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**CUSTOMER ORIENTATION CLIMATE AND PERFORMANCE:
CONTEXTUAL INFLUENCES IN THE MEDICAL PRODUCT SALES INDUSTRY**

A Dissertation in

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by

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ABSTRACT

Using a sample of medical sales professionals, this study examined ethical climate level and customer orientation climate strength as moderators of customer orientation climate level's relationship with both financial and individual performance. Results at the subsidiary company-level showed that both ethical climate level and customer orientation climate strength moderated the relationship between customer orientation climate level and financial performance. Customer orientation climate level was more strongly related to financial performance when ethical climate level was high and when customer orientation climate was strong. Implications of the study's results, along with directions for future research, are discussed.

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Chapter 1

Introduction and Literature Review

Interest in organizational climate, an “experientially based description of what people see happening to them in an organizational situation” (Ostroff, Kinicki, & Tamkins, 2003, p. 566), has increased dramatically since the turn of the century (Kuenzi & Schminke, 2009). Interest in the topic is largely attributable to the perception that climate research “is not only a variable of conceptual interest to researchers, but also one that offers insight and practical competitive advantage to organizations.” (Schneider, Ehrhardt, & Macey, 2011, p. 45). Indeed, organizational climate’s practical utility has been affirmed through research demonstrating its relationship with outcomes such as customer satisfaction (Liao & Chuang, 2004) and safety compliance (Clarke, 2006). Because climate research is specified at the organizational level, where organizational leaders make decisions (Schneider et al., 2011), it holds great potential for informing leaders as they choose which strategic objectives to prioritize in their organizations.

Research on the topic of organizational climate is thriving with opportunity (Ashkanasay, Wilderom, & Peterson, 2011), particularly with regards to developing a more contextualized understanding of the construct. Taking the perspective that individuals create global cognitive representations of their total situations (Lewin, 1935), early climate research examined climate as a holistic, global construct (e.g. Litwin & Stringer, 1968). However, climate researchers soon shifted their focus away from this broad based perspective toward a focus on specific dimensions directed toward strategic

organizational objectives (e.g. climate for innovation, service, or safety). While the focused approach to climate research has thrust the field forward by allowing researchers to establish the climate construct's validity and practical utility, this research has largely failed to account for contextual influences that moderate climate's effects (Kuenzi & Schminke, 2009; Schulte, Ostroff, Shmulyian, & Kinicki, 2009). Given recent calls to better "contextualize" organizational research (Johns, 2006; Rousseau & Fried, 2001), it is time for climate research to "come full circle" with the early emphasis on the broader situation and begin to examine contextual influences on climate's effects (Schneider, Ehrhart, & Macey, 2010).

In an effort to answer these calls for research to explore contextual influences on climate's effects, the current study will make four general contributions to the climate literature. First, the study will clarify customer orientation climate's impact on performance at both the individual and organizational levels of analysis. Although climate's relationship with financial performance is of great interest to both researchers and practitioners (Borucki & Burke, 1999; Patterson, Warr, & West, 2004; Schneider et al., 2009), few studies have explored this relationship (Kuenzi & Schminke, 2009). Research examining customer orientation climate's impact on individual or financial performance is sparse and inconclusive (e.g. Paradise-Tornow, 1991; Schneider, Macey, & Young, 2009; Weitzel, Schwarzkopf, and Peach, 1989). Because prior inconsistent results may reflect the influence of moderators, the current research will consider ethical climate and climate strength as possible situational influences. From the perspective of multilevel theory, examining climate's relationship with individual and organizational performance in the same study will help to determine if climate's impact on performance

at the organizational level is isomorphic to its cross level impact at the individual levels of analysis (Liao, Toya, Lepak, & Hong, 2009). If climate's impact is not homologous, it would suggest that climate theory needs to be refined to better understand how cross level performance relationships differ from those completely at the higher level (Chen, Bliese, & Mathieu, 2005). Yammarino and Dansareau (2011) recently noted that "multiple levels should be considered in combination, and multilevel effects should be identified" in climate research because of the inherently hierarchical nature of the construct (p. 54). The current research will be among the first to answer this call by examining customer orientation climate's impact on both organizational and individual performance in a single study.

The study's second purpose will be to examine the interactive effects of customer orientation and ethical climates. The simultaneous existence of multiple climates has received little research attention (Zohar & Hofmann, 2012). The current body of climate literature is therefore limited because climate types are likely to not only co-exist but also "interact and influence each other in different ways" (Kuenzi & Schminke, 2009, p. 78). Specifically, the study will examine whether ethical climate moderates the impact customer orientation climate exerts on performance.

The choice to focus on customer orientation and ethical climates was informed by both theoretical and contextual factors. Theoretically, Schneider and colleagues (2011) recently distinguished between climates that are focused on strategic outcomes and those regarding organizational processes about the way things are done. By focusing on customer orientation and ethical climates, this study will explore the intersection between an outcome focused climate (customer orientation) and a process focused climate

(ethics), which each hold particular relevance for companies in the medical products industry. Because medical sales employees market products such as pharmaceutical drugs and medical devices to physicians, customer orientation climate is critical to maintaining ongoing service relationships (Guttek, Bhappu, Liao-Troth, & Cherry, 1999). Choices about healthcare products can mean the difference between life and death for patients, so ethical issues are also paramount in this context.

Third, this research will present and test competing theoretical arguments regarding the interaction between customer orientation and ethical climates. When multiple climates exist within an organizational context, behaviors oriented to achieving the goals of one climate referent may be either “complementary to or antagonistic” with another climate (McKay et al., 2011, p. 788). Therefore, this research presented competing theoretical arguments for why these climates, which are likely to coexist in organizations, might complement or impede each other’s effects. The study will thus indicate whether the theoretical frameworks on which the predictions are based (i.e. social exchange theory, goal conflict, and the Competing Values Framework) are useful lenses by which to study climate interactions. Practically, understanding the implications of pairing these climates will inform decisions practitioners make about which strategic objectives and processes to emphasize in their organizations.

Finally, this study will examine climate strength as a moderator of climate’ relationships with outcomes. Climate strength is defined as the degree of within-group agreement among unit members’ climate perceptions (Gonzalez-Roma, Peiro, & Tordera, 2002, p. 465). Ostroff and colleagues (2003, p. 598) noted that when employees lack a shared sense of climate, relationships between aggregate climate perceptions and

subsequent outcomes are “unlikely to be realized.” Climate strength has been suggested to have “the most practical implications for management” in the climate literature because it indicates the importance of ensuring that messages about strategy are “sent and received” by organizational members (Schneider et al., 2011, p. 43). Despite promising results produced by initial studies (e.g. Colquitt, Noe, & Jackson, 2002; Gonzalez-Roma et al., 2002), empirical research on climate strength remains “scarce” (Luria, 2008, p. 43). Thus, there have been several calls for research to expand beyond a simple focus on climate level (i.e. the mean of aggregate climate perceptions; Luria, 2008) to consider the role of climate strength when examining relationships between climate and outcomes (e.g. Mayer, Kuenzi, & Greenbaum, 2009; Kuenzi & Schminke, 2009). In particular, climate strength’s role as a moderator has been noted as an area of research need in the customer orientation climate literature (Groth & Godwin, 2010).

This paper will be organized in the following manner. First, the general literature on organizational climate will be reviewed, followed by reviews of each climate type to be examined in the current study. Next will be a summary of the small body of literature on interactions between climates and three theoretical frameworks which may be useful for understanding them. The literature review will conclude with a summary of past research on climate strength. After the literature review will be a theoretical development of the study’s hypotheses. The hypotheses will regard relationships between customer orientation climate level’s relationship with performance outcomes at both the organizational and individual levels of analysis, and how they are moderated by ethical climate and climate strength. Next, I will present the research design, data collection strategy, and analytical approach that was used to test the proposed hypothesis in a

sample of subsidiary companies from a large multinational healthcare manufacturing corporation. Finally, I will present the results of the research, a theoretical explanation of the findings, and possible directions for future research.

Organizational Climate Overview

Defining Organizational Climate. Noting that definitional issues were not emphasized in early climate research, Schneider (1990) observed that initial attempts to define climate resembled trying to “nail Jell-O on the wall” (p.1). However, climate researchers have coalesced around a definition of climate as shared perceptions regarding policies, practices, and procedures that are rewarded, supported, and expected in an organization (Schneider & Reichers, 1983). Moreover, climate is defined as relating to specific aspects of the organizational environment such as productivity, safety, or innovation (Schneider et al., 2010). Thus, climates are “for something” and are focused on areas of strategic emphasis in an organization (Schneider et al., 2011). Conceptualizing climate to be “for something” has moved the climate literature beyond the definitional difficulties found in early climate research, which took a global “everything-but-the-kitchen sink” perspective towards climate’s conceptualization (Schneider et al., 2011).

Process versus Outcome Focused Climates. When Schnieder (1975) first called for climate to be studied in terms of specific climate “types,” he argued that the measurement of climate should focus on strategic outcomes organizations desire to achieve (Schulte et al., 2009). A sizeable number of studies followed which examined

climates focused on strategic outcomes such as service (Schneider, Parkington, & Buxton, 1980), safety (Zohar, 1980), and innovation (Klein & Sora, 1996). Recently, Schneider noted that researchers have expanded their attention to include climates for organizational processes or the way things are accomplished, including ethics (Martin & Cullen, 2006) and justice (Li & Cropanzano, 2009). While considerable research attention has been paid to both strategic and process climates, studies examining the integration of both categories are virtually nonexistent (Kuenzi & Schminke, 2009; Schneider et al., 2010). In practice, companies simultaneously emphasize strategic outcomes they are trying to achieve as well as practices and procedures regarding the way things are supposed to be done. Thus, examining interactive relationships between strategic and process climates will present an important step towards understanding the role climates play in organizations.

Organizational Climate versus Organizational Culture. While organizational climate and culture share some conceptual overlap (Dennison, 1996; Payne, 2000; Schein, 2000), they emerged from very different streams of research. Whereas the roots of organizational climate are found in Lewinian psychology (Lewin, Lippitt, & White, 1939), organizational culture emerged from sociological and anthropological research streams (Ostroff et al., 2003; Schneider, 1990). A key distinction between the constructs is that while climate deals with what employees experience in their organizational environment, culture represents the underlying values and beliefs about what is important in the environment experienced by employees (Schein, 2000). While climate researchers emphasize employee perceptions of how values and beliefs are enacted through organizational policies and practices (Kuenzi, 2008; Moran & Volkwein, 1992), culture

researchers focus on the manifestation of values and beliefs through artifacts, legends, and symbols (Schneider et al., 2010). Climate is thus a more tangible construct than culture, which regards deeply embedded and often unconscious assumptions present in organizations (Schein, 2004). Although there has been little integration of the climate and culture constructs (Ashkanasy, Widlerom, & Peterson, 2000), new paradigms have been proposed which synthesize the two literatures (e.g. Ostroff et al., 2003). For example, culture may serve as a foundation upon which organizational climate is created (Schneider, White, & Paul, 1998; Schein, 2004). The current research will focus exclusively on organizational climate, a less abstract construct because of its focus on tangible policies, practices, and procedures present in organizations.

Levels of Analysis. Another important distinction in climate research is between climate as an individual or unit (e.g. organization, department) level construct (Glick, 1985; Payne & Pugh, 1976). This issue is clarified by differentiating organizational climate from psychological climate (Ostroff et al., 2003). Introduced by James and Jones (1974), psychological climate refers to situations in which data collection and analyses are conducted entirely at the individual level of analysis. Therefore, psychological climate is an individual level construct that reflects meanings assigned by individuals to their environment (James & James, 1989). Conversely, organizational climate is a collective construct conceptualized at the unit level of analysis (Kozlowski & Klein, 2000).

Because climate is a collective construct, climate researchers face a number of methodological and statistical issues regarding data aggregation in order to ensure the construct is properly assessed. The primary issue which confronts climate researchers is

that climate is measured at the individual (i.e. individual responses to surveys) level but conceptualized and analyzed at the unit level. Therefore, researchers must specify a composition model to clarify how individual responses to a climate questionnaire come to represent the unit level construct of organizational climate. Composition models refer to “the functional relationships among phenomenon or constructs at different levels of analysis (e.g. individual level, team level, organizational level) that reference essentially the same construct but that are qualitatively different at different levels” (Chan, 1998, p.234). Of the five composition models delineated by Chan (1998), the direct consensus and referent shift models are most appropriate for the majority of organizational climate research (Schneider et al. 2010). Direct consensus models, the most frequently used in climate research, use “within-group consensus of the lower level units as the functional relationship to specify how the construct conceptualized and operationalized at the lower level is functionally isomorphic to another form of the construct at the higher level” (Chan, 1998, p. 237). The primary distinguishing feature between direct consensus and referent-shift composition models regards the wording of items. Referent shift items ask respondents to describe the perspective of their unit rather than their own perspective (Chan, 1998). In order to justify aggregation using the direct consensus or referent shift models, researchers must demonstrate that sufficient interrater agreement and interrater reliability exist in their sample (Kozlowski & Hattrup, 1992, Lebreton & Senter, 2008). Although mean based composition models have received the vast majority of attention in climate research, the idea of climate strength draws on Chan’s (1998) dispersion composition model whereby within unit variability rather than agreement is used for aggregation. Climate strength will be discussed in greater detail later in this paper.

Customer Orientation Climate

Customer Orientation Climate Conceptualization. Customer orientation climate, shared employee perceptions about the degree to which a firm prioritizes understanding customers, meeting their needs, and providing outstanding service, is part of the larger construct of service climate (Schneider et al., 1998) and is also related to “market orientation” (e.g. Narver & Slater, 1990). Market orientation is defined as the extent to which organizations embody the marketing concept, which holds that the most successful firms will be those that prioritize understanding and meeting their customer’s needs (Kohli & Jaworski, 1990). As the concept of customer orientation is core to the conceptualization of each construct (Schneider et al., 1998), relevant research from both service climate and market orientation will be included in this review. While service climate and market orientation share great conceptual overlap, a major distinction lies in how they have been assessed (Schneider et al., 1998). Rather than use aggregate employee perceptions as reflected by survey responses, common practice in the service climate literature, market orientation research has relied on ratings provided by a single senior executive or key informant (Schneider et al., 1998). Thus, market orientation as it has been measured does not reflect an essential definitional aspect of climate, which is that it is a collective phenomenon (Kuenzi & Schminke, 2009).

Customer Orientation Antecedents. As it is a commonly presumed contributor to financial success (Deshpande & Farley, 1999), there have been a number of studies conducted to identify factors that are antecedent to the development of customer orientation in organizations. Research on antecedents of service climate and market

orientation can be grouped into three categories (Jaworski and Kohli, 1993): interdepartmental factors, management factors, and organizational systems. For example, Schneider and colleagues (1998) found that those bank branches that provided more positive ratings of the interdepartmental service they received experienced higher levels of service climate. Also related to the notion of interdepartmental factors, De Jong and colleagues have shown that interteam coordination and support each contribute to team level service climate (de Jong, de Ruyter, & Lemmink, 2004, 2005). In addition, Jaworski and Kohli (1993) found that the extent to which members had formal or informal contacts across departments significantly predicted market orientation.

There has been a sizeable amount of research examining the second category of customer orientation antecedents: management factors. For example, the degree to which retail managers viewed service as important was associated with higher levels of customer service climate (Borucki & Burke, 1999). Moreover, in a sample of grocery stores, the personal service quality orientations of managers themselves predicted the service climate of the grocery store as a whole (Salvaggio, Schneider, Nishii, Mayer, Ramesh, & Lyon, 2007). In the market orientation literature, several studies have found support for top management factors as an important antecedent (Jaworski & Kohli, 1993; Kirca, Jayachandran, & Bearden, 2005; Narver & Slater, 1990).

The final category of service climate antecedents regards organizational systems. Schneider and colleagues (1998) found that general facilitative conditions, the degree to which employees in organizations have obstacles to work removed and have supportive supervisors, were significant predictors of service climate. Organizational resources have also been supported as predictors of service climate (Salanova et al., 2005). With regards

to market orientation, evidence suggests social network density and top management emphasis on market orientation to be important antecedents (Kirca et al., 2005).

Customer Orientation Climate Outcomes. Research on customer orientation and service climate emerged in part from “linkage research” (Wiley, 1996), which examines the relationships employee and customer assessments have with business performance. Thus, a fair amount of research has been conducted examining the relationship between service climate and business outcomes. Three categories of outcomes which have received attention in the service climate and market orientation literatures are customer consequences, employee service performance, and financial consequences.

The first category of consequences includes those related to customers. Such outcomes have received great emphasis in the service climate literature. The most robust findings for service climate regard its positive association with customer satisfaction (e.g. Dietz, Pugh, & Wiley, 2004; Johnson, 1996). Schneider and colleagues (1998) also found a relationship between service climate and customer perceptions of service quality. Higher levels of both customer satisfaction and customer loyalty were predicted by service climate in a study conducted by Liao & Chuang (2004). As evidenced by a recent meta-analysis conducted by Kirca and colleagues (2005), market orientation also predicts customer focused variables such as customer satisfaction and loyalty.

A small number of studies examining service climate have also investigated the extent to which service climate impacts employee service performance. For example, Liao and Chuang (2004) administered a survey in a chain of Midwestern restaurants, finding that service climate predicted the self-rated service performance of the restaurant employees. Liao and Chuang conducted a more recent study in a chain of barber shops,

but failed to find a significant main effect relationship between service climate and manager rated service performance. Thus, the very small body of research examining individual performance as an outcome of service climate does not provide conclusive results, and neither of the studies has accounted for important individual level control variables such as prior performance.

Similarly, comparatively little research has examined financial performance in the service climate literature, and relationships are “sometimes found and sometimes not” (Ryan & Ployhart, 2003, p. 286). For example, Sowinski, Fortmann, and Lezotte (2008) did not find service climate to predict financial performance in a sample of automotive service stores. Amongst hotels from an international hospitality organization, Batalskaya (2009) similarly failed to detect a relationship between service climate and financial performance. In one study, a negative relationship was even found by authors studying the relationship between service climate and the financial performance of bank branches (Paradise-Tornow, 1991). Service climate exerted a positive main effect on the financial performance of fabric stores in a study conducted by Weitzel and colleagues (1989). Other studies which have examined this relationship have found that service climate positively predicts financial performance but that the relationship is mediated by intervening variables. For example, service climate’s impact on financial performance was mediated by customer satisfaction in an organization level study representing a wide range of industries conducted by Schneider and colleagues (2009). Customer satisfaction was similarly found to mediate the relationship between service climate and sales in a sample of grocery store departments (Schneider et al., 2005). The relationship between

service climate and financial performance was also mediated by aggregated service performance in a study by Borucki & Burke (1999).

Research on the closely related concept of market orientation has placed particular focus on financial outcomes, and this body of literature has likewise produced conflicting results. Support has been found for the positive association between market orientation and financial performance in two separate studies (Narver & Slater, 1990; Slater & Narver, 2000). Other studies, however, have failed to detect a significant relationship (e.g. Jaworski & Kohli, 1992). Although the main effect relationship between market orientation and financial performance has been substantiated through meta-analysis (Kirka et al., 2005; Ellis, 2005), nearly all of the studies included in the analysis used self-reported as opposed to objective financial metrics as the outcome.

Customer Orientation Interactions. A number of studies have examined the interactive relationships service climate has when examined in combination with other variables. For example, one study demonstrated that service climate's impact on customer rated service quality is augmented when employees receive high levels of internal service, ensuring they have the resources and equipment to meet customer needs (Ehrhart, Witt, Schneider, & Perry, 2011). Similarly, Gitell (2002) found that interdependence between front line employees and those in support roles strengthened service climate's prediction of customer attitudes. Finally, a study conducted by Hui and colleagues (2007) suggests that leadership may be a contextual variable deserving of further exploration with regards to service climate. Specifically, their results indicated an interaction between task based supervisory behavior and service climate in a sample of service teams. The interaction was such that when either of the factors was low, the other

served a compensatory role in predicting service quality. However, when both were high, task based leadership became deleterious to the service quality provided by the teams. In the market orientation literature, the relationship between customer orientation and business performance was strongest amongst firms that engaged in high levels of corporate social responsibility activities (Ben Brik, Rettab, & Mellahi, 2010). Additionally, a meta-analysis found that market orientation was more strongly related to business performance in studies conducted in product as opposed to service based firms (Kirca et al., 2005). Finally, Subramanian and colleagues (2009) provided evidence that market orientation's relationship with performance was stronger among firms whose top management teams engaged in higher levels of risk taking. While small in quantity, these results suggest that customer orientation's effects are influenced by contextual moderators.

Customer Orientation Climate Future Directions. The service climate and market orientation literatures each suggest that the concept of customer orientation is relevant to meaningful outcomes. However, additional research is needed to address several inconsistencies in the current literature, including clarifying service climate's impact on performance outcomes. The inconsistencies in prior research findings suggest that investigations into possible moderators of this relationship are likely to prove fruitful. Furthermore, most of the samples utilized in prior studies on the topic have consisted of service representatives (e.g. hospitality employees, automotive technicians). Although service representatives and salespeople each identify satisfying customers as among their primary goals (Evans, Arnold, & Grant, 1999), the immediate results they see from doing so may differ. For salespeople, excellent service is more likely to lead to "a higher

proportion of closed sales and more repeat business” than for service representatives (Gwinner, Bitner, Brown, & Kumar, 2005). Thus, because salespeople have a more immediate and proximal impact on bottom line results, they may provide a more appropriate sample for clarifying service climate’s relationship with financial performance.

In addition to performance at the organization level, results have also been mixed at the individual level. Future research can include moderators to clarify service climate’s impact on individual performance, and examine whether the same moderators influence service climate’s relationship at the organizational level. Moreover, future research on individual performance should avoid same source bias by using manager ratings. Finally, in order to clarify service climate’s impact on performance at both the individual and organizational levels, future studies must control for prior performance. Because prior performance is strongly tied to future performance at both the individual (Kinicki, Prussia, Wu, & McKee-Ryan, 2004; Murphy, Balzer, Lockhart, & Eisenman, 1985) and organizational (Wright, Gardner, Moynihan, & Allen, 2005; Gibson, Porath, Benson, & Lawler, 2007) levels, it must be controlled in order to determine the incremental value of service climate. As noted by Wright and colleagues (2005) it is particularly important to control for prior financial performance to ensure results are not impacted by employees’ implicit performance theories (e.g. “my company did well last year so we must be customer oriented”). In order to address these needs, this research will examine ethical climate and climate strength as moderators of customer orientation climate’s impact on individual and organizational performance in a sample of medical sales professionals. All analyses will control for prior performance.

Ethical Climate

Ethical Climate Conceptualization. Although running an organization that adheres to ethical standards is a commonly stated goal amongst modern organizations, corporate corruption is anything but rare in the business world (Bazerman & Tenbrunsel, 2011). Given highly visible scandals that have emerged in organizations such as Enron, Tyco, and WorldCom, researchers and practitioners alike have turned their attention to ethical climate as a means to guard against ethical breakdowns (Arnaud & Schminke, 2007; Dickson, Smith, Gojean, & Ehrhart, 2001). Although these events have renewed interest in the topic, research on ethical climate goes back more than 25 years. Ethical climate was first defined by Victor and Cullen (1987) as “the shared perceptions of what is ethically correct behavior and how ethical issues should be handled” (pp. 51-52). Their theoretical perspective is based on an overarching two dimensional conceptualization of ethical climate. The first is ethical criterion (ranging from preconventional, to conventional, to postconventional), which draws from Kohlberg’s (1981) theory of Cognitive Moral Development. Locus of analysis (ranging from individual, to local, to cosmopolitan), the second dimension, draws from Merton’s (1957) sociological model of roles and reference groups. According to Victor and Cullen’s (1987) original model, these two dimensions cross to form a three by three matrix resulting in nine ethical climate types: self-interest, company profit, efficiency, friendship, team interest, social responsibility, personal morality, company rules and procedure, and laws and professional codes. While other researchers have proposed alternative conceptualizations and measures of ethical climate (e.g. Schwepker, Ferrell, & Ingram 1997; Vidaver-

Cohen, 1995), the Ethical Climate Questionnaire (ECQ) has served as the theoretical framework for the vast majority of extant ethical climate research.

Despite its popularity, research has not supported the ECQ's factor structure, which has been extremely inconsistent across a range of studies. The authors themselves have even found contradictory factor structures, including one set of five factors (Victor & Cullen, 1987), a completely different set of five factors (Victor and Cullen 1988), and a set of seven factors (Cullen, Victor, & Bronson, 1993). Factor analytic efforts on the part of other ethical climate researchers have had similarly inconsistent results, with the number of factors ranging from three (Wimbush, Shepard, & Markham, 1997) to nine (Peterson, 2002). To magnify these concerns, the factor analyses performed on the ECQ across samples have not only revealed a different number of factors but different factors entirely (Mayer et al., 2009). Therefore, prior research, which has generally used the ECQ has been called into question due to construct validity issues (Mayer et al., 2009).

In addition to construct validity concerns, researchers also question whether the ethical climate construct introduced 25 years ago fits the modern definition of organizational climate. Recalling that organizational climate is defined in terms of policies, practices, and procedures (Kuenzi & Schminke, 2009), the ECQ's conceptualization makes no reference to any of these three defining characteristics (Mayer et al., 2009). Rather, Arnaud and Schminke (2007) argued that the various dimensions of the ECQ instead reflect an organization's norms regarding appropriate moral decision making. Given the conceptual and validity concerns present in the ECQ, a moratorium on its continued use in ethical climate research has been issued (Mayer et al., 2009). Rather, research is needed which measures perceptions of what people in

organizations *do* regarding ethics (i.e. policies, practices, and procedures) rather than what they *should* do. Therefore, the current research defines ethical climate as a “one dimensional construct assessing perceptions that one has established and maintains an ethical code through communication and policy” (Stewart, Volpone, Avery, & McKay, 2011, p. 583). This definition is similar to those proposed by other ethical climate researchers (e.g. Jaramillo Mulki, & Solomon, 2006; Mulki, Jaramillo, & Locander, 2006, Weeks Loe, Choko, Martinez, & Wakefield, 2006). By using this definition, along with a measure that is consistent with it, the current research will answer the recent call to align ethical climate’s definition and measurement with the appropriate conceptualization of organizational climate.

Ethical Climate Antecedents. The first category of ethical climate antecedents includes those dealing with leader characteristics. For example, a leader’s moral development and integrity (Englebrecht, van Aswegen, & Theron, 2005, Schminke, Ambrose, & Neubam, 2005) have each shown positive associations various measures of ethical climate. Evidence also suggests that transformational leadership predicts higher employee perceptions regarding ethical climate (Englebrecht et al., 2005).

The second group of ethical climate antecedents concern organizational characteristics. Neubaum, Mitchell, and Schminke (2004) found that independence ethical climates were more prevalent in new firms, while instrumental ethical climates were less common in such firms. The extent to which organizations enforce ethical codes of conduct also seems to impact the level to which ethical climates are perceived to be present in organizations (Schwepker & Hartline, 2005). Verbeke, Ouwerkerk, and Peelen (1996) found that organizations with a behavior control orientation had more prevalent

ethical climates than organizations oriented towards outcome orientation. Finally, some evidence suggests that non-profit organizations tend to see higher scores on the friendship, social responsibility, and rules dimensions of the ECQ than for-profit organizations (Brower & Shrader, 2000; Agarwal & Malloy, 1999)

Ethical Climate Outcomes. The majority of outcomes which have been studied in relation to ethical climate fall into one of the following categories: ethical behavior, job attitudes, and employee stress. Nearly all of this research has conceptualized ethical climate as psychological climate and been conducted within a single organization at the individual level of analysis.

Regarding unethical behaviors, Wimbush, Shepard, and Markham (1997) found that disobedience and lying decreased when perceptions of ethical climate were high. A negative relationship between reported incidents of intentional norm violations and ethical climate perceptions has also received some support (Vardi, 2001). A variety of other unethical behaviors have also been negatively linked to ethical climate such as unethical selling behaviors (Schwepker & Good, 2007), stealing (Martin & Cullen, 2006), and property deviance (Peterson, 2002a). Finally, Peterson (2002b) found that ethical climate was significantly correlated with reduced scores on an aggregate index which included a variety of unethical behaviors. In addition to decreasing unethical behaviors, there is also some evidence that ethical climate increases prosocial behaviors such as whistle blowing (Rothwell & Baldwin, 2007).

Job attitudes are the second category of consequences that have been examined within the ethical climate literature. For example, Deshpande (1996) found ethical climate to increase a variety of satisfaction outcomes (e.g., job, supervisor, promotions).

Koh and Boo (2004) generalized support for the ethical climate-job satisfaction relationship to an international sample of MBA students in Singapore. Utilizing employee data from telephone companies and accounting firms, results from another study suggest that the benevolence dimension is positively and the egoistic dimension negatively related to organizational commitment (Cullen, Parboteeah, Victor, 2003). Finally, research also indicates a link between ethical climate and turnover intentions (e.g. Hart 2005, Schwepker, 2001).

The third category of ethical climate outcomes focuses on the area of employee stress. For example, salespeople who reported high levels of perceived ethical climate experienced less role conflict and ambiguity in a study conducted by Jaramillo and colleagues (2006). Moreover, in a sample of service employees at a county health department, ethical climate predicted stress related outcomes such as role conflict and emotional exhaustion (Mulki et al., 2006). This study also provided evidence that stress mediated the impact of ethical psychological climate and turnover intentions.

Ethical Climate Interactions. Although the majority of ethical climate research has examined main effect relationships, several studies have explored ethical climate's interactions with other variables. For example, Trevino, Butterfield, and McCabe (1998) found that when alumni from two private colleges worked in an organization that had an ethical code, ethical culture was more closely associated with ethical conduct. On the other hand, ethical climate was the better predictor of ethical conduct amongst organizations that did not have ethical codes. In a recent study, Arnaud and Schminke (in press) found that ethical climates were most strongly related to ethical conduct amongst groups high in collective empathy and collective efficacy. Few studies have examined

ethical climate as a moderating variable, but one study that did so found that ethical psychological climate attenuated the relationship between psychological diversity climate and turnover intentions in a study conducted in a sample of warehouse employees (Stewart et al., 2011). Specifically, employees who reported high levels of both diversity and ethical climates reported the lowest levels of turnover intentions. Barnett and Vaicys (2000) examined ethical climate as a moderator of the relationship between individual's ethical judgments and their behavioral intentions. Results suggested that when individuals did not personally find particular behaviors to be unethical, their likelihood of engaging in that behavior was more heavily influenced by their perceptions regarding ethical climate.

Ethical Climate Future Directions. There are a number of shortcomings in the current literature which necessitate further research on the topic of ethical climate. First, ethical climate research has been conducted almost exclusively at the individual level of analysis. As the appropriate conceptualization of ethical climate is as a higher order construct (Mayer et al., 2009), research is needed in which the measurement and analysis is consistent with construct's higher level conceptualization. Second, with few exceptions (e.g. Stewart et al., 2011), ethical climate has not been examined as a contextual factor that influences other organizational relationships. Because climate is a higher order construct that touches "nearly every area of organizational life" (Kuenzi & Schminke, 2009, p. 635), ethical climate is likely to interact with other organizational variables. Finally, as noted by Mayer and colleagues (2009), the measurement tool utilized in prior ethical climate research is not consistent with the modern conceptualization of organizational climate and is plagued construct validity concerns. Future research is

needed that conceptualizes and measures ethical climate as an organization's policies, practices, and procedures regarding ethics (Schneider & Reichers, 1983). Answering these calls, the current research will therefore measure and analyze ethical climate as a higher level construct, examine ethical climate as a contextual influence on the relationship between customer orientation climate and performance, and conceptualize ethical climate in a manner consistent with the dominant modern definition of organizational climate.

Moderators in Climate Research

There has been a limited amount of research on moderators of the relationship between organizational climate and outcomes. For example, Liao and Rupp (2005) found that the cross level relationship between justice climate and individual level attitudes was moderated by justice orientation. Specifically, the relationship between justice climate and individual level attitudes was more pronounced amongst employees who had strong justice orientations. Also focusing on justice climate, Yang, Mossholder, and Peng (2007) examined culture as a boundary condition. Their research found that higher levels of power distance amplified the relationship between procedural justice climate and individual level commitment as well as OCBs. Moderators have also been found to influence safety climate's relationship with outcomes. Hofmann and Mark (2006) found that the degree of complexity of patient medical conditions moderated the relationship between safety climate and safety outcomes such as medication errors and back injuries. When increasingly complex patient conditions were present, the impact of safety climate

on outcomes was stronger than when dealing with less complex conditions. Finally, safety climate's impact on injuries and accidents was found to be amplified when participants received adequate safety training (Burke, Chan-Serafin, Salvador, Smith, & Sarpy, 2008).

Although relatively few studies have empirically examined moderators of climate to outcome relationships, it is clear that climate's role in organizations is more complex than previously thought. Continued research is needed to understand the conditions under which climate's effects on important organizational outcomes will be greatest. Two moderators which will likely be fruitful avenues for developing a more contextualized understanding of organizational climate are other climate types and climate strength (Kuenzi & Schminke, 2009, Schneider et al., 2010).

Climate Interactions with Other Climate Types

Overview. In their recent summary of the organizational climate literature, Kuenzi and Schminke (2009) called special attention to the dearth of research that simultaneously examines multiple climate types. Schneider and colleagues (2011) also recognized that research integrating multiple climate types will be an essential step towards understanding how climate functions in organizations. Because focusing on a single climate type at a time fails to represent the organizational reality that multiple climates co-exist, exploration of interactive effects between multiple climates represents an important research avenue (Kuenzi & Schminke, 2009, Schneider et al 2010, Schneider et al., 2011, Schulte et al., 2009). Indeed, such an approach is consistent with

the views of researchers who have argued that organizational behavior factors considered together tend to be more meaningful than when considered individually (e.g. Johns, 2006; Rousseau & Fried, 2001, Schulte et al., 2009). Although research on climate interactions is sparse, the few studies that have explored multiple climates simultaneously demonstrate the promise that lies in pursuing such investigations.

Prior Research. Spell and Arnold (2007) performed one of the earliest studies exploring interactions between multiple climate types. Focusing on the interaction between distributive and procedural justice climates, the deleterious effect of distributive justice on depression and anxiety was buffered in groups that were high in procedural justice. Another study revealed that service orientation moderated the relationship between diversity climate and customer satisfaction (McKay et al., 2011). Specifically, diversity climate's relationship with customer satisfaction was strongest amongst retail stores with highly pro customer service climates. Walumbwa and colleagues (2010) studied group level justice and service climates as moderators of the relationship between individual commitment to supervisor and OCB in a sample drawn from seven companies operating in Kenya. A three way interaction between procedural justice climate, service climate, and commitment to the supervisor resulted such that the relationship between individual level commitment and OCB was strongest when both justice climate and service climate were high. Analyses conducted by Batalskaya (2010) indicated that interactions between climate types predicted both financial performance and guest satisfaction in a multinational hotel chain. Results suggested that the interaction between innovative service climate and leadership climate predicted financial performance. In addition, guest satisfaction was highest amongst hotels rated highly in both support

climate and leadership climate. Batalaskaya's (2010) findings provide evidence that climate interactions are likely to be a fruitful avenue for future research.

Two other recent works have taken a different approach to researching how the simultaneous presence of multiple climates impacts outcomes. Rather than study interactive effects, these studies focused on configurations of scores across climate dimensions. In a sample of business units drawn from multiple companies, MacCormick and Parker (2010) examined four theoretically competing climates (external control, internal control, internal flexibility, external flexibility). Utilizing discriminant function analysis, the researchers found that business units with the highest scores across the various effectiveness indicators were those concurrently rated highly on all four of the climates measured. Schulte and colleagues (2009) compared the extent to which mean scores across climates, variability across climate scores, and patterns across climate scores influenced organizational outcomes. While higher mean scores across climates emerged as the best predictor of employee related outcomes, the pattern of scores across dimensions better predicted financial performance. The researchers did not reach conclusions regarding which specific combinations of climate dimensions are related to financial performance. However, the results suggest that studying interactive effects of multiple climates on financial performance will likely be a more fruitful approach than examining main effects alone.

In summary, the small body of work examining climate interactions suggests that organizational climate's effects are more complicated than implied by the common approach which focuses on only one climate type at a time. In order to better understand how climate operates in the context of other climate types, it will be necessary to examine

climate interactions. Therefore, the current study will explore how interactions between two climate types impact outcomes at both the individual and organizational level of analysis.

Overview of Theoretical Frameworks

Three theoretical frameworks that can be applied to understanding how climates may function when considered in combination are social exchange theory, goal conflict, and the Competing Values Framework (CVF). Each will be discussed below.

Social Exchange Theory. The first theoretical framework which could be applied to understanding how climates may interact, is social exchange theory (Blau, 1964). According to Eisenberger, Huntington, Hutchison, and Sowa (1986), employees hold global beliefs regarding the extent to which their organization values their contributions and cares about their well-being. The reciprocity norm, the key tenet of social exchange theory, holds that individuals feel obligated to respond positively when others treat them favorably (Gouldner, 1960). Therefore, when employees believe that their organization values their contribution and is genuinely concerned about their well-being, they feel obligated to return the favorable treatment (Macey & Schneider, 2006). In the context of organizational climate, social exchange theory predicts that when employees believe that their organization supports them, they reciprocate in ways that are valued by the organization. Employees obtain information about which reciprocation behaviors are valued through their perceptions regarding organizational climate. According to social exchange theory, if innovation climate is high, an employee who feels valued by their

organization would reciprocate by channeling extra time and effort into activities aimed at creating new and useful processes or products. An example of a study which applied social exchange theory to interactions in the climate literature, though not to the study of multiple climates, was conducted by Hofmann, Morgeson, and Gerras (2002). The researchers found that the interaction between LMX and safety behavior was moderated by safety climate. The authors reasoned that because LMX relationships are based in social exchange, employees who perceived high LMX reciprocated by engaging in safety behaviors when they perceived that safety was highly valued in their organization.

Goal Conflict. Because climate communicates information about specific organizational goals (Schneider et al., 1998; Kern, 2011), the goal conflict literature may provide insight as to how climates might interact. Goal conflict is defined as the degree to which multiple performance expectations are or are perceived to be incompatible (Locke, Smith, Erez, Chah, & Schaffer, 1994). The goal setting literature suggests that goal conflict can negatively impact performance on a goal both directly and because of decreased goal commitment (Slocum, Cron, & Brown, 2002). Although the goal setting literature has established strong evidence that difficult specific goals contribute to strong task performance, goal commitment is necessary for goal setting to be effective (Locke & Latham, 1990). As others have argued (e.g. Cheng, Lockett, & Mahama, 2007; Slocum et al, 2002), employees faced with competing goals may decrease their commitment to those goals, thus diminishing their positive performance implications.

While the literature examining the implications of goal conflict for performance is relatively small, the current body of work indicates that goal conflict has negative performance implications. For example, a series of lab and field studies conducted by

Locke and colleagues (1994) demonstrated that conflict between multiple competing goals reduced performance outcomes such as productivity and quality. Furthermore, to the extent call center employees perceived multiple performance goals such as net sales, call time, and process accuracy to conflict, they experienced diminished performance across their performance goals (Cheng et al., 2007). Likewise, goal conflict led to decreased goal commitment and ultimately lower goal related performance amongst medical supply salespeople in a study conducted by Slocum and colleagues (2002). Although not explicitly measuring conflict, a number of lab studies indicate tradeoffs are made when individuals pursue multiple goal related tasks (e.g. Erez, Gopher, & Arazi, 1990; Schmidt, Kleinbeck, & Brockmann, 1984). Likewise, in a field study, chronic smokers who set goals to quit smoking were less successful when they perceived that their efforts to quit conflicted with other personal life goals (McKeeman, & Karoly, 1991).

CVF. A third theoretical framework which may be drawn upon to understand climate interactions is the CVF (Quinn & Rohrbaugh, 1983). The CVF is a meta-theoretical model which organizes the underlying values emphasized in organizations. The framework is based on two basic dimensions which range on continuums: organizational focus and structure (Hartnell et al, 2011; Kuenzi, 2008; Paul, 2012). The focus dimension ranges from internal (e.g. focus on employee development, well-being, and employee relations) to external (e.g. focus on productivity, resource acquisition, task accomplishment). The second dimension, structure, ranges from control (e.g. rules, policies) to flexibility (e.g. discretion, adaptability). When the two dimensions are crossed, four quadrants which represent four competing value orientations result:

flexible/external, flexible/internal, control/external, and control/internal (MacKormick & Parker, 2010; Kalliath, Bluedorn, & Gillespie, 1999). While only a few researchers have applied the CVF to understanding organizational climate (e.g. Paul, 2012; McKormack & Parker, 2010; Kuenzi, 2008), it has been applied more extensively in areas such as strategy (Bluedorn & Lundgren, 1993) and culture (Hartnell, Ou, & Kinicki, 2011). Application of the CVF to organizational climate suggests that climates representing organizational values from opposing quadrants may conflict, causing confusion and reducing alignment of effort toward strategic goals or processes (MacKormick & Parker, 2010; Paul, 2012).

Prior research which has examined climate interactions is sparse. Therefore, the current study will draw from social exchange theory, goal conflict, and the CVF to predict the nature of the interaction between customer orientation and ethical climates. Utilizing these conceptual frameworks, competing hypotheses will be proposed predicting that ethical climate will either enhance or inhibit the impact of customer orientation climate on performance.

Climate Strength

Climate strength is defined as the extent of within-group agreement among members in a work unit or organization (Schneider, Salvaggio, & Subirats, 2002). Drawing from Chan's (1998) typology of composition models, climate strength is conceptualized as a dispersion model, in which the group level construct is defined in terms of variability at the lower level. The theoretical underpinnings of the climate

strength construct are based on the concept of situational strength (Mischel, 1976). Michel (1976) asserted that strong situations (i.e. when a group of individuals share similar perceptions of the environment) create uniform expectations regarding appropriate behavior, provide incentives for behaving according to those expectations, and ensure that individuals possess the skills needed to act according to those expectations. Strong situations thus create an environment which produces behavior that is congruent with the expectations for appropriate behavior. On the other hand, individuals in weak situations lack clarity on how to appropriately perceive and respond to the environment. Organizational climates in which consensus across respondents is high (i.e. “strong” climates) similarly provide situational cues that serve to guide behavior (Schneider et al., 2002).

Climate Strength Antecedents. Driven by the interest practitioners have shown in how to build strong climates (Schneider et al., 2010), several studies have examined antecedents of climate strength. In a sample of infantry soldiers, Luria (2008) found transformational leadership to be associated with stronger climates, especially in highly cohesive units. Zohar and Tenne-Gazit (2008) also provided evidence that transformational leadership positively influences climate strength through the use of social network analysis. Their findings indicated that central individuals who have many friends are especially instrumental to the creation of strong climates. Research conducted by Roberson (Roberson 2006a, Roberson 2006b) suggests that climate can be strengthened by performing sense-making activities or increasing member identification with the group. Finally, Dickson, Resick, & Hanges (2006) found that organizations characterized as mechanistic tended to have stronger climates than organic organizations.

However, the results further indicated the strongest climates to be those that were either clearly mechanistic or clearly organic.

Climate Strength Outcomes. Although research interest in climate strength has in large part suggested its potential as moderator (Groth & Goodwin, 2010), some research has examined climate strength's main effects on outcomes. For example, Bliese and Halverson (1998) found that leadership climate strength explained incremental variance above climate level in the average psychological well-being within 73 military units. Results from another study showed interactional justice strength to significantly affect within group variability across all three dimensions of burnout (Moliner, Martinez-Tur, Peiro, Ramos, & Cropanzano, 2005).

Climate Strength Interactions. Climate strength's role as a boundary condition for the effects of climate level has been noted as a promising avenue for future climate studies to explore (Kuenzi & Schminke, 2009; Schneider et al., 2011). This research asks the question "in organizations where there is higher consensus across respondents, does the aggregate mean derived from such scores differ in its predictive capability from scores aggregated across respondents where consensus was lower?" (Schneider et al., 2010, p.385). While the body of literature examining this question is small, initial returns seem to indicate the answer to be "yes" (e.g. Gonzalez-Roma, Fortes-Ferriera, & Peiro, 2009).

One of the first investigations in this line of research was performed by Schneider and colleagues (2002). The researchers found that service climate strength amplified the relationship between service climate level and customer assessments of service quality. In another study, climate strength augmented the impact levels of both innovation and goals

orientation climates had on job attitudes (Gonzalez-Roma et al., 2002). Gonzalez-Roma and colleagues (2009) demonstrated that team organizational support and innovation climate level predicted both subjective and objective performance indicators, but only under conditions of high climate strength. Finally, Colquitt and colleagues (2002) indicated that team justice climate level was most strongly related to team performance and absenteeism when the climate was strong.

Climate Strength Future Directions. Although extant research on climate strength suggests it to be an important contextual variable, it remains understudied (Luria, 2008). Climate strength therefore holds “great potential” for future climate research (Kuenzi & Schminke, 2009, p. 707). Achieving a better understanding of climate strength’s role will be especially helpful to practitioners who need to know when it is critical to get everyone on the same page (Schneider et al., 2011). Only a handful of studies have considered climate strength as a moderating variable. The current research is a response to the recent call for research to better understand climate strength’s influence on customer orientation climate level (Groth & Goodwin, 2010). In response to this recent call, the current investigation will do just that.

A second opportunity for climate strength research involves broadening the outcomes examined. Climate strength has been studied as a moderator of climate’s relationship with unit level outcomes such as aggregate job attitudes (Gonzalez-Roma, 2002), aggregate burnout (Moliner et al, 2005), and customer ratings of unit service quality (Schneider et al, 2002). As such, extant research has only examined climate strength as a moderator of relationships which involve climate and outcome variables at the unit level of analysis. Mischel’s (1967) concept of situation strength, upon which

theory regarding climate strength is based, suggests that individual attitudes and behaviors in weak situations are determined more by personal idiosyncrasy than context. On the other hand, context is more likely to exert an impact when situations are strong. Therefore, based on Mischel's (1967) theory, strong situations presented by high consensus climates should affect attitudes and behaviors at the individual level in addition to the aggregate level. The current study will seek to fill this gap in the literature by considering climate strength as a moderator of the cross level effect of organizational climate on individual performance.

Chapter 2

Hypothesis Development

A complete list of the study's hypotheses is included in the Appendix.

Main Effects

Firms that have a customer orientation climate should experience superior financial performance. When firms engender a customer oriented climate amongst their sales force, they are likely to see enhanced product augmentation (Bowen, Siehl, & Schneider, 1989, Narver & Slater, 1994). Product augmentation involves providing a total product experience that exceeds customer expectations through elements such as customer friendly product design, financing options, and delivery arrangements (Payne & Holt, 2001). Because of the value they place on customer need satisfaction, companies

with a customer orientation climate are likely to be more effective at tailoring their total product experience to the particular desires of their customer base (Zhou, Brown, & Dev, 2009). Successful augmentation of products is critical for financial success because competitive differentiation primarily takes place through product augmentation (Kotler, 2003).

Customer service is an aspect of product augmentation of particular relevance for the current sample of sales employees. Customer perceptions of service quality have received strong support as predictors of financial performance in the service-profit chain literature (Christopher, Payne, & Ballantyne, 1991; Heskett, Sasser, & Schlesinger, 1997). In order to provide outstanding customer service, sales employees need to understand customer expectations, make customer satisfaction their employees' primary objective, and proactively track customer satisfaction (Narver & Slater, 1994). All of these procedures are characteristically emphasized by a customer orientation climate (Kohli & Jaworski, 1990; Schneider et al., 2002). Moreover, when an organization makes customer satisfaction a top priority, it will be emphasized in the firm's recruitment, selection, and training systems (Siguaw, Simpson, & Baker, 1998), especially for employees in customer facing positions such as sales. This process should result in a sales force that is better equipped and more inclined toward outstanding customer service performance (Jones, Busch, Dacin, 2003). Indeed, research in the service climate literature indicates that service climate does indeed enhance customer satisfaction (Salanova et al., 2005; Schneider et al., 2009).

In addition to enhanced product augmentation and customer service, companies should produce more innovative products when they collect and utilize information about

customer needs and preferences. Such companies should be more adept at recognizing and screening new ideas and evaluating customer reactions after new products launch (Atuahene-Gima, 1995; Troy, Szymanski, & Varadarajan, 2001). Because customer oriented companies are expected to have better customer service and more innovative products, customer orientation climate level should enhance financial performance. The contribution customer orientation climate level will make to financial performance is expected to contribute is above and beyond that of prior financial performance.

H1: Customer orientation climate level will be positively related to financial performance beyond the effect of past financial performance.

Customer orientation climate level is also expected to predict individual employee performance. According to Schneider and Reichers (1983), climate provides employees a signal regarding how the organization expects things to be done, what types of behaviors are appropriate, and to which goals their behaviors should be directed. Likewise, employees rely on the organizational context for cues regarding behavioral expectations and consequences (Salancik & Pfeffer, 1978). Therefore, employees who work for organizations that place special emphasis on understanding and satisfying customer needs will tend to engage in behaviors consistent with that emphasis. Behaviors consistent with those expected, desired, and rewarded by the organization are more likely to lead to more favorable performance ratings (Liao & Chuang, 2004). It is therefore expected that customer orientation climate level will predict manager rated individual level performance ratings in the current sample. This relationship is expected to hold even when accounting for prior performance.

H2: Customer orientation climate level will be positively related to individual performance beyond the effect of past individual performance.

Climate Interactions

The current study examines the intersection between customer orientation climate level and ethical climate level in a healthcare setting. The goals associated with each of these focal climates are critical to attain in order for companies to be successful in the medical product industry. Due to the complexities inherent in their work, medical sales representatives must reconcile conflicting interests to effectively perform their jobs (Ariely, 2012). Specifically, these sales representatives work in a hypercompetitive environment in which they must balance pressure to gain a competitive edge with the knowledge that the lives of end consumers are impacted by every sale they make. Because of these complexities, it is not known whether companies that emphasize customer orientation as a source of competitive advantage will see more or less benefit if they also emphasize ethics. It is possible that ethical climate will either enhance or hinder customer orientation climate's impact on performance. Next, I propose competing theoretical arguments for why each possible relationship might be expected.

Complementary Climates Prediction. Several researchers have suggested that customer orientation climate needs to be coupled with a second climate that enhances employee motivation in order to enhance performance (e.g. Burke, Borucki, & Kaufman, 2002; Schulte et al., 2009). Customer orientation climate signals to employees that their organization's strategic directives prioritize customer satisfaction. Sales representatives

who work for organizations high in customer orientation climate level will thus understand that their organization values and expects behaviors aimed at understanding and satisfying customer needs. However, the extent of customer orientation climate level's bottom line impact depends on the degree to which employees are motivated to behave in accordance with those customer focused directives (McKay et al., 2011). Drawing from exchange theory, employees who believe their company treats them well perceive an obligation to repay the company for its support through discretionary effort (Blau, 1964). Employees tend to direct this discretionary effort in a manner consistent with the types of behaviors valued in their organizational milieu (Hofmann et al., 2003). Employees look to organizational climate to determine the valued behavioral currency for reciprocation in exchange relationships (Hofmann et al., 2003). Thus, when customer orientation climate level is high, employees will direct their reciprocation towards understanding and satisfying customer needs. Following this reasoning, high levels of ethical climate level may amplify the impact exerted by customer orientation climate level on financial performance.

Because employees interpret the company's ethics as how they are personally treated (Trevino & Nelson, 2004), employees of ethical organizations tend to perceive that their organization supports their best interests and treats them fairly (Koh & Boo, 2004; McKay, Avery, & Morris, 2008). Employees working in an ethical climate are therefore likely to perceive an obligation to repay the organization for treating them well. When a customer orientation climate is coupled with a high ethical climate levels, its effects on financial performance will be accentuated because employees will have enhanced motivation to behave in accordance with customer oriented values. The

climates will work together such that the ethical climate will motivate employees to direct discretionary effort toward behaviors valued by the organization, and the customer orientation climate will inform employees that the behaviors valued by the organization are those aimed at understanding and meeting customer needs. Because organizations experience superior financial results when their workforce is motivated and aligned with the organization's strategic objectives (Delery, 1998; Huselid & Becker, 2011), customer orientation climate level's impact on financial performance should be stronger when ethical climate level is high.

Conversely, customer orientation climate level's impact on financial outcomes could be attenuated when ethical climate level is low. In the context of low ethical climate level, a high customer orientation climate level will still convey the message that the company expects, desires, and rewards behaviors regarding customer need satisfaction. However, employees under these conditions will be less likely to engage in behaviors consistent with the company's customer focused priorities. According to the fairness heuristic, people rely on various sources in their environment to determine the likelihood that they will be excluded or exploited (Lind, Kray, & Thompson, 1998). Employees use this information to determine the extent to which they invest themselves in their organization (Lind et al., 2001). Fearing exploitation, employees working for unethical organizations will invest less energy and resources towards helping the organization achieve its customer oriented objectives. Customer orientation climate level will also have little impact under low ethical climate level because employees' instrumentality beliefs will be low (Van Erde & Thierry, 1996). When ethical climate level is low, employees will be less motivated to demonstrate customer oriented behavior

because they will lack confidence that behaving in accordance with the organization's customer oriented values will be rewarded. Although employees in these conditions will know from their environment that the organization desires behaviors that drive customer satisfaction, they will be less likely to act on that knowledge. Customer orientation climate level's impact on financial performance can only be realized if employees work to understand and meet customer needs, and therefore will be stronger when ethical climate level is high as opposed to when it is low.

H3(a): Ethical climate level moderates the relationship between customer orientation climate level and financial performance such that the when ethical climate level is high, the relationship between customer orientation climate level and financial performance will be stronger than when ethical climate level is low.

H3(b): Ethical climate level moderates the relationship between customer orientation climate level and individual performance such that the when ethical climate level is high, the relationship between customer orientation climate level and individual performance will be stronger than when ethical climate level is low.

Competing Climates Prediction. It is also possible that ethical climate level will have a deleterious effect on customer orientation climate level's relationship with performance outcomes. While customer focused selling techniques may not be unscrupulous in themselves, they raise ethical questions in the context of the medical industry due to their impact on doctors' decisions about patient care (Wazana, 2000). From an ethical standpoint, medical sales representatives function to provide physicians with the information and awareness about their products necessary to make informed

decisions about patient care (AdvaMed, 2009; Pharmaceutical Research & Manufacturers of America, 2008). Customer focused behaviors influence doctors' decisions through personal and emotional appeal, potentially leading to decisions that are not in the best interest of patients (Komesaroff, 2010).

Therefore, as shown in the following three examples, sales representatives may be conflicted when trying to provide outstanding customer service without influencing physicians' ability to make objective decisions. First, providing free samples to doctors is one means by which medical sales reps can display a strong customer focus. Free samples allow reps to provide physicians exposure to new treatment options and help provide patients with new medications as soon as possible (Chimonas & Kassirer, 2009). However, free samples also may negatively influence physician's ability to make objective decisions about medical care due to the felt obligation to pay back the representatives who provided them (Ariely, 2012; Reitemeier, Ozuna, Taylor, Cook, & Fox, 2003). Representatives who simultaneously perceive the need to exhibit a customer focus and also uphold high ethical standards are faced with a dilemma. They must find a balance between providing enough free samples to allow the doctor to make an informed decision without influencing his or her capacity for objective decision making (Ariely, 2012).

Second, having strong social and emotional bonds with customers is a critical aspect to an ongoing customer service relationship (Berry, 1995). However, ethical guidelines limit the ability sales representatives have to engage in activities that could enhance the interpersonal bond they share with their customers. For example, sales representatives who follow ethical code will not be able to take physicians to golf

outings, sporting events, or other non-product related social activities. For sales representatives willing to step outside the bounds of business ethics, such activities offer an opportunity to form stronger interpersonal bonds with their customers.

Third, physicians often choose to use drugs and medical devices for purposes other than those for which they were tested and approved (Radley, Finkelstein, & Stafford, 2006). Marketing products to doctors for such uses would allow sales representatives an avenue by which to meet their customers' needs. However, ethical guidelines prohibit sales representatives from recommending their products for such "off label" uses (AdvaMed, 2009; Pharmaceutical Research & Manufacturers of America, 2008). Employees must therefore choose between upholding their companies' ethical values and meeting physicians' needs through promoting an "off-label" use of their product. Therefore, companies whose climates prioritize both ethics and customer focus may be sending conflicting messages to their sales representatives.

The literature on goal setting is relevant to the topic of organizational climate because employee perceptions of climate represent the company's focus on a given goal (Kern, 2011; Schneider et al., 1998). Given the potential areas of conflict noted above, medical sales representatives will likely perceive the goals communicated by customer orientation and ethical climates to oftentimes be incompatible. Research on goal conflict suggests that competing goals negatively influence performance both directly and as a result of reduced goal commitment (Locke et al., 1994; Slocum et al, 2002). Due to the potentially incompatible priorities communicated by customer orientation and ethical climates, customer orientation climate's positive relationship with performance will be diminished when levels of each climate are high. Sales representatives who do not

perceive their company to place a strong emphasis on ethics will be less constrained in the range of sales enhancing customer focused behaviors they feel free to engage in. Moreover, employees will likely decrease their commitment to service related goals when they perceive ethical climate level to be high (Slocum et al., 2002). When ethical climate level is low, sales representatives will be most committed to customer oriented goals because they will not be expected to simultaneously pursue competing goals regarding ethics.

The CVF also provides theoretical reason to expect ethical climate level to have a mitigating effect on customer orientation level's relationship with performance. This is because customer orientation climate and ethical climate are situated in opposing quadrants of the CVF (See Figure 1). While customer orientation climate is best conceptualized as belonging in the external-flexibility quadrant, ethical climate clearly reflects values consistent with the internal-control quadrant of the CVF (Paul, 2012). By definition, high customer orientation climate companies are primarily externally oriented with an emphasis on seeking information and feedback from customers. Furthermore, a critical aspect of providing excellent customer service is being flexible to do what it takes to ensure customers' needs are met (Gwinner et al., 2005). The primary concern of ethical climate is necessarily the internal behavior of its employees. Ethical climate focuses on shared perceptions of the company's policies and practices regarding how employees in the company should behave (Stewart et al., 2011). This focus on policies and practices regarding appropriate behavior clearly reflects the control end of the flexibility-control continuum.

According to the CVF (Quinn & Rohrbaugh, 1981), the external-flexibility (customer orientation climate) and internal-control (ethical climate) orientations represent conflicting values. As noted by Schulte and colleagues (2009), the CVF holds that if conflicting value orientations are out of balance, performance will suffer. The simultaneous presence of competing value orientations which exists when levels of both customer orientation and ethical climates in a company are high results in a “muddying of the waters” (Paul, 2012, p. 42). The competition between opposing value orientations causes confusion over whether employees should prioritize the company’s objectives regarding customer satisfaction or ethical business practices. The misconstrual of performance expectations which occurs when both ethical and customer orientation climate levels are high will likely impede customer orientation climate level’s impact on the company’s performance. In sum, goal conflict theory and the CVF each suggest that ethical climate level may attenuate customer orientation climate level’s positive relationship with both individual and company performance.

H4(a): Ethical climate level moderates the relationship between customer orientation climate level and financial performance such that when ethical climate level is high, the relationship between customer orientation climate level and financial performance will be weaker than when ethical climate level is low.

H4(b): Ethical climate level moderates the relationship between customer orientation climate level and individual performance such that when ethical climate level is high, the relationship between customer orientation climate level and individual performance will be weaker than when ethical climate level is low.

Climate Strength

Previous research has shown that while climate level can have main effect relationships with a variety of outcomes, climate strength may be an important moderator of those effects (Colquitt et al., 2002; Gonzalez-Roma et al., 2002). The expectation that climate strength will moderate customer orientation climate level's relationship with outcomes is based on Mischel's (1973) concept of *situation strength* (the amount of ambiguity present in a given situation). According to Mischel, people in strong situations interpret environmental information similarly and thus their affective and behavioral responses are also similar. On the other hand, weak situations are ambiguous in nature and large variability exists in how they are interpreted.

Building on the situation strength concept, customer orientation climate is expected to have stronger relationships with financial and individual performance when it is strong as opposed to weak. Customer orientation climate communicates that behaviors which give priority to outstanding service and meeting customer needs are expected, desired, and rewarded by organizations (Liao & Chuang, 2004). When climate is strong, employees receive a clear, unambiguous message that such behaviors are valued and will be rewarded. Climate that is both strong and high will therefore uniformly direct employee behavior to be consistent with the customer oriented objectives desired by the organization (Beaty, Cleveland, & Murphy, 2001). When employees in strong situations have similar interpretations of their climate, their behavioral responses will be more uniform and consistent, rendering them more predictable (Gonzalez-Roma et al., 2002, 2009). Because strong climates will be associated with less variability in employee

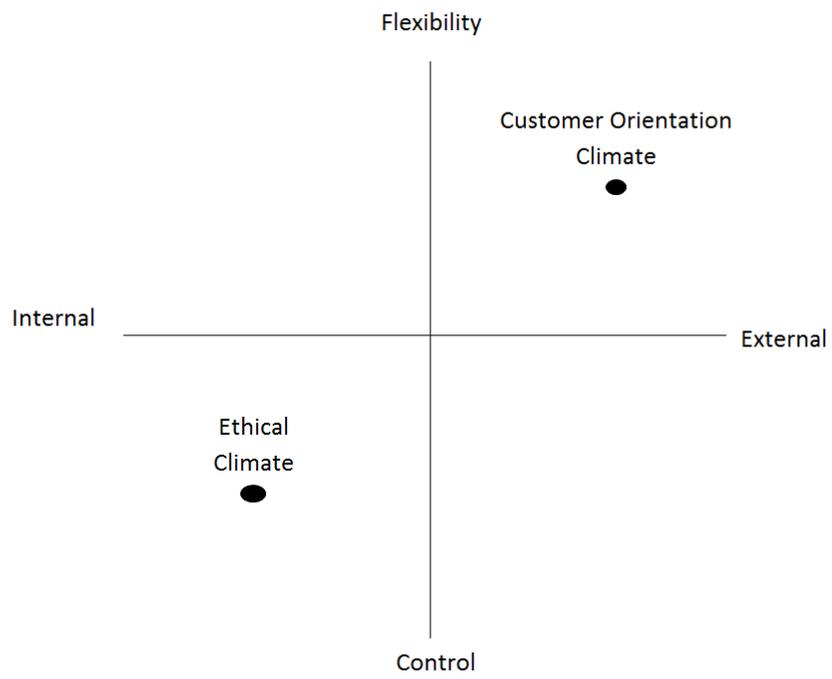
behavior, there will be less variability in customer experiences as well, rendering performance more predictable (Schneider et al., 2002).

On the other hand, weak situations “are not uniformly interpreted, they do not produce uniform expectancies regarding the desired behavior, and they do not provide sufficient incentives for its performance” (Mischel, 1973, p. 276). Employee responses in weak situations are more heavily influenced by personal characteristics and less influenced by the environment (Mischel, 1973). Because climate cannot account for the idiosyncratic responses exhibited by employees in the context of weak climate, climate’s relationship with affective and behavioral outcomes will be attenuated in these situations. Moreover, employee responses will vary to a greater extent when climate is weak rather than strong, rendering outcomes inherently less predictable (Lindell & Brandt, 2000). As suggested by Schneider and colleagues (2002), predictions of outcomes under weak climate conditions should be less reliable than when climate is strong, regardless of climate level. Indeed, prior research has provided some support for climate strength as a moderator of aggregate behavioral outcomes (Colquitt et al., 2002; Whitman, Caleo, Carpenter, Horner, & Bernerth, 2012). It is predicted that the relationship customer orientation climate level is hypothesized to have with both individual and financial performance will be stronger when climate is strong rather than weak.

H5a: Climate strength moderates the relationship between customer orientation climate level and financial performance such that the when climate strength is high, the relationship between customer orientation climate level and financial performance will be stronger than when climate strength is low.

H5b: Climate strength moderates the relationship between customer orientation climate level and individual performance such that the when climate strength is high, the relationship between customer orientation climate level and individual performance will be stronger than when climate strength is low.

Figure 1. Competing Values Framework



Chapter 3

Method

Organizational Context

The current study utilized data from an annual employee attitude survey that was administered in a large multinational corporation that operates in the healthcare product industry. The survey was made available to all of the corporation's full time employees. The corporation has over 150 subsidiary companies which operate in over 50 countries.

Participants

Participants were employees who completed the corporation's 2010 annual employee survey. Across the entire corporation, the survey was completed by 109,484 employees from all functions. Because the current research focused on medical sales employees only, the sample included 16,862 responses. The reason for the decision to include only medical sales employees was that company level samples include perceptions from employees from functions that are further in customer proximity relative to sales. In such functions, employees themselves are less customer focused and the organization's customer orientation may not be as salient (Liao & Subramony, 2008). By including only sales employees, a function which engages in high levels of customer contact, climate perceptions will not be obscured by employees in support roles.

Moreover, compared to customer service employees, excellent service from salespeople is more likely to lead to “a higher proportion of closed sales and more repeat business” (Gwinner et al., 2005). Thus, using a sample of only sales employees may provide a more fruitful avenue by which to predict financial outcomes. Regarding tenure, 12% of sales employees had been with the company for less than one year, 39% between one and five years, 27% between six and ten years, 12% between eleven and fifteen years, 5% between sixteen and twenty years, and 5% over twenty years. Moreover, 15% of the sample held managerial level positions. Individual level data was aggregated by subsidiary company for analysis.

In order to ensure there were enough respondents to provide reliable estimates of the climate variables, only those companies which had more than 10 responses from sales employees were included in the analysis. Bliese’s (1998) simulation study found that biases associated with aggregating individual scores are smaller when the group sizes were at least 10. Moreover, this decision rule reduced the potential that companies with a very low number of salespeople would have a confounding influence on the results (McKay et al., 2011). Finally, the director of the organization’s survey program indicated that those subsidiaries with fewer than 10 salespeople were not accurate representations of true subsidiaries. Rather, those companies are more likely to serve the purpose of holding small amounts of sales dollars to allow the organization to comply with international tax regulations. The director did not feel that the company would value insights gained from the study’s findings if extremely small groups were included that were not representative of the organization’s typical subsidiaries. Of the 93 total companies which had more than 10 responses from sales employees, 77 had both prior and future financial performance

data and 17 had both prior and future individual performance data. The sizes of the companies in the final sample ranged from 13 to 1745, with an average size of 200.25.

It is important to note that one company was removed because it was determined to be an error outlier on the financial performance outcome (this company did not have individual performance data). As demonstrated by Hollenbeck, DeRue, and Mannor (2006) even one case that is an outlier can have a disproportionate influence on a study's conclusions. In order to identify outliers, both visual (boxplot) and quantitative (SD Analysis) were used. One company's financial performance not only emerged as irregularly high upon visual inspection of the boxplot, but also was found to be more than six standard deviations above the mean. This is well above the 3.29 point at which no variables should normally be expected to exceed (Field, 2005). Further inspection of the case's history revealed that the company increased its headcount by 160% during the same year. Headcount changes of this magnitude are indicative of a merger or significant restructuring as opposed to increased headcount to meet consumer demand. Thus, it was determined that irregularities specific to the particular case made comparison with others illegitimate. Following recommendations of Aguinis, Gottfredson, and Joo (2013), the case was deleted from the data set prior to analysis.

Procedure

The survey was administered in electronic format during May of 2010, and employees were permitted time to complete the survey during regular work hours. A month prior to data collection, all of the corporation's employees received an email from

the chief executive officer encouraging them to participate in the survey. Employees who had computers at their work location completed the survey on their regular work machines, and kiosks were arranged for employees who did not have regular access to computers. Employees were given three weeks to complete the survey and no global communications were sent to remind employees about the survey. However, support for participation was provided by lower level managers, many of whom offered local incentives for filling out the survey (e.g. if response rates reach 70% by a certain date, employees could leave work four hours early). The final corporation wide response rate was over 85%. Survey responses were voluntary, anonymous, and participants received no compensation or other benefits for participation. Although the survey contained no unique identifiers that could be linked to archival HR data files, employees self-reported demographic information including tenure, function, and the subsidiary for which they worked. This allowed survey data to be linked to subsidiary company level archival HR and financial data.

The survey was made available to employees in multiple languages, and a third party translation firm was utilized for item translation. The third party first completed all translations, which were then sent to organizational volunteer representatives to review and edit. Translated surveys were then returned again to the translation vendor to check for accuracy in an iterative process which was completed when each party agreed that translation quality was satisfactory.

Climate Level Measures

The employee survey was proprietary in nature, and therefore the exact wording of the items cannot be shared. As such, example items will be stated broadly in order to convey their content without compromising their proprietary nature.

Customer orientation climate was measured via three items. Using a one to five (strongly agree-strongly disagree) scale, the item content was similar to the customer orientation subscales developed by Schneider and colleagues (1998) and Narver and Slater (1990). A sample item relates to whether the respondent believes their company understands customer needs.

Ethical climate was measured using seven items which were similar to other ethical climate questionnaires used in the literature (Saini & Martin, 2009; Stewart et al., 2010). All items utilized a five point scale with response choices ranging from one (strongly disagree) to five (strongly agree). An example item relates to the actions taken by the company towards ethics violations.

Climate Strength

Consistent with previous research, climate strength was operationalized using the within-organization standard deviation of climate ratings multiplied by negative one (Dickson et al., 2006; Schneider et al., 2002; Lindell & Brandt, 2000). The standard deviation is multiplied by negative one so that a lower standard deviation is more readily interpretable as a stronger climate. LeBreton and Senter (2008) noted that the standard deviation is ideal for testing dispersion models such as climate strength (Chan, 1998).

Schneider and colleagues (2002) argued for the use of standard deviation in testing climate strength because the difference between consensus and its opposite, “dissensus,” is inconsequential in the climate strength context. Furthermore, it is preferable to r_{wg} , because the r_{wg} index can sometimes exceed 1.0, a property that can cause confusion when studying climate strength (Schneider et al., 2002).

Performance Outcomes

Individual performance was measured using archival manager ratings that were provided as part of the year end performance appraisal process. Each employee received a single global performance rating from their immediate supervisor. Scale anchors for performance ratings ranged from 1 (Performance consistently does not meet job standards) to 9 (Performance consistently exceeds job standards by a significant degree). The performance ratings were completed in December of 2010, which was seven months after employees completed predictor climate measures in the employee survey. Prior performance used performance ratings collected in December of 2009.

Individual performance ratings were only available for subsidiaries located within the United States, of which there were 17 who which had both 2009 and 2010 performance ratings. Although surveys were anonymous, respondents provided information about the subsidiary for which they worked. Thus climate data for each subsidiary could be matched to individual performance ratings for its employees.

Company Level Financial performance was conceptualized as sales growth during a one year period from 2009 to 2010. Specifically, sales growth was measured as

the percentage change in year-end sales from 2009 to 2010. Year-end sales results were determined by the total revenue during the calendar year. Sales growth is a commonly used method of conceptualizing sales performance (e.g. Collins & Smith, 2006; Ling, Simsek, Lubatkin, & Veiga, 2008; McKay et al., 2009). An advantage of this measure is that it provides a single index that captures organizational improvement versus decline (McKay et al, 2009). Moreover, it standardizes performance across the subsidiary companies which differ in sales volume and the types of products sold. Prior financial performance was measured the same way except that it used sales figures from 2008 to 2009. Of the companies that had more than 10 survey responses from sales employees, 77 had sales growth data for both 2009 and 2010.

Control Variables

In addition to the prior performance control variables for both company financial and individual performance, several other variables were used as controls in analyses. Following prior research (Zahra, 1996), analyses controlled for in which of the corporation's two sectors each subsidiary operated to account for potential differences in outcomes according to industry. The natural logarithm of the number of full time employees at the end of the year was further used to account for differences in resources due to firm size (Collins & Smith, 2006; Guthrie, 2001). Additionally, tests for hypotheses relating to financial performance included dummy variables for region (North America, Latin America, Asia, and Europe/Middle East/Africa) as controls. Finally, tenure was controlled for in tests of hypotheses relating to individual performance to

account for potential performance discrepancies due to experience (Hofmann, Jacobs, & Gerra, 1992).

Chapter 4

Results

Preliminary Analyses

Factor Analysis. Because the items in this research had not been used in previously published research, exploratory factor analyses (EFA) were conducted to verify the expected two factor structure on half of the data that was randomly split. In order to cross validate results, confirmatory factor analyses (CFA) were conducted on the other half of the data (Arbuckle, 1997).

For the EFA, all ten climate items were analyzed using a principle axis rotation method with a direct oblimin rotation. Items were expected to load onto two separate factors: ethical climate and customer orientation climate. The scree plot revealed a two factor solution, with each factor exhibiting an eigenvalue over one and accounting for 70% of the total variance. As shown in Table 1, all items loaded above .45 onto their intended factor, and none loaded higher than .12 onto their non-intended factor. Thus, the EFA supported the expected two factor solution.

Next, a CFA was conducted using AMOS with the second half of the data. Factor loadings from the CFA are included in Table 1. Model fit was evaluated using the χ^2 statistic, Bentler and Bonnet's (1980) normed fit index (NFI), Bentler's (1990)

comparative fit index (CFI), and Steiger's (1990) root mean square error of approximation (RMSEA; Browne & Cudeck, 1993). NFI and CFI values approaching .95 (Hu & Bentler, 1999), and RMSEA values under .06 are indicative of good fit (MacCallum et al., 1996).

The CFA indicated that the two factor solution fit the data well ($\chi^2(34) = 837.84$, $p < .001$; NFI = .98; CFI = .99; RMSEA = .053). In order to provide support for relative fit of the two factor solution, a unidimensional model was fit to the data. Results of this analysis indicated a poorer fit for the unidimensional model ($\chi^2(35) = 7040.66$, $p < .001$; NFI = .87; CFI = .87; RMSEA = .154). This conclusion was supported by the χ^2 difference test ($\chi^2(1, N = 8,454) = 6202.82$, $p < .001$). Therefore, CFA results supported the retention of a two factor structure for the climate measures.

Factorial Invariance Analysis. Because the final sample included data from surveys translated into 35 different languages, measurement invariance tests were performed to ensure that the two factor structure was consistent across languages. If the factor structure is not consistent across language translations, then the various translations may in fact be measuring different psychological constructs (Fischer & Fontaine, 2011). All but six of the 77 companies in the final sample were composed at least 75% of surveys in the same language translation. Therefore, measurement invariance analyses focused only on the 25 languages which were the primary translation used in at least one company. The sample included only 176 surveys in the other 10 languages combined. They were spread across the 77 companies, together never accounting for more than 30% of a single company's total responses.

CFA is a strong method for testing measurement invariance because it is an a-priori, theory driven approach (Fischer & Fontaine, 2011). First, separate CFAs were conducted within each language sample. The English translation, chosen as the referent group, exhibited a strong fit to the data ($\chi^2(34) = 856.45$, $p < .001$; NFI = .98; CFI = .98; RMSEA = .063). Of the 24 other languages, the two factor structure exhibited a similarly strong fit in 13.

Using only the languages which demonstrated strong fit in the CFAs, multi-group CFA was next used to test increasingly restricted models (Vijver & Leung, 1997). Specifically, two models were tested. First, a configural model was tested which specified the loading patterns to be equivalent across languages (Merideth, 1993). A metric equivalence model was then examined which held factor loadings to be equal across languages. Similar to prior research, a change in CFI of less than .01 was used to indicate similarly fitting models. The configural model exhibited a strong fit to the data, suggesting that the loading patterns were consistent across languages ($\chi^2(34) = 2636.94$, $p < .001$; NFI = .97; CFI = .97; RMSEA = .018). The fit for the metric equivalence model was also strong ($\chi^2(34) = 3463.94$, $p < .001$; NFI = .96; CFI = .97; RMSEA = .019). Because the CFI difference was less than .01 (.008, precisely), the multigroup CFA demonstrated that the two factor structure was consistent across the 14 languages supported by CFA.

Although CFA is considered a more robust test of measurement invariance, EFA with procrustean rotation can also be used to demonstrate equivalence (Vijver & Leung, 1997). Because acceptable support by procrustean rotation is considered sufficient evidence of measurement invariance, the 10 languages which were not supported by CFA

were subjected to the EFA test. This step was deemed worthwhile because of the greater statistical power required to use CFA compared to EFA. The 11 languages not supported by CFA had an average size of 91 and ranged from 13 to 275 (compared to average size of 1334 ranging from 65 to 5906 for the supported languages). Procrustean rotation rotates the factor structures obtained for each language toward the rotation found for a target language (Fischer & Fontaine, 2011). After rotations are obtained, the congruence between loadings is compared using Tucker's phi coefficient, with coefficients greater than .85 indicating acceptable agreement (Fischer & Fontaine, 2011). Using English as the target language, all but four languages demonstrated acceptable agreement. Because the languages which were not supported consisted of only 79 total responses (average size of 19.8), it was determined that the totality of CFA and EFA evidence taken together was sufficient to include the entire sample for further analyses.

Data Aggregation. Because testing of the study's hypotheses required that climate ratings be analyzed at the company level, reliability (ICC1, ICC2) and agreement (rwg) statistics were calculated to justify aggregation (LeBreton & Senter, 2008). One-way ANOVAs, calculated using company as the independent variable, were significant ($p < .001$) for both ethical and customer orientation climates. ICC1 values were .14 and .22 for ethical climate and customer orientation climate, respectively. Given that the average ICC1 value in the organizational literature is around .12 (James, 1982), these values are characteristic of those in the literature. Moreover, ICC2 values were .97 for ethical climate and .98 for customer orientation climate, well above the .70 cutoff recommended by Klein and colleagues (2000). Finally, rwgs were used to examine within-company agreement on the climate scales. The average values across hotels were .78 for ethical

climate and .72 for customer orientation climate, thus providing further support for aggregation to the company level.

Reliability. To examine the internal consistency of the climate scales, Cronbach's alphas were calculated for both ethical climate ($\alpha = .92$) and customer orientation climate ($\alpha = .86$). Each demonstrated adequate internal consistency.

Company Level Correlations. Correlations between company level variables are presented in Table 2. Ethical climate and customer orientation climate means were highly positively correlated ($r = .78, p < .01$). Customer orientation climate level was significantly correlated with 2010 financial performance ($r = .23, p < .05$), but ethical climate level was not ($r = .18, ns$). Each climate level variable was significantly correlated with prior financial performance (customer orientation $r = .33, p < .01$; ethical $r = .37, p < .01$). Customer orientation climate strength correlated positively with financial performance from both 2010 ($r = .27, p < .05$) and 2009 ($r = .34, p < .01$). On the other hand, ethical climate strength did not correlate significantly with financial performance from either year (2010 $r = .15, ns$ 2009 $r = .13, ns$). Finally, the correlation between financial performance in 2009 and 2010 was .41 ($p < .01$).

Individual Level Correlations. At the individual level, there was a strong correlation between prior and current performance ratings ($r = .42, p < .01$). Tenure was significantly, though not strongly, correlated with both 2009 ($r = .14, p < .01$) and 2010 ($r = .07, p < .01$) performance.

HLM Null Model. Hypotheses regarding individual performance as an outcome predicted that both individual and organization level variables would be significant predictors. In order for hypotheses regarding the impact of company level climate on

individual level performance to be supported, it is necessary for the between group performance variability to be significant. In order to establish the appropriateness of HLM as an analysis technique for this sample, a null model was therefore calculated in order to determine the ICC value for individual performance. The null model bifurcates the within group performance variability from the between group variance and forces it into the Level 1 and Level 2 residual terms, respectively. The ICC was then conducted to measure the percent of the total variability in the outcome that is between groups (Gavin & Hofmann, 2002). The results showed the within group variance component to be 1.20 and the between group variance component to be significantly different than zero at .04 [$\chi^2 (16) = 239.21, p < .001$]. Therefore, while the amount of between group variability in performance is relatively small, the significant value supports the use of both individual and group level predictors.

Hypothesis Testing

Main Effects. Hypothesis 1 predicted that customer orientation climate level would have a positive main effect on financial performance. Tested using OLS regression, results indicated that customer orientation climate did not have a significant main effect on financial performance ($b = .13$, ns, see Table 3) above the control variables (company size, sector, past performance, and region).

Hypothesis 2 predicted a significant main effect of customer orientation climate level on individual performance beyond the impact of prior performance. Results for all individual performance hypotheses can be seen in Table 4. A random intercept model

with both Level 1 (tenure, prior performance) and Level 2 (sector, company size) controls and customer orientation climate at Level 2 was conducted to test the hypothesis. Results indicated that customer orientation climate level was not a significant predictor of individual performance ($\hat{y} = -.23$, ns). Thus, hypothesis 2 was not supported. Snijder and Bosker's (1994) pseudo R^2 showed that compared to the null model, the model reduced the between groups error by 49% and the total error by 19%. This represented an improvement of only .01 beyond the controls for between group error. Because of the sample's small amount of between group variability, the .01 improvement in between group variability explained did not improve the .19 percent of the total variability explained by the controls alone.

Interaction Effects. Hypotheses 3a and 4a presented competing predictions regarding the interactive impact of ethical climate level and customer orientation climate level on financial performance. While 3a predicted that ethical climate level would accentuate customer orientation climate level's impact on financial performance, 4a predicted that ethical climate level would inhibit customer orientation's influence. Company size, sector, past performance, and dummy variables for region were added as control variables in the first step of the regression. Main effects were also entered as controls. The interaction term between ethical and customer orientation climate levels in the regression equation in the final step was significant explaining an additional seven percent of financial performance variability above controls and main effects ($b = .29$, $p < .05$, $\Delta R^2 = .07$; see Table 3). As shown in Figure 2, the slopes of the regression lines for customer orientation were plotted under both high and low levels of ethical climate (i.e. one SD above and below the mean). A simple slope analysis revealed that customer

orientation climate level was significantly related to financial performance when ethical climate level was high ($b = 23.39, p < .05$), but not when ethical climate level was low ($b = 4.13, ns$). Thus, the influence of customer orientation climate level was stronger under conditions of high as opposed to low ethical climate level. Furthermore, there was little difference in financial performance between low and high ethical climate level when customer orientation level was high. Consistent with predictions, the regression plot indicates that companies high on levels of both customer orientation climate and ethical climate had stronger financial performance than those with low levels of each climate. Results thus supported hypothesis 3a, which predicted that ethical climate level would strengthen customer orientation climate's positive relationship with financial performance.

Hypotheses 3b and 4b presented competing predictions regarding the interactive impact of ethical climate and customer orientation climate levels on individual performance (Table 4). Prior performance and tenure were included as controls at Level 1, and company size and sector were controlled at Level 2. Main effects were also entered as Level 2 controls. HLM analyses indicated that the interaction between customer orientation level and ethical climate level was not a significant predictor of individual performance ($\hat{y} = 1.17, ns$). Therefore, neither hypothesis 3b nor 4b was supported. The model reduced the error between groups by 54% and the total error by 19%, representing an improvement over controls and main effects of .03 for between group error and no improvement for the total error.

Hypothesis 5a predicted that customer orientation climate strength would moderate the relationship between customer orientation climate level and financial

performance such that the relationship would be strengthened when customer orientation climate was also strong. Results are presented in Table 5. After entering company size, sector, prior performance, and region as controls as well as main effects, a significant interaction term explained an additional eight percent of the variance in financial performance ($b = .29$, $p > .01$, $\Delta R^2 = .08$). Simple slope analyses indicated that customer orientation climate level marginally predicted higher financial performance when climate was strong ($b = 14.54$, $p < .10$), but was not significant when climate was weak ($b = -5.11$, ns). As shown in Figure 3, financial performance was best under conditions of high customer orientation climate level that is also strong. When customer orientation level was low, financial performance appeared to be better if the climate was weak. Thus, the form of Figure 3 was consistent with the direction predicted by Hypothesis 5a.

Hypothesis 5b predicted that customer orientation climate strength would moderate the relationship between customer orientation climate level and individual performance such that the relationship would be enhanced when climate was strong. Controlling for prior performance, tenure, company size, and sector, along with main effects, the interaction between customer orientation climate level and strength was not significant ($b = 2.34$, ns). Pseudo R^2 indicated that the model reduced the between group error by 57% and the total error by 19% compared to the null model. Compared to the control variables and main effects alone, this represented an additional six percent explanation of between group individual performance variability. Results did not support Hypothesis 5b.

Ancillary Analyses

The predictions in the current research focused on customer orientation climate level as the focal variable, and ethical climate level and customer orientation strength as moderators. However, ethical climate level might also exert an influence on the outcomes of interest in this research, and climate strength might be considered a moderator of those effects. Ancillary analyses were therefore conducted to test these relationships. Results for financial performance are displayed in Table 6. Ethical climate level did not have a significant main effect on financial performance above the control variables ($b = .08$, ns). However, ethical climate strength did significantly moderate ethical climate level's impact on financial performance ($b = .36$, $p < .01$, $\Delta R^2 = .10$). The form of the interaction is plotted in Figure 4. Simple slope analyses indicated that ethical climate level had a non-significant positive relationship with financial performance when ethical climate was strong ($b = 10.64$, ns), and significantly predicted lower financial performance when ethical climate was weak ($b = -26.94$, $p < .05$).

Parallel results for the individual performance outcome are in Table 7. Ethical climate level was not a significant main effect predictor of individual performance ($\hat{y} = -.37$, ns). However, the interaction term testing climate strength as a moderator of ethical climate level was significant ($\hat{y} = 5.05$, $p < .001$). In Figure 5, the regression slopes are plotted at one standard deviation above and below the ethical climate strength mean. Simple slope analyses revealed that ethical climate level was not significantly related to individual performance when the climate was either strong ($b = .09$, ns) or weak ($b = -.74$, ns). The best individual performance was present under conditions of ethical climate

that was both low and weak. Further, the poorest individual performance was seen when ethical climate level was high but ethical climate was weak. Nonetheless, inspection of Figure 5 suggests that ethical climate had a subtle positive influence on individual performance when it was strong and a negative relationship with individual performance when it was weak.

Because both customer orientation climate strength and ethical climate level significantly interacted with customer orientation climate level to predict financial performance, a three way interaction was explored to further clarify the nature of these interactions. After controls, the means for customer orientation climate level, ethical climate level, and customer orientation climate strength were each entered in the second step of the regression. The three possible two way interactions were entered in the third step, and the three way interaction between customer orientation climate level, ethical climate level, and customer orientation climate strength was entered in the final step. However, the three way interaction term was not significant.

Table 1.

EFA and CFA factor loadings for ethical climate and customer orientation climate

	Factor		CFA
	EFA Factor 1	EFA Factor 2	
Ethical 1	0.85	-0.01	0.85
Ethical 2	0.82	-0.06	0.77
Ethical 3	0.81	0.04	0.84
Ethical 4	0.76	0.11	0.84
Ethical 5	0.74	-0.03	0.72
Ethical 6	0.73	-0.03	0.72
Ethical 7	0.70	0.08	0.74
Customer 1	-0.09	1.00	0.91
Customer 2	0.04	0.78	0.83
Customer 3	0.12	0.65	0.74

The sample was randomly split in half. One half was used for EFA, the other half for the CFA. Bolding indicates the item loads on the intended factor.

Table 2.

Company level correlations between measured variables

	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. Average Tenure	2.76	0.50	1							
2. Company Size	513.31	746.49	.01	1						
3. Ethical Level	4.13	0.26	-.31**	-.05	1					
4. Customer Level	3.99	0.38	-.34**	-.13	.78**	1				
5. Ethical Strength	0.65	0.13	-.25*	-.30**	.54**	.38**	1			
6. Customer Strength	0.72	0.17	-.30**	-.29*	.58**	.76**	.54**	1		
7. 2010 Financial Performance	4.53%	16.14%	-.17	-.13	.18	.23*	.15	.27*	1	
8. 2009 Financial Performance	4.09%	14.74%	-.10	-.16	.37**	.33**	.13	.34**	.41**	1

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); N=77

Table 3.

OLS regression testing effect of customer orientation climate level main effect and interaction with ethical climate level on financial performance

	Model			
	1	2	3	4
<i>Controls</i>				
Company Size	-0.12	-0.12	-0.11	-0.14
Sector	-0.06	-0.04	-0.03	0.00
Prior Financial Performance	0.39**	0.34*	0.35*	0.31*
Region Dummy 1	-0.12	-0.14	-0.14	-0.24
Region Dummy 2	-0.06	-0.08	-0.07	-0.15
Region Dummy 3	0.06	0.06	0.06	-0.01
<i>Main Effects</i>				
Customer Level		0.13	0.17	0.33 [†]
Ethical Level			-0.05	-0.15
<i>Interaction Term</i>				
Ethical Level X Customer Level				0.29*
R2	0.20	0.21	0.21	0.28
F	2.88	1.18	0.07	6.31
R2 Δ	0.20	0.01	0.00	0.07

** Significant at the 0.01 level (2-tailed); * Significant at the 0.05 level (2-tailed);

[†] would meet the .10 level; N = 77

Table 4.

HLM analyses for customer orientation climate level on individual performance main effect, interaction with ethical climate level, and interaction with customer orientation climate strength

	Model					
	1	2	3	4	5	6
<i>Level 1</i>						
Intercept	5.49***	5.49***	5.49***	5.46***	5.48***	5.42***
Prior Performance	0.41***	0.41***	0.41***	0.41***	0.42***	0.41***
Tenure	0.00	0.00	0.00	0.00	0.00	0.00
<i>Level 2 Controls</i>						
Company Size	-0.20 [†]	-0.25*	-0.21	-0.26	-0.22*	-0.23*
Sector	0.07	0.08	0.05	0.1	0.11	0.14 [†]
<i>Level 2 Predictors</i>						
Customer Level		-0.23	-0.15	-0.16	0.02	-0.18
Ethical Level			-0.18	-0.04		
Customer Level X Ethical Level				1.17		
Customer Strength					-0.6	0.53
Customer Level X Customer Strength						2.34
Within-group variance	0.97	0.97	0.97	0.97	0.97	0.97
Between groups variance	0.02	0.02	0.02	0.02	0.02	0.02
R ² within-group	0.18	0.18	0.18	0.18	0.18	0.18
R ² between-group	0.48	0.49	0.51	0.54	0.51	0.57
R ² total	0.19	0.19	0.19	0.19	0.19	0.19

*** Significant at the .001 level (2-tailed); ** Significant at the 0.01 level (2-tailed); * Significant at the 0.05 level (2-tailed); [†] Would meet the .10 level; Level 2 N= 17; Level 1 N = 6666

Table 5.

OLS regression testing effect of customer orientation climate level interaction with customer orientation climate strength on financial performance

	Model			
	1	2	3	4
<i>Controls</i>				
Company Size	-0.12	-0.12	-0.10	-0.10
Sector	-0.06	-0.04	-0.02	-0.06
Prior Performance	0.39**	0.34*	0.33*	0.35**
Region Dummy 1	-0.12	-0.14	-0.15	-0.21
Region Dummy 2	-0.06	-0.08	-0.08	-0.14
Region Dummy 3	0.06	0.06	0.05	0.06
<i>Main Effects</i>				
Customer Level		0.13	0.05	0.11
Customer Strength			0.12	0.09
<i>Interaction Term</i>				
Customer Level X Customer Strength				.29**
R2	0.20	0.21	0.22	0.29
F	2.88	1.18	0.43	7.13
R2 Δ	0.20	0.01	0.01	0.08

** Significant at the 0.01 level (2-tailed); * Significant at the 0.05 level (2-tailed); † would meet the .10 level; N = 77

Table 6.

OLS regression testing effect of ethical climate level main effect and interaction with ethical climate strength on financial performance

	Model			
	1	2	3	4
<i>Controls</i>				
Company Size	-0.12	-0.12	-0.10	-0.03
Sector	-0.06	-0.06	-0.06	-0.01
Prior Performance	0.39**	0.36**	0.37**	0.44***
Region Dummy 1	-0.12	-0.13	-0.19	-0.12
Region Dummy 2	-0.06	-0.08	-0.11	-0.14
Region Dummy 3	0.06	0.06	0.04	0.04
<i>Main Effects</i>				
Ethical Level		0.08	0.00	-0.13
Ethical Strength			0.15	0.11
<i>Interaction Term</i>				
Ethical Level X Ethical Strength				0.36**
R2	0.20	0.20	0.22	0.31*
F	2.88	0.41	1.05	9.49
R2 Δ	0.20	0.01	0.01	0.10**

*** Significant at the .001 level (2-tailed); ** Significant at the 0.01 level (2-tailed);

* Significant at the 0.05 level (2-tailed); † Would meet the .10 level; N = 77

Table 7.

HLM analyses for ethical climate level on individual performance main effect and interaction with ethical climate strength

	Model			
	1	2	3	4
<i>Level 1</i>				
Intercept	5.49 ^{***}	5.49 ^{***}	5.50 ^{***}	5.47 ^{***}
Prior Performance	0.41 ^{***}	0.41 ^{***}	0.41 ^{***}	0.41 ^{***}
Tenure	0.00	0.00	0.00	0.00
<i>Level 2 Controls</i>				
Company Size	-0.20 [†]	-0.16	-0.17	-0.20 [*]
Sector	0.07	0.02	0.02	0.12
<i>Level 2 Predictors</i>				
Ethical Level		-0.37	-0.32	-0.33
Ethical Strength			-0.09	0.08
Ethical Level X Ethical Strength				5.05 ^{***}
Within-group variance	0.97	0.97	0.97	0.97
Between groups variance	0.02	0.02	0.02	0.02
R ² within-group	0.18	0.18	0.18	0.18
R ² between-group	0.48	0.51	0.51	0.53
R ² total	0.19	0.19	0.19	0.19

^{***} Significant at the .001 level (2-tailed); ^{**} Significant at the 0.01 level (2-tailed); ^{*} Significant at the 0.05 level (2-tailed); [†] Would meet the .10 level; Level 2 N= 17; Level 1 N = 6666

Figure 2: Customer Orientation Climate Level x Ethical Climate Level Interaction on Financial Performance

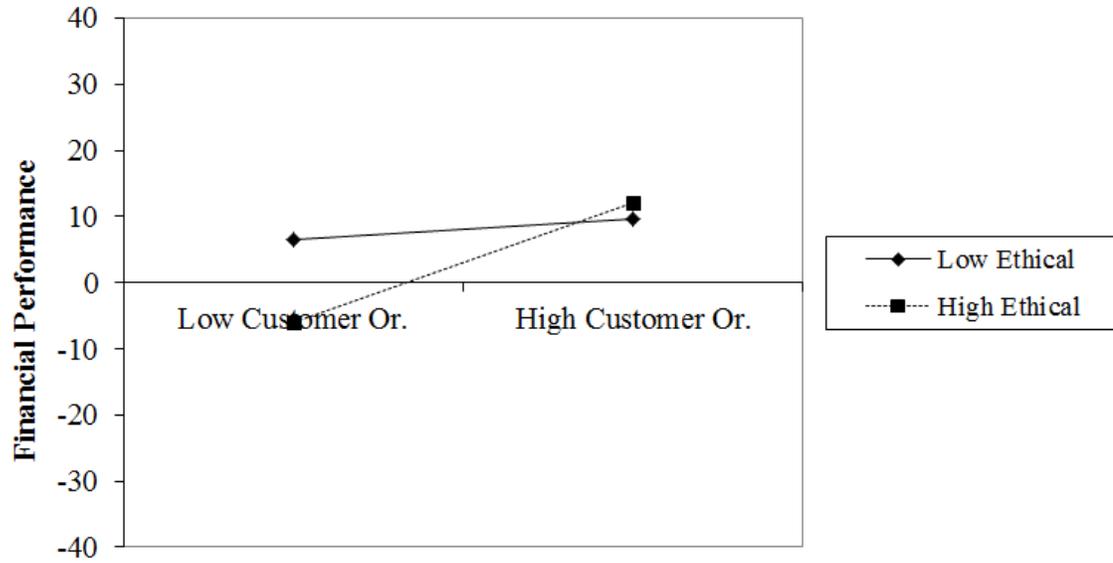


Figure 3: Customer Orientation Climate Level x Strength Interaction on Financial Performance

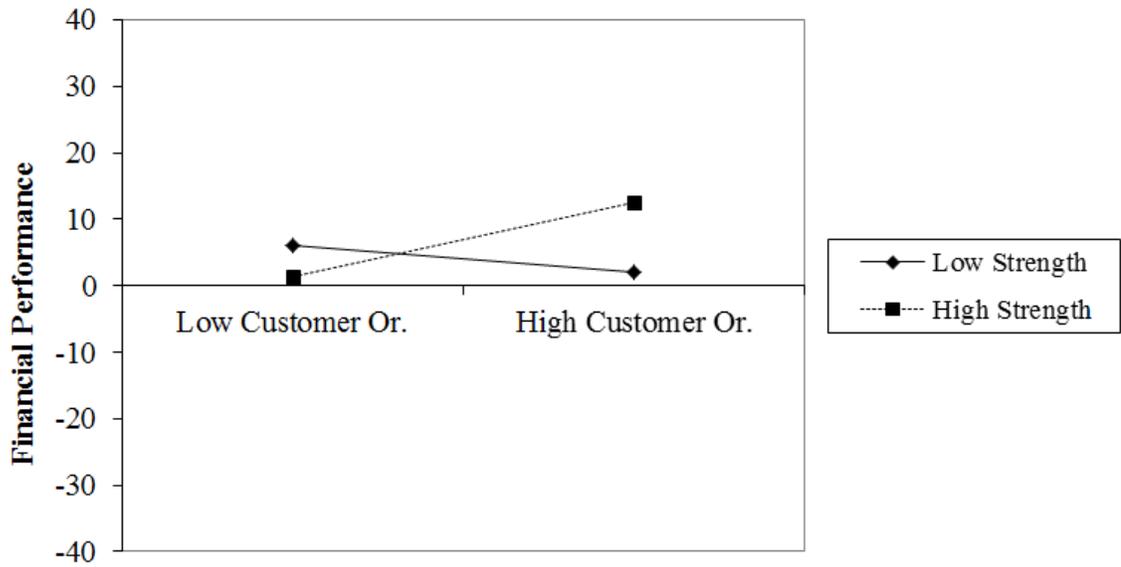


Figure 4: Ethical Climate Level x Strength Interaction on Financial Performance

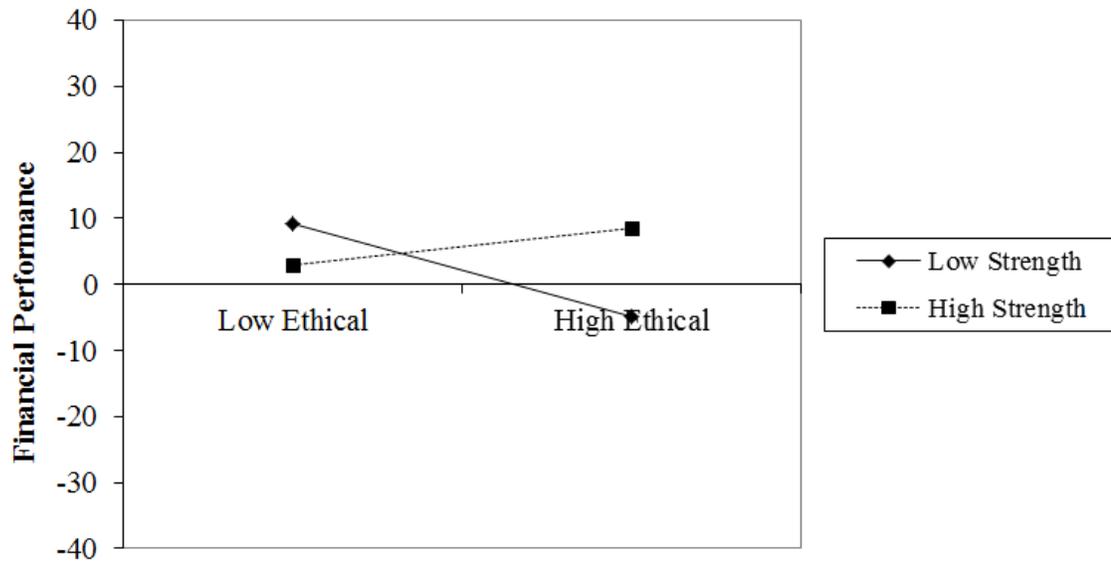
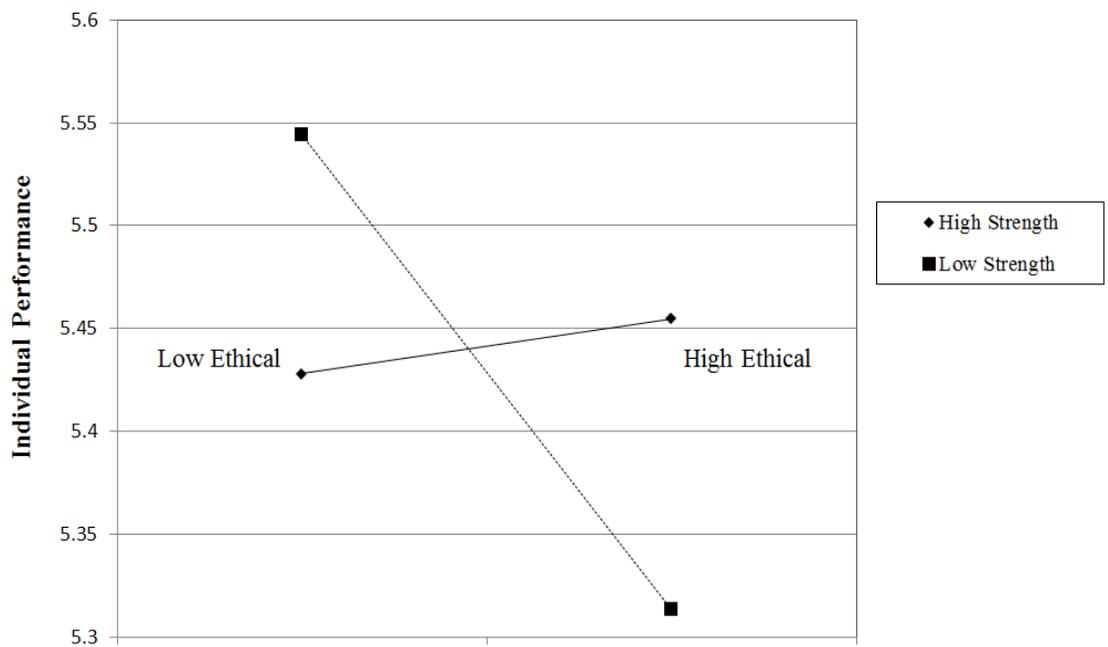


Figure 5: Ethical Climate Level x Strength Interaction on Individual Performance



Chapter 5

Discussion

Summary of Results

Although organizational climate is defined as perceptions of context (Ostroff, Kinicki, & Muhammed, 2012), research has not sufficiently accounted for contextual influences on climate (Zohar & Hofmann, 2011). The current results suggest that climate research which considers and explores contextual moderators will likely prove more fruitful. The study found no support for main effect relationships. In contrast, climate level consistently predicted financial performance when moderators were included in the analyses. Customer orientation climate level was positively related to financial performance under conditions of high, but not low ethical climate level. Similarly, a positive association between customer orientation climate level and financial performance was observed only under conditions of strong as opposed to weak climate. Finally, ancillary analyses revealed significant interactions between ethical climate level and climate strength for both the financial and individual performance outcomes. The form of the interaction for each outcome generally suggested positive associations for ethical climate level and performance under strong climates but negative associations between ethical climate level and performance under weak climates.

Theoretical Implications

The current research has several implications for climate theory. The overarching takeaway is that climate's relationship with financial performance is complex. In order to understand climate's bottom line impact, research must account for boundary conditions. This study was therefore consistent with recent calls for climate researchers to take a more fine-grained and nuanced approach to understanding the relationship between climate and its outcomes (e.g. Kuenzi & Schminke, 2009). Prior researchers have argued that specific climate types are unlikely to predict the criterion unless there is a clear match between the particular referent and focus of each (Schneider 1975). However, the current research suggests that the policies, practices, and procedures enacted by an organization regarding specific processes and objectives can impact broad outcomes like financial performance, but only under certain conditions.

More specifically, these results help clarify the relationship between customer orientation climate and financial performance. While a few prior studies have examined customer orientation climate as a predictor of financial performance, main effect results to date have been inconsistent (e.g. Weitzel et al., 1989; Paradise-Tornow, 1991; Sowinski et al., 2008). This inconsistency has led some to conclude that customer orientation climate's usefulness is limited to predicting more proximal outcomes such as customer satisfaction (e.g. Schneider et al., 2009). However, this study showed that customer orientation climate level was positively related to financial performance when ethical climate levels were also high or if the customer orientation climate was strong. The situational contingencies supported in this study suggest future consideration of

boundary conditions such as customer contact frequency (Mayer, Ehrhart, & Schneider, 2009), interdependence (Gittell, 2002), and “busy-ness” (i.e. high customer volume relative to resources available to meet customer needs, Wiley, 1991) will likely continue to better clarify customer orientation’s impact on financial performance.

The study also calls attention to the importance of considering climate interactions. Climate research needs to account for interactions between climate types in order to accurately reflect the organizational reality that “multiple climates exist in organizations” (Kuenzi & Schminke, 2009, p. 705). Although the need to study climate interactions has been noted in several recent reviews of the climate literature (e.g. Ostroff et al., 2012, Zohar & Hofmann, 2011), very few studies have done so. This study’s support for the interactive relationship suggests that climate researchers should focus greater attention on how different climates might accentuate or attenuate one another’s effects. It may be especially important to account for climate interactions for broad as opposed to narrow outcomes. Because climate interactions account for a wider range of factors, it makes sense that combinations of climates would be more strongly related to broad outcomes than a single climate type alone. This is consistent with the strategic human resource systems literature, which suggests configurations of human resource practices are more strongly related to business results than individual practices considered in isolation (e.g. Ichniowski, Shaw, & Prennushi, 1997). Extending beyond the conclusion that it is important to study climate interactions, the current results suggest that the interplay between process and outcome focused climates may be particularly important to explore.

The plot of the interaction between customer orientation and ethical climates indicated that companies with low ethical climate performed well financially regardless of customer orientation climate level. This suggests that companies that do not emphasize customer satisfaction can only achieve strong financial performance if they have a low ethical climate. Indeed, a lack of emphasis on ethics may improve sales because salespeople feel free to use more aggressive sales tactics. Unethical practices may thus allow companies that fail to prioritize customer satisfaction to perform well financially; at least in the short term. However, unethical conduct can have long term negative consequences such as lawsuits and diminished brand value due to reputational damage (Trevino, & Nelson, 2004). The current results highlight customer orientation climate as a means by which companies can achieve strong bottom line results while still encouraging ethical business practices. Because customer orientation climate's relationship with financial results was stronger when ethical climate was high, results support social exchange theory as an interpretive lens for understanding climate interactions. Exchange Theory may be especially useful when considered in combination with the delineation between strategic and process climates (Schneider et al., 2011). Process climate (e.g. ethical climate) might provide employees with the perception that they are treated well by their company (Schneider et al., 2011). Thus, strategic climate (e.g. customer orientation climate) may exert a stronger performance impact when combined with process climate because employees repay their company for providing support by directing greater effort toward achieving the objectives the strategic climate communicates.

Despite competing theoretical rationale that promoting ethical practices may at times come at the cost of lower sales dollars, the current research indicates that it pays for customer oriented companies to also be ethical. Thus, the climate competition hypotheses based on goal conflict and the CVF were not supported. However, interactions between climates that are in more direct opposition may produce support for the competing climate hypothesis. For example, climate combinations such as innovation and predictability (Anderson & West, 1998), safety and efficiency (Kuenzi & Schminke, 2009), and service and transaction efficiency (Schneider et al., 1998) are more diametrically opposed to each other. Compared to the climates examined in this study, effective performance seems more likely to be precluded when climates more directly antagonistic to one another are paired.

Another contribution of this work was the consistent support obtained for the role of climate strength as a moderator of climate level's relationships with criterion. While climate strength only moderated customer orientation climate level's relationship with financial performance, it significantly interacted with ethical climate level to predict both financial and individual performance. Of particular note is that the form of the interaction was generally consistent and as expected for all three significant climate strength interactions across climate types and outcomes. In each case, climate level was only positively associated with performance when the climate was strong. Therefore, the current research mirrors prior work which has found that climate strength fosters the positive influence of climate level on outcomes. The results further suggest that weak climates may in fact be destructive to organizations. In all of the significant interactions, the worst performance was observed under conditions of high but weak climate. In each

case, weak climate's relationship with financial or individual performance exhibited a negative trend. These findings suggest that organizations which send weak inconsistent messages about strategic outcomes or processes of focus will not only fail to reap any benefit but may do more harm than good.

A final theoretical takeaway from this study was that results were more consistent for financial, as opposed to individual performance. Results suggest that company level climate's impact on outcomes at the company level may not be homologous with its impact on individual level outcomes. Several factors could have contributed to this pattern. First, Zohar and Luria (2005) found that companies have both an overall climate set by senior leaders and local unit level climates based on the extent to which supervisors implement the company's policies and procedures. Perhaps individual responses are more strongly influenced by the local climate set by their immediate supervisor than the high level climate which reflects the company's strategy as set by senior leaders. Indeed, Zohar and Luria (2005) found that the relationship between company level safety climate perceptions and individual safety behaviors were mediated by subunit level safety climate perceptions. The current results, coupled with Zohar and Luria's (2005) study, suggest that perhaps company level climate is most valid for predicting criterion at the same level of analysis, and that subunit climate should be considered when the outcome of interest is at the individual level. It is also possible that the less consistent findings for individual performance hypotheses may have resulted from the small amount of between company individual performance variability and a small Level 2 sample size for individual performance hypothesis tests. These limitations

may have reduced the study's ability to detect significant relationships between climate and individual performance.

Practical Implications

In terms of practical implications, several themes emerged from the current study's results. A general takeaway for practitioners is that leaders should account for combinations of climates that may reinforce one another. In addition to implementing policies, practices, and procedures focused on a strategic objective (Schein, 2004), leaders should also consider processes which support that objective. Companies that foster climates that enhance employee well-being may see greater financial impact from strategic climates than companies that focus only on objectives without ensuring their employees feel supported. Despite the nuances involved, this study demonstrates that climate offers practitioners a potential source of competitive advantage which, if leveraged appropriately, can lead to enhanced revenue.

More specifically, the findings suggest that when companies develop a customer orientation climate, they may in turn see improved financial returns. However, management should only expect financial gains to result if certain conditions are in place. In particular, if the policies, practices, and procedures enacted in their organization encourage ethical conduct, their customer focus will be more likely to lead to a financial payoff.

Another practical implication is based on the study's finding that the positive influence of climate on performance was observed under conditions of strong but not

weak climate. These results suggest that business leaders should take great care in communicating their strategic values. Management must ensure that these messages are communicated clearly and that the information is received by their employees (Schneider et al., 2011). Essentially, the findings are consistent with the notion that “half-hearted attempts at sending a message will fail” (Schneider et al., 2011, p. 43). Leaders might facilitate stronger climates through engaging in transformational leadership (Luria, 2008), encouraging greater cohesion (Zohar & Tenne-Gazit, 2008), and enhancing employees’ identification with the organization (Roberson, 2006).

Limitations and Future Research

There were limitations to this research which should be noted. The measure of individual performance had characteristics which may have reduced the study’s ability to detect significant relationships. First, while the between group variability in individual performance was statistically significant, the amount of between company variability was small (.04), reducing the likelihood of statistically significant effects. Second, the Level 2 sample size for tests of individual performance hypotheses was 17, with a Level 1 sample size of 6666. Some researchers argue that there is a trade-off in sample size requirements between levels whereby a large Level 1 sample size compensates for a small Level 2 sample (e.g. Cohen, 1998; Raudenbush & Liu, 2000). However, others have suggested that the number of Level 2 groups is more important than the number of individuals present in the data at Level 1 (Garson, 2013). The significance tests used by the program HLM utilize degrees of freedom based in part on the Level 2 sample size

(Hox, 2010). Nonetheless, Maas and Hox (2005) demonstrated that a small Level 2 sample size is far less of a concern when the researcher is only interested in the fixed part of the model. Because the hypotheses tested in the current research concerned fixed effects, it is believed that the sample size was adequate. Indeed, the sample size used in the current research was similar to others which have tested fixed effects predictions (e.g. Hom, Roberson, & Ellis 2008; Mueller, Hattrup, Spiess, & Lin-Hi, 2012). Nevertheless, future research should seek to replicate results with larger Level 2 samples. The third limitation of the individual performance measure was that it consisted of only one global item which represented performance for the entire calendar year. Because single-item measures often suffer from inferior reliability (Wanous & Hurdy, 2001), any relationship between climate and individual performance may have been attenuated due to measurement error. Finally, it is important to note that the sample for the individual performance hypothesis tests included only US based subsidiary companies. Therefore, while the results for the company level and individual level performance analyses differed, cultural variation cannot be ruled out as an explanation for this finding.

Although the customer orientation and ethical climate scales each showed strong psychometric properties and were similar to items in published studies (e.g., Schneider et al., 1998; Stewart et al., 2011), they were developed in house. Therefore, their nomological networks and criterion related validities have not been evaluated by prior work.

The extent to which the results would generalize to other professions and industries is unclear. Ethical issues are very salient in the pharmaceutical and medical device industries, and regulatory bodies have outlined standards for appropriate conduct

(AdvaMed, 2009; Pharmaceutical Research & Manufacturers of America, 2008).

Samples drawn from other industries in which ethical issues are less prominent and there is less clarity between ethical and non-ethical conduct may display different results. Due to popular perceptions that salespeople are unethical and dishonest (Gallup, 2006), it is possible that customer reactions to unethical behaviors on the part of sales people may be less severe. Therefore, future research should examine the generalizability of this study's results to non-sales employees. Finally, the sample consisted of subsidiary companies from a single large multinational organization. Although the organization uses a decentralized management approach, generalizability of the results to other organizations may be limited.

Although sales growth is a commonly used measure of financial performance (Collins & Clark, 2006), it only accounts for the revenue portion of the profit equation. Because company performance is multidimensional, it is necessary to examine several financial indicators to obtain a holistic perspective of climate's relationship with financial success (Kuenzi, 2008). Results may have differed if the financial performance measure accounted for expenditures such as labor, property, and travel. Therefore, the use of accounting based indices such as return on assets (ROA) or market-based financial performance estimates (e.g. Tobin's q) could help provide a more comprehensive indicator of overall company profitability and operating efficiency (Tobin, 1969; van Dyck, Frese, Baer, & Sonnentag, 2005).

Although results were consistent with social exchange theory, it is important to note that the mechanisms underlying climate's influence on outcomes were not measured (e.g. perceived organizational support, employee effort). Future research should therefore

measure mediators of the relationship between climate and performance that would illuminate the mechanisms underlying these relationships.

Although ethical issues are particularly salient for salespeople in the medical industry, other process climate variables should also be investigated. For example, because “fair procedures reassure members that their interest will be protected and advanced” (Lind & Tyler, 1988), justice climate may also boost service climate’s business impact. Diversity climate is another process climate which engenders in employees a sense that their organization supports their best interests (McKay et al., 2008). Each of these process climates provides a potentially fruitful avenue for further investigations of climate interactions.

Future research could also examine alternative conceptualizations of climate strength. Similar to prior climate strength research (e.g. Gonzalez-Roma et al., 2002), the current research focused only on companies’ sales functions, conceptualizing strength in terms of the within company standard deviation. Future research at the company level could include all departments and examine *climate variability* (Zohar & Luria, 2005), which refers to the within organization, between unit variability in climate perceptions. According to Zohar and Luria (2005), supervisory discretion in how they implement organizational policies and procedures creates meaningful variation in climate perceptions between subunits. Future studies should determine if internal alignment across subunits functions similarly as a boundary condition of climate’s effects. Further, studies should determine if there are certain situations and outcomes in which one or the other.

Appendix

List of Hypotheses

Hypothesis #	Hypothesis	Result
H1	<i>Customer orientation climate level will be positively related to financial performance beyond the effect of past financial performance.</i>	Not Supported
H2	<i>Customer orientation climate level will be positively related to individual performance beyond the effect of past individual performance.</i>	Not Supported
H3(a)	<i>Ethical climate level moderates the relationship between customer orientation climate level and financial performance such that the when ethical climate level is high, the relationship between customer orientation climate level and financial performance will be stronger than when ethical climate level is low.</i>	Interaction significant, Form consistent with expectations, Simple slopes significant
H3(b)	<i>Ethical climate level moderates the relationship between customer orientation climate level and individual performance such that the when ethical climate level is high, the relationship between customer orientation climate level and individual performance will be stronger than when ethical climate level is low.</i>	Not Supported
H4(a)	<i>Ethical climate level moderates the relationship between customer orientation climate level and financial performance such that the when ethical climate level is high, the relationship between customer orientation climate level and financial performance will be weaker than when ethical climate level is low.</i>	Not Supported
H4(b)	<i>Ethical climate level moderates the relationship between customer orientation climate level and individual performance such that the when ethical climate level is high, the relationship between customer orientation climate level and individual performance will be weaker than when ethical climate level is low.</i>	Not Supported
H5(a)	<i>Climate strength moderates the relationship between customer orientation climate level and financial performance such that the when climate strength is high, the relationship between customer orientation climate level and financial performance will be stronger than when climate strength is low.</i>	Interaction significant, Form consistent with expectations, Simple slopes marginal
H5(b)	<i>Climate strength moderates the relationship between customer orientation climate level and individual performance such that the when climate strength is high, the relationship between customer orientation climate level and individual performance will be stronger than when climate strength is low.</i>	Not Supported

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VITA
Adam Myer

EDUCATION

The Pennsylvania State University - University Park, PA
Ph.D. in Industrial/Organizational Psychology (August 2013)
M.S. in Industrial/Organizational Psychology (December 2010)

Evangel University - Springfield, MO
B.S. in Psychology (May 2007)

APPLIED EXPERIENCE

Survey Analytics Intern: Johnson & Johnson 6/11-7/13

- Facilitated the design, implementation, and action planning phases of the annual employee survey.
- Performed analyses of relationships between employee survey results and business outcomes.

Assessor: PNC Leadership Assessment Center 8/09-2/11

- Observed, rated, and provided feedback to center participants across leadership competencies.

Pennsylvania State University Practicum Group 8/08-5/11
Project Co-Lead: Pennsylvania State Education Association (PSEA) Member Survey

- Created, administered, and analyzed a longitudinal member attitude survey.
- Presented results and recommendations to senior PSEA leadership in an on-site meeting.

Aerosoles International Associate Selection Tool

- Developed a new pre-screening selection tool for Aerosoles International.
- Used reliability, factor analysis, and regression to demonstrate the scale's validity.

Penn State University Department of Human Resources Performance Evaluation System

- Developed a new performance evaluation system for implementation at all Penn State University campuses. The system utilized behaviorally anchored rating scales.
- Conducted focus groups to obtain behavioral exemplars for the competencies to be rated in the new evaluation system.

Pennsylvania State Education Association UniServ Representative Selection Process

- Created a new interview protocol as part of a revision to a multiple hurdle selection process.

SELECTED PUBLICATIONS AND CONFERENCE PRESENTATIONS

Zhang, Y., Mohammed, S., **Myer, A.**, & Ocker, R. (2013, April). *Pacing Style Diversity, Time Awareness Norms, and Temporal Conflict*. Poster to be presented at the 28th Annual Conference of the Society for Industrial and Organizational Psychology, Houston, TX.

Myer, A. & Mohammed, S. (2012, April). *Team Temporal Leadership: Construct Development and Validation*. Poster presented at the 27th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.

Hunter, S. T., Thoroughgood, C., **Myer, A.**, & Ligon, G.S. (2011). The paradoxes of leading for innovation. *Psychology of Aesthetics, Creativity, and the Arts – Special issue: Innovation in Organizations*, 5, 54-66.