

Ethical Climates in Organizations: A Review and Research Agenda

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ABSTRACT: Since seminal meta-analytical work in 2006 we have witnessed burgeoning research on ethical climates. This article offers a comprehensive review of literature examining the antecedents and outcomes of ethical climates over the last decade, as well as moderators of the relationship between ethical climates and other variables. Based on the review, an agenda for future research is also presented. In addition to highlighting the potential for incorporating alternative theoretical perspectives such as situational strength theory, trait-activation theory, social information processing theory, and institutional theory to better our understanding of ethical climates, this article highlights the need for future research to incorporate a dynamic perspective to study ethical climates, examine the curvilinear effects of ethical climates on work outcomes, extend the study of ethical climates to different levels of the organization, and examine the effects of culture on ethical climates.

KEY WORDS: ethical climate, organizational climate, antecedents, outcomes, measurement

In the last three decades since Victor and Cullen (1987, 1988) introduced the ethical climate framework, we have witnessed burgeoning research on ethical climates in the management literature. An ethical climate refers to shared perceptions between members of an organization or part of an organization as to “what constitutes right behavior” and arises when “members believe that certain forms of ethical reasoning or behavior are expected standards or norms for decision making within the firm” (Martin & Cullen, 2006: 177).

Ethical climates develop as a result of organizational policies, practices, and leadership, and exert significant influence on the ethical decision making of organizational members and their subsequent attitudes and behavior at work (Schminke, Arnaud, & Kuenzi, 2007; Simha & Cullen, 2012). As highlighted in Martin and Cullen’s (2006) meta-analytical study, early work on ethical climates examined their relationships with employee work attitudes such as organizational commitment. However, over the last decade we have witnessed growing research linking ethical climates to both ethical as well as behavioral outcomes in the workplace, and identifying the organizational and team-level

antecedents of ethical climates. Although Simha and Cullen (2012) carried out a brief review of the ethical climate literature, their study had selective coverage, failing to include recent work which has examined the influence of ethical climates on performance outcomes, identified the antecedents of ethical climates, treated ethical climate as a mediator or moderator, and examined the boundary conditions of the relationship between ethical climates and work outcomes. They also did not highlight the key theoretical perspectives which explain the effects of ethical climate and factors which attenuate or accentuate its effects, did not address key methodological concerns regarding the measurement of ethical climate, and did not provide a detailed agenda for future research. The years since the publication of Simha and Cullen (2012) have witnessed a growth in work on ethical climate, including studies that have examined the antecedents of ethical climate and treated ethical climate as a mediator or moderator, thereby calling for a fresh review.

This study conducts a systematic review of key research on ethical climate that has been published in the last decade since Martin and Cullen's (2006) meta-analysis. In particular, it provides a detailed and focused review of empirical work on the antecedents and outcomes of ethical climate, studies in which ethical climate was treated as a mediator and moderator, and work which has examined the boundary conditions of the relationships between ethical climate and its outcomes, as well as highlights issues associated with the conceptualization and measurement of ethical climate. In line with best practice (Short, 2009), the Web of Science, Google Scholar, and related databases were used to identify journal articles with "ethical climate" or "climate" in their title, keywords, or abstract that were published from 2006 to 2016. As a result, 102 articles were identified for inclusion in this review, of which 95 were empirical (91 quantitative and 4 qualitative), more than three times the number reviewed by Simha and Cullen (2012).

As well as consolidating our knowledge of research on ethical climates, the present study also makes an important contribution by providing a roadmap for future research indicating key avenues for theoretical and empirical development of the field. We highlight the potential for theoretical development of the ethical climate domain via incorporation of relevant theories such as social information processing theory, trait-activation theory, situational strength theory, and institutional theory. From an empirical viewpoint, we highlight the need for more work on ethical climates at multiple levels of analysis, the dynamic nature of ethical climates, the curvilinear effects of ethical climates on different outcomes, and the effects of culture on ethical climates.

The rest of the article is structured in the following way. First, in order to set the scope and context for the review, we discuss the definition and measurement of ethical climates. Following on from this, we review in detail what research conducted since Martin and Cullen's (2006) meta-analysis found with regard to ethical climate. These findings are divided into three sections: antecedents, outcomes, and finally, moderators and mediators. We then present an agenda for future research which includes both opportunities for theoretical advancement and opportunities for empirical advancement.

DEFINITION AND MEASUREMENT

In this section we first pay attention to the definition and measurement of ethical climate. This provides the foundation for the sections which categorize the existing research broadly into antecedents, outcomes, and moderators as depicted in Figure 1.

Defining Ethical Climate

Scholars have provided a number of definitions of ethical climate, with the most widely used being Victor and Cullen's (1987) definition. They defined ethical climate as "the shared perception of what is correct behavior and how ethical situations should be handled in an organization" (Victor & Cullen, 1987: 51). A year later they defined ethical climate as the "prevailing perceptions of typical organizational practices and procedures that have ethical content" (Victor & Cullen, 1988: 101). Although the wording is slightly different, both definitions highlight the role organizations play in shaping the ethical behavior of employees.

Based on concepts of moral philosophy, Victor and Cullen's (1987, 1988) conceptualization led them to divide ethical climates into three categories, namely, egoism, benevolence, and deontology/principle climates (Fritzsche & Becker, 1984; Williams, 1985). These categories are distinguished based on the criteria used for intra-organizational moral reasoning, maximizing self and joint interests, or adhering to principles (Victor & Cullen, 1988). Using these categories and three loci of analysis (individual, local, and cosmopolitan) to specify the sources of ethical reasoning within an organization, Victor and Cullen (1987, 1988) developed a theoretical typology of ethical climates. As can be seen in Figure 2, they originally posited nine ethical climate types, represented in a 3 x 3 matrix form with the rows representing ethical criteria (egoism, benevolence, principle), and the columns representing loci of analysis (individual, local, cosmopolitan).

A lack of reliable empirical support uniformly across all the nine theoretical ethical climate types led Victor and Cullen (1988) to refine the original nine types into five climates that were commonly found empirically: instrumental, caring, independence, law and codes, and rules (Victor & Cullen, 1988). In doing so, they highlighted how units such as departments have different climates where the variation between units is greater than the variation among individuals. Although Cullen, Victor, and Bronson (1993) note that all ethical climate types derived from theory have been empirically observed, they have rarely been observed in the same study. This may result from the lack of heterogeneity in units or organizations in any one study. While some researchers continue to use the original ethical climate categories to establish the ethical climates observable in organizations or organizational units as per Figure 2 (e.g. Parboteeah & Kapp, 2008; Putranta & Kingshott, 2011), the overwhelming majority use the subset of five commonly observed ethical climates as identified by Victor and Cullen (1988).

Other authors have forwarded alternative definitions of ethical climate. For example, Olson (1994) proposed a more general definition of ethical climate by diluting the focus on organizational influence. Ethical climate, according to Olson (1998: 346), "provides the context in which ethical behavior and decision-making occurs."

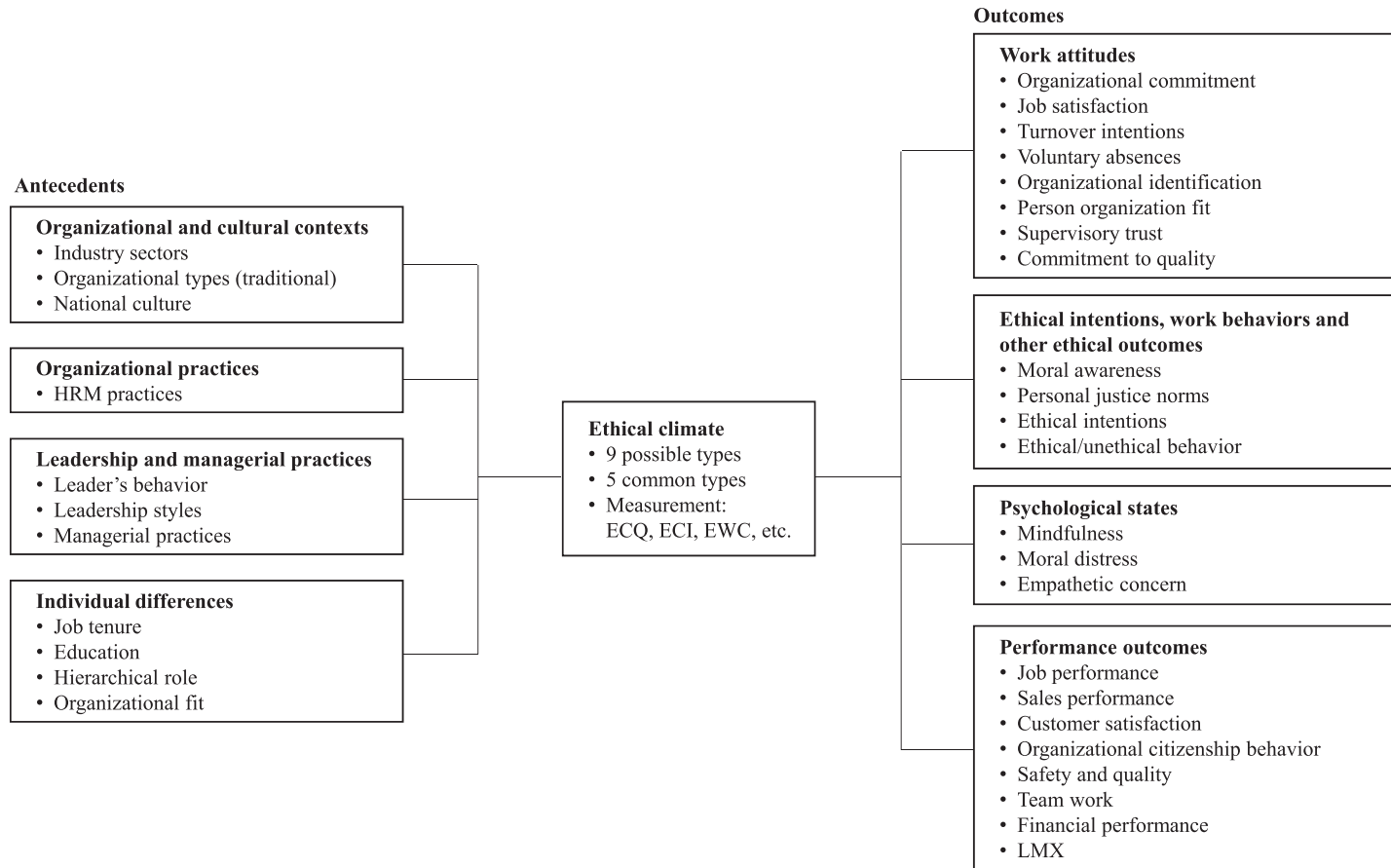


Figure 1: Categorization of Existing Research

ETHICAL CLIMATES IN ORGANIZATIONS

Ethical Theory	Locus of Analysis			
		<i>Individual</i>	<i>Local</i>	<i>Cosmopolitan</i>
	<i>Egoism</i>	Self-interest	Company's profits	Efficiency
	<i>Benevolence</i>	Friendship	Team interest	Social responsibility
	<i>Principle</i>	Personal morality	Company rules and procedures	Law and professional codes

Figure 2: Theoretical Types of Ethical Climate (Victor & Cullen, 1988)

However, the role of the organization is still implicit in this definition to the extent that it is the encompassing organizational environment that often provides the context in which individual decision making occurs at work. Other definitions of ethical climate have also tried to highlight the individual (as opposed to organizational) angle of this construct (e.g. Babin, Boles, & Robin, 2000).

In more recent work, Arnaud (2010: 125) attempted to significantly broaden the definition of ethical climate by defining it 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.” In response to criticisms of Victor and Cullen’s (1987, 1988) framework as to whether it “is comprehensive enough to capture the true breadth of the ethical climate construct” (Arnaud, 2010: 347), Arnaud (2006; 2010) proposed a broader theoretical model of ethical work climate by drawing on the four-component cognitive development model of Rest (1984, 1986) which is based on Kohlberg’s work (Kohlberg, 1970). It not only captures the moral reasoning dimension that was the basis of Victor and Cullen’s theoretical framework, but also encompasses other aspects of the ethical decision-making process, namely collective moral motivation, moral character, and moral sensitivity. However, this conceptualization has yet to be widely adopted in empirical work, probably because the most advanced forms of moral development (sensitivity, motivation, and character) rarely exist at the collective level in organizations as they take time to develop and because of the popularity of Victor and Cullen’s conceptualization. A summary of the various definitions (and measures) of ethical climate is provided in the Appendix.

Distinguishing Ethical Climate from Other Moral Constructs

Ethical climate, as conceptualized by Victor and Cullen (1987, 1988), differs from other moral constructs such as moral identity and moral awareness in that it looks at how the social context in organizations influences ethical behavior of employees through fostering their collective moral reasoning. In contrast, moral identity focuses on the extent to which morality is an important part of an individual’s self-concept (Shao, Aquino, & Freeman, 2008), and moral awareness is defined as “a person’s determination that a situation contains moral content and legitimately can be considered from a moral point of view” (Reynolds, 2006: 233). In other words these constructs focus on the individual determinants of ethical behavior, rather than organizational

drivers. Although we might envisage situations under which individuals develop a collective moral identity which encompasses aspects of morality, and jointly recognize how their collective decisions influence others in a way that may conflict with ethical standards, empirical research examining whether collective moral identity and moral awareness exist at the level of the group or organization is limited. This is perhaps due to the fact that collective moral identity and moral awareness are only rarely evidenced in organizational contexts where employees frequently interact and work towards shared objectives.

Another collective moral construct that has been proposed by researchers that shares some overlap with ethical climate is ethical culture, which has been defined as a subset of organizational culture that captures the organization's systems and practices of behavioral control that promote ethical or unethical behavior (Trevino, Butterfield, & McCabe, 1998). Although both ethical climate and ethical culture are primarily concerned with explaining similar organizational phenomena (e.g. ethical or unethical behavior in the workplace), and refer to ethical features of the organizational environment, researchers have only recently begun to pay attention to differentiating the two constructs (Kaptein, 2011; Kish-Gephart, Harrison, & Trevino, 2010). Trevino et al. (2008) contrasted the narrower focus of ethical culture on formal and informal systems aimed at behavioral control, with the broader focus of ethical climate on perceived organizational values that shape ethical decision making. Although climate researchers have generally argued that organizational climates such as ethical climate provide the behavioral evidence for the culture within an organization through influencing the behavior of individuals, i.e. acts as an precursor to the development of an ethical culture (Schein, 2010; Schneider, Salvaggio, & Subirats, 2013), other researchers have argued that ethical culture may act as a source of employees' shared perceptions of the ethical climate because ethical culture captures their shared perceptions of organizational practices and arrangements that are put in place by the organization to ensure compliance with what constitutes ethical or unethical behavior, and the ethics-related messages that result from such systems and practices (Kish-Gephart et al., 2010). Supporting the latter view, research has shown that ethical climate is a more proximate predictor of unethical intentions or behavior than ethical culture. For example, recent meta-analytical work by Kish-Gephart et al. (2010) found that when ethical culture was included as a predictor with ethical climate dimensions, it did not explain any unique variance in both outcomes, suggesting that ethical climate acts as a more proximate antecedent of ethical work outcomes. As Kaptein (2011) points out, whilst ethical climate refers to employees' perceptions about what is the right thing to do in the organization, ethical culture is procedural in that it relates to whether employees' believe the conditions are in place in the organization to influence ethical behavior and, therefore, we argue, provides a basis from which the ethical climate develops.

Measuring Ethical Climate

The Ethical Climate Questionnaire (ECQ) has been widely used to measure ethical climate. The ECQ was developed by Victor and Cullen (1987) based on a "climate approach" to research (Schneider, 1983: 111) and written to capture the nine ethical

climate types determined by theory. The original questionnaire consisted of 26 items and respondents were asked to indicate on a six-point Likert-type scale how accurately each item describes their work climate (Victor & Cullen, 1987). This measure, either in its entirety or with modifications (abbreviated versions), appears to be the most favored method of measuring ethical climate (Lemmergaard & Lauridsen, 2008). In a subsequent review by Cullen et al. (1993), ten additional items were added to the scale, which was then tested and found to have strong validity and reliability. In our review we identified a total of fifty-four studies which have adopted the original or the modified version of the ECQ to measure ethical climate. While researchers acknowledge the limitations of the Victor and Cullen (1987, 1988) framework, and have argued that both the conceptualization and measurement of ethical climate need to be reconsidered (Salaman & Mesko, 2016), they have continued to use the ECQ for the reason that it has been widely validated (Dark & Rix, 2015), and therefore provides a basis for the comparison of findings between studies.

Although the ECQ is the most widely used measure of ethical climate, a number of other measures have been developed and adopted in previous research. Building on solid theoretical reasoning and empirical data from three distinct samples, Arnaud (2006, 2010) developed the Ethical Climate Index (ECI) as an alternative measure of ethical climate at the unit-level. This measure captures four dimensions of ethical climate; collective moral sensitivity, collective moral judgment, collective moral motivation, and collective moral character. Although Arnaud offered an alternative way of conceptualizing and measuring ethical climate (Arnaud, 2006, 2010), only one additional study has utilized Arnaud's ECI to measure ethical climates (Salaman & Mesko, 2016). Even Arnaud, in a study with Schminke (2012), reverted to using a modified version of the Victor and Cullen (1987, 1988) ECQ. Despite this, in line with other scholars (Macklin, Martin, & Mathison, 2015), we call on researchers to consider using the ECI (Arnaud, 2010) as it provides a basis from which researchers can measure the wider multidimensional nature of ethical climates, and therefore enriches Victor and Cullen's (1987, 1988) initial work which only captures the moral reasoning dimension of ethical climates.

Another measure of ethical climate used in multiple studies is Schwepker's (2013) scale. This scale consists of seven five-point Likert-type statements and was developed based on the work of Qualls and Puto (1989). It measures the perceptions of the ethical practices within the organization, the enforcement of codes, and management actions governing ethical behaviors. This scale has been shown to have acceptable reliability and validity (Schwepker, Ferrell, & Ingram, 1997), and has been used in its entirety in seven studies (e.g. Jaramillo, Mulki, & Solomon, 2006), and in an abbreviated form in three studies (e.g. Tanner, Tanner, & Wakefield, 2015).

Three studies have used the Ethical Work Climate (EWC) scale developed by Babin et al. (2000) to measure the ethical work climate of marketing employees involved in sales and/or services (DeConinck, 2010, 2011; Lopez, Babin, & Chung, 2009). This scale is based on four ethical climate dimensions: trust/responsibility, the perceived ethicality of peers' behavior, the perceived consequences of violating norms, and the nature of the organization's selling practices.

Other scales which have been used in multiple studies include the Schminke, Ambrose, and Neubaum (2005) 16-item scale which captures self and other-focused reasoning. Some, but not all, studies in the area of healthcare have used the Olson (1994) Hospital Ethical Climate Scale (Schluter, Winch, Holzhauser, & Henderson, 2008). Finally, a few studies have relied on global unidimensional scales developed by the authors themselves, and include a global ethical climate six-item scale developed by Mayer, Kuenzi, and Greenbaum (2010), a four-item measure developed by Jaramillo, Mulki, and Boles (2013), a two-item measure developed by Stewart, Volpone, Avery, and McKay (2011), and a six-item scale developed by Luria and Yagil (2008).

Methodological Concerns

Our review identified a number of methodological concerns with prior research. Our first concern relates to the conceptualization and measurement of ethical climate in prior work. Victor and Cullen (1987) initially conceptualized ethical climate based on two dimensions (locus of analysis and ethical theory) which resulted in the nine theoretical types categories (see Figure 2), and later (1988) using factor analysis rationalized this to a subset of five climate types as noted before. Our review highlights that the majority of studies have continued to utilize these five types as a basis for conceptualizing ethical climate. This construct typology has exhibited structural validity; however, there are very few studies that have sought to further develop this conceptualization of ethical climate. In addition, we identified that there is a lack of consistency over how ethical climates have been measured in prior work. As highlighted earlier, although the majority of studies use different versions of the ECQ (Cullen et al., 1993; Victor & Cullen, 1987, 1988), other studies use abbreviated measures, or with the exception of Arnaud (2010), develop their own measures without adequate theoretical rationale. As such we recommend researchers use either the ECQ (Cullen et al., 1993; Victor & Cullen, 1987, 1988) or the ECI (Arnaud, 2010) in future work, as these measures have been developed based on sound theoretical reasoning.

Second, 89 out of the 91 quantitative studies in our review were cross-sectional in nature. Cross-sectional designs limit our ability to infer causality and also suffer from a greater likelihood of common method bias compared to longitudinal designs, where variables are collected at different points in time (Demirtas & Akdogan, 2015). By facilitating a chronological separation of the antecedent variables from the mediator and outcome variables, longitudinal studies provide us with greater confidence that the association between variables is not spurious and provide stronger inferences of causality (Hansen, Dunford, Alge, & Jackson, 2016). In order to strengthen inferences from existing work, future work should incorporate longitudinal designs which would open up new avenues for investigating ethical climate such as allowing researchers to ask questions about the impact of organizational or contextual changes on ethical climate.

A final limitation concerning the measurement of ethical climates is that most studies (70 out of 91 quantitative studies) have measured ethical climates at the individual-level of analysis (i.e. captured employees' perceptions of the ethical climate in their organizations) rather than aggregating such perceptions to the organizational

or departmental level to produce a more objective measure of climate. This is in spite of the fact that Victor and Cullen (1987) originally conceptualized ethical climate as construct which captured employees' shared perceptions as to the ethical climate in their organizations. As we highlight later on, given ethical climate was originally conceptualized as a variable which captures employees' shared perceptions of the organizational climate, future work should examine whether ethical climates meaningfully exist at higher-levels of analysis, and the extent of climate strength across organizational levels of analysis.

ANTECEDENTS OF ETHICAL CLIMATE

Although the antecedents of ethical climates have received less attention than their outcomes, we have witnessed growing empirical work on the antecedents of ethical climates in the decade since Martin and Cullen's (2006) meta-analytical work. Such antecedents include leadership and managerial practices, organizational practices, organizational and cultural context, and individual differences.

Leadership and Managerial Practices

Most research examining the antecedents of ethical climate have identified leadership as a key variable which leads to the establishment and maintenance of ethical climates. Researchers have generally drawn upon social learning theory to explain the process by which leaders influence ethical climates in the organization through role-modelling expected behaviors to employees (Demirtas & Akdogan, 2015; Mayer et al., 2010; Shin, 2012; Shin, Sung, Choi, & Kim, 2015). Martin and Cullen's (2006) meta-analysis highlighted only a handful of studies prior to 2006 which focused on leadership or managerial orientation as an antecedent of ethical climates. Since then a growing number of studies have examined the influence of specific leadership styles such as ethical leadership on ethical climates. By drawing on social information processing and social learning theories, Mayer et al. (2010) found that ethical leadership led to the development of ethical climates that foster adherence to ethical standards. Similarly, both Lu and Lin (2014) and Demirtas and Akdogan (2015) found that ethical leadership enhanced employee perceptions of the ethical climates in their organizations. Finally, both Shin (2012) and Shin et al. (2015) found that the ethical leadership of top management fostered a positive ethical climate in their organizations. Longitudinal research by Hansen et al. (2016) found that employees' perceptions of organizational corporate social responsibility practices influenced their perceptions of the ethical leadership of top management, which in turn influenced their perceptions of the ethical climate.

Researchers have also examined the influence of other leadership styles on ethical climates. For example, prior research has found that instrumental leadership (Mulki, Jaramillo, & Locander, 2009), benevolent leadership (Ghosh, 2015) and the benevolent and moral dimensions of paternalistic leadership (Cheng & Wang, 2015; Erben & Guneser, 2008; Otken & Cenkci, 2012) influence ethical climate.

Finally, researchers have also examined the influence of managerial practices on ethical climates. Drawing on social exchange theory, Parboteeah, Chen, Lin, Chen,

Lee, and Chung (2010) found that the employment of communication practices by managers was positively related to principle climates, and the use of empowerment practices was negatively related to egoistic climates.

In conclusion, over the last decade growing research has enhanced our understanding as to whether specific leadership styles and managerial practices influence ethical climate.

Organizational Practices

In their meta-analytical study, Martin and Cullen (2006) did not draw attention to work that examined the relationship between organizational practices and ethical climates. Since then, researchers have begun to examine the influence of organizational practices, such as human resource management (HRM) practices, on ethical climates. Although Manroop and colleagues (Manroop, 2015; Manroop, Singh, & Ezzedeen, 2014) drew on the resource-based view of the firm to hypothesize that HRM might act as an important antecedent to the development of ethical climates in their conceptual work, only Guerri, Radaelli, Siletti, Cirella, and Shani (2015) have empirically examined the influence of HRM on ethical climates. Drawing on the ability-motivation-opportunity (AMO) framework, they found that an organization's use of ability-enhancing practices and opportunity-enhancing practices are positively related to employees' perceptions of benevolent and principle organizational climates, whilst the use of motivation-enhancing practices are positively related to employees' perceptions of egoistic climates. Luria and Yagil (2008) found that employees' perceptions of the justice climate in their organization is positively related to the ethical climate. Qualitative work by Humphries and Woods (2016) established that understaffing in a healthcare facility led employees to have negative perceptions of the ethical climate due to the chronic work pressures they faced. In contrast, another qualitative study amongst healthcare employees found that organizational practices which fostered meeting needs of patients and next of kin, receiving and giving support and information, and developing standards of behavior fostered a positive organizational climate (Silen, Kjellstrom, Christensson, Sidenvall, & Svantesson, 2012).

Although research has begun to address the limited focus of organizational practices on ethical climate, given the complexity of the organizational environment, and the pervasiveness of organizational policies and practices, we agree with Manroop and colleagues (Manroop, 2015; Manroop et al., 2014) that more attention needs to be paid to the role of organizational policies or procedures in shaping ethical climate through the resource-based perspective.

Organizational and Cultural Contexts

In their meta-analytical study Martin and Cullen (2006) highlighted how early empirical work examined organizational context as a key predictor of ethical climates. Such work found that ethical climates varied across industrial sectors and between profit-oriented and non-profit organizations. Since then, researchers have examined the differences in ethical climates between family and non-family

businesses, between non-profits and government departments, between public and private sector organizations, and between enterprises at different stages of development. For example, Duh, Belak, and Milfelner (2010) found stronger caring climates and law-and-code climates in family as opposed to non-family businesses. However, there were no significant differences between family and non-family businesses across other climates. Malloy and Agarwal (2010) found that whilst social caring was the most visible climate in non-profits, individual caring was the most visible climate in government organizations. They also found that although independence and efficiency climates were evident in both sectors, instrumental climates and law-and-code climates were only visible in the public sector, and rules climates in the non-profit sector. Venezia, Venezia, and Hung (2010) found significant differences between accountants' perceptions of ethical climates in the public and private sectors. Whilst rules and codes, caring, self-interest, social responsibility, and instrumentalism climates were more prevalent in the public sector, efficiency and personal morality climates were more prevalent in the private sector. Belak & Mulej (2009) established that whilst in early stages of enterprise development, caring and rules climates prevailed, rules and law-and-code climates were most visible in the growth phase, and in the maturity stage instrumental climates prevailed. Finally, Weber and Gerde (2011) found that the organizational context influenced the ethical climates of military units. More specifically, they determined that the higher the levels of risk and environmental uncertainty, and greater the task interdependence in units, the higher the prevalence of caring and instrumental climates.

Empirical work has also begun to examine the influence of cultural context on ethical climates. For example, a comparative study of ethical climates in UK and Japanese non-profits found evidence of caring climates in both, but stronger independence climates in UK organizations and stronger rules and codes climates in Japan (Laratta 2009). Parboteeah, Seriki, and Hoegl (2014) found that national contexts shaped ethical climates in African organizations.

In conclusion, employees' perceptions of the ethical climate have been shown to vary across different organizational contexts, including the type of ownership, lifecycle stage of the organization, and its profit orientation. Only recently has this focus been extended to consider the impact of the overarching cultural context.

Individual Differences

As highlighted in Martin and Cullen's (2006) meta-analytical work, early research into ethical climates concentrated on organizational or external factors as antecedents, and did not focus on the explanatory power of individual differences. More recently, researchers have begun to consider individual differences with Goldman and Tabak (2010) finding that employees with greater job tenure were more likely to perceive instrumental climates in their organizations and those with lower levels of education perceived stronger instrumental and service climates. Filipova (2009) found distinct differences between individual nurses in their perceptions of ethical climates depending on their position in the managerial hierarchy in line with organizational support theory. Weeks, Loe, Chonko, Martinez, and Wakefield (2006) found that an employee's level of cognitive moral development negatively predicted his/her

perceptions of the ethical climate for Mexican employees but not for US employees. Finally, Domino, Wingreen, and Blanton (2015) found ethical climate fit to be predicted by a higher locus of control in employees, a history of frequent job changes, and perceptions of an increasingly better fit with the organization's ethical climate.

In comparison to other areas, research into individual differences and ethical climate is not as advanced. We argue that it is important to consider the influence of the individual in determining their perceptions of the ethical climate and expand on how this may be done in the agenda for future research.

OUTCOMES OF ETHICAL CLIMATE

Over the last decade we have witnessed burgeoning literature on the outcomes of ethical climates. We organize this work into four categories: work attitudes; ethical intentions, work behaviors and other ethical outcomes; psychological states; and performance and other behavioral outcomes.

Work Attitudes

A large proportion of the early empirical work on the outcomes of ethical climate examined the relationship between different ethical climates and work attitudes such as organizational commitment and job satisfaction (Martin & Cullen, 2006). Meta-analytical work by Martin and Cullen (2006) found a positive relationship between caring climates and both variables, and a negative relationship between instrumental climates and both variables. The meta-analysis also surfaced a non-significant relationship between other climates (independence, rules, and law-and-code) and both variables, with the exception of law-and-code climates.

Researchers have continued to examine the relationship between ethical climates and work attitudes including organizational commitment and job satisfaction. This work is generally supportive of the findings of the meta-analysis (Elçi & Alpkın, 2009; Filipova, 2009; Kim & Miller, 2008; Shafer, 2009; Shafer, Poon, & Tjosvold, 2013a; Shapira-Lishchinsky & Rosenblatt, 2010; Wang & Hsieh, 2012). For example, Filipova (2009) found that whilst caring climates were positively related to job satisfaction and organizational commitment, instrumental climates were negatively related to organizational commitment and positively related to turnover intentions.

A growing number of studies have begun to look at the relationships between ethical climates and different components of organizational commitment and job satisfaction, and examine mediators underlying such relationships. Borhani, Jalali, Abbaszadeh, and Haghdoost (2014) found that professionalism, caring, rules and independence climates were positively linked to affective organizational commitment, only professionalism and caring climates were linked to normative organizational commitment and none of the climates were positively linked to continuance commitment. Hung, Tsai, and Wu (2015) found that whilst caring and rules climates were positively related to affective organizational commitment, instrumental climates were negatively related. In addition, whilst law-and-code, instrumental and independence climates were positively related to continuance commitment, rules climates were negatively related. Finally, caring, law-and-code,

rules, and independence climates were positively related to normative commitment. Putranta and Kingshott (2011) found that although benevolence climates positively predicted all three dimensions of organizational commitment, egoism climates only negatively predicted affective commitment and neither normative nor continuance commitment. Tsai and Huang (2008) found that although instrumental climates were positively related to continuance commitment, these were negatively related to affective commitment and overall commitment. They also found a positive link between caring and rules climates and normative commitment. Shafer, Poon, and Tjosvold (2013b) found that benevolent climates positively influenced commitment by enhancing cooperative goals while instrumental climates exerted a negative influence by enhancing competitive goals and reducing cooperative goals.

Tsai and Huang (2008) looked at the relationships between different ethical climates and facets of job satisfaction. They found that a caring climate was positively related to overall job satisfaction, satisfaction with pay and satisfaction with work, an independent climate was positively related to satisfaction with supervision and overall job supervision, and a rules climate was positively related to satisfaction with supervision, satisfaction with co-workers, satisfaction with pay, and overall job satisfaction. In contrast, an instrumental climate was negatively associated with satisfaction with promotion and overall job satisfaction. Okpara and Wynn (2008) found that instrumental, professional, independence, efficiency, caring, and rules climates positively predicted most facets of job satisfaction. They also found positive relationships between all ethical climates and several dimensions of organizational commitment.

Studies adopting global measures of ethical climate have also found positive relationships between ethical climate and work attitudes such as organizational commitment and job satisfaction, and a negative relationship with turnover intentions (Demirtas & Akdogan, 2015; Erben & Guneser, 2008; Hashish, 2017; Hwang & Park, 2014; Kang, Stewart, & Kim, 2011; McManus & Subramaniam, 2014; Mulki et al., 2009; Numminen, Leino-Kilpi, Isoaho, & Meretoja, 2015; Ulrich, O'Donnell, Taylor, Farrar, Danis, & Grady, 2007; Weeks, Loe, Chonko, Martinez, & Wakefield, 2006). Researchers have also examined the mechanisms linking global measures of ethical climate to work attitudes (Jaramillo et al., 2006; Mulki, Jaramillo, & Locander, 2006). Mulki, Jaramillo, and Locander (2008) further established that ethical climate positively influenced job satisfaction, trust in supervisor, and emotional exhaustion and negatively influenced turnover intentions through reducing role ambiguity and conflict.

Positive associations have also been found between ethical climates and other work attitudes such as satisfaction with supervision (Mulki et al., 2009), organizational identification (DeConinck, 2011), person-organization fit (Lopez et al., 2009), supervisory trust (DeConinck, 2011), commitment to quality (Weeks et al. 2006), intention to participate in training (Kang et al., 2011), and career commitment (Kang et al., 2011). Research has also begun to examine the influence of ethical climate fit on employees' work attitudes. For example, Ambrose, Arnaud, and Schminke (2008) found that the fit between an employee's moral development and the ethical climate is positively linked with higher job satisfaction and organizational commitment,

and lower turnover intentions. Similarly, Domino et al. (2015) found that ethical climate fit of employees was positively related to both job satisfaction and organizational commitment.

Finally, as well as finding a direct relationship between both caring and service climates and job satisfaction, Goldman and Tabak (2010) also established that incongruence between employee perceptions of ideal and actual caring and independence climates negatively predicted job satisfaction.

In conclusion, our review of work suggests that the influence of ethical climates on work attitudes continues to be an important focus for researchers. Building on the work prior to 2006, recent work has begun to extend our knowledge by examining how ethical climates predict different facets of organizational commitment or job satisfaction.

Ethical Intentions, Work Behaviors and Other Ethical Outcomes

Martin and Cullen's (2006) meta-analytical work highlighted limited research examining the influence of ethical climates on employees' ethical intentions, behavior, and other ethical outcomes prior to 2006. However, over the last decade we have witnessed burgeoning research in this area. Whereas ethical intentions refer to how individuals intend to deal with ethical issues they face, ethical behavior refers to whether individuals are acting in ways consistent with what others in society believe is morally appropriate.

Growing work has examined the influence of ethical climates on employees' ethical intentions. For example, Shafer (2008) found that whereas egoistic climates predicted employees' intention to commit unethical acts, benevolent and principle climates reduced such intention. However, it has been found that ethical climates generally failed to predict whistleblowing intentions (Rothwell & Baldwin, 2006), with the exception of friendship or team climates (Rothwell & Baldwin, 2007). Shafer (2015) found that ethical climates were significantly associated with accountants' judgement and ethical intentions regarding earnings manipulation through influencing their beliefs in the importance of corporate social responsibility.

Researchers have also widely examined the influence of ethical climates on different measures of ethical and unethical behavior. For example, Mayer et al. (2010) found that it was negatively related to employee misconduct. Similarly, Hsieh and Wang (2016) found a strong negative relationship between ethical climate and organizational deviance mediated by job satisfaction, perceived organizational support, and positive affect. Smith, Thompson, and Iacovou (2009) found that rules climates (instrumental climates) were associated with lower (higher) misreporting. Arnaud (2010) established that several dimensions of an ethical work climate (norms of empathetic concern, collective moral motivation, and collective moral character) were significant predictors of ethical behavior. Similarly, Lu and Lin (2014) found that an ethical climate which emphasized rules, policies, independence, caring, professional standards, and law and codes was positively related to levels of ethical behavior amongst employees. However, drawing on social learning theory in their respective studies, Deshpande and Joseph (2009) and Fu and Deshpande (2012) found that only independence and rules climates out of all climate types were positively related

to employees' ethical behavior. At the workgroup-level, Arnaud and Schminke's (2012) found that an ethical climate based on self-focused reasoning within workgroups negatively predicted ethical behavior, but ethical climate based on other-focused reasoning did not, thus extending behavioral plasticity theory. Further, Yi, Dubinsky, and Lim (2012) found that the ethical attitudes of salespeople explained the process by which ethical climate reduced the likelihood that they would engage in unethical selling.

Researchers have begun to examine the influence of ethical climate on other ethical outcomes such as employees' moral awareness and justice norms. VanSandt, Shepard, and Zappe (2006) found that while benevolent or principle climates positively predicted moral awareness, egoistic climates negatively predicted moral awareness. Lau and Wong (2009) found that when working in an egoistic climate, employees reported a greater preference for distributive justice and when working in a principle climate, employees reported a greater preference for procedural justice. In contrast, when working in a benevolent climate, employees reported a lower preference for distributive justice. Shacklock, Manning, and Hort (2011) found that whilst working in an instrumental climate led human resource practitioners to have lower levels of perceived capacity to act and self-efficacy when faced with ethical dilemmas, working in caring and law and rules climates led human resource practitioners to have higher levels of perceived capacity to act and self-efficacy.

In summary, in the decade since the meta-analytical work of Martin and Cullen (2006), researchers have begun to look in more detail at how different ethical climates influence a variety of ethical outcomes at work. Despite this researchers have yet to examine whether ethical climates influence unethical behavior that is done with the intention of benefiting the organization, known in the literature as unethical pro-organizational behavior (Umphress, Bingham, & Mitchell, 2010).

Psychological States

Over the last decade another group of researchers has examined the relationship between ethical climates and employees' experienced psychological states, a topic which had been neglected by researchers in the previous decade. Jaramillo et al. (2013) established that ethical climates which stressed adherence to ethical norms led to higher levels of experienced mindfulness, which in turn reduced felt stress. Zoghbi-Manrique-de-Lara and Guerra-Baez (2016) found that rules and codes and efficiency climates led employees to express empathic concern and to be more mindful to present-moment phenomenon. They also found that rules and codes and social responsibility climates led them to be more understanding of others. In addition, although personal and moral caring climates led to a positive effect on humanity, social responsibility climates did not, having a negative effect on humanity. Humphries and Woods (2016) found that weak ethical climates resulting from understaffing led to moral distress on the part of employees. Finally, Pauly, Varcoe, Storch, and Newton's (2009) study also examined the influence of ethical climate on employees' perceptions of moral distress. They found that the stronger the employees' perceptions of the ethical climate, the lower the intensity and frequency of their moral distress.

Despite growing work in this area, there has been comparatively less research on the relationship between ethical climates and psychological states than other outcome variables.

Performance and Other Behavioral Outcomes

Since Martin and Cullen (2006) highlighted the scarcity of research examining the link between ethical climate and performance and behavioral outcomes, we have witnessed burgeoning research in this area at different levels of analysis. Studies have begun to examine the relationships between ethical climates and the job performance of employees, finding, for example, a positive relationship between a rules and codes climate, and both job performance and self-rated competence (e.g. Numminen et al., 2015). Researchers have also looked at the mechanisms linking ethical climates to job performance. Whereas Briggs, Jaramillo, and Weeks (2012), using social identity theory, found that ethical climate influences the job performance of salespeople by reducing lone wolf tendencies (the preference to work alone rather than with others), Tseng and Fan (2011) found that social responsibility and law/professional codes climates influenced job performance of employees through engagement and satisfaction with knowledge management. Jaramillo et al. (2013) also found that ethical climate enhanced job performance through fostering experienced mindfulness.

A number of studies have also established a positive relationship between ethical climates that stress adherence to rules and codes and both sales performance and customer satisfaction (Luria & Yagil, 2008; Schwepker, 2013). For example, Schwepker (2013) found that ethical climate enhanced sales performance through reducing ethical ambiguity and fostering commitment to providing superior customer value.

Researchers have also examined the influence of ethical climates on employees' extra-role behaviors. Drawing on social exchange theory, Leung (2008) found that whilst caring and law-and-code climates are positively associated with organizational citizenship behavior, instrumental and independence climates are negatively associated with organizational citizenship behavior. Drawing on the same theory, Huang, You, and Tsai (2012) found that whilst caring and rules climates predicted organizational citizenship behavior directed towards the organization, law-and-code and rules climates predicted organizational citizenship behavior directed towards co-workers. However, they found no influence of ethical climate on employees' job performance. Ghosh (2015), found a positive link between an ethical climate that stresses adherence to law and codes and ethical standards and caring for employees, is positively related to the exhibition of organizational citizenship behaviors by members of the organization. Suhonen, Stolt, Gudstafsson, Jatajisto, and Charalambous (2014) found that the ethical climate within hospitals and residential care facilities led nurses to provide greater individualized care towards patients.

Although some studies have incorporated other-rated measures of in-role and extra-role behavior (e.g. Arnaud, 2010), most empirical work has relied on self-rated measures. This is concerning as employees have a tendency to over-rate their own performance. We believe that future research would be enhanced by the inclusion of additional data to support self-rated measures (e.g. peer feedback on an individual's extra-role contributions).

Researchers who explored the link between ethical climates and negative outcomes of performance at work, such as treatment errors in hospitals, injury incidents and safety behaviors found that nurses with more positive perceptions of the ethical climate relating to relationships with patients in their organizations were less likely to have made medical errors when treating their patients (Hwang & Park, 2014). In addition, drawing on social exchange theory, Parboteeah and Kapp (2008) found that whereas the existence of principle climates was negatively related to injury incidents and positively related to safety-enhancing behaviors, benevolence climates were only negatively related to injury incidents, and egoism climates were related to neither.

Examining the influence of ethical climates on team and organizational performance outcomes, Rathert and Fleming (2008) found that a benevolence climate fostered higher levels of teamwork amongst healthcare workers, whereas Arnaud (2010) found that employees' collective perceptions of the ethical climate in their organizations were positively related to their collective perceptions of organizational performance. Similarly, both Choi, Moon, and Ko (2013) and Moon and Choi (2014) used concepts of stakeholder theory to establish that employees' collective perceptions of the ethical climate in their organizations led to higher levels of objective financial performance and perceived customer satisfaction through fostering organizational innovation. In addition, Moon and Choi (2014) found that organizational commitment and climate for innovation mediated the effects of ethical climate on organizational innovation. Finally, Saini and Martin (2009) found that whilst benevolent climates enhanced organizational performance through increasing risk-taking propensity, egoistic climates negatively influenced organizational performance through limiting risk-taking propensity.

Examining the effect of ethical climate on in-role and extra-role performance both Shin (2012) and Shin et al. (2015) grounded their research in aspects of institutional theory and social learning theory. Whereas Shin et al. (2015) found that ethical climates fostered higher levels of objective financial performance and collective organizational citizenship behavior through enhancing the justice climate within the organization, Shin (2012) established that employees' aggregated perceptions of ethical climate within the organization was positively related to collective organizational citizenship behaviors directed towards the organization and its employees. Finally, Vardaman, Gondo, and Allen (2014) argued that certain ethical climates are likely to promote pro-social rule-breaking whilst others are likely to constrain pro-social rule-breaking.

Researchers have also examined the relationship between ethical climate and dysfunctional behavior at work. Bulutlar and Oz (2009) established that whereas a rules climate was negatively related to several dimensions of bullying at work, both instrumental and profit climates were positively related to similar dimensions. Arnaud (2010) established a negative link between ethical climate and political behavior at work. Researchers examining the influence of ethical climates on organizational and professional conflict at work found that whereas principle and benevolent climates were negatively related to conflict, egoistic and instrumental climates were positively related to conflict (Shafer, 2009; Shafer et al., 2013a).

In summary, since Martin and Cullen's (2006) meta-analytical study we have seen a proliferation of research examining the relationship between ethical climates and work behaviors. This work provides strong evidence that ethical climates influence a whole host of behavioral outcomes at different levels of analysis including employees' job performance, extra-role performance, and dysfunctional behaviors, as well as team and organizational measures of performance and innovation.

Other Work Outcomes

Researchers have investigated numerous other work outcomes of ethical climate. For example, Stachowicz-Stanusch and Simha (2013) found that whereas law-and-code climates were negatively related to organizational corruption, caring and instrumental climates were positively related to it. Research has also established that ethical climates exert significant effects on executive directors' perceptions of statutory accountability demands, ability to identify internal and/or external downward accountability mechanisms in non-profit organizations (Laratta, 2011), payment discipline (Salamon & Mesko, 2016), and reduce managers' propensity to create budgetary slack in public organizations (Ozer & Yilmaz, 2011).

Researchers have also established that ethical climates predict leader-member exchange (LMX), team identification, and acquiescent as well as defensive silence. For example, Fein, Tziner, Lusky, and Palachy (2013) found that ethical climates stressing adherence to ethical norms fostered high quality LMX relationships between managers and their subordinates. Cheng and Wang (2015) examined the effects of ethical climates on team identification finding that whilst benevolent and principle climates were positively related to team identification, egoism climates were negatively related. Finally, Wang and Hsieh (2013) found that although caring and independence climates were negatively related to both acquiescent and defensive silence, instrumental climates were related positively to acquiescent silence. They also found that the relationship between instrumental, caring, and independence climates with acquiescent silence and defensive silence is mediated by employees' perceptions of organizational support.

MODERATION AND MEDIATION

Moderators of the Relationship between Ethical Climate and Outcomes

Prior to Martin and Cullen's (2006) meta-analysis, limited work had been conducted on the boundary conditions of the ethical climates/work outcomes relationship. Since then, however, researchers have begun to examine the moderating effects of different variables on the relationship between ethical climate and various attitudinal and behavioral outcomes. For example, VanSandt et al. (2006) found that the relationship between ethical climate and moral awareness was stronger for individuals with a higher level of education. Shafer (2008) found that those high in relativism were significantly influenced by the ethical climate in terms of reduced intentions to commit unethical acts, whereas those low in relativism were not. Shafer et al. (2013a) found that employees with high degrees of professional commitment reported less conflict and greater organizational commitment when they

perceived a benevolent ethical climate. Choi et al. (2013) found that an ethical climate was positively related to innovation when support for innovation was high as opposed to low. Rathert and Fleming (2008) found that an ethical climate had a stronger relationship with teamwork when the leader exhibited continuous quality improvement leadership behaviors. Finally, drawing on behavioral plasticity theory and social cognitive theory Arnaud and Schminke (2012) found that collective moral emotion and collective moral efficacy strengthened the influence of ethical climate on ethical behavior.

In conclusion, since Martin and Cullen's (2006) meta-analytical work there has been growing research on the moderators of the ethical climates/work outcomes relationship. This research has predominantly focused on individual differences or situational factors. In addition, only one study has examined the boundary conditions of the relationship between ethical climate and its antecedents, finding that there was a stronger relationship between paternalistic leadership and social responsibility/friendship climate when trust in leader was high (Otken & Cenkci, 2012).

Ethical Climate as a Mediator

As well as looking at the antecedents and outcomes of ethical climate, a growing body of literature has treated ethical climate as a mediating variable which explains the process by which leadership, management, and organizational practices influence workplace outcomes. Most of this work has focused on the role of ethical climate in explaining the effects of leadership behavior on work outcomes. For example, researchers have argued that through role-modelling ethical behaviors to their subordinates, ethical leaders foster ethical behavior, reduce unethical behavior, and enhance positive workplace attitudes through enhancing ethical climates in their organizations (Demirtas & Akdogan, 2015; Lu & Lin, 2014; Mayer et al., 2010; Shin, 2012; Shin et al., 2015). In addition, recent research has established that ethical climate mediates the relationship between ethical leadership and the financial performance of the organization (Shin et al., 2015). Researchers have also found that ethical climate mediates the relationship between other leadership styles and a whole host of work outcomes. For example, ethical climate has been found to moderate the relationships between instrumental leadership and employees' work attitudes (Mulki et al., 2009) and between benevolent leadership and employees' organizational citizenship behavior (Ghosh, 2015). Cheng and Wang (2015) also found that whereas the authoritarian dimension of paternalistic leadership reduces team identification through weakening the benevolence climate and enhancing the egoism climate, the benevolent and moral dimensions of paternalistic leadership fosters team identification through enhancing benevolence and principle climates. In addition, ethical climate has been found to mediate the relationship between the benevolent dimension of paternalistic leadership and affective commitment (Erben & Guneser, 2008).

Comparatively limited work has examined ethical climate as a mediator between organizational practices and work outcomes. Only Luria and Yagil (2008) have investigated such issues, finding that employees' perceptions of the justice climate in their organization positively predicts service performance through fostering a positive ethical climate.

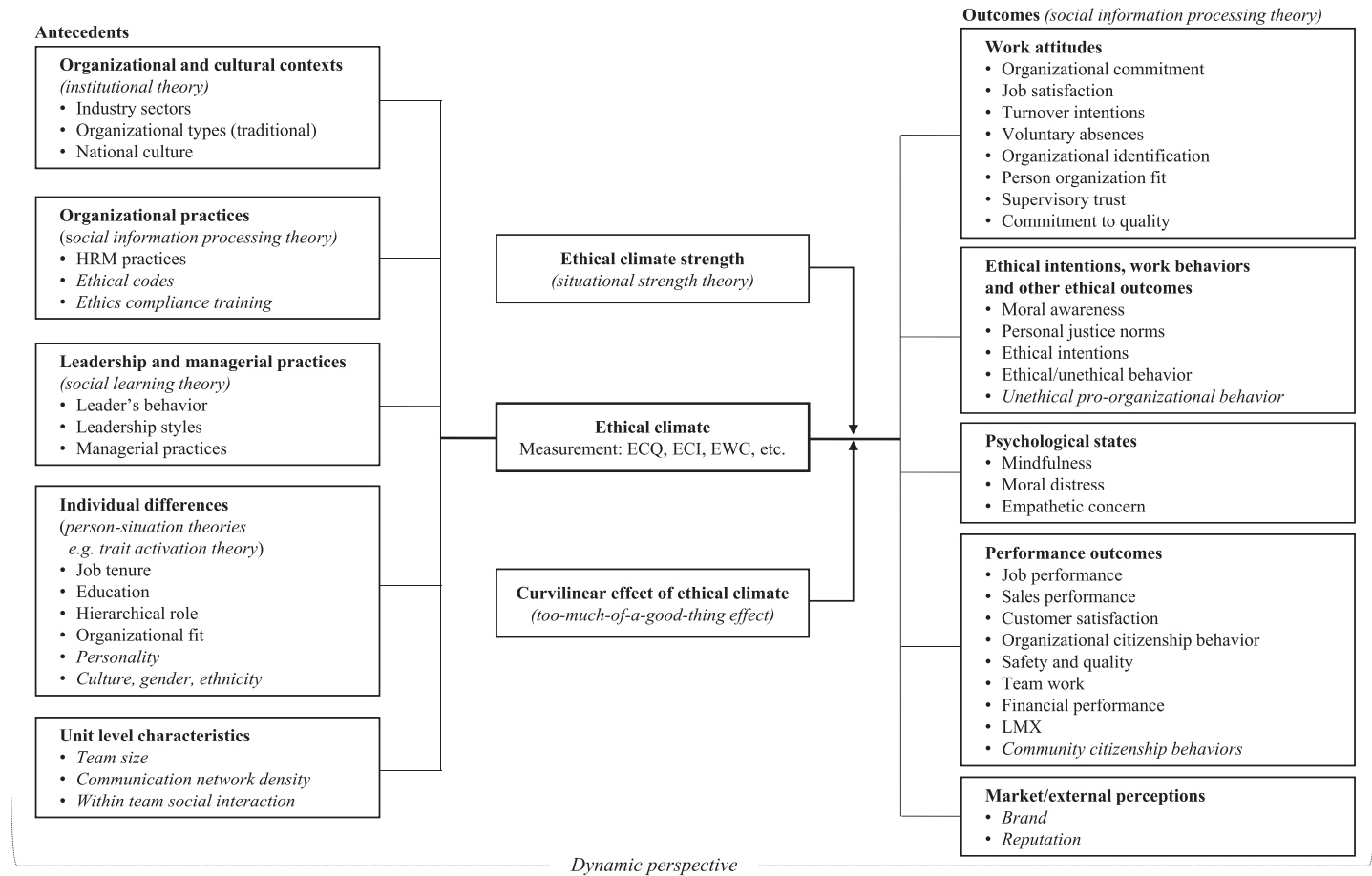
Ethical Climate as a Moderator

Prior to Martin and Cullen's (2006) meta-analytical work, limited research had treated ethical climate as a moderating variable which may accentuate or attenuate the influence of individual and team level constructs on employee work attitudes and behavior. Over the last decade, researchers have begun to examine the moderating effects of ethical climates by drawing on person-situation interactionist perspectives such as trait-activation theory. For example, Chen, Chen, and Liu (2013) found that whilst an instrumental ethical climate strengthened the relationship between negative affect and workplace deviance, a caring ethical climate weakened it. Similarly, examining the effects of ethical climates on the relationship between ethical dispositions and personal justice norms, Lau and Wong (2009), found that a benevolent ethical climate weakened the relationship between equity sensitivity and the distributive justice norm, and principle ethical climate weakened the relationship between the need for structure and procedural justice norm. Tanner et al. (2015) found that ethical climate weakened the relationship between motivation for recognition and job satisfaction and strengthened the relationship between self-efficacy and job satisfaction. Other studies have found that ethical climate strengthens the relationship between diversity climate and turnover intentions (Stewart et al., 2011), and weakens the relationship between performance and turnover intentions (Fournier, Tanner, Chonko, & Manolis, 2010). Whereas Simha and Stachowicz-Stanusch (2013) found that when managers believed that their organization had a strong professionalism/independence climate, they perceived a strong positive link between success and ethical behavior in their organization, Deshpande, Joseph, and Shu (2011) found that when managers believed that their organization had a strong rules climate, they perceived a strong positive link between success and ethical behavior in their organization.

In conclusion, since Martin and Cullen's work in 2006, research on ethical climate as a moderator has increased, especially work examining how ethical climate moderates the effects of individual differences on work outcomes.

AGENDA FOR FUTURE RESEARCH

Our review highlighted burgeoning work on the outcomes of ethical climates in an organizational context. Although researchers have also turned their attention to the antecedents of ethical climates and their boundary conditions, this work still lags behind that which focuses on its outcomes. For example, drawing from the organizational climate literature (Schneider, Ehrhart, & Macey, 2013) research on ethical climates may be extended to incorporate antecedents such as cultural values, gender, and ethnicity at the individual level, and also consider unit-level antecedents such as unit size, level of social interaction, and communication network density (as indicated in Figure 3). Outcomes may also be extended beyond the current focus on individual level outcomes (e.g. work attitudes, ethical cognitions, intentions, and behavior) and organizational level outcomes (e.g. performance outcomes) to consider how ethical climates influence employees' behavior directed towards external stakeholders (community citizenship behaviors), unethical behavior done with the intention of benefiting the organization (unethical pro-organizational behavior), and



ETHICAL CLIMATES IN ORGANIZATIONS

Figure 3: Future Research Directions

enhancement of external stakeholders' perceptions of the organization. In addition, although a small number of studies have drawn on key theoretical perspectives, such as social learning and identity theories, to show how ethical climates develop, our review highlighted that many studies have failed to integrate theory to explain how ethical climates shape work outcomes and when ethical climates are more likely to influence such outcomes. Our review also highlighted a number of methodological limitations of prior work including the predominant reliance on cross-sectional research designs and the tendency to measure ethical climates at the individual-level rather than as aggregated perceptions.

Based on these limitations, in the following sections we highlight how researchers might integrate alternative theoretical perspectives to study ethical climates and identify opportunities for empirical advancement of the literature. In order to demonstrate where our suggested future research may fit into the broader research context we have overlaid the proposed future research directions on the categorization of ethical climate studies we used previously (Figure 3). In this figure we also highlight the theoretical approaches that we consider appropriate to describe the effects of antecedents on ethical climates, ethical climates on outcomes, and moderators of the ethical climate/outcomes relationship. Our proposed extensions to the existing research landscape are noted in italics.

Opportunities for Theoretical Advancement

Although researchers have begun to draw on social learning and identity theories to explain the process by which ethical climates develop and influence work outcomes, the majority of empirical work fails to draw adequately on theory to explicate hypothesized relationships. As well as continuing to draw on social learning and identity theories, we also encourage researchers to consider a wider set of theoretical perspectives, as discussed next.

Institutional Theory

Growing work has examined the antecedents of ethical climates within organizations since Martin and Cullen's (2006) meta-analytical work. Our review however indicates that, despite Simha and Cullen (2012) highlighting the potential utility of institutional theory in examining how external organizational contexts impact on ethical climates, very little research has been done in this space (see Shin [2012] and Shin et al. [2015] for two notable exceptions). Given that there have been a number of high-profile ethical transgressions involving organizations globally, and many of these are clustered in certain sectors or geographic regions, more work is needed on the way in which the external context impacts ethical climate. To do this, we suggest that institutional theory may be used more extensively to consider the way in which the external context impacts ethical climates in organizations. Underpinning institutional theory is the assumption that in order to survive and thrive, organizations need social acceptability and creditability (Scott, 2001). In other words, organizations need to act in a way which is perceived as legitimate within the broader context, which includes the prevailing rules, regulations, values, and norms. Legitimacy, in

this context, is considered to be the general perception that an entity is acting in a way that is desirable and appropriate within the socially constructed institutional frameworks (Suchman, 1995). The desire for legitimacy leads to isomorphism within organizational fields (DiMaggio & Powell, 1983). We suggest that future research may consider the extent to which certain prevailing factors in the overarching context influence the formation of ethical climates within organizations operating in this environment. Focusing on different industrial sectors, researchers could study whether organizations in highly regulated sectors have different ethical climates than those in less regulated sectors. For example, we might expect there to be a greater prevalence of rules and law and codes climates in organizations operating in industrial settings where there are high as opposed to low levels of regulation. In addition, researchers might examine whether there is a lower prevalence of rules and law and codes climates in less developed institutional settings where the legal system is less transparent and there are higher levels of corruption.

Social Information Processing Theory

One theory that helps to explicate the processes by which ethical climates influence work outcomes is social information processing theory (SIPT) (Salancik & Pfeffer, 1978). SIPT intimates that individuals use the social information obtained from their work environment to adapt their behaviors to the social context they find themselves within. In other words, social information assists individuals by providing them with cues to interpret the nature of that environment and deduce appropriate ways to behave (Boekhorst, 2014). Although a small number of researchers have drawn on SIPT to argue that ethical climates offer employees guidance as to the types of behavior that are deemed appropriate in that work environment (Mayer et al., 2010; McManus & Subramaniam, 2014), most research examining the relationship between ethical climates and work outcomes has failed to provide theoretical justification for the relationship, with the exception of studies that have drawn on social learning theory to explicate the mediating effects of ethical climates on the relationship between leadership and work outcomes, and social exchange theory to explicate the link between ethical climates and a number of different work outcomes. Whereas social learning theory provides a useful explanation as to how leaders shape the ethical climate through role modelling appropriate behaviors to employees, and social exchange theory explains how people reciprocate positive treatment by the organization, SIPT provides a more precise explanation as to how employees act on cues obtained from the work environment. Based on the SIPT, we would expect the prevalent ethical climate in the organization or organizational unit to be an important source of information from the work environment that indicates what constitutes appropriate behavior in that context, especially when making decisions with a moral component. For example, based on SIPT we may expect a strong law-and-code climate to influence employees' ethical conduct through providing cues to employees that it is important to abide by the law and ethical codes. Similarly, through signaling the importance of caring for others, we may expect a caring climate to influence the propensity of employees to engage in organizational citizenship

behaviors and community citizenship behaviors (e.g. employee volunteering). In other words, researchers can use the SIPT theory to explain the differential effects of ethical climates on a variety of work outcomes. As highlighted in Figure 3, researchers may also draw on SIPT theory to explain how organizational policies and practices (e.g., ethical codes and compliance training) influence ethics related work outcomes through fostering a law-and-code ethical climate where employees feel it is important to follow the ethical guidelines provided by the organization.

Trait-Activation Theory

To further our understanding of the situations in which ethical climates are more likely to foster positive workplace outcomes for employees, we call on researchers to build on extant work (Chen et al., 2013) by incorporating prominent person-situation theoretical perspectives such as trait activation theory (TAT) (Tett & Guterman, 2000), which suggests that “personality traits and situations are sources of behavioural variance, and traits are expressed as responses to trait-relevant situational cues” (Dawkins, Tian, Newman, & Martin, 2017: 177). According to TAT the influence of personality traits on employee work attitudes and behaviors may depend on inducements offered by the context (situational cues), and therefore provides a theoretical explanation as to why employees may respond differently to organizational climates, such as ethical climate, depending on their personality traits and other individual differences (e.g. cultural value orientations). In line with TAT, prior work has confirmed that the influences of organizational or team climates on employee behaviors are accentuated when employees exhibit certain personality traits (e.g. Byrne, Stoner, Thompson, & Hockwarter, 2005). In the case of ethical climate we might expect individuals with high levels of agreeableness to respond more positively to caring ethical climates in the form of enhanced work attitudes and citizenship behaviors than those with low levels as individuals high in agreeableness generally tend to be altruistic, compassionate, and place significant value on protecting and promoting the welfare of others around them (Carlo, Okun, Knight, & de Guzman, 2005). In addition, we might expect individuals high in conscientiousness to respond more positively to rules and law-and-code ethical climates in the form of enhanced job performance and work attitudes because such climates reduce the levels of ambiguity that conscientious individuals dislike. In contrast, individuals who rank highly on openness to experience may respond less positively to rules and law-and-code ethical climates as the lower levels of ambiguity reduce the opportunity for new experiences that such individuals crave. Finally, we might expect individuals high in uncertainty avoidance to respond more positively than those low in uncertainty avoidance to rules and law-and-code climates in the form of enhanced job performance and work attitudes, as such individuals prefer to have formal rules and structures in the workplace to guide their behavior (Clugston, Howell, & Dorfman, 2000).

Situational Strength Theory

Future researchers may consider drawing upon situational strength theory (SST) to extend the work done by Shin (2012) and enhance our understanding of how

different ethical climates and the strength of those climates influence workplace outcomes. Situational strength has been defined as “implicit or explicit cues provided by external entities regarding the desirability of potential behaviors” (Meyer, Dalal, & Hermida, 2010: 122). A strong situation is one where there are unambiguous cues, clear behavioral expectations and incentivized compliance (Smithikrai, 2008), which leads to a high degree of congruence of individuals’ perceptions of appropriate behavior (Beaty, Cleveland, & Murphy, 2001). Despite the intuitive appeal of situational strength theory and recognition within organizational sciences that situational strength is a potentially important mechanism, which aligns behaviors and influences the extent to which relevant outcomes are predictable (Meyer, et al., 2010), prior work on ethical climates, especially that which looks at the strength of ethical climates, has not drawn on situational strength theory to explain the effects of ethical climates. As research has established that the effects of organizational climates on outcomes are augmented in strong climates and attenuated in weak climates (Schneider, Salvaggio & Subirats, 2002), future research may build on initial work by Shin (2012) to examine, in line with SST, whether ethical climate strength will accentuate the influence of the ethical climate on work outcomes across different organizational contexts. For example, we might expect when caring ethical climate strength is stronger the relationship between caring ethical climate and outcomes such as organizational commitment and organizational citizenship behaviors will be stronger. As well as examining the moderating effects of ethical climate strength on the ethical climate/work outcomes relationship, future research might also draw on SST to examine whether through providing clarity over what behaviors are expected at work (reducing situational ambiguity), strong ethical climates may neutralize the tendency for individuals with certain personality traits to engage in negative forms of behavior. For example, researchers might determine whether the tendency for those high in the personality traits of psychological entitlement, narcissism, psychopathy, and Machiavellianism (e.g. Roeser, McGregor, Stegmaier, Mathew, Kubler, & Muele, 2016) to engage in unethical behavior will be reduced when the strength of certain ethical climates (e.g. rules and law-and-code climates) are high.

Opportunities for Empirical Advancement

Incorporating a Dynamic Perspective to Studying Ethical Climates

Our review has identified that all but two empirical studies utilized cross-sectional data to study the antecedents and outcomes of ethical climates. As discussed earlier, cross-sectional designs do not provide strong support for causal influences between variables. They also do not assist us in examining how ethical climates change over time, the factors which influence such changes, and the outcomes of change. In other words, cross-sectional designs ignore the dynamic nature of ethical climates.

We advocate dynamic approaches to studying ethical climates, given that organizations are not static entities, and organizational climates are unlikely to remain constant. In line with process studies that focus on how and why things emerge, develop and change over time (Langley, Smallman, Tsoukas, & Van De Ven, 2013), research on ethical climates could be extended to explicitly draw on theorizing that incorporates temporality as a

way of explaining and understanding organizational phenomenon. For example, building on work by Gehman, Trevino, and Garud (2013), which looked at how moral values within an organization evolve over time, researchers might adopt a longitudinal panel study design to examine how ethical climates change over time, what induces change (both positive and negative), and how changing climates influence outcomes. More specifically, researchers might consider the impact of exogenous “jolts” (Meyer, 1982) such as social upheaval, technological disruptions, leadership, and regulatory change on ethical climates. For example, after the global financial crisis, governments in many countries tightened up regulation of the financial sector. Such changes are likely to impact ethical climates within financial institutions as they tighten up their practices and policies to ensure compliance with such regulations. Researchers might also consider how ethical climates are affected by organizational change. For example, we might expect that organizational change that involves significant staff restructuring and/or downsizing will have a negative influence on caring ethical climates and a positive influence on instrumental climates, as individuals put their own interests first.

Curvilinear Effects of Ethical Climates

In contrast to the linear approach by previous research, we argue that future research should also examine the potential curvilinear effects of ethical climates. This is important as research has shown that relationships between contextual factors at work and workplace outcomes demonstrate a curvilinear effect (e.g. Isenberg, 1981; Yerkes & Dodson, 1908). Recent work has extended this thinking to show how not only seemingly negative aspects of the organization can demonstrate this effect, but also that ordinarily beneficial circumstances may lead to negative outcomes. This theoretical principle is referred to as the too-much-of-a-good-thing effect (TMGT effect) (Pierce & Aguinis, 2013), and has been observed in numerous studies. For example, researchers have found curvilinear effects of perceived organizational support (POS) on organizational outcomes (Burnett, Chiaburu, Shapiro, & Li, 2015). Drawing on the TMGT perspective, we propose that positive effects on work outcomes facilitated by ethical climates may “reach context-specific inflection points, after which the relations turn asymptotic or even negative, resulting in an overall pattern of curvilinearity” (Pierce & Aguinis, 2013: 325). For example, we might expect a curvilinear relationship between a caring ethical climate and employees’ job performance. Although a caring ethical climate will signal to employees that the organization cares about their wellbeing and lead them to reciprocate in the form of positive work attitudes and behaviors, too high levels of caring climate may reduce employee motivation, as a result of heightened job security, and negatively influence performance at work. In addition, whilst we might expect rules and law-and-code ethical climates to foster innovation within an organization through indicating to employees that there are policies and regulations in place to guide their behavior in the workplace, at too high levels such climates may constrain innovation if employees feel overburdened having to abide by such policies and regulations. For example, in the medical research field whilst researchers realize the need for their organizations and professional associations to develop policies and regulations to

guide their ethical behavior, too much bureaucracy can make the research process very complicated and act as a disincentive to explore new avenues of research.

Ethical Climates at Multiple Levels of Analysis

As highlighted earlier, prior work on ethical climates has predominantly been conducted at the individual level of analysis, with only a small number of studies having aggregated employees' individual-level perceptions of ethical climate to the departmental or organizational levels of analysis (e.g. Arnaud & Schminke, 2012; Mayer et al., 2010). Given ethical climate has been conceptualized as a variable that captures employees' shared perceptions of the organizational climate, we call on researchers to measure ethical climate at higher levels through aggregating the ratings provided by raters within the unit being analyzed rather than measure it as an individual-level perception. When aggregating individual-level perceptions to a higher level of analysis, it is necessary to demonstrate that there is agreement between raters within the unit (interrater agreement), and relative consistency in ratings provided by multiple raters of multiple targets (interrater reliability) through the calculation of r_{WG} statistics for interrater agreement, and ICC(1) and ICC(2) statistics for interrater reliability (LeBreton & Senter, 2008). In order to justify aggregation of individual-level data to higher levels, and show that shared perceptions meaningfully exist, researchers generally recommend an ICC(1) of more than .20 (Bliese, 2000), an ICC(2) of more than .70 (Bliese, 2000) and a r_{WG} requirement of .70 or above (James, Demaree, & Wolf, 1984).

When examining the existence of ethical climates at higher levels of analysis, researchers should seek to identify whether the ethical climates highlighted in Victor and Cullen's (1987, 1988) framework might be better captured at the team or department level (e.g. caring or instrumental climates) and others at the organizational level (e.g. law-and-code climates). In order to determine whether certain climates are stronger at different organizational levels, researchers might examine whether shared perceptions exist at the team, department, and organizational levels of analysis, and the level of agreement in such perceptions (climate strength). Multi-level research into ethical climate which allows for the aggregation of perceptions at different levels will not only produce a more accurate measure of ethical climate consistent with its conceptualization as a higher level construct, but will also allow for comparisons between areas and levels of the business. For example, researchers could study whether, within an organization, climate dilutes or changes across hierarchy, business functions, or regions.

As well as measuring ethical climate at higher levels of analysis (e.g. departmental and organizational) and examining its relationship with antecedents and outcomes at these levels of analysis, researchers should also consider assessing relationships at cross-levels of analysis using techniques such as multi-level structural equation modelling (Preacher, Zyphur, & Zhang, 2010). For example, future research could examine cross-level direct influences such as the influence of ethical climates at the departmental-level on work outcomes at the individual-level, or the influence of organizational practices on ethical climates at the department level. For a two-level analysis, researchers should sample at least five employees from more than 40 units (departments or organizations) to achieve adequate statistical

power (Scherbaum & Ferreter, 2009). When modelling the cross-level effects of independent variables at higher levels of analysis on dependent variables at lower levels of analysis, increasing the number of units being sampled will result in higher statistical power (Mathieu, Aguinis, Culpepper, & Chen, 2012).

Culture and Ethical Climates

Although researchers have begun to examine the influence of cultural context (Laratta, 2009; Parboteeah et al., 2014), this research has simply looked at the prevalence of ethical climates in different cultural contexts, and has neglected examination of whether dimensions of the national culture (e.g. power/distance, masculinity) may predict the existence of different ethical climates. Drawing on Hofstede's (2001) cultural dimensions framework, we might expect certain ethical climates to be more widespread in organizations located in national cultures which rank highly across certain cultural dimensions. For example, we might expect that in cultures high in power distance, as opposed to those low in power distance, there will be a greater prevalence of rules and law-and-code ethical climates in organizations, as such cultures stress the need to maintain control through organizational hierarchies. In addition, we might expect that in more feminine and collectivistic cultures we will see a greater prevalence of caring ethical climates in organizations due to the emphasis that such cultures place on caring for and being empathic towards others. Conversely, in more masculine and individualistic cultures we will be more likely to encounter instrumental ethical climates due to the stress these cultures place on competitiveness and individuality.

CONCLUSION

This article presented an in-depth review of empirical research on ethical climates since the seminal meta-analytical work of Martin and Cullen (2006). We examined how ethical climate has been conceptualized and measured in previous research, and reviewed extant work on its antecedents and outcomes. Our review identified key gaps in the literature and led to the development of a future research agenda highlighting opportunities to integrate alternative theoretical perspectives along with opportunities for empirical testing and advancement.

REFERENCES

- Ambrose, M. L., 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.
- Arnaud, A. 2006. *A new theory and measure of ethical work climate: The psychological process model (PPM) and the ethical climate index (ECI)*. PhD Dissertation, University of Central Florida.
- . 2010. Conceptualizing and measuring ethical work climate: Development and validation of the Ethical Climate Index. *Business and Society*, 49(2): 345–358.
- Arnaud, A., & Schminke, M. 2012. The ethical climate and context of organizations: A comprehensive model. *Organization Science*, 23(6): 1767–1780.

- 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(3): 345–358.
- Beaty, J. C., Cleveland, J. N., & Murphy, K. R. 2001. The relation between personality and contextual performance in ‘strong’ versus ‘weak’ situations. *Human Performance*, 14: 125–148.
- Belak, J., & Mulej, M. 2009. Enterprise ethical climate changes over life cycle stages. *Kybernetes*, 38: 1377–1378.
- Bliese, P. 2000. Within-group agreement, non-independence, and reliability. In K. Klein & S. Kozlowski (Eds.), *Multi-level theory, research, and methods in organizations*: 349–381. San Francisco, CA: Jossey-Bass.
- Boekhorst, J. A. 2014. The role of authentic leadership in fostering workplace inclusion: A social information processing perspective. *Human Resource Management*, 54(2): 241–264.
- Borhani, F., Jalali, T., Abbaszadeh, A., & Haghdooost, A. 2014. Nurses’ perception of ethical climate and organizational commitment. *Nursing Ethics*, 21(3): 278–288.
- Briggs, E., Jaramillo, F., & Weeks, W. A. 2012. The influences of ethical climate and organization identity comparisons on salespeople and their job performances. *Journal of Personal Selling and Sales Management*, 32(4): 421–436.
- Bulutlar, E., & Oz, E. U. 2009. The effects of ethical climates on bullying behavior in the workplace. *Journal of Business Ethics*, 86: 273–295.
- Burnett, M. F., Chiaburu, D. S., Shapiro, D. L., & Li, N. 2015. Revisiting how and when perceived organizational support enhances taking charge: An inverted u-shaped perspective. *Journal of Management*, 41(7): 1805–1826.
- Byrne, Z. S., Stoner, J., Thompson, K. R., & Hockwarter, W. 2005. The interactive effects of conscientiousness, work effort, and psychological climate on job performance. *Journal of Vocational Behavior*, 66: 326–338.
- Carlo, G., Okun, M. A., Knight, G. P., & de Guzman, M. R. T. 2005. The interplay of traits and motives on volunteering: Agreeableness, extraversion and prosocial value motivation. *Personality and Individual Differences*, 38(6): 1293–1305.
- Chen, C. C., Chen, M. Y. C., & Liu, Y. C. 2013. Negative affectivity and workplace deviance: The moderating role of ethical climate. *International Journal of Human Resource Management*, 24(15): 2894–2910.
- Cheng, M. Y., & Wang, L. 2015. The mediating effect of ethical climate on the relationship between paternalistic leadership and team identification: A team-level analysis in the Chinese context. *Journal of Business Ethics*, 129: 639–654.
- Choi, B. K., Moon, H. K., & Ko, W. 2013. An organization’s ethical climate, innovation, and performance. *Management Decision*, 51(6): 1250–1275.
- Clugston, M., Howell, P. J., & Dorfman, P. W. 2000. Does cultural socialization predict multiple bases and foci of commitment? *Journal of Management*, 26(1): 5–30.
- 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.
- Dark, D., & Rix, M. 2015. Back to the future: Using the Ethical Climate Questionnaire to understand ethical behaviour in not for profits. *Asia Pacific Journal of Health Management*, 10(3): SI22–SI31.
- Dawkins, S., Tian, A. W., Newman, A., & Martin, A. 2017. Psychological ownership: A review and research agenda. *Journal of Organizational Behavior*, 38: 163–183.
- DeConinck, J. B. 2010. The influence of ethical climate on marketing employees’ job attitudes and behaviors. *Journal of Business Research*, 63: 384–391.

- . 2011. The effects of ethical climate on organizational identification, supervisory trust, and turnover among salespeople. *Journal of Business Research*, 64: 617–624.
- Demirtas, O., & Akdogan, A. A. 2015. The effect of ethical leadership behavior on ethical climate, turnover intention, and affective commitment. *Journal of Business Ethics*, 130: 59–67.
- Deshpande, S. P., & Joseph, J. 2009. Impact of emotional intelligence, ethical climate, and behavior of peers on ethical behavior of nurses. *Journal of Business Ethics*, 85(3): 403–410.
- Deshpande, S., Joseph, J., & Shu, X. 2011. Ethical climate and managerial success in China. *Journal of Business Ethics*, 99(4): 527–534.
- DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional Isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48: 147–160.
- Domino, M. A., Wingreen, S. C., & Blanton, J. E. 2015. Social cognitive theory: The antecedents and effects of ethical climate fit on organizational attitudes of corporate accounting professionals—a reflection of client narcissism and fraud attitude risk. *Journal of Business Ethics*, 131: 453–467.
- Duh, M., Belak, J., & Milfelner, B. 2010. Core values, culture and ethical climate as constitutional elements of ethical behaviour: Exploring differences between family and non-family enterprises. *Journal of Business Ethics*, 97: 473–489.
- Elci, M., & Alpan, L. 2009. The impact of perceived organizational ethical climate on work satisfaction. *Journal of Business Ethics*, 84(3): 297–311.
- Erben, G. S., & Guneser, A. B. 2008. The relationship between paternalistic leadership and organizational commitment: Investigating the role of climate regarding ethics. *Journal of Business Ethics*, 82: 955–968.
- Fein, E. C., Tziner, A., Lusky, L., & Palachy, O. 2013. Relationships between ethical climate, justice perceptions, and LMX. *Leadership & Organization Development Journal*, 34(2): 147–163.
- Filipova, A. A. 2009. Licensed nurses' perceptions of ethical climates in skilled nursing facilities. *Nursing Ethics*, 16(5): 574–588.
- Fournier, C., Tanner, J. F., Chonko, L. B., & Manolis, C. 2010. The moderating role of ethical climate on salesperson propensity to leave. *Journal of Personal Selling & Sales Management*, 30(1): 7–22.
- Fritzche, D. J., & Becker, H. 1984. Linking management behavior to ethical philosophy. *Academy of Management Journal*, 27: 166–175.
- Fu, W., & Deshpande, S. 2012. Factors impacting ethical behavior in a Chinese state-owned steel company. *Journal of Business Ethics*, 105: 231–237.
- Gehman, J., Trevino, L. K., & Garud, R. 2013. Values work: A process study of the emergence and performance of organizational values practices. *Academy of Management Journal*, 56(1): 84–112.
- Ghosh, K. 2015. Benevolent leadership in not-for-profit organizations. *Leadership & Organization Development Journal*, 36(5): 592–611.
- Goldman, A., & Tabak, N. 2010. Perception of ethical climate and its relationship to nurses' demographic characteristics and job satisfaction. *Nursing Ethics*, 17(2): 233–246.
- Guerci, M., Radaelli, G., Siletti, E., Cirella, S., & Shani, A. B. R. 2015. The impact of human resource management practices and corporate sustainability on organizational ethical climates: An employee perspective. *Journal of Business Ethics*, 126: 325–342.

- Hansen, S. D., Dunford, B., Alge, B. J., & Jackson, C. L. 2016. Corporate social responsibility, ethical leadership, and trust propensity: A multi-experience model of perceived ethical climate. *Journal of Business Ethics*, 137(4): 649–662.
- Hashish, E. A. A. 2017. Relationship between ethical work climate and nurses' perception of organizational support, commitment, job satisfaction and turnover intent. *Nursing Ethics*, 24(2): 151–166.
- Hofstede, G. 2001. *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hsieh, H. H., & Wang, Y. D. 2016. Linking perceived ethical climate to organizational deviance: The cognitive, affective, and attitudinal mechanisms. *Journal of Business Research*, 69(9): 3600–3608.
- Huang, C. C., You, C. S., & Tsai, M. T. 2012. A multidimensional analysis of ethical climate, job satisfaction, organizational commitment, and organizational citizenship behaviors. *Nursing Ethics*, 19(4): 513–529.
- Humphries, A., & Woods, M. 2016. A study of nurses' ethical climate perceptions: Compromising in an uncompromising environment. *Nursing Ethics*, 23(3): 265–276.
- Hung, Y., Tsai, T. Y., & Wu, Y. F. 2015. The effects of ethical work climate on organizational commitment in Taiwanese Military units. *Chinese Management Studies*, 9(4): 664–680.
- Hwang, J. I., & Park, H. A. 2014. Nurses' perception of ethical climate, medical error experience and intent-to-leave. *Nursing Ethics*, 21(1): 28–42.
- Isenberg, D. J. 1981. Some effects of time-pressure on vertical structure and decision-making accuracy in small groups. *Organizational Behavior and Human Performance*, 27(1): 119–134.
- James, L. R., Demaree, R. G., & Wolf, G. 1984. Estimating within-group inter-rater reliability with and without response bias. *Journal of Applied Psychology*, 69: 86–98.
- Jaramillo, F., Mulki, J. P., & Solomon, P. 2006. The role of ethical climate on salesperson's role stress, job attitudes, turnover intention, and job performance. *Journal of Personal Selling & Sales Management*, 26: 271–282.
- Jaramillo, F., Mulki, J. P., & Boles, J. S. 2013. Bringing meaning to the sales job: The effect of ethical climate and customer demandingness. *Journal of Business Research*, 66: 2301–2307.
- Kang, D. S., Stewart, J., & Kim, H. 2011. The effects of perceived external prestige, ethical organizational climate, and leader-member exchange (LMX) quality on employees' commitments and their subsequent attitudes. *Personnel Review*, 40(6): 761–784.
- Kaptein, M. 2011. Understanding unethical behavior by unraveling ethical culture. *Human Relations*, 64(6): 843–869.
- Kim, N. Y., & Miller, G. 2008. Perceptions of the ethical climate in the Korean tourism industry. *Journal of Business Ethics*, 82: 941–954.
- Kish-Gephart J. J., Harrison D. A. & Trevino L. K. 2010. Bad apples, bad cases, and bad barrels. *Journal of Applied Psychology*, 95(1): 1–31.
- Kohlberg, L. 1970. *Moral stages and moralization. moral development and behavior*. New York: Holt, Rinehart & Winston.
- Langley, A., Smallman, C., Tsoukas, H., & Van De Ven, A. H. 2013. Process studies of change in organization and management: Unveiling temporality, activity and flow. *Academy of Management Journal*, 56(1): 1–13.
- Laratta, R. 2009. Ethical climate in nonprofit organizations: A comparative study. *International Journal of Sociology and Social Policy*, 29(7/8): 358–371.

- . 2011. Ethical climate and accountability in nonprofit organizations: A comparative study between Japan and the UK. *Public Management Review*, 13(1): 43–63.
- Lau, V. P., & Wong, Y. Y. 2009. Direct and multiplicative effects of ethical dispositions and ethical climates on personal justice norms: A virtue ethics perspective. *Journal of Business Ethics*, 90(2): 279–294.
- LeBreton, J. M., & Senter, J. L. 2008. Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11(4): 815–852.
- Lemmergaard, J., & Lauridsen, J. 2008. The ethical climate of Danish firms: A discussion and enhancement of the ethical-climate model. *Journal of Business Ethics*, 80(4): 653–675.
- Leung, A. S. M. 2008. Matching ethical work climate to in-role and extra-role behaviors in a collectivist work setting. *Journal of Business Ethics*, 79(1/2): 43–55.
- Lopez, T. B., Babin, B. J., & Chung, C. 2009. Perceptions of ethical work climate and person–organization fit among retail employees in Japan and the US: A cross-cultural scale validation. *Journal of Business Research*, 62: 594–600.
- Lu, C. S., & Lin, C. C. 2014. The effects of ethical leadership and ethical climate on employee ethical behavior in the international port context. *Journal of Business Ethics*, 124: 209–223.
- Luria, G., & Yagil, D. 2008. Procedural justice, ethical climate and service outcomes in restaurants. *International Journal of Hospitality Management*, 27: 276–283.
- Macklin, R., Martin, A., & Mathison, K. 2015. An integrated model of justice and ethical climates and the influence of cultural diversity. *Management and Organization Review*, 11(1): 101–121.
- Malloy, D. C., & Agarwal, J. 2010. Ethical climate in government and non-profit sector: Public policy implications for service delivery. *Journal of Business Ethics*, 94: 3–21.
- Manroop, L. 2015. Human resource systems and competitive advantage: An ethical climate perspective. *Business Ethics: A European Review*, 24(2): 186–204.
- Manroop, L., Singh, P., & Ezzedeen, S. 2014. Human resource systems and ethical climates: A resource-based perspective. *Human Resource Management*, 53(5): 795–816.
- Martin, K. D., & Cullen, J. B. 2006. Continuities and extensions of ethical climate theory: A meta-analytic review. *Journal of Business Ethics*, 69: 175–194.
- Mathieu, J. E., Aguinis, H., Culpepper, S. A., & Chen, G. 2012. Understanding and estimating the power to detect cross-level interaction effects in multilevel modelling. *Journal of Applied Psychology*, 97: 951–966.
- Mayer, D. M., Kuenzi, M., & Greenbaum, R. L. 2010. Examining the link between ethical leadership and employee misconduct: The mediating role of ethical climate. *Journal of Business Ethics*, 95: 7–16.
- McManus, L., & Subramaniam, N. 2014. Organisational and professional commitment of early career accountants: Do mentoring and organisational ethical climate matter? *Accounting & Finance*, 54(4): 1231–1261.
- Meyer, A. D. 1982. Adapting to environmental jolts. *Administrative Science Quarterly*, 27: 515–537.
- Meyer, R. D., Dalal R. S., & Hermida R. 2010. A review and synthesis of situational strength in organizational sciences. *Journal of Management*, 36(1): 121–140.
- Moon, H. K., & Choi, B. K. 2014. How an organization's ethical climate contributes to customer satisfaction and financial performance, *European Journal of Innovation Management*, 17(1): 85–106.
- Mulki, J. P., Jaramillo, F., & Locander, W. B. 2006. Effects of ethical climate and supervisory trust on salesperson's job attitudes and intentions to quit. *Journal of Personal Selling & Sales*, 26: 19–26.

- . 2008. Effect of ethical climate on turnover intention: Linking attitudinal- and stress theory. *Journal of Business Ethics*, 78: 559–574.
- . 2009. Critical role of leadership on ethical climate and salesperson behaviors. *Journal of Business Ethics*, 86: 125–141.
- Numminen, O., Leino-Kilpi, H., Isoaho, H., & Meretoja, R. 2015. Ethical climate and nurse competence: Newly graduated nurses' perceptions. *Nursing Ethics*, 22(8): 845–859.
- Okpara, J. O., & Wynn, P. 2008. The impact of ethical climate on job satisfaction, and commitment in Nigeria. *Journal of Management Development*, 27(9): 935–950.
- Olson, L. 1994. Ethical climate in health care organizations. *International Nursing Review*, 42(3): 85–90.
- . 1998. Hospital nurses' perceptions of the ethical climate of their work setting. *Journal of Nursing Scholarship*, 30(4): 345–349.
- Otken, A. B., & Cenkci, T. 2012. The impact of paternalistic leadership on ethical climate: The moderating role of trust in leader. *Journal of Business Ethics*, 108: 525–536.
- Ozer, G., & Yilmaz, E. 2011. Effects of procedural justice perception, budgetary control effectiveness and ethical work climate on propensity to create budgetary slack. *Business and Economics Research Journal*, 2(4): 1–18.
- Parboteeah, K. P., Chen, H. C., Lin, Y. T., Chen, I. H., Lee, A. Y. P., & Chung, A. 2010. Establishing organizational ethical climates: How do managerial practices work? *Journal of Business Ethics*, 97: 596–611.
- Parboteeah, K. P., & Kapp, E. 2008. Ethical climates and safety-enhancing behaviors: An empirical test. *Journal of Business Ethics*, 80: 515–529.
- Parboteeah, K. P., Seriki, H. T., & Hoegl, M. 2014. Ethnic diversity, corruption and ethical climates in sub-Saharan Africa: Recognizing the significance of human resource management. *International Journal of Human Resource Management*, 25(7): 979–1001.
- Pauly, B., Varcoe, C., Storch, J., & Newton, L. 2009. Registered nurses' perceptions of moral distress and ethical climate. *Nursing Ethics*, 16(5): 561–573.
- Pierce, J. R., & Aguinis, H. 2013. The too-much-of-a-good-thing effect in management. *Journal of Management*, 39(2): 313–338.
- Preacher, K. J., Zyphur, M., & Zhang, Z. 2010. A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, 15(3): 209–233.
- Putranta, M. P., & Kingshott, R. P. J. 2011. The relationships between ethical climates, ethical ideologies and organisational commitment within Indonesian higher education institutions. *Journal of Academic Ethics*, 9: 43–60.
- Qualls W. J., & Puto C. P. 1989. Organizational climate and decision framing: An integrated approach to analyzing industrial buying decisions. *Journal of Marketing Research*, 26: 179–192.
- Rathert, C., & Fleming, D. A. 2008. Hospital ethical climate and teamwork in acute care: The moderating role of leaders. *Health Care Management Review*, 33(4): 323–331.
- Rest, J. R. 1984. *The major components of morality*. New York: Wiley.
- . 1986. *Moral development: Advances in research and theory*. New York: Praeger.
- Reynolds, S. 2006. Moral awareness and ethical predispositions: Investigating the role of individual differences in the recognition of moral issues. *Journal of Applied Psychology*, 91(1): 233–243.
- Roeser, K., McGregor, K., Stegmaier, S., Mathew, J., Kubler, A., & Meule, A. 2016. The Dark Triad of personality and unethical behavior at different times of day. *Personality and Individual Differences*, 88(1): 73–77.

- Rothwell, G. R., & Baldwin, J. N. 2006. Ethical climates and contextual predictors of whistle-blowing. *Review of Public Personnel Administration*, 26(3): 216–244.
- . 2007. Ethical climate theory, whistle-blowing, and the code of silence in police agencies in the state of Georgia. *Journal of Business Ethics*, 70(4): 341–361.
- Saini, A., & Martin, K. 2009. Strategic risk taking propensity: The role of ethical climate and marketing output control. *Journal of Business Ethics*, 90(4): 593–606.
- Salamon, T., & Mesko, M. 2016. Can an ethical work climate influence payment discipline? *Journal of Industrial Engineering and Management*, 9(1): 73–89.
- Salancik, G. R., & Pfeffer, J. 1978. A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23: 224–253.
- Schein, E. H. 2010. *Organizational culture and leadership* (4th ed.). San Francisco: Jossey-Bass.
- Scherbaum, C. A., & Ferreter, J. M. 2009. Estimating statistical power and required sample sizes for organizational research using multilevel modeling. *Organizational Research Methods*, 12: 347–367.
- Schluter, J., Winch, S., Holzhauser, K., & Henderson, A. 2008. Nurses' moral sensitivity and hospital ethical climate: A literature review. *Nursing Ethics*, 15(3): 304–321.
- Schminke, M., Ambrose, M. L., & Neubaum, D. O. 2005. The effect of leader moral development on ethical climate and employee attitudes. *Organizational Behavior and Human Decision Processes*, 97(2): 135–151.
- Schminke, M., Arnaud, A., & Kuenzi, M. 2007. The power of ethical work climates. *Organizational Dynamics*, 36(2): 171–186.
- Schneider, B. 1983. Work climates: An interactionist perspective in N. W. Feimer & E. S. Geller (Eds.), *Environmental psychology: Directions and perspectives*: 106–128. New York: Praeger.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. 2013. Organizational climate and culture. *Annual Review of Psychology*, 64: 361–388.
- Schneider, B., Salvaggio, A. N., & Subirats, M. 2002. Climate strength: A new direction for climate research. *Journal of Applied Psychology*, 87: 220–229.
- Schwepker, C. H. 2013. Improving sales performance through commitment to superior customer value: The role of psychological ethical climate. *Journal of Personal Selling & Sales Management*, 33(4): 389–402.
- Schwepker, C. H., 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(2): 99–108.
- Scott, W. R. 2001. *Institutions and organizations*. Thousand Oaks: Sage.
- Shacklock, A., Manning, M., & Hort, L. 2011. Ethical climate type, self-efficacy, and capacity to deliver ethical outcomes in public sector human resource management. *Journal of New Business Ideas*, 9(2): 34–49.
- Shafer, W. E. 2008. Ethical climate in Chinese CPA firms. *Accounting, Organizations and Society*, 33: 825–835.
- . 2009. Ethical climate, organizational-professional conflict and organizational commitment: A study of Chinese auditors. *Accounting, Auditing & Accountability Journal*, 22(7): 1087–1110.
- . 2015. Ethical climate, social responsibility, and earnings management. *Journal of Business Ethics*, 126: 43–60.
- Shafer, W. E., Poon, M. C. C., & Tjosvold, D. 2013a. An investigation of ethical climate in a Singaporean accounting firm. *Accounting, Auditing & Accountability Journal*, 26(2): 312–343.

- . 2013b. Ethical climate, goal interdependence, and commitment among Asian auditors. *Managerial Auditing Journal*, 28(3): 217–244.
- Shao, R., Aquino, K., & Freeman, D. 2008. Beyond moral reasoning: A review of moral identity research and its implications for business ethics. *Business Ethics Quarterly*, 18(4): 513–540.
- Shapira-Lishchinsky, O., & Rosenblatt, Z. 2010. School ethical climate and teachers' voluntary absence. *Journal of Educational Administration*, 48(2): 164–181.
- Shin, Y. 2012. CEO Ethical leadership, ethical climate, climate strength, and collective organizational citizenship behavior. *Journal of Business Ethics*, 108: 299–312.
- Shin, Y., Sung, S. Y., Choi, J. N., & Kim, M. S. 2015. Top management ethical leadership and firm performance: Mediating role of ethical and procedural justice climate. *Journal of Business Ethics*, 129: 43–57.
- Short, J. 2009. The art of writing a review article. *Journal of Management*, 35: 1312–1317.
- Silen, M., Kjellstrom, S., Christensson, L., Sidenvall, B., & Svantesson, M. 2012. What actions promote a positive ethical climate? A critical incident study of nurses' perceptions. *Nursing Ethics*, 19(4): 501–512.
- Simha, A., & Cullen, J. R. 2012. Ethical climates and their effects on organizational outcomes: Implications from the past and prophecies for the future. *Academy of Management Perspectives*, 26(4): 20–34.
- Simha, A., & Stachowicz-Stanusch, A. 2013. The link between ethical climates and managerial success: A study in a Polish context. *Journal of Business Ethics*, 114: 55–59.
- Smith, H. J., Thompson, R. L., & Iacovou, C. L. 2009. The impact of organizational climate on reporting behaviors in information systems projects. *Journal of Business Ethics*, 90(4): 577–591.
- Smithikrai, C. 2008. Moderating effect of situational strengths on the relationship between personality traits and counterproductive work behaviour. *Asian Journal of Social Psychology*, 11: 253–263.
- Stachowicz-Stanusch, A., & Simha, A. 2013. An empirical investigation of the effects of ethical climates on organizational corruption. *Journal of Business Economics and Management*, 14(S1): S433–S446.
- Stewart, R., Volpone, S. D., Avery, D. R., & McKay, P. 2011. You support diversity, but are you ethical? Examining the interactive effects of diversity and ethical climate perceptions on turnover intentions. *Journal of Business Ethics*, 100: 581–593.
- Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20: 571–610.
- Suhonen, R., Stolt, M., Gustafsson, M. L., Katajisto, J., & Charalambous, A. 2014. The associations among the ethical climate, the professional practice environment and individualized care in care settings for older people. *Journal of Advanced Nursing*, 70(6): 1356–1368.
- Tanner, E. C., Tanner, J. F., & Wakefield, K. 2015. Panacea or paradox? The moderating role of ethical climate. *Journal of Personal Selling & Sales Management*, 35(2): 175–190.
- Tett, R. P., & Guterman, H. A. 2000. Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, 34: 397–423.
- Trevino, L. K., Butterfield, K. D., & McCabe, D. L. 1998. The ethical context in organizations: Influences on employee attitudes and behaviors. *Business Ethics Quarterly*, 8: 447–477.

- Tsai, M. T., & Huang, C. C. 2008. The relationship among ethical climate types, facets of job satisfaction, and the three components of organizational commitment: A study of nurses in Taiwan. *Journal of Business Ethics*, 80: 565–581.
- Tseng, F. C., & Fan, Y. J. 2011. Exploring the influence of organizational ethical climate on knowledge management. *Journal of Business Ethics*, 101: 325–342.
- 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 Science and Medicine*, 65: 1708–1719.
- Umphress, E. E., Bingham, J. B., & Mitchell, M. S. 2010. Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs influencing unethical pro-organizational behavior. *Journal of Applied Psychology*, 95: 769–780.
- VanSandt, C. V., Shepard, J. M., & Zappe, S. M. 2006. An examination of the relationship between ethical work climate and moral awareness. *Journal of Business Ethics*, 68(4): 409–432.
- Vardaman, J. M., Gondo, M. B., & Allen, D. G. 2014. Ethical climate and pro-social rule breaking in the workplace. *Human Resource Management Review*, 24: 108–118.
- Venezia, G., Venezia, C., & Hung, C. 2010. A comparative study of ethical work climates among public and private sector Asian accountants. *International Business and Economics Research Journal*, 9(4): 77–85.
- Victor, B., & Cullen, J. B. 1987. A theory and measure of ethical climate in organizations. In W. C. Frederick (Ed.), *Research in corporate social performance and policy*: 51–71. Greenwich: JAI Press.
- . 1988. The organizational bases of ethical work climates. *Administrative Science Quarterly*, 33(1): 101–125.
- Wang, Y. D., & Hsieh, H. H. 2012. Toward a better understanding of the link between ethical climate and job satisfaction: A multilevel analysis. *Journal of Business Ethics*, 105: 535–545.
- . 2013. Organizational ethical climate, perceived organizational support, and employee silence: A cross-level investigation. *Human Relations*, 66(6): 783–802.
- Williams, B. 1985. *Ethics and the limits of philosophy*. Cambridge, MA: Harvard University Press.
- Weber, J. & Gerde, V. 2011. Organizational role and environmental uncertainty as influences on ethical work climate in military units. *Journal of Business Ethics*, 100: 595–612.
- Weeks, W. A., Loe, T. W., Chonko, L. B., Martinez, C. R., & Wakefield, K. 2006. Cognitive moral development and the impact of perceived organizational ethical climate on the search for sales force excellence: A cross-cultural study. *Journal of Personal Selling & Sales Management*, 26(2): 205–217.
- Yerkes, R. M., & Dodson, J. D. 1908. The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18: 459–482.
- Yi, H. T., Dubinsky A. J., & Lim, C. U. 2012. Determinants of telemarketer misselling in life insurance services. *Journal of Services Marketing*, 26(6): 403–418.
- Zoghbi-Manrique-de-Lara, P., & Guerra-Baez, R. 2016. Exploring the influence of ethical climate on employee compassion in the hospitality industry. *Journal of Business Ethics*, 133: 605–617.

APPENDIX: DEFINITION AND MEASUREMENT OF ETHICAL CLIMATE (EC)

Source	Definition	Measure
Victor and Cullen (1988: 101)	“prevailing perceptions of typical organizational practices and procedures that have ethical content”	<i>Ethical Climate Questionnaire (ECQ)</i> Originally with 26 items. 10 more items were added to the scale later by Cullen, Victor, and Bronson (1993). The ECQ has been described as “... a series of questions designed to measure respondents’ affective responses to the ethical dimensions of decision making in their organizations” (Victor & Cullen, 1988: 117).
Olson (1998: 346)	“ethical climate provides the context in which ethical behavior and decision-making occurs”	<i>Hospital Ethical Climate Survey (HECS)</i> Originally with 74 items. The items are organized according to conditions for ethical reflection in organizations (Brown, 1990) and the relationships that hospital nurses have in their typical work settings (Olson, 1998).
Babin et al. (2000: 345)	“individual interpretations and evaluations of the ... work environment on dimensions that have ethical content”	<i>Marketing Employees Ethical Work Climate Scale</i> A specialized scale based on four ethical climate dimensions of trust/responsibility, perceived ethicality of peers’ behavior, perceived consequences of violating norms and the nature of the organization’s selling practices.
Martin and Cullen (2006: 177)	ethical climate refers to shared perceptions between members of an organization or part of an organization as to “what constitutes right behavior” and arises when “members believe that certain forms of ethical reasoning or behavior are expected standards or norms for decision-making within the firm”	<i>Ethical Climate Questionnaire (ECQ)</i> As highlighted above.
Arnaud (2006) and (2010: 125)	“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”	<i>Ethical Climate Index (ECI)</i> Captures ethical work climate dimensions of collective moral sensitivity (twelve items), collective moral judgment (ten items), collective moral motivation (eight items), and collective moral character (six items).
Luria and Yagil (2008: 277)	“perceptions of trust, responsibility, and high moral standards regarding perceived rightness or wrongness in the service context, which should encourage the efficiency and effectiveness of service”	<i>Six-item EC scale</i> A unidimensional scale specific to the restaurant industry.
Mayer et al. (2010: 7)	“the holistic impression that individuals have regarding ethical policies, practices, and procedures within a unit or organization”	<i>Six-item Global Ethical Climate Scale</i> A unidimensional scale.

APPENDIX: continued

Source	Definition	Measure
Stewart et al. (2011: 581)	“employees’ perceptions that their organization values and enforces ethically correct behavior”	<i>Two-item Ethics Climate Questionnaire</i> A unidimensional scale which assesses employees’ knowledge of the organization’s policies toward ethics and ethical violations (Item 1) and the organization’s actions toward ethical violations (Item 2).
Arnaud and Schminke (2012: 1767)	“the collective moral reasoning of organization members” and “provides employees a foundation for thinking about moral issues”	<i>Schminke et al. (2005) 16-point scale</i> (a modified version of the Victor and Cullen [1988] EC scale). Moral reasoning component of ethical climate captured along two dimensions: self-focused and other-focused reasoning.
Jaramillo et al. (2013: 2304)	ethical climate is what helps people in organizations “learn about ‘right’ or ‘wrong’ behaviors primarily from observation”	<i>Four-item scale specifically created for the organization.</i> The scale consists of two items to capture a salesperson’s belief that acceptable ethical behaviors are learned via a socialization process. The two other items on the scale capture a salesperson’s credence that the organization follows the golden rule of selling.
Schwepker (2013: 389)	“an employee’s perception of the ethical practices and procedures that have ethical content (e.g. rules, policies, values, and behaviors) and the meaning assigned to them in his or her work environment”	<i>Psychological Ethical Climate Scale</i> A seven-item scale that assesses perceptions of the presence and enforcement of codes of ethics, corporate policies on ethics, and top management actions related to ethics.