



# EMPLOYEE INVOLVEMENT CLIMATE AND ORGANIZATIONAL EFFECTIVENESS

**CHRISTINE M. RIORDAN, ROBERT J. VANDENBERG,  
AND HETTIE A. RICHARDSON**

*This study empirically examines the relationship between the perceived employee involvement (EI) climate and organizational effectiveness. Using a sample of insurance companies, results indicate that organizations with high levels of perceived EI climate lead to organizational effectiveness as measured through financial performance, turnover rate, and workforce morale. Implications of the results for research and practice are discussed. © 2005 Wiley Periodicals, Inc.*

Researchers have argued that today's organizations operate in hypercompetitive markets characterized by continuous technological change, shortened product life-cycles, and competitors who compete in aggressive ways (D'Aveni, 1998; Volberda, 1996). Although the exact processes that generate profitability in such environments remain unclear, there is some agreement that successful organizations are flexible and responsive and react quickly to and anticipate changes in the competitive landscape (Miles, Snow, Matthews, & Coleman, 1997; Volberda, 1996). Taking this argument a step further, some authors (e.g., Huselid, 1995; Lawler, 1996) specifically argue that employee involvement (EI) is one way in

which organizations can achieve the responsiveness needed in a hypercompetitive world.

Lawler and his colleagues, for example, suggest that EI taps into employees' capabilities in a way that traditional, top-down management cannot (Lawler, 1996; Lawler, Mohrman, & Ledford, 1995). By helping organizations to actively develop and utilize their human resources, EI should enable organizations to produce high-quality products/services, increase the speed of work operations and innovation, and improve employee performance, motivation, and attitudes. Empirical research indicates that successful employee involvement efforts can substantially impact organizational financial productivity (e.g., Huselid, 1995; Ostroff, 1995).

Correspondence to: Christine M. Riordan, Associate Dean for External Relations and the Luther Henderson University Chair in Leadership, Neeley School of Business, TCU, Box 298530, Fort Worth, TX 76129, 817-257-7122, c.riordan@tcu.edu

To date, most existing research examining the link between EI and desirable outcomes has focused specifically on involvement-related organizational practices such as quality circles and suggestion systems. Researchers have recently argued, however, that an exclusive focus on practices is of limited value to researchers and practitioners interested in understanding and successfully implementing EI. As Bowen and Ostroff (2004) point out, it is unlikely that there is a single most appropriate set of practices for an objective such as EI. Further, there is often a disconnect between an intended program of involvement and how that program actually is implemented (Glew, O'Leary-Kelly, Griffin, & Van Fleet, 1995; Truss, 2001). Whereas examining the presence or absence of involvement practices may provide a reasonably accurate picture of an intended involvement program, it may not accurately represent the extent to which employees really are involved. Related to this last issue, practice-oriented EI research has been criticized for relying on single respondents to describe organizations' EI efforts (Gerhart, Wright, McMahan, & Snell, 2000; Purcell, 1999). Not only are single respondents unlikely to capture important process issues (Purcell, 1999), but there is also concern that this approach may result in both over- and underestimates of EI's effects on performance (Gerhart et al., 2000).

In response to these concerns, there has been a call to consider the role of organizational climate in understanding how EI might be associated with organization-level employee and performance outcomes (Bowen & Ostroff, 2004). Organizational climates are shared perceptions among employees about their organizational context (such as might be defined by the organization's practices and policies), and they serve to mediate the relationship between the context itself and responses to the context such as behaviors or affect (Schneider & Reichers, 1983). In other words, the climate literature suggests that an organization's in-

tention to use a program of EI to stimulate effectiveness gains and the presence of practices associated with EI will be meaningless unless employees behave in ways that are supportive of EI. Citing Argyris (1964) and Likert (1961), Bowen and Ostroff (2004; Ostroff & Bowen, 2000) argue that, when employees perceive positive organizational climates, they will be more satisfied and committed to the organization and more willing to work toward its goals. They go on to suggest that the strongest climates are those in which employees within the organization have consistent expectancies regarding appropriate response patterns, that provide incentives for performance of the response patterns, and instill the skills necessary for the appropriate execution of the response patterns (Bowen & Ostroff, 2004). To the extent that an organization has a strong climate for EI, employees should be more likely to demonstrate the patterns of behavior suggested by EI (e.g., engaging in decision-making activities), and EI's desirable organization-level outcomes should be more likely to materialize.

The purpose of the present article is to empirically examine the relationship of a perceived EI climate to organizational effectiveness. Based on the logic that organizational climates tell employees "the kinds of behaviors that management expects, supports, and rewards" (Bowen & Ostroff, 2004, p. 205) and that climates motivate employees to engage in those behaviors, we suggest that a climate in which employees perceive they are involved will be positively associated with organizational effectiveness, as defined by strong financial performance, positive employee attitudes, and low turnover rates.

## A Climate of Employee Involvement

We define a climate of involvement in terms of employee perceptions of four attributes described by Lawler and his colleagues (Lawler, 1996; Lawler et al., 1995). These authors propose that EI can be characterized by a work environment where *all* employees recognize that (a) they have the power to make decisions (participative decision mak-

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ing); (b) information is shared throughout the organization (information sharing); (c) they are provided with the necessary training to do the work (training); and (d) they will be rewarded for using their participation in decision making, information sharing, and training to positively influence organizational outcomes (performance-based rewards) (Dachler & Wilpert, 1978; Galbraith, 1973; Guzzo, Jette, & Katzell, 1985; Harrison, 1985; Ledford & Lawler, 1994; Randolph, 1995; Sashkin, 1984).

Such an approach to involvement fits with the Bowen and Ostroff (2004) notion that climates will produce their intended outcomes when employees consistently recognize what behaviors are expected, have the knowledge and skills necessary to appropriately exhibit the expected behaviors, and are rewarded for exhibiting the behaviors. It is also important to point out that involvement researchers indicate that employees must perceive high levels of all four attributes for an optimal EI climate to exist. As Lawler (1986) explains:

Power without knowledge, information, and rewards is likely to lead to poor decisions. Information and knowledge without power leads to frustration because people cannot use their expertise. Rewards for organizational performance without power, knowledge, and information can lead to frustration and lack of motivation because people cannot influence their rewards. Information, knowledge, and power without rewards for organizational performance are dangerous because nothing will ensure that people will exercise their power in ways that will contribute to organizational effectiveness. (p. 42)

In the sections that follow, we discuss each of the four attributes of perceived EI climate in more detail.

### *Participative Decision Making*

Participative decision making is the perception among employees that they have con-

trol over or say in decisions that affect their work. Much research has traditionally examined EI by narrowly operationalizing it only as participative decision making. However, reviews and meta-analyses considering both the practice and perceptions of participative decision making have concluded that, when examined in isolation, participative decision making does not strongly affect the performance or morale of individuals. For example, in their meta-analysis, Wagner and Gooding (1987; see also Wagner, Leana, Locke, & Schweiger, 1997) found that participation in decision making was not strongly related to increased individual task performance ( $r = .11$ ). While such findings suggest that participation by itself does not lead to desired outcomes, several studies indicate that participation may have a stronger effect when it co-exists with organizational attributes that support it (Dachler & Wilpert, 1978; Guzzo et al., 1985). For example, Guzzo et al. (1985) found that productivity increased when participative decision making was accompanied by changes in the compensation system and job design.

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### *Information Sharing*

Information sharing exists when employees perceive that information about the organization, its goals, and its plans are shared with them. Researchers consistently argue that open communication is necessary for employees to receive the information needed to participate and make quality decisions (Argyris, 1964; Hackman & Oldham, 1980; Harrison, 1985; Likert, 1961; McGregor, 1960; Pasmore & Fagan, 1992; Randolph, 1995). As noted by Randolph (1995), "without information, people cannot act responsibly; informed they are almost compelled to act with responsibility" (p. 22). Individuals who do not perceive that they have the necessary information to make decisions will also find such tasks frustrating and demotivating (Hackman & Oldham, 1980; Pasmore & Fagan, 1992).

## Training

Appropriate, ongoing training enables employees to develop the knowledge required for effective performance (Cohen, Ledford, & Spreitzer, 1996; Lawler, 1992). Training also is integrally linked to participation and information in that employees need to perceive that they have opportunities to develop the skills that accompany increased information processing and effective decision making (Randolph, 1995). Training also provides employees with a basis for selecting

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a particular course of action and for understanding why that course of action is more desirable than others (Galbraith, 1973; James, James, & Ashe, 1990; Katz & Kahn, 1966).

## Performance-Based Rewards

Finally, employees in an EI climate perceive that incentives link their behaviors to outcomes within the organization. Performance-based rewards have a powerful influence on the strength of attitudes and the frequency of employee behaviors (Porter, Lawler, & Hackman, 1975). When employees recognize that their behaviors determine their rewards, they will be more likely to alter their behaviors to be consistent with organizational goals (Wright & McMahan, 1992). Thus, employees should believe that the reward system fits with key organizational factors, such as goals and objectives, organizational structure, and the design of the work (Lawler, 1992). Making the performance-reward link obvious within a climate of EI ensures that organizations are reinforcing performance standards associated with increased use of information and knowledge and with effective decision making.

## Hypotheses

Our main research question is whether organizations with varying levels of a perceived EI climate differ in overall effective-

ness. We hypothesize that high levels of an EI climate are positively associated with financial performance and workforce morale and negatively associated with corporate turnover.

## Human Capital Perspective

Linking a perceived EI climate to organizational effectiveness is consistent with human capital theory, which states that people possess skills, experience, and knowledge that add economic value to firms (Cascio, 1991; Parnes, 1984). As noted by Parnes (1984), worker skills and knowledge represent capital to an organization because they directly enhance productivity. That is, people add value to a firm to the extent that they perform services.

Following from the human capital perspective, it is expected that a perceived EI climate will significantly affect two indicators of organizational effectiveness: financial performance and organizational employee turnover rates. If employees perceive an EI climate, then they should also believe that they can and do control their own work activities (Manz, 1992; Manz & Sims, 1980). Thus, employee perceptions of a climate of EI suggest that they believe their knowledge, creativity, and perspective are brought to bear directly on work-related issues. As such, employees who perceive a climate of EI should engage in the knowledgeable and informed application of creativity and relevant perspectives in their day-to-day work activities. When there is a collective effort to use this application to enhance products and services, organizational financial performance also should improve (Ichniowski, Kochan, Levine, Olson, & Strauss, 1996; Leana & Florkowski, 1992; Miller & Monge, 1986).

Supporting this notion, in a study of a paper mill, Ichniowski (1992) found that profitability increased after the implementation of a system of practices that supported EI (e.g., employee participation in decision making, performance-based rewards, and communication). The main reason noted by Ichniowski (1992) for the increase in prof-

itability was that workers were offering suggestions for improving operations, something they had not done previously. Similarly, in a study of the apparel industry, Berg, Appelbaum, Bailey, and Kalleberg (1996) found that allowing workers to self-regulate resulted in cost savings and reductions in turnaround times. As the practices within an organization are believed to shape the process by which involvement is enacted (e.g., the climate; Ostroff & Bowen, 2000), the link between involvement-related practices and outcomes found in these studies may indicate that a perceived climate of EI existed in these organizations.

The rationale for a relationship between a perceived climate of EI and turnover is that employees can provide a competitive advantage that is not easy to replicate (Schuler & MacMillan, 1984; Ulrich, 1991; Wright & McMahan, 1992). The costs of replacing human capital can be quite extensive due to recruitment, selection, training costs, productivity losses, and the organization's loss of talent (Baysinger & Mobley, 1983; Hom & Griffith, 1995). Organizations seeking a climate of EI have an incentive to minimize the turnover rate in order to minimize associated costs and to maintain a competitive advantage (Arthur, 1994). Further, employees who perceive a climate of EI are also likely to perceive that the organization invests in its human capital and cares about employee well-being. Some suggest that, when such perceptions exist, the resulting organizational setting is likely to attract, socialize, and retain similar employees who have or develop the skills necessary to function effectively in the given environment (Kozlowski & Doherty, 1989; Lawler, 1986, 1992; Ostroff & Bowen, 2000). Not only are these the types of employees that organizations most want to keep, but these organizations may be the companies at which employees most want to remain. Therefore, we propose:

*Hypothesis 1: The greater the presence of a perceived EI climate within an organization, the higher will be the corporate financial performance and the lower the corporate employee turnover rate.*

### *Human Relations Perspective*

Human relations theorists argue that involvement-oriented work environments will affect employee attitudes (Argyris, 1964; Likert, 1961; McGregor, 1960). These theorists suggest that a perceived EI climate meaningfully improves employee work environments, and research indicates that employees will respond with positive emotions to an environment that is perceived as personally beneficial (James et al., 1990). A perceived EI climate characterized by Lawler's four attributes should be positively meaningful to employees: the participation in decision-making attribute suggests employees believe they have challenges, independence, and responsibility; the training and information attributes imply that employees believe work is facilitated because they have access to the necessary knowledge and information; and the performance-reward attribute suggests that employees believe positive behaviors are supported and recognized (Hackman & Lawler, 1979; James et al., 1990; Locke, 1976; Miller & Monge, 1986). The more that each of these elements permeates the organization to create a perceived EI climate, the greater the chance that employees will be satisfied with their jobs and committed to their organizations (Ichniowski et al., 1996). Thus, we propose the following:

*Hypothesis 2: The greater the presence of a perceived EI climate within an organization, the higher will be the employee morale as assessed through organizational commitment and job satisfaction.*

The human relations perspective suggests that an EI climate can indirectly affect the performance of an organization by increasing the workforce morale of its employees (French, Israel, & As, 1960; Miller & Monge, 1986). If work conditions can be arranged so that employees satisfy their own needs by working toward organizational goals, they

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will work hard toward the achievement of these goals (McGregor, 1960). In short, the human relations perspective suggests that, because of increased morale associated with a perceived climate of EI, employees are more likely to engage in behaviors that contribute to the achievement of organizational goals as well as positive, discretionary-type behaviors that go beyond formally specified duties (Organ, 1990). Additionally, because experiencing a climate of EI increases employee commitment and satisfaction, they may be less likely to leave the organization (Leana & Florkowski, 1992; Miller & Monge, 1986). Thus, we propose:

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*Previous research demonstrates that organizational size is related to indices of organizational effectiveness.*

*Hypothesis 3: The greater the presence of a perceived EI climate within an organization, the higher the workforce morale, which will, in turn, increase corporate financial performance and lower the corporate employee turnover rate. In other words, workforce morale will mediate the relationship between a perceived climate of EI and corporate financial performance and corporate employee turnover rate.*

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## Method

### Sample

Ninety-two insurance companies in the United States and Canada comprised the sample for this study. Data were collected as part of a large survey administered to the employees of these companies. Ten percent of the available employees at each job level were randomly selected within each organization. The number of respondents ranged from 14 to 123 across the 92 organizations, resulting in a total of 4,828 respondents. The response rate was approximately 90% of those employees originally contacted. The characteristics of the sample are presented in Table I.

### Control Variables

Three controls were included in the tests of the hypotheses. The number of employees

and reported assets were used as indicators of organizational size. Previous research demonstrates that organizational size is related to indices of organizational effectiveness, such as financial performance (Arthur, 1994; Huselid, 1995; Snell & Dean, 1992) and employee turnover (Hom & Griffith, 1995). The heads of human resources in each organization provided these values.

The number of full-time, head/home office employees was estimated by having them choose from: (a) less than 200; (b) 200–499; (c) 500–999; (d) 1,000–4,999; and (e) 5,000 or more. Similarly, admitted corporate assets were estimated using the following format: (a) less than \$100 million; (b) \$100 million–\$499.9 million; (c) \$500 million–\$1.499 billion; (d) \$1.5 billion–\$4.999 billion; (e) \$5 billion–\$14.999 billion; and (f) \$15 billion or more. *Organization type* was also included in the analysis because insurance companies can be categorized based on their financial policies as well as the insurance codes under which they operate. The corporate heads of human resources were asked to identify their companies as mutual, stock, or “other” type.

## Dependent Variables

### Financial Performance

Three measures assessed company financial performance. The first was return on assets (ROA), defined as the net operating gain (after taxes) as a percentage of prior-year admitted assets. This measure assesses insurance earnings in relation to the company's total asset base (*Best's Insurance Reports: Life-Health Insurance Edition*, 1993, p. xix). The second measure was an index of how well an insurance company extracts higher returns on income relative to companies with the same financial leverage (better-performing companies extract higher returns). This index is calculated by dividing net income (total after-tax earnings from operations and capital gains) by net premiums written (NPW; gross premiums written minus premiums ceded). This index is referred to as gain from NPW. The third measure was return on

**TABLE I** Sample Characteristics

Gender	<ul style="list-style-type: none"> <li>• 70% female</li> </ul>
Age	<ul style="list-style-type: none"> <li>• &lt; 1% less than 20 years of age</li> <li>• 67% between 20 and 40 years of age</li> <li>• 21% between 41 and 50 years of age</li> <li>• 11% greater than 50 years of age</li> </ul>
Education	<ul style="list-style-type: none"> <li>• 2% of the respondents had some high school</li> <li>• 24% possessed a high school diploma</li> <li>• 29% indicated some college work</li> <li>• 12% completed a two-year associate degree</li> <li>• 28% possessed bachelor's degrees</li> <li>• 6% had graduate degrees</li> </ul>
Race	<ul style="list-style-type: none"> <li>• 81% Caucasian</li> <li>• 7% African-American</li> <li>• 3% Asian</li> <li>• 4% Hispanic</li> <li>• 5% "other"</li> </ul>
Organizational Tenure	<ul style="list-style-type: none"> <li>• 9% less than 1 year of tenure</li> <li>• 13% one to less than two years</li> <li>• 27% two to less than 5 years</li> <li>• 21% five to less than 10 years</li> <li>• 31% 10 or more years of tenure</li> </ul>
Job Level	<ul style="list-style-type: none"> <li>• 17% executive or manager/director</li> <li>• 10% supervisors</li> <li>• 73% nonmanagement or nonsupervisory positions</li> </ul>

surplus (ROS), the ratio of the current year's net income over the prior year's capital surplus (amounts of directly contributed equity capital in excess of the face or par value of the equity). This ratio is a profitability index in that it estimates how much of the current year's income is due to available equity. Better-performing companies typically gain higher returns on surplus than poorer-performing companies. All data for the financial performance measures were obtained directly from the *Best's Insurance Reports* for the one-year period following the collection of the workforce morale and the EI climate measures.

#### Employee Turnover Rate

The overall organizational turnover rate was collected from the head of the human resources department. Human resources directors were asked to provide the yearly

turnover rate in percentages relative to the total organizational employee population.

#### Workforce Morale

The two measures of workforce morale were organizational commitment and job satisfaction. Commitment was measured with five items from Mowday, Steers, and Porter's (1979) *Organizational Commitment Questionnaire*. Sample items include: "If I had to do it all over again, I would still go to work for this company" and "I feel a high level of loyalty to this company." Responses were scored on a four-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (4). The scale score for commitment was calculated by averaging the five items ( $\alpha = .87$ ). Job satisfaction was assessed using two items from Cammann, Fichman, Jenkins, and Klesh (1979): "Considering everything, how satisfied are you with your job?" and "Please in-

dicating the amount of personal satisfaction you receive from doing your job." Responses for job satisfaction were based on a four-point scale ranging from *very satisfied* (1) to *very dissatisfied* (4). The scale score for job satisfaction was the average of the items ( $\alpha = .68$ ).

### Independent Variables

#### Perceived Participative Decision Making, Information Sharing, Training, and Performance-Based Rewards

Individuals should exhibit agreement about the presence or absence of EI within their organization.

Based on the work of several researchers (e.g., Cohen et al., 1996; Vandenberg, Richardson, & Eastman, 1999), we used 20 items to operationalize the four perceived EI attributes (participative decision making: four items; information sharing: four items; training: four items; performance-based rewards: six items). The validity of these measures was assessed in three phases: content, exploratory factor, and confirmatory factor analyses.

**Phase I: Content Analysis.** Ten subject-matter experts (SMEs) were used to verify that the items in the scale actually reflect the construct definitions of participative decision making, information sharing, training, and performance-based rewards. Following the procedures outlined by Hinkin (1995), the SMEs were asked to sort the items by construct. Eighteen of the 20 items were assigned to the correct a priori category more than 80% of the time, and thus were retained for use (McKenzie, Podsakoff, & Fetter, 1991).

**Phase II: Exploratory Factor Analysis.** The total sample was randomly split in half such that one subsample was used for the exploratory factor analysis and the other subsample for the confirmatory factor analysis. Thus, using a subsample of 1,792, a principal components analysis with orthogonal rota-

tion was conducted to examine the factor structure of the 18 remaining items. Overall, four factors emerged with eigenvalues greater than 1, which together accounted for 58.2% of the variance in the data. Additionally, all items loaded on their respective factors, with relatively small coefficients on the other factors ( $< .40$ ).

**Phase III: Confirmatory Factor Analysis.** Confirmatory factor analyses using LISREL 8 (Jöreskog & Sörbom, 1993) were conducted to determine how well the model developed through exploratory analysis would fit the second subsample ( $N = 1,791$ ). We examined a four-factor model and found strong support ( $\chi^2 [127] = 464.63, p < .001$ ; TLI = .96; CFI = .97; RMSEA = .04). The factor loadings and the interfactor correlations from the latter analysis are presented in Table II. Based on both the exploratory and confirmatory findings, we concluded that the 18 items were clearly operationalizing the four constructs that we used to define perceived EI climate, and were doing so with minimal overlap. Thus, the scale score for overall perceived EI climate, which was used in tests of all hypotheses, was created by averaging all 18 items. The scale scores for the individual attribute variables, which were used in supplemental analysis for testing Hypotheses 1 and 2, were created by averaging items by attribute.

## RESULTS

### Data Aggregation

A central characteristic of a climate is that employees throughout the organization have similar perceptions regarding the attributes defining that climate. Therefore, individuals should exhibit agreement about the presence or absence of EI within their organization. Following this logic, the James, Demaree, and Wolf (1984) procedure for assessing within-organization interrater agreement ( $r_{wg}$ ) was calculated on each of the four EI attributes. Using .70 as a lower-bound limit on agreement, three organizations that did not demonstrate sufficient agreement were eliminated from the sample. Thus, the

TABLE II

## Confirmatory Factor Analysis of the Power, Information Sharing, Performance-Based Rewards, and Training Scales

Items	Standardized Item Loadings (Standard Errors)			
	Participative Decision Making	Information Sharing	Performance- Based Rewards	Training
1. I have sufficient authority to fulfill my job responsibilities	.65 (.03)			
2. I have enough input in deciding how to accomplish my work	.81 (.04)			
3. I have enough freedom over how I do my job	.75 (ref)			
4. Company goals and objectives are clearly communicated to employees		.58 (.05)		
5. The channels for employee communication with top management are effective		.61 (.05)		
6. Top management is adequately informed of the important issues in my department		.58 (.05)		
7. Company policies and procedures are clearly communicated to employees		.61 (ref)		
8. I often have to rely on the grapevine to get job-related information (reverse)		.54 (.05)		
9. Most of the time I receive sufficient notice of changes affecting my work group		.59 (.05)		
10. I am satisfied with the amount of recognition I receive when I do a good job			.65 (.05)	
11. Generally I feel this company rewards employees who make an extra effort			.66 (.50)	
12. There is a strong link between how well I perform my job and the likelihood of receiving a raise in pay/salary			.73 (ref)	
13. There is a strong link between how well I perform my job and the likelihood of receiving high performance appraisal ratings			.77 (.03)	
14. If I perform well, I am more likely to be promoted			.64 (.05)	
15. I receive sufficient training to do my job				.83 (.03)
16. Education and training are integral parts of this company's culture				.58 (.05)
17. I have had sufficient/adequate job-related training				.83 (ref)
18. If I felt that I needed more job-related training, the company would provide it				.64 (.05)
Composite reliability for each factor:	.87	.86	.85	.89

Note. All factor loadings were statistically significant at  $p < .001$ ; (ref) = reference indicator for that factor, and thus, no standard error is available.

effective sample size for the remaining analyses was 89 and not 92. The levels of agreement among the 89 organizations ranged as follows: (a) participative decision making = .74 to .92; (b) information sharing = .84 to .95; (c) training = .72 to .95; and (d) performance-based rewards = .72 to .92. Additionally, the levels of agreement for organizational commitment ranged from .83 to .96 and for job satisfaction, from .70 to .93.

### Tests of Hypotheses

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*Evidence supported the presence of skewness for all variables except turnover.*

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Table III presents the means, standard deviation, and correlations for the variables in this study. Prior to the main analyses, the distributions of the four objective measures were examined for non-normality. Evidence supported the presence of skewness for all variables except turnover. As such, the primary analyses were conducted using the logarithm of returns on assets, gains in net premiums written, and returns on surplus. Hierarchical regression analyses were conducted to test the three main hypotheses (Cohen et al., 1996). For Hypotheses 1 and 2, the control variables were entered in Step 1, and the perceived EI climate variable was entered in Step 2.

With respect to the mediational hypothesis, Hypothesis 3, the procedures of Baron and Kenny (1986) were followed. As specified by them, the first condition for mediation is that the independent variable should be related to the mediators. The reasonableness of this condition would be inferred from the test of Hypothesis 2. The second condition for mediation is that the independent variable be related to the main outcomes. This condition would be inferred from the test of Hypothesis 1 above. Assuming the latter conditions are met, the third condition would be observing a reduction in the regression coefficient from the independent variable to the outcomes after including the mediators in the regression analysis. To test the latter condition, the final analysis was also a hierarchi-

cal regression analysis with the control variables entered as a block in Step 1, the mediating variables (organizational commitment and job satisfaction) entered as a block in Step 2, and the independent variable (perceived EI climate) entered in Step 3. The resulting coefficients from Step 3 were compared to those from the tests of Hypothesis 1 to determine whether any mediation took place.

### Hypothesis 1

Hypothesis 1 proposed that higher levels of perceived EI climate would be positively associated with the financial performance indices and negatively related to turnover. As presented in Table IV, Hypothesis 1 was completely supported. The perceived EI climate had positive and statistically significant associations with the financial performance indices (ROA,  $\beta = .24$ ; Gain in NPW,  $\beta = .31$ ; ROS,  $\beta = .34$ ), and a negative association with turnover ( $\beta = -.28$ ).

### Hypothesis 2

Hypothesis 2 proposed that higher levels of perceived EI climate would be positively associated with organizational commitment and job satisfaction. As presented in Table IV, Hypothesis 2 was partially supported, with perceived EI climate significantly related to commitment ( $\beta = .50$ ). The overall F-score for job satisfaction was not statistically significant. This latter result means that we did not include job satisfaction as a mediator in the tests of Hypothesis 3.

To determine the relative importance of the EI climate relative to the four attributes underlying it, the hierarchical regression was again undertaken using the four attributes as independent variables. These results are presented in Table V. While the four attributes had some association with some of the outcomes, particularly organizational commitment, they did not have a consistent impact across the range of outcomes. In contrast, the overall perceived EI climate had a much more consistent pattern of statistically significant associations across the objective measures

**T A B L E I I I Means, Standard Deviations, and Correlations**

Variables	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	
1. Number of Employees	2.1	1.2																		
2. Assets	2.7	1.4	.75																	
3. Mutual	.34	.48	.15	.28																
4. Stock	.49	.50	-.19	-.17	-.71															
5. Participative Decision Making	3.1	.12	-.01	.05	-.08	.15														
6. Information Sharing	2.6	.11	.18	.10	-.15	-.02	.39													
7. Performance-Based Rewards	2.6	.19	.32	.20	.01	-.06	.25	.53												
8. Training	2.8	.17	.24	.19	-.06	-.07	.41	.50	.49											
9. Turnover	17.0	9.3	-.18	-.17	-.06	.31	-.08	-.26	-.19	-.29										
10. Return on Assets	1.8	2.9	.02	-.21	-.24	.18	.01	.25	.34	.09	-.23									
11. Gain Net Premiums Written	17.5	94.9	.12	.19	-.08	.11	.08	-.05	.07	-.02	.09	.23								
12. Return on Surplus	34.2	139.6	.18	.06	-.19	.13	.05	-.04	.16	.10	.08	.05	.49							
13. Organizational Commitment	2.9	.12	.18	.07	-.17	.01	.38	.65	.54	.65	-.41	.24	-.05	.12						
14. Job Satisfaction	3.0	.14	-.04	-.07	-.05	-.03	.54	.49	.37	.46	-.14	.08	.07	.16	.57					
15. Log Return on Assets	.04	.49	-.01	-.10	-.30	.33	.08	.23	.43	.15	-.03	.78	.20	.10	.14	-.07				
16. Log Gain Net Premiums Written	5.26	.79	.75	.79	.22	-.25	.08	.13	.37	.30	.09	-.12	-.23	.08	.17	-.10	.02			
17. Log Return on Surplus	.99	.43	.12	.10	-.21	.29	.14	.15	.40	.25	-.09	.40	.51	.81	.10	.10	.63	.09		
18. Climate of Involvement	11.07	.45	.26	.19	-.01	-.08	.63	.76	.81	.81	-.27	.23	.09	.10	.73	.59	.28	.23	.32	

Correlations of  $|\cdot 20|$  or above are statistically significant at  $p < .05$ .

**T A B L E I V** Hierarchical Regression Analyses

Independent Variables	Dependent Variables											
	Turnover		Return on Assets		Gain from Net Premiums Written		Return on Surplus		Organizational Commitment		Job Satisfaction	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1: Controls	.16*		.16*		.12		.14		.09		.01	
Size		.05		.13		-.15		-.08		.02		-.05
Assets		-.26		-.12		-.03		.17		.07		.15
Mutual		.36*		.06		-.06		.02		-.17		.05
Stock		.53**		.41*		.22		.29		-.13		-.03
Step 2: Climate	.07*		.05*		.08*		.10**		.21***		.10**	
Employee Involvement		-.28*		.24*		.31*		.34*		.50***		.34**
Equation F	3.56***		3.10**		2.50*		3.19**		5.98***		1.67	
R <sup>2</sup> (Adjusted R <sup>2</sup> )	.23 (.17)		.21 (.14)		.20 (.12)		.24 (.16)		.30 (.25)		.11 (.04)	

\*p < .05; \*\*p < .01; \*\*\*p < .001; N = 89.

TABLE V Hierarchical Regression Analyses

Independent Variables	Dependent Variables											
	Turnover		Return on Assets		Gain from Net Premiums Written		Return on Surplus		Organizational Commitment		Job Satisfaction	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1: Controls	.17*		.16*		.12		.14		.08		.01	
Size		.05		.05		-.13		-.13		.08		-.02
Assets		.26		-.22		-.07		.16		-.10		-.23
Mutual		-.36		-.13		-.14		.09		.12		.05
Stock		.53**		.22		.14		.26		-.01		-.08
Step 2: EI Attributes	.07		.15*		.10		.14*		.66***		.40***	
Participative Decision Making		-.10		-.10		.14		.05		.05**		.30**
Information Sharing		-.10		-.10		-.14		-.17		.44***		.33**
Performance-Based Rewards		.01		.49**		.18		.30†		.19*		.12
Training		-.18		-.00		.21		.25		.61***		.12
Equation F		2.20*		3.06**		1.64		2.37*		23.55***		5.66***
R <sup>2</sup> (Adjusted R <sup>2</sup> )	.24 (.13)		.31 (.21)		.22 (.08)		.28 (.16)		.74 (.71)		.41 (.33)	

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ,  $N = 89$ .

and organizational commitment. If “relative importance,” as stated earlier, is defined as identifying influences across a broad range of indices that collectively embody organizational effectiveness, then the perceived EI climate variable, and not the individual attributes, are more important. The pattern of findings for the individual attributes on the attitudinal measures suggest, however, that individual attributes may play a role in independently shaping some workplace attitudes.

### Hypothesis 3

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*The planned creation of a climate is one of the most difficult challenges an organization can undertake.*

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Hypothesis 3 predicted that employee morale would mediate the relationships between the perceived EI climate and the four objective measures. Using Baron and Kenny’s (1986) approach to mediation, organizational commitment was found to completely mediate the relationship between perceived EI climate and turnover. It did not, however, mediate the relationship between perceived EI climate and the financial performance measures.

Additionally, job satisfaction was not a mediator for any of the relationships. Thus, Hypothesis 3 was only minimally supported.

### Discussion

A common belief about EI is that it is a powerful management philosophy that has multiple positive effects for both employees and overall firm performance (Lawler, 1992; Lawler, Ledford, & Mohrman, 1989; Leana & Florkowski, 1992). The results of the present study support this common belief by demonstrating that the presence of a perceived multi-attribute climate of EI within an organization is related to high levels of organizational effectiveness. More specifically, results indicate that a perceived EI climate is related to increased financial performance and reduced turnover. Additionally, perceived EI climate is related to increased employee loyalty or organizational commitment. Such a combination of effects implies

that creating an EI climate is a potent intervention, which could provide competitive advantage to a firm.

Specifically, while the current study supported a direct link between perceived EI climate (consisting of the four attributes of participative decision making, information sharing, training, and performance-based rewards) and organizational effectiveness, an earlier study (Vandenberg et al., 1999) demonstrated which business practices and policies of the organization have the strongest influence on promoting an involvement climate. Namely, an involvement climate appeared strongest in organizations with business practices that (a) directly linked incentives to involvement-like behaviors; (b) promoted flexible work practices; (c) designed jobs to be controlled more by the employee than by managers; (d) devoted extensive resources to continuous learning; and (e) provided clear direction to employees.

Similarly, another study (Richardson & Vandenberg, 2005) demonstrated that managers’ transformational leadership behaviors are also an important component of promoting a climate for involvement. Together, these and the present study offer compelling evidence that the stronger the perceived climate for involvement, the stronger the financial performance of the organization, the lower the turnover rate, and the higher the morale of the employees. The main point, therefore, is that organizations that implement practices aimed at increasing employee perceptions of all four attributes of EI should enjoy the greatest increases in overall performance.

The planned creation of a climate is one of the most difficult challenges an organization can undertake (Schein, 1992). However, because they are so difficult to imitate, certain climates can be a significant source of competitive advantage for a company (Neal & Tromley, 1995; Prahalad & Hamel, 1990). Thus, it would be worth the effort for a company to create a climate of EI. As part of this effort, managers should recognize that the company is most likely to succeed when employees have the appropriate tools, training, and knowledge to do their best work. Addi-

tionally, it is important to give employees appropriate authority and decision-making power to do their jobs effectively. Information about company goals and performance should be shared with employees—information is vital to understanding the business. Finally, rewards that are tied to the performance standards desired by the organization are fundamental for reinforcing desired behaviors that contribute to the long-term effectiveness of the organization.

Additionally, because perceptions of employees about an EI climate appear to be so crucial to achieving the desired effects, companies should regularly monitor employees' beliefs about the EI attributes to make sure that they are being recognized and favorably received. It is important for employees at all levels of the organization to recognize that an EI climate exists if the organization is to achieve maximum benefits.

### *Limitations of Study*

Three limitations of this study provide opportunities for future research. First, the number of organizations in the sample was relatively small. Additionally, the standard deviations on some of the measures such as EI, job satisfaction, and organizational commitment indicated minimal variance. Although the hypotheses were supported, future research on this topic should use a larger number and broader range of organizations to increase variability and potentially produce stronger results (Cohen & Cohen, 1983).

Second, the sample was obtained from the insurance industry. By sampling one industry, we were able to avoid controlling for

industry effects on financial performance (e.g., Huselid, 1995). However, to increase the generalizability of our results, additional research should be conducted in a variety of industries. Also, Lawler (1992) noted that an EI climate might not be effective in all types of industries. Indeed, EI actually may be counterproductive in organizations or industries in which rigid adherence to standards is required and in which employees have little job discretion. Future research should examine whether the positive associations between an EI climate and organizational effectiveness are moderated by industry type.

Third, the cross-sectional nature of the EI climate and morale data did not allow us to fully test for causality. Although the measures of financial performance were collected one year after the practice data, future longitudinal research should directly address the causal relationship between EI and all effectiveness criteria.

### **Conclusion**

Overall, this study demonstrated empirical support for the link between a perceived climate of EI and organizational effectiveness. Both employees and organizations benefit from the presence of an EI climate in that it is associated with increased employee morale, lower turnover rates, and stronger financial performance. As noted by Ledford and Lawler (1994), "it is time to gain a richer, more context-dependent understanding of employee involvement" (p. 635). The present study charts new ground by providing one of the first tests of EI from this organizational climate perspective.

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**CHRISTINE M. RIORDAN** is the associate dean for external relations in the Neeley School of Business at Texas Christian University. She is also a professor of management and the Luther Henderson University Chair in Leadership. Her research has been published in a variety of journals and focuses on demographic diversity, leadership, and the impact of organizational practices on performance. Riordan has also served on the editorial review boards for the *Journal of Applied Psychology*, *Journal of Management*, and *Academy of Management Journal*. She is currently the president of the Southern Management Association (SMA) and has served on the executive committee of the Human Resource Management Division of the Academy of Management.

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**ROBERT J. VANDENBERG** is a professor of management in the Terry College of Business at the University of Georgia. Besides high-involvement work processes, his substantive research interests include organizational commitment and occupational safety and health. His methodological interests include measurement invariance and the evaluation of change. Articles on these topics have appeared in many outlets such as the *Journal of Applied Psychology*, *Organizational Behavior and Human Decision Processes*, the *Journal of Management*, and *Organizational Research Methods*. He has served on the editorial boards of all of the journals mentioned above. Further, he is a past chair of the Research Methods Division of the Academy of Management.

**HETTIE A. RICHARDSON** is an assistant professor of management at the E. J. Ourso College of Business, Louisiana State University, where she holds the Milton J. Womack Professorship for Developing Scholars. She received her PhD from the University of Georgia. Her current substantive research interests include employee involvement, strategic human resource management, and group/team processes. Her current methodological research interests include measurement invariance and common method variance.

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