ingram, 1997). Although a lot of measures of ethical climate have been used, the ECQ has clearly been used the most. Unfortunately, the ECQ has not undergone a formal validation process by which it is compared to related constructs in its nomological network and subjected to confirmatory factor analyses that have held up over time. Indeed, the factor structure of the ECQ (when formally examined) has been inconsistent. Without a psychometrically sound measure of ethical climate, it calls into question the validity of extant empirical findings.

Although the ECQ has provided a much needed measure of ethical climate, we believe given the limitations of the measure it is time to call a moratorium on the use of the ECQ. Indeed, we believe it is important to develop a new measure of ethical climate using a behavioral ethics framework that focuses on how employees actually do behave as opposed to how they should behave (i.e., descriptive instead of prescriptive). This framework is consistent with other climate constructs that have made it into mainstream management journals such as service, safety, and justice. A key aspect of the development of any new measure is that it is based in existing theory. For example, Kaptein's (2008) ethical culture measure draws on the *corporate ethics virtue model* as a theoretical basis for developing a measure. Although this measure is inconsistent with how we defined organizational climate, this ethical culture measure was validated in a rigorous manner and has a strong conceptual framework, which is a step in the right direction.

One particularly fruitful approach for developing a new measure is to draw on Treviño and Nelson's (1998) framework of ethical context. Treviño and Nelson highlight many different dimensions that comprise ethical context such as decision making processes, recruitment and selection systems, orientation and training programs, reward and punishment systems, formal policies and codes, and structures in place to increase accountability. A nice aspect of Treviño and Nelson's model is that it focuses on practices, policies, and procedures—all hallmarks of organizational climate.

Multilevel designs. The use of multilevel designs will also aid this literature. Given that ethical climate is a group or organizational-level construct,

it would be interesting to examine the effects of ethical climate on individual, group, and organizational outcomes. Further, it is important to report aggregation statistics (e.g., r_{wg}, ICCs) to demonstrate that some assumptions of ethical climate are met before relating the construct to other variables. In addition, the use of multilevel designs will allow researchers to examine if ethical sub-climates exist within a single organization. Although this type of research has been examined in a few studies (cf., Weber, 1995, Wimbush et al., 1997b), ICC(1) values showing a comparison between within-group and between-group agreement were not reported.

Conceptual basis for construct and predictions. As mentioned previously, there are some inherent difficulties in taking a theory based on philosophy and sociology and translating it into a measure to be used for empirical research. Thus, as suggested previously, we suggest drawing on a theoretical framework that is based in the social sciences and is consistent with other types of climate.

In addition to the conceptualization of ethical climate, there is little theory provided for why ethical climate should be associated with various outcomes. Is the mechanism for the relationship between job attitudes the same for unethical behavior? Some theories that may be particularly useful to draw on include theories of social influence, such as social learning theory (Bandura, 1977, 1986), social exchange theory (Blau, 1964), and social information processing theory (Salancik & Pfeffer, 1978). All of these theories highlight how individuals look to their social environment for cues about the appropriate way to behave.

Alternate research paradigms. The traditional research design in ethical climate studies involves mailing a survey to an organization (or multiple organizations) where ethical climate and some other variables are measured and then correlated. This design has allowed us to infer that ethical climate is related to a number of different outcomes. However, it is a theoretical leap to draw causal conclusions from correlational research. The use of both experimental designs and causal modeling will be very helpful in this regard. Structural equation modeling, particularly with longitudinal designs, is a useful approach to understanding causal relationships between variables. Thus, an expansion of present research designs and analytical techniques could enrich the literature.

Expanding the dependent variables. As discussed previously, ethical climate has been empirically linked to both attitudinal and ethics-related outcomes. However, there is no research linking ethical climate to bottom line organizational performance despite suggestions from some scholars that the link exists (Treviño & Nelson, 1998). Although Victor and Cullen (1988) state that ethical climate should lead to organizational performance, this relationship has not been empirically examined in the literature. Dickson et al. (2001) provide a potentially useful explanation for how ethical cli-

mate can translate into bottom line performance. They suggest that when an ethical climate exists, this can lead to more cohesion and/or morale within a work group or organization and this cohesion/morale translates into positive bottom-line returns. If researchers find that ethical climate is related to firm performance, whether it is directly or through some mediating mechanism, undoubtedly there will be more interest given to this body of research. Future research should seek to examine both direct and mediated relationships that link ethical climate to financial performance. Indeed, such research would meet calls for linking ethical climate to important organizational outcomes (Kaptein, 2008).

In addition, although unethical behaviors have been examined, there is a dearth of research on the relationship between ethical climate and prosocial behaviors. For instance, it would be interesting to examine whether ethical climates promote citizenship behaviors aimed at improving group and organizational functioning.

Exploring antecedents of ethical climate. Many business ethics researchers have described the importance of leadership in developing and sustaining ethical climates (Dickson et al., 2001; Mendonca & Kanungo, 1996; Treviño & Nelson, 1998, Wimbush & Shepard, 1994). Indeed, some have said that leadership is the single biggest factor in predicting whether an ethical climate will exist (Treviño & Nelson, 1998). However, to date there is a dearth of empirical research examining the role of leadership on ethical climates. It is important for future research to determine what type of leader is able to create and sustain an ethical climate. One potentially useful construct in this regard is Brown, Treviño, and Harrison's (2005) measure of ethical leadership. Ethical leadership draws on principles of social learning theory (Bandura, 1977, 1986) to explain how managers influence employees. It would be particularly interesting to examine which level of leadership (i.e., top management or supervisory) has the strongest influence on the development of ethical climates.

In addition to leadership, it is important to examine the role of followers' characteristics in the development of ethical climates. In the leadership literature there is growing interest in the role of followers in understanding leadership effects (Van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). Indeed, the effects of leadership on ethical climate are likely dependent on follower personality, values, and identity. Future research should examine the joint influence of leaders and followers as antecedents of ethical climates.

Finally, Kaptein (2008) suggests that future research also examine how ethical climates vary as a function of hierarchical level, sector, and nation. Indeed, aspects of the industry or organizational context could influence the emergence of ethical climates.

The effects of other stakeholders' perceptions of ethical climate. Almost all research on ethical climate has focused on employees' perceptions. However, it would be interesting to examine the effects of other stakeholders' perceptions of ethical climate. For example, are the effects of ethical climate rated by employees similar to that of supervisors or top management? Do customers' perceptions of ethical climate influence the likelihood of remaining a consumer? Do investors consider the ethical climate of an organization before purchasing stock? These are all potentially interesting questions to examine in future research.

Exploring ethical climate strength. One issue that is often confounded when people talk about ethical climate is that reporting a high score on ethical climate means that there is a strong climate. However, climate strength has been operationalized as the amount of agreement within a particular organization or work group (Schneider, Salvaggio, & Subirats, 2002). Thus, it is possible to have a mean score on ethical climate that is high but with a lot of variability in responses. This issue is discussed by Dickson et al. (2001) and provided a rationale for why they use the term "climate regarding ethics." These authors argue that people often inadvertently confuse the term ethical climate (i.e., the mean level of ethical climate) with a strong ethical climate (i.e., the variance in perceptions of ethical climate). However, it is possible for the ethical climate to be high or low as well as strong or weak.

It is possible that ethical climate strength (i.e., the variability in ratings) may be an important moderator of the relationship between ethical climate level (i.e., the mean score) and organizational outcomes. Indeed, empirical research on service climate (Schneider et al., 2002) and justice climate (Colquitt, Noe, & Jackson, 2002) has found climate strength to be important. For example, perhaps the relationship between ethical climate and organizational commitment is even stronger when organizational members agree that the climate is ethical. This issue should be explored in future research.

Relative impacts of personal values and ethical climate on behavior. A recurring theme in the literature on ethical climate is whether unethical behavior is more a function of personal or organizational characteristics (Treviño & Nelson, 1998). There is general consensus among scholars that both factors impact unethical acts. However, an implicit assumption of research on ethical climate is that the way an organization is structured can influence the display of ethical behavior among organizational members. In other words, it is not just a "few bad apples" that cause ethical problems in organizations (Treviño & Nelson, 1998). However, there have not been empirical investigations into the relative impact of personal characteristics and ethical climate on individual and organizational outcomes. This could prove to be a fruitful area of research and could help empirically demonstrate that the

organization's environment is important in influencing ethicality over and above the effects of characteristics of individuals in an organization.

CONCLUSIONS

The media attention given to corporate indiscretions in recent years has put ethical issues into the forefront of the minds of many people. In these times, the importance of research on ethical climate cannot be overstated. Some important conclusions are starting to be drawn based on the empirical work on ethical climate. However, the scientific study of business ethics, and ethical climate specifically, must meet the high standards of conceptual and methodological rigor to help make sure it emerges as a mainstream management topic. Given the development of research on climate, the time is ripe to take research on ethical climate to the next level. This paper highlighted the gains that have been made and a number of avenues to aid in the progression of research in this domain.

REFERENCES

Agarwal, J., & Malloy, D. C. (1999). Ethical work climate dimensions in a not-for-profit organization: An empirical study. *Journal of Business Ethics, 20,* 1–14.

Ambrose, M., Arnaud, A., & Schminke, M. (2008). Individual moral development and ethical climate: The influence of person-organization fit on job attitudes. *Journal of Business Ethics, 77,* 323–333.

Aquino, K. (1998). The effects of ethical climate and the availability of alternatives on the use of deception during negotiation. *International Journal of Conflict Management, 9,* 195–217.

Aquino, K., & Becker, T. E. (2005). Lying in negotiations: How individual and situational factors influence the use of neutralization strategies. *Journal of Organizational Behavior, 26,* 661–679.

Arnaud, A., & Schminke, M. (2007). Ethical work climate: A weather report and forecast. In S. W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Research in social issues in management: Managing social and ethical issues in organizations* (Vol. 5, pp. 181–227). Greenwich, CT: IAP.

Babin, B. J., Boles, J. S., & Robin, D. P. (2000). Representing the perceived ethical work climate among marketing employees. *Journal of the Academy of Marketing Science, 28,* 345–358.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W. H. Freeman.

Bandura, A. (1986). *Social foundations of thought & action.* Englewood Cliffs, NJ: Prentice-Hall.

Barnett, T., & Vaicys, C. (2000). The moderating effect of individuals' perceptions of ethical work climate on ethical judgments and behavioral intentions. *Journal of Business Ethics, 27,* 351–362.

Bartels, L. K., Harrick E., Martell, K., & Strickland, D. (1998). The relationship between ethical climate and ethical problems with human resource management. *Journal of Business Ethics, 17,* 799–804.

Beu, D. S., & Buckley, M. R. (2004). Using accountability to create a more ethical climate. *Human Resource Management Review, 14,* 67–83.

Blau, P. (1964). *Exchange and power in social life.* New York: John Wiley.

Bourne, S., & Snead, J. D. (1999). Environmental determinants of organizational ethical climate: A community perspective. *Journal of Business Ethics, 21,* 283–290.

Brower, H. H., & Shrader, C. B. (2000). Moral reasoning and ethical climate: Not-for-profit vs. for-profit boards of directors. *Journal of Business Ethics, 26,* 147–167.

Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes, 97,* 117–134.

Buchan, H. F. (2005). Ethical decision making in the public accounting profession: An extension of Ajzen's theory of planned behavior. *Journal of Business Ethics, 61,* 165–181.

Caldwell, D. F., & Moberg, D. (2007). An exploratory investigation of the effect of ethical culture in activating moral imagination. *Journal of Business Ethics, 73,* 193–204.

Cullen, J. B., Parboteeah, K., & Victor, B. (2003). The effects of ethical climates on organizational commitment: A two-study analysis. *Journal of Business Ethics, 46,* 127–141.

Cullen, J. B., Victor, B., & Bronson, J. W. (1993). The ethical climate questionnaire: An assessment of its development and validity. *Psychological Reports, 73,* 667–674.

Dawson, L. M. (1992). Will feminization change the ethics of the sales profession? *Journal of Personal Selling & Sales Management, 12,* 21–32.

DeConinck, J. B. (2003). The impact of a corporate code of ethics and organizational justice on sales managers' ethical judgments and reaction to unethical behavior. *Marketing Management Journal, 13,* 23–31.

DeConinck, J. B., & Lewis, W. F. (1997). The influence of deontological and teleological considerations and ethical climate on sales. *Journal of Business Ethics, 16,* 497–506.

Deshpande, S. P. (1996a). The impact of ethical climate types on facets of job satisfaction: An empirical investigation. *Journal of Business Ethics, 15,* 655–660.

Deshpande, S. P. (1996b). Ethical climate and the link between success and ethical behavior: An empirical investigation of a non-profit organization. *Journal of Business Ethics, 15,* 315–320.

Deshpande, S. P., George, E., & Joseph, J. (2000). Ethical climates and managerial success in Russian organizations. *Journal of Business Ethics, 23,* 211–217.

Dickson, M. W., Smith. D. B., Grojean, M. W., & Ehrhart, M. (2001). An organizational climate regarding ethics: The outcome of leader values and the practices that reflect them. *Leadership Quarterly, 12,* 197–217.

Elm, D. R., & Nichols, M. P. (1993). An investigation of the moral reasoning of managers. *Journal of Business Ethics, 12,* 817–833.

Engelbrecht, A. S., van Aswegan, A. S., & Theron, C. C. (2005). The effect of ethical values on transformational leadership and ethical climate in organizations. *South African Journal of Business Management, 36,* 19–26.

Erondu, E. A., & Sharland, A., & Okpara, J. O. (2004). Corporate ethics in Nigeria: A test of the concept of an ethical climate. *Journal of Business Ethics, 51,* 349–357.

Flannery, B. L., & May, D. R. (2000). Environmental ethical decision making in the U.S. metal-finishing industry. *Academy of Management Journal,* 43, 642–662.

Forte, A. (2004a). Business Ethics: A study of the moral reasoning of selected business managers and the influence of organizational ethical climate. *Journal of Business Ethics, 51,* 167–173.

Forte, A. (2004b). Antecedents of manager's moral reasoning. *Journal of Business Ethics, 51,* 315–347.

Fritzche, D. J. (2000). Ethical climates and the ethical dimension of decision making. *Journal of Business Ethics, 24,* 125–140.

Fritzche, D. J., & Becker, H. (1984). Linking management behavior to ethical philosophy. *Academy of Management Journal, 27,* 166–175.

Gonzalez-Padron, T., & Hult, T. M. (2008). Exploiting innovative opportunities in global purchasing: An assessment of ethical climate and relationship performance. *Industrial Marketing Management, 37,* 69–82.

Herndon, N. C., Jr., Ferrell, O. C., LeClair, D. Y., & Ferrell, L. K. (1999). Relationship of individual moral values and perceived ethical climate to satisfaction, commitment, and turnover in a sales organization. *Research in Marketing, 15,* 25–48.

Jaffe, E. D., & Tsimerman, A. (2005). Business ethics in a transition economy: Will the next Russian generation be any better? *Journal of Business Ethics, 62,* 87–97.

Joseph, J., & Deshpande, S. P. (1997). The impact of ethical climate on job satisfaction of nurses. *Health Care Management Review, 22,* 76–83.

Kaptein, M. (2008). Developing and testing a measure for the ethical culture of organizations: The corporate ethical virtues model. *Journal of Organizational Behavior, 29,* 923–947.

Kelley, S. W., & Dorsch, M. J. (1991). Ethical climate, organization commitment, and indebtedness among purchasing executives. *Journal of Personal Selling & Sales Management, 11,* 55–66.

Koh, H. C., & Boo, E. H. Y. (2001). The link between organizational ethics and job satisfaction: A study of managers in Singapore. *Journal of Business Ethics, 29,* 309–324.

Logsdon, J. M., & Young, J. E. (2004). Executive influence on ethical culture. In R. Giacalone, C. Jurkeiwicz, & C. Dunn (Eds.), *Positive psychology in business and ethics and corporate social responsibility* (pp. 103–122). Greenwich, CT: Information Age.

Logsdon, J. M., & Yuthas, K. (1997). Corporate social performance, stakeholder orientation, and organizational moral development. *Journal of Business Ethics, 16,* 1213–1226.

Luthar, H. K., & Karri, R. (2005). Exposure to ethics education and the perception of linkage between organizational ethical behavior and business outcomes. *Journal of Business Ethics, 61,* 353–368.

Malloy, D. C., & Agarwal, J. (2001). Ethical climate in nonprofit organizations: Propositions and implications. *Nonprofit Management & Leadership, 12,* 39–54.

Martin, K., & Cullen, J. (2006). Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics, 69,* 175–194.

McKendall, M. A., & Wagner III, J. A. (1997). Motive, opportunity, choice, and corporate illegality. *Organization Science, 8,* 624–647.

Mendonca, M., & Kanungo, R. N. (1996). *The ethical dimensions of leadership.* Thousand Oaks, CA: Sage.

Merton, R. K. (1957). *Social theory and social structure.* New York: Free Press.

Meyer, J. W., & Rowan, B. (1977). Formal structure of organizations as myth and ceremony. *American Journal of Sociology, 83,* 340–263.

Mulki, J., Jaramillo, J., & Locander, W. (2006). Effect of ethical climate on turnover intention: Linking attitudinal- and stress theory. *Journal of Business Ethics, 78,* 559–574.

Naumann, S., & Bennett, N. (2000). A case for procedural justice climate: Development and test of a multilevel model. *Academy of Management Journal, 43,* 881–889.

Neubaum, D. O., Mitchell, M. S., & Schminke, M. (2004). Firm newness, entrepreneurial orientation, and ethical climate. *Journal of Business Ethics, 52,* 335–347.

Parboteeah, K. P., Cullen, J. B., Victor, B., Sakano, T. (2005). National culture and ethical climates: A comparison of U.S. and Japanese accounting firms. *Management International Review (MIR), 45,* 459–481.

Peterson, D. K. (2002a). Deviant workplace behavior and the organization's ethical climate. *Journal of Business and Psychology, 17,* 47–61.

Peterson, D. K. (2002b). The relationship between unethical behavior and the dimensions of the ethical climate questionnaire. *Journal of Business Ethics, 41,* 313–326.

Ross, W. T., & Robertson, D. C. (2000). Lying: The impact of decision context. *Business Ethics Quarterly, 10,* 409–440.

Rothwell, G. R., & Baldwin, J. N. (2006). Ethical climates and contextual predictors of whistle-blowing. (2006). *Review of Public Personnel Administration, 26,* 216–244.

Rothwell, G. R., & Baldwin, J. N. (2007). Ethical climate theory, whistle blowing, and the code of silence in police agencies in the State of Georgia. *Journal of Business Ethics, 70,* 341–361.

Ruppel, C. P., & Harrington, S. J. (2000). The relationship of communication, ethical work climate, and trust to commitment and innovation. *Journal of Business Ethics, 25,* 313–328.

Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly, 23,* 224–253.

Schminke, M., Ambrose, M. L., & Neubaum, D. O. (2005). The effects of leader moral development on ethical climate and employee attitudes. *Organizational Behavior and Human Decision Processes, 97,* 135–151.

Schneider, B., Bowen, D. E., Ehrhart, M. G., & Holcombe, K. M. (2000). The climate for service: Evolution of a construct. In N. M. Ashkanasy, C. Wilderom, & M. F. Peterson (Eds.), *Handbook of organizational culture and climate* (pp. 21–36). Newbury Park, CA: Sage.

Schneider, B., & Reichers, A. (1983). On the etiology of climates. *Personnel Psychology, 36,* 19–41.

Schneider, D., Salvaggio, A. N., & Subirats, M. (2002). Climate strength: A new direction for climate research. *Journal of Applied Psychology, 87,* 220–229.

Schwepker, C. H. Jr. (2001). Ethical climate's relationship to job satisfaction, organizational commitment, and turnover intention in the salesforce. *Journal of Business Research, 54,* 39–52.

Schwepker, C. H. Jr., Ferrell, O. C., & Ingram, T. N. (1997). The influence of ethical climate and ethical conflict on role stress in the sales force. *Journal of the Academy of Marketing Science, 25,* 99–108.

Schwepker, C. H., & Good, D. J. (2007). Exploring sales manager quota failure from an ethical perspective. *Marketing Management Journal, 17,* 156–168.

Schwepker, C. H. Jr., & Hartline, M. D. (2005). Managing the ethical climate of customer-contact service employees. *Journal of Service Research, 7,* 377–397.

Sims, R. L., & Keon, T. L. (1997). Ethical work climate as a factor in the development of person-organization fit. *Journal of Business Ethics, 16,* 1095–1105.

Sims, R. L., & Kroeck, K. G. (1994). The influence of ethical fit on employee satisfaction, commitment and turnover. *Journal of Business Ethics, 13,* 939–947.

Sims. R. R., & Brinkmann, J. (2003). Enron ethics (Or: Culture matters more than codes). *Journal of Business Ethics, 45,* 243–256.

Treviño, L. K., & Butterfield, K. D., & McCabe, D. L. (1998). The ethical context in organizations: Influences on employee attitudes and behaviors. *Business Ethics Quarterly, 8,* 447–476.

Treviño, L. K., & Nelson, K. A. (1998). *Managing business ethics: Straight talk about how to do it right.* Wiley, John & Sons.

Treviño, L. K., & Weaver, G. R. (2003). *Managing ethics in business organizations: Social scientific perspectives.* CA: Stanford University Press.

Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management, 32,* 951–990.

Ulrich, C., O'Donnell, P., Taylor, C., Farrar, A., Danis, M., & Grady, C. (2007). Ethical climate, ethics stress, and the job satisfaction of nurses and social workers in the United States. *Social Sciences & Medicine, 65,* 1708–1719.

Upchurch, R. S., & Ruhland, S. K. (1996). The organizational bases of ethical work climates in lodging operations as perceived by general managers. *Journal of Business Ethics, 15,* 1083–1093.

Vaicys, C., Barnett, T., & Brown, G. (1996). An analysis of the factor structure of the ethical climate questionnaire. *Psychological Reports, 79,* 115–120.

VanSandt, C. V., Shapard, J. M., & Zappe, S. M. (2006). An examination of the relationship between ethical work climate and moral awareness. *Journal of Business Ethics, 68,* 409–432.

Van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly, 15,* 825–856.

Vardi, Y. (2001). The effects of organizational and ethical climates in misconduct at work. *Journal of Business Ethics, 29,* 325–337.

Zohar, D. (1980). Safety climate in industrial organizations: Theoretical and applied implications. *Journal of Applied Psychology, 65*, 96–102.

Zohar, D. (2000). A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology, 85*, 587–596.