TAKING EMPOWERMENT TO THE NEXT LEVEL: A MULTIPLE-LEVEL MODEL OF EMPOWERMENT, PERFORMANCE, AND SATISFACTION

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Most research to date has approached employee empowerment as an individual-level phenomenon. In this study we proposed a work-unit-level construct, empowerment climate, and tested a multiple-level model integrating macro and micro approaches to empowerment. Empowerment climate was shown to be empirically distinct from psychological empowerment and positively related to manager ratings of work-unit performance. A cross-level mediation analysis using hierarchical linear modeling showed that psychological empowerment mediated the relationships between empowerment climate and individual performance and job satisfaction.

Employee empowerment has become a trend over the last decade, approaching the status of a movement or of a fad, depending on one's perspective (Abrahamson, 1996; Block, 1987). At its core the concept of empowerment involves increased individual motivation at work through the delegation of authority to the lowest level in an organization where a competent decision can be made (Conger & Kanungo, 1988; Thomas & Velthouse, 1990). Thus, the empowerment concept has roots in such substantive issues as intrinsic motivation, job design, participative decision making, social learning theory, and self-management (Liden & Tewksbury, 1995). Empirical support has begun to accumulate regarding the relationship of employee empowerment to important work-related outcomes (Liden, Wayne, & Sparrowe, 2000; Sparrowe, 1994; Spreitzer, 1995; Spreitzer, Kizilos, & Nason, 1997). Sustained scholarly attention will be necessary if this management fashion is to be transformed into a scientifically informed learning process capable of producing effective management techniques (Abrahamson, 1996).

Liden and Arad (1996) noted that within the literature on empowerment there has developed both a macro perspective that focuses on organizational structures and policies, and a micro perspec-tive that focuses on empowerment as intrinsic motivation. Both academics and practitioners have frequently discussed the important role they believe organizational structures, policies, and practices play in bringing about high levels of intrinsic motivation (Bennis & Nanus, 1985; Block, 1987; Conger & Kanungo, 1988; Lawler, Mohrman, & Ledford, 1995; Liden & Tewksbury, 1995; Randolph, 1995; Spreitzer, 1996; Thomas & Velthouse, 1990). For example, Conger and Kanungo explicitly recognized an antecedent role for organizational practices in their definition of empowerment as "a process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques providing efficacy information" (1988: 474). Other authors (e.g., Quinn & Spreitzer, 1997; Swift & Levine, 1987) have distinguished between *empowering* structures, policies, and practices on the one hand, and *empowerment,* or individuals' psychological reactions to these managerial practices, on the other. The empowering structures and practices are seen as contextual variables affecting employee feelings of empowerment.

Yet this multilevel aspect of empowerment has not been captured in empirical research on empowerment. The emergence of a dominant psychological empowerment construct in the literature (Liden & Arad, 1995; Spreitzer, 1995) has been accompa-

nied by examination of empowerment as an individual-level psychological state in virtually all of the empirical research to date. Such studies include Conger and Kanungo (1988), Liden and Tewksbury (1995), Liden et al. (2000), Kraimer, Seibert, and Liden (1999), Sparrowe (1994, 1995), Spreitzer (1996), Spreitzer et al. (1997), and Thomas and Velthouse (1990); but see Kirkman and Rosen (1999) for an exception. No empirical research that we are aware of has been conducted on empowerment as a macro construct reflecting managerial structures and practices. This may be attributable to the lack of progress in developing a macro empowerment construct that is comparable to the micro construct.

The current study goes beyond previous empowerment research in three ways. First, we conceptualized the macro dimensions of empowerment as a "climate" construct, which we named "empowerment climate" and defined in terms of employees' shared perceptions of managerial structures, policies, and practices related to empowerment. Second, a multiple-level model of empowerment that specifies effects on important work-unit and individual outcomes was developed and tested. This multiple-level aspect of empowerment has been implicit in the literature but, to our knowledge, has never been made theoretically explicit and subjected to an empirical test as it was in this study. Third, we hypothesized a mediating role for psychological empowerment in the relationship between empowerment climate and the individual-level outcomes in the model. Integrating these macro and micro approaches to empowerment is an important theoretical contribution because it provides a fuller understanding of the processes and outcomes of empowerment in organizations. A model depicting the key theoretical relationships in this study is presented in Figure 1.

EMPOWERMENT CLIMATE

A degree of consensus exists regarding the organizational structures and policies associated with empowerment (Bennis & Nanus, 1985; Blanchard, Carlos, & Randolph, 1999; Block, 1987). Drawing on extensive experience with a set of organizations implementing an empowerment strategy, Blanchard and his colleagues (Blanchard, Carlos, & Randolph, 1995; Randolph, 1995) identified three key organizational practices associated with empowerment: information sharing, autonomy through boundaries, and team accountability. *Information sharing* involves providing potentially sensitive information on costs, productivity, quality, and financial performance to employees throughout an organization. *Autonomy through boundaries* refers to organizational structures and practices that encourage autonomous action, including the development of a clear vision, and clarity regarding goals, work procedures, and areas of responsibility. *Team accountability* involves the perception that teams are the locus of decision-making authority and performance accountability in organizations. Teams are also supported through individual and group training and selection decisions. These three practices make up the dimensions of the empowerment climate construct used in this study.

While Blanchard and his colleagues have been the most explicit regarding the managerial structures and practices they expect to be associated with empowerment, the macro empowerment construct itself has been theoretically underspecified and has lacked empirical validation. In the paragraphs below, we review the literature on climate in order to conceptually develop the empowerment climate construct. This development involves being explicit with regard to the origin and nature of the construct, the level at which it is theoretically

FIGURE 1
A Multilevel Model of Empowerment
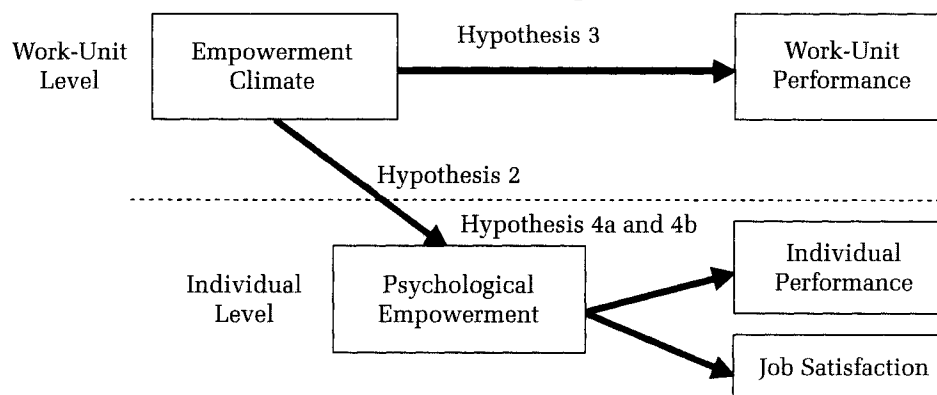
manifest, and the compositional model appropriate for forming and assessing empowerment climate as a higher-level construct.

Climate

Organizational climate has been defined as a set of shared perceptions regarding the policies, practices, and procedures that an organization rewards, supports, and expects (James, Joyce, & Slocum, 1988; Schneider & Reichers, 1983). Previous research has shown climate perceptions to be conceptually and empirically distinct from affective or evaluative individual reactions (Downey, Hellriegel & Slocum, 1975; James & Jones, 1974; LaFollette & Sims, 1975; Rousseau, 1988; Schneider & Snyder, 1975). Growing out of the field-theoretic tradition initiated by Kurt Lewin, climate research is an effort to understand organizational behavior through the subjective perceptions of organizational members (Schneider, 2000).

Although climate reflects descriptive beliefs individuals hold regarding properties of their organizations, there is not necessarily a one-to-one correspondence between specific managerial practices and employee climate perceptions. For example, in some cases posting quarterly profit and loss information may be seen as an empowering practice, while in others it may be seen as a means for weakening the wage demands of employees. These different interpretations of the same practice may arise from different individual backgrounds and experiences or from the history of a specific organization or work unit (James, James, & Ashe, 1990). Climate thus captures the meaning employees ascribe to the overall pattern of organizational activities. Climate perceptions are critical because, according to this perspective, it is the employees' own understanding of a situation that drives their attitudes and behaviors (James & Jones, 1974; Schneider, 2000).

Schneider (1975) was one of the first to argue that climate dimensions should have a strategic focus— that is, that one should not assess *overall* climate but climate *for something.* Researchers have identified climates for specific domains of organizational functioning, such as service (Schneider, Parkington, & Buxton, 1980), safety (Hofmann, & Stetzer, 1996), and procedural justice (Naumann & Bennett, 2000). In view of the important role in the success of empowerment efforts that researchers and practitioners have attributed to organizational policies and practices, we propose a climate for empowerment. We define *empowerment climate* as a shared perception regarding the extent to which an organization makes use of structures, policies, and practices supporting employee empowerment. Empowerment climate is composed of the three dimensions identified in the previous literature— information sharing, autonomy through boundaries, and team accountability—that we expect to form a single unidimensional construct.

Issues of Level

In organizational research the term "level" refers to the specific focal unit under consideration, typically the individual, the work unit or team, or the organization. Researchers who develop multiple-level models of organizational processes need to be explicit regarding the theoretical level of origin and the corresponding level of measurement for their constructs. Researchers also need to be explicit regarding the level at which a construct is manifest within their theoretical model and the corresponding level at which the construct is represented for purposes of statistical analysis (Klein, Dansereau, & Hall, 1994; Rousseau, 1985).

The level of origin for a construct is the level at which the processes forming the construct take place. Although empowerment climate perceptions reflect distal characteristics of an organization, these perceptions emerge from a fundamentally psychological process in which individuals ascribe meaning to the structures and practices occurring in the organization around them (James, 1982). Thus, the level of origin for empowerment climate perceptions is the individual, and the appropriate level from which to collect data, the level of measurement, is also the individual.

The theoretical level of a construct refers to the level at which the construct is manifest in a given theoretical model (Kozlowski & Klein, 2000). A defining characteristic of climate is that perceptions are shared (e.g., Schneider, 2000). Although climate perceptions originate within individuals, we expected empowerment climate perceptions to be shared by members of the same work unit because of a number of social processes taking place within the unit. First, members of the same work unit are likely to be exposed to the same goals, strategies, technologies, work environments, and other proximal influences, and this exposure results in a relatively homogeneous experience of their organization that is distinct from those of other work units (James & Jones, 1974). Members of the same work unit also share the same manager. Middle managers fill in, or "interpolate," broad organizational policies as they apply to their own units, creating a unique shared experience of organizational poli-

cies for his or her immediate subordinates (Katz & Kahn, 1978). Managers also act to filter the information reaching work-unit members and shape the interpretations they reach as a group (Kozlowski & Doherty, 1989). High levels of social interaction within a work unit can also lead to a shared view of an organization that may be unique to the unit (Klein, Conn, Smith, & Sorra, 2001; Naumann & Bennett, 2000; Rentsch, 1990). Finally, once a work unit has established a distinctive character, attraction-selection-attrition dynamics (Schneider, 1987) may result in greater homogeneity among work unit members' personalities, attitudes, and values and thus in greater homogeneity in how they perceive the organization. Empirical research supports each of these processes and, indeed, previous climate scholars have found multiple climates within single organizations that correspond to their different departments or work units (Drexler, 1977; Johnston, 1976; Powell & Butterfield, 1978). We therefore specified empowerment climate as a work-unit-level construct in our theoretical model and our statistical analyses.

Researchers need to be explicit regarding the model they use to compose a construct that is measured at one level but theoretically specified at another level (Chan, 1998; Kozlowski & Klein, 2000). The appropriate compositional model for the empowerment climate construct used in this study is the *referent-shift consensus model* (Chan, 1998). The level of origin for empowerment climate is the individual, but the construct itself refers to the collective work environment. Thus, the referent of the construct is shifted from "I," representing *psychological climate* perceptions, to "we," representing *collective climate* perceptions. We measured work-unit-level empowerment climate as the mean of work-unit members' responses on a measure of collective empowerment climate. Use of mean responses to represent a work-unit-level variable is justified when a high degree of consensus among the perceptions of work-unit members is demonstrated.

HYPOTHESES

Empowerment Climate and Psychological Empowerment

Psychological empowerment has been defined as an individual's experience of intrinsic motivation that is based on cognitions about him- or herself in relation to his or her work role (Spreitzer, 1995). Conceptually, these cognitions are closely related to the psychological states specified by Hackman and Oldham (1980) and other theorists of intrinsic

motivation. However, the psychological empowerment construct is designed to emphasize individuals' subjective experiences of empowerment; measures of the construct ask respondents to use their own personal values, background experience, and self-concepts as frames of reference in forming judgments about their work environments. These cognitions are distinct from, for example, personality traits, in that an individual's work context influences empowerment cognitions, but traits are enduring dispositions not immediately influenced by such contextual factors (Spreitzer, 1995).

The overall psychological empowerment construct is composed of four cognitions: meaning, competence, self-determination, and impact (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990). Meaning refers to the value of a work goal judged in terms of an individual's own values or standards. Competence is an individual's belief in his or her capability to successfully perform a given task or activity. Self-determination is the individual's sense of choice about activities and work methods. Finally, impact is the degree to which the individual believes she or he can influence organizational outcomes. These four cognitions combine additively to form a single unitary construct; lack of any single dimension will decrease but not eliminate the overall degree of empowerment experienced (Spreitzer, 1995).

Spreitzer (1995) examined the validity of this conceptualization of psychological empowerment. A second-order confirmatory factor analysis supported the view of psychological empowerment as a single overall construct composed of four distinct subdimensions reflecting the four hypothesized cognitions. Spreitzer also examined the relationship of two antecedent personality traits, self-esteem and locus of control, with psychological empowerment. The small magnitude of the relationship of these two personality traits with psychological empowerment (in fact, the locus of control relationship did not reach statistical significance) provided evidence that, while personality traits may influence perceptions of psychological empowerment, they are distinctly different constructs.

Empowerment climate and psychological empowerment are conceptually distinct in a number of ways. Klein and colleagues (2001) encouraged researchers to be precise in defining group-level constructs because of the impact that subtle differences can have on the level at which constructs are manifest. Following their framework, we can distinguish between the two empowerment constructs in terms of referent, focus, and content. Empowerment climate refers to a work environment, while

psychological empowerment refers to an individual's internal psychological state. Empowerment climate has a relatively descriptive focus, while psychological empowerment has a more subjective and evaluative focus, which is based on the match between an individual's values and the demands and opportunities of his or her work tasks. Finally, in terms of content, empowerment climate asks respondents to assess the meaning of organizational structures and practices related to information sharing, boundaries, and team accountability, while psychological empowerment asks respondents to report such psychological states as meaning, competence, self-determination, and impact. The first task of this study was to show that these two conceptually distinct empowerment constructs are in fact empirically distinct.

Hypothesis 1. Empowerment climate and psychological empowerment are empirically distinct constructs.

An extensive literature has shown that organizational climate perceptions are related to individual attitudes and behaviors (e.g., Glisson & James, 2002; Hofmann & Stetzer, 1996; Lawler, Hall, & Oldham, 1974; Naumann & Bennett, 2000; Schneider et al., 1980). The view taken by climate researchers is that it is important to understand the shared meaning that employees ascribe to organizational characteristics because it is this subjective understanding that determines the feelings and behaviors of employees (James & Jones, 1974). In keeping with this literature, we expected perceptions of empowerment climate to be positively related to individual-level perceptions of psychological empowerment.

Examination of the specific dimensions of the two empowerment constructs provided strong theoretical reasons to expect a positive relationship. For example, a clear vision and well-defined goals, roles, and procedures define the "autonomy through boundaries" dimension of empowerment climate. These managerial practices help to define the boundaries within which one can exercise autonomous action and influence. They should therefore be associated with greater feelings of self-determination and impact (Hackman & Oldham, 1980). The information-sharing dimension of empowerment climate is defined by broad sharing of financial, operational, and performance information. This practice should help individuals to better understand the meaning of their work and develop a sense of competence in performing their tasks, and it should make them feel better able to have an impact on their organization (Bandura, 1982; Ferrante & Rousseau, 2001; Gist & Mitchell, 1992). The

team accountability dimension of empowerment climate involves reliance on team authority to carry out a broad range of tasks, team training, and team accountability for work outcomes. These managerial practices should enhance individuals' feelings of competence and impact in their organization (Kirkman & Rosen, 1999; Liden & Tewksbury, 1995). Both empowerment climate and psychological empowerment are conceptualized as unitary constructs composed additively from their underlying dimensions. We therefore framed the following hypothesis in terms of the unitary empowerment constructs rather than the underlying dimensions. Note also that, given the nature of the constructs, Hypothesis 2 is a cross-level hypothesis.

Hypothesis 2. Empowerment climate and psychological empowerment will be positively and significantly related.

Empowerment Climate and Work-Unit Performance

Previous research has documented the positive relationship between organizational climate as a general construct and organizational and subunit performance outcomes (e.g., Lawler et al., 1974; Pritchard & Karasick, 1973; Schneider, 1985). However, little previous research is available regarding empowerment climate per se. The literatures on organizational design and work team effectiveness were used to help us form another hypothesis based on the constituent elements of the empowerment climate construct: information sharing, autonomy through boundaries, and team accountability. For example, previous research has shown that access to accurate information is necessary for effective decision making in groups and organizations (e.g., Galbraith, 1977; Gladstein, 1984). Work units with better information should make better decisions, according to the "work smarter" logic frequently discussed in the literature on participation (e.g., Scully, Kirkpatrick, & Locke, 1995). Such processes should be associated with the information sharing dimension of empowerment climate. Clear goals, responsibilities, and procedures facilitate effective teamwork, cohesion, coordination, and conflict resolution in organizational work groups (e.g., Campion, Medsker, & Higgs 1993; Galbraith, 1977; Gladstein, 1984; Guzzo, Yost, Campbell, & Shea, 1993). These practices should be associated with the "autonomy through boundaries" dimension of empowerment climate. Team responsibility and autonomy, along with careful selection and training of team members, is associated with team potency and performance (e.g., Cummings,

1978; Kirkman & Rosen, 1999; Guzzo et al., 1993). These outcomes should also be associated with the team accountability dimension of empowerment climate. In view of the findings from these several different research areas, we expected empowerment climate to be positively related to work-unit performance. Thus,

> *Hypothesis 3. Empowerment climate will be positively and significantly related to work-unit performance.*

The Role of Psychological Empowerment

A growing body of research supports the contention that psychological empowerment will be related to individual performance and satisfaction (Liden et al., 2000; Spreitzer, 1995; Spreitzer et al., 1997; Thomas & Tymon, 1994). For example, Spreitzer and her coauthors (1997) found that competence and impact were most strongly related to managerial effectiveness, while meaning was the best predictor of work satisfaction. Thomas and Tymon (1994) found their measure of choice (conceptually related to self-determination in the Spreitzer model) related to work effectiveness. Impact, meaningfulness, and choice were each related to job satisfaction. Thus, our tests of Hypotheses 4a and 4b, which are stated below, were designed to replicate previous findings and are proposed here as part of the larger multiple-level model being tested in this study. Since findings for specific dimensions of psychological empowerment have varied across studies, we developed our hypotheses for the overall construct.

> *Hypothesis 4a. Psychological empowerment will be positively and significantly related to individual job performance.*
>
> *Hypothesis 4b. Psychological empowerment will be positively and significantly related to job satisfaction.*

Empowerment theorists view psychological empowerment as the mechanism through which contextual factors influence individual attitudes and behaviors (Conger & Kanungo, 1988; Liden & Tewksbury, 1995; Spreitzer, 1995, 1996; Thomas & Velthouse, 1990; Quinn & Spreitzer, 1997). We have specifically formulated our multilevel model of empowerment as a means to empirically examine the relationship between an empowering climate, the individual experience of empowerment, and individual and organizational outcomes. In keeping with this theoretical view, we expected psychological empowerment to be a mechanism

through which empowerment climate affects individual behaviors and attitudes. Thus,

> *Hypothesis 5a. Psychological empowerment will mediate the relationship between empowerment climate and individual performance.*
>
> *Hypothesis 5b. Psychological empowerment will mediate the relationship between empowerment climate and job satisfaction.*

METHODS

Sample and Procedures

Individual-level data for this study were collected from 375 employees in one division of a *Fortune* 100 manufacturer of high-technology office and printing equipment located in the northeastern United States. Three hundred one employees provided complete surveys (an 80 percent response rate). The employees were electrical, mechanical, and systems design engineers organized into 50 project teams involved in design engineering for a family of new products. Project teams were the primary work unit for the engineers, and the teams were composed of mixes of the different types of engineers, as required by the specific components being engineered. All teams had been in place for at least one year and continued to meet at least once a week. The average project team had 6 members, and the teams ranged from 3 to 14 members. Respondents completed surveys that assessed their perceptions of empowerment climate, psychological empowerment, and job satisfaction. Survey packets were distributed to respondents by their project team managers. Each survey packet included a cover letter explaining the general purpose of the study and stating that participation was voluntary. The letter also assured respondents that their information would remain confidential. Respondents were instructed to complete the survey individually and to use the preaddressed envelope to mail the survey directly to one of the authors.

Data on individual performance were collected from the appropriate project team manager during weekly staff meetings conducted by second-level managers (that is, the managers of the project team managers). One of the authors administered the performance measurement instrument to the project managers ($n = 50$). Data on work-unit performance were collected from the appropriate second-level managers ($n = 16$). We judged the second-level managers to be the most appropriate source for work-unit performance data because they had a broad organizational perspective by which to evaluate project team performance. Al-

though they were not directly involved in managing any particular project team, they regularly reviewed project team performance information. All technical project teams within the organization studied were tracked via a uniform performance objectives system, and the second-level managers were invited to consult this information when forming their own judgments regarding project team performance.

Complete data (including individual and work-unit performance data provided by project team managers and second-level managers) were available for 48 of the 50 teams, leaving a final sample of 285 employees with complete individual and work-unit-level data. The average age of the members of the final sample was 39.6 years (s.d. = 14.3), and these respondents had been employed by the organization for an average of 14.8 years (s.d. = 10.7). Seventy-seven percent of the sample members were male; 80.4 percent were white; 1.4 percent were African-American; 3.5 percent were Hispanic; and 5.9 percent were Asian/Pacific Islander. Nine percent of the respondents in the final sample indicated high school completion or some college as their highest level of educational achievement; 21 percent indicated attainment of an associate's degree; 43.6 percent, a bachelor's degree; 24.4 percent, a master's degree; and 2 percent, a Ph.D.

Measures

Empowerment climate. We assessed empowerment climate using an instrument developed by Blanchard and his colleagues (Blanchard et al., 1995; Randolph, 1995) to measure organizational aspects of empowerment. The measure consists of 30 items designed to reflect three dimensions: information sharing, autonomy through boundaries, and team responsibility and accountability. Example items are as follows: "People in our organization get information about the organization's performance in a timely fashion" and "We get information into the hands of frontline people so they can make responsible decisions" for information sharing; "We create structures and procedures that encourage and expect people to take initiative in improving organizational performance" and "We create new structures, policies and practices that help people use their knowledge and motivation" for autonomy through boundaries; and "We use teams as the focal point of responsibility and accountability in our organization" and "We work hard in our organization to develop effective, self-directed teams" for team responsibility and accountability. All items in the measure were rated from 1, "almost never," to 7, "almost always."

Three items from this scale were inconsistent with the compositional model used in this study, using the referent "I" (representing psychological climate) instead of "we" (representing collective climate). These items were therefore excluded from all subsequent analyses. We averaged responses to the remaining 27 items to form a single score (α = .97). Because empowerment climate is a work-unit-level construct, individual scores were aggregated to yield a single score for each work unit. The Cronbach alpha based on these aggregated scores was .98. Analysis of the dimensional properties and aggregation properties of the empowerment climate instrument are reported in the results section.

Psychological empowerment. Spreitzer's (1995) 12-item psychological empowerment scale was used to measure individual perceptions of empowerment. The rating scale ranged from 1, "strongly disagree," to 7, "strongly agree." The measure is composed of four subscales designed to reflect Thomas and Velthouse's (1990) definition of empowerment. An example item from each subscale is "The work I do is very important to me" (meaning); "I am confident about my ability to do my job" (competence); "I have significant autonomy in determining how I do my job" (self-determination); and "My impact on what happens in my department is large" (impact). Following Spreitzer (1995, 1996), we averaged scores from the four subscales to form a single empowerment score for each respondent (α = .88).

Work-unit performance. The team performance instrument, which was developed specifically for this study, was based on discussions with a set of managers from a division of the company not participating in the study. One of the authors met with a group of three managers who ranged in rank from second-level manager to vice president for quality and who had from 10 to 25 years of experience with the company. Discussion among the managers produced quality, cost, and time to delivery (schedule) as criteria that could be used to evaluate the performance of all work units. Although a uniform performance tracking system was in place at this company, we chose to use managerial judgments to measure performance for a number of reasons. First, the goals for projects were often very specific and highly technical, so direct comparison of work units was not possible. In addition, the true complexity or difficulty of a project might not become clear until the project has been worked upon for some time. Such differences in task difficulty can obscure true performance differences. Finally, project goals were set by the second-level managers, who might vary in the extent to which they used goals as realistic targets or as "stretch" objec-

tives. On the basis of our discussion with the managers, we felt that the use of managerial judgment was the best way to render performance ratings that would be comparable across work units.

Eight items reflecting quality, cost, schedule, and overall performance and again rated 1, "strongly disagree," to 7, "strongly agree" were developed The managers reviewed the instrument to ensure content validity. Two example items are "This team is meeting its primary quality objective(s)" and "Overall, this team performs effectively." Each project team was rated by the second-level managers responsible for the work unit. The eight items were averaged to form a single measure of project team performance ($\alpha = .82$).

Individual performance and satisfaction. We also developed a set of performance questions for this research, basing these on criteria used by the company for individual evaluation and feedback. Five items reflecting an individual's level of technical skills, productivity, quality of work, updating of skills, and personal drive were agreed upon through discussion with the manager for training and development at the division. A six-point rating scale (1, "almost never demonstrates this aspect of performance," to 6, "almost always demonstrates this aspect of performance") was used to be consistent with existing performance feedback instruments used in the company. We asked several first-level managers from another division to suggest additions, deletions, or changes to the items. All of the managers agreed that the final version of the items was meaningful for the evaluation of individual employees. Two example items from the instrument are "Technical skills: Demonstrates a solid technical understanding in his/her field and effectively applies technical skills and abilities to a variety of work situations; is able to solve problems by using appropriate analytical approaches and tools" and "Productivity: Demonstrates efficiency in his/her work processes; effectively uses tools to improve productivity; uses resources wisely; meets deadlines." The appropriate work-unit managers rated each work-unit member using this instrument. We averaged the five items to yield a single score for each individual ($\alpha = .90$). Individual job satisfaction was assessed using the three-item job satisfaction scale from Seashore, Lawler, Mirvis, and Cammann (1983). Reliability for the scale in this sample was .83.

Analyses

We used confirmatory factor analysis to establish the empirical distinctiveness of the empowerment climate and psychological empowerment scales.

We compared the fit of a hypothesized model in which separate second-order factors represented the two empowerment constructs to a model in which a single second-order factor represented both constructs.

In this study the level of measurement (individual) differed from the level of analysis (work unit) for the empowerment climate construct (Rousseau, 1985). It was therefore necessary to establish the viability of empowerment climate as a work-unit-level construct. Doing so required assessing both within-group agreement and between-groups variability (Hofmann, 1997; Hofmann & Stetzer, 1996; Klein et al., 1994). We used an analysis of variance (ANOVA) to examine between-groups variation in empowerment climate perceptions and computed the intraclass correlation coefficient referred to as ICC(1) (Bliese, 2000; James, 1982; Shrout & Fleiss, 1979) as an index of within-group agreement.

Hypothesis 2 and Hypotheses 5a and 5b are cross-level hypotheses in that they involve relationships between empowerment climate at the work-unit level and psychological empowerment, individual performance, and job satisfaction at the individual level of analysis. Traditional approaches to cross-level models in the organizational sciences have been to either disaggregate data, assigning group-level variables to individuals, or to aggregate individual data to the group level. Each of these options has potential empirical and conceptual weaknesses. Disaggregation provides biased estimates of standard errors; aggregation to the group level weakens statistical power, discards meaningful individual-level variance, and perhaps leads to inappropriate inferences (Bryk & Raudenbush, 1992; Hofmann, 1997; Klein et al., 1994).

We used hierarchical linear modeling (HLM) to test these hypotheses because it is an appropriate approach for testing cross-level models. HLM allows an analyst to explicitly model both individual- and group-level variance in individual outcomes. The intercept and slope from the level 1, or within-group, analysis serve as the dependent variables in the level 2, or between-groups, analysis. A significant parameter estimate (γ_{10}) for the level 1 predictor indicates an individual-level effect, and a significant parameter estimate (γ_{01}) for the level 2 predictor of the level 1 intercepts indicates a group-level effect (Hofmann, 1997; Bryk & Raudenbush, 1992). HLM was the most appropriate approach because it allowed use of individual predictors at the individual level and group predictors at the group level without the shortcomings of the aggregation or disaggregation approaches.

Correlations were an appropriate test for Hypotheses 3, 4a, and 4b because they propose relation-

ships at single levels of analysis (Hypothesis 3, the work-unit level; Hypotheses 4a and 4b, the individual level). However, the work-unit performance ratings exhibited nonindependence because 16 second-level managers provided the 48 ratings. We used HLM to control for the rater effect and thus obtain an accurate estimation of the relationship between empowerment climate and work-unit performance.

RESULTS

Tests of Hypotheses 1–4b

Hypothesis 1. Figure 2 presents the results of a confirmatory factor analysis in which empowerment climate and psychological empowerment were modeled as two distinct second-order constructs. Each of the 27 items from the empowerment climate scale was specified to "load" only onto its expected first-order construct (information sharing, autonomy through boundaries, or team responsibility), and each of the 12 items from the psychological empowerment scale was specified to load only onto its expected first-order construct

(meaning, competence, self-determination, or impact). The first-order constructs were in turn specified to load only onto their respective second-order constructs. The correlation between the empowerment climate and psychological empowerment second-order constructs was freely estimated.

The fit that was obtained for the model was acceptable (RMSEA = .07, SRMR = .07, CFI = .98), especially in light of the stringent assumption of zero cross-loadings for each item. All items loaded significantly onto their first-order constructs, and all first-order constructs loaded significantly onto their respective second-order constructs. The correlation between the second-order empowerment climate and psychological empowerment constructs was significant ($r = .52$, $p < .01$) but not so large as to suggest that the constructs were not distinct.

We specified an alternative confirmatory factor analysis model to directly test the empirical distinctness of the two second-order empowerment constructs. In this nested alternative model, we specified a single second-order factor by setting the

FIGURE 2
Results of Second-Order Confirmatory Factor Analysis[a]
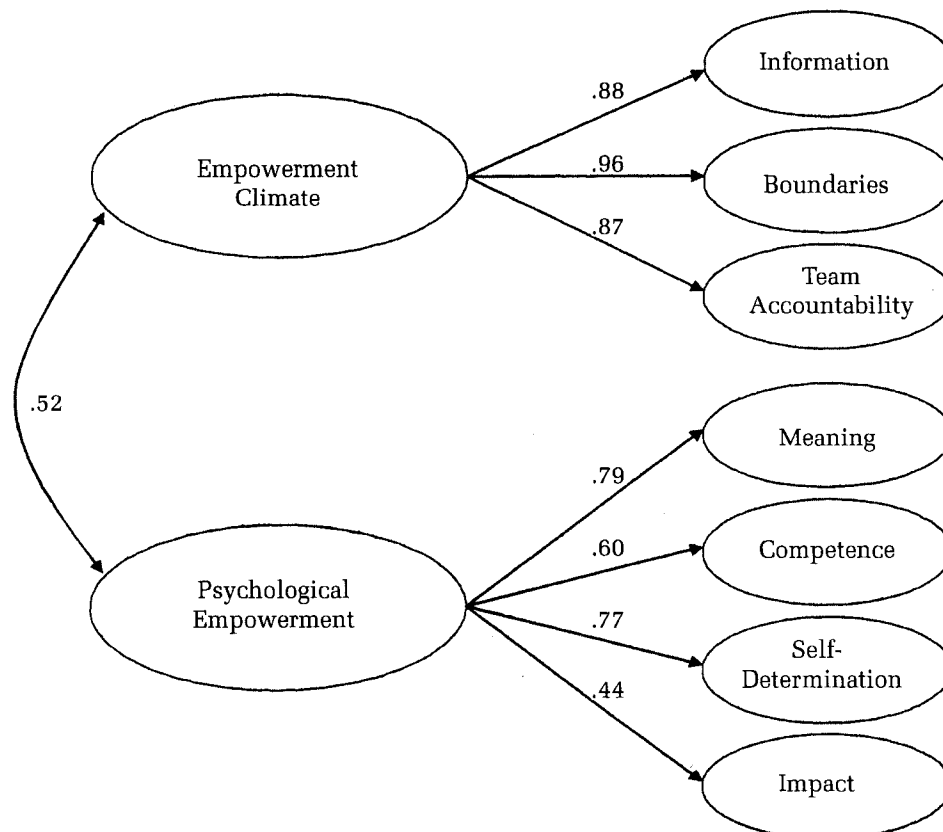
[a]Indexes: χ^2 = 1,597, *df* = 694, RMSEA = .07, SRMR = .07, CFI = .98. Standardized parameter estimates are presented. Observed variables and paths are omitted for clarity.

correlation between empowerment climate and psychological empowerment equal to one. The change in chi-square test ($\Delta\chi^2 = 150.3, \Delta df = 1, p < .01$) showed that the two-factor model provided a significantly better fit to the observed data, providing support for Hypothesis 1.

Aggregation of empowerment climate data. To assess the viability of aggregating individual-level data to the work-unit level, it was necessary to demonstrate both between-units variability and within-unit agreement (Hofmann, 1997; Hofmann & Stetzer, 1996; Klein et al., 1994; Naumann & Bennett, 2000). We assessed between-groups variance in the work-unit-level empowerment climate construct using a one-way analysis of variance. The ANOVA indicated significant between-groups variance in empowerment climate ($F[47, 237] = 3.20$, $p < .01, \eta^2 = .38$). The ICC(1) calculated from the ANOVA was .28. This value is at the high end of what can be expected in applied research settings (Bliese, 2000). Together, these statistics show acceptable levels of within-group agreement and between-groups variability in empowerment climate as a work-unit-level variable.

Hypothesis 2. The next set of analyses was conducted to test Hypothesis 2, a cross-level hypothesis, which states that empowerment climate, a level 2 variable, will be positively related to psychological empowerment, a level 1 variable. Since a group-level variable can explain only differences between groups, the first task of a hierarchical analysis is to show that significant between-groups differences exist for the dependent variables of interest (Hofmann, 1997). Thus, we ran a null hierarchical model (that is, a model with no level 2 explanatory variable) with psychological empowerment as the level 1 dependent variable. The results provided evidence of significant between-groups variance in psychological empowerment ($\tau_{00} = .16$, $df = 47, \chi^2 = 110.32, p < .01$) and justified further cross-level analyses. The null model also provided information for computing the intraclass correla-

tion coefficient, which indicates the proportion of between-groups variance relative to the total variance exhibited by a variable (Bryk & Raudenbush, 1992). This statistic represents the maximum amount of variance in a level 1 variable that could potentially be explained by a level 2 predictor variable. Our calculation showed that 20 percent of the variance in psychological empowerment existed between work units in this sample. Finally, we used an intercepts-as-outcome model with empowerment climate as the level 2 predictor and psychological empowerment as the level 1 outcome to test Hypothesis 2. The results indicated a significant, positive relationship between empowerment climate and psychological empowerment ($\gamma_{01} = .49$; t [46] $= 4.17, p < .01$). The amount of variance explained by empowerment climate can be calculated by comparing the variance component for psychological empowerment in a model without empowerment climate to one in which empowerment climate is included. This reduction in variance calculation indicated that empowerment climate explained 62 percent of the between-groups variance in psychological empowerment. Since 20 percent of the variance in psychological empowerment existed between groups, these results indicated that empowerment climate explained 12.4 percent of the total variance in psychological empowerment. Thus, Hypothesis 2 was supported.

Hypothesis 3. Hypothesis 3 predicts a positive relationship between empowerment climate and work-unit performance. Examination of the top half of Table 1 provides support for this work-unit-level hypothesis ($r = .33, p < .05$). Work units that experienced a more empowered climate had higher performance as rated by the second-level managers.

Because the 48 work-unit performance ratings were provided by 16 second-level managers, they exhibited nonindependence. Hierarchical linear modeling can be used to control for the lack of independence in the dependent variable caused by nesting within raters (Bryk & Raudenbush, 1992).

TABLE 1
Means, Standard Deviations, and Correlations[a]

Variables	Mean	s.d.	1	2	3	4	5	Mean	s.d.
1. Psychological empowerment	5.45	0.88		.23	.73**	.60**	.25	5.41	0.58
2. Individual performance	4.64	0.92	.15*		.07	.08	.12	4.64	0.65
3. Job satisfaction	5.79	1.21	.54**	.11		.69**	.35*	5.72	0.73
4. Empowerment climate	3.89	1.00	.47**	.03	.52**		.33*	3.82	0.66
5. Work-unit performance							—	5.89	0.66

[a] Work-unit-level means, standard deviations, and correlations ($n = 48$) are above the diagonal; individual-level means, standard deviations, and correlations ($n = 285$) are below the diagonal. Team performance data were collected at the group level of analysis only.

* $p < .05$
** $p < .01$

Treating raters as a second-level effect allows an analyst to more accurately estimate the relationship between first-level variables, in this case the relationship between empowerment climate and work-unit performance. Consistent with the correlational results reported above, results from the hierarchical linear model indicated a significant relationship between empowerment climate and work-unit performance ($\gamma_{01} = .48$; $t[15] = 3.15$, $p < .01$). The calculation for reduction in variance showed that empowerment climate explained 22 percent of the variance in work-unit performance when rater effects were controlled.

Hypotheses 4a and 4b. Hypothesis 4a and 4b respectively predict a positive relationship between psychological empowerment and individual performance and job satisfaction. The correlations in the bottom half of Table 2 support this individual-level hypothesis. Psychological empowerment was significantly and positively related to individual performance ($r = .15$, $p < .05$) and job satisfaction ($r = .54$, $p < .01$).

Hypotheses 5a and 5b

The next set of analyses were conducted to test Hypotheses 5a and 5b, two cross-level mediation hypotheses stating that psychological empowerment (a level 1 variable) will mediate the effects of empowerment climate (a level 2 variable) on individual performance and job satisfaction (level 1 variables). It is necessary to meet three preconditions to support a mediation hypothesis (Baron & Kenny 1986; see Hofmann and Stetzer [1996] for an example using a two-level model). One must establish significant relationships between the independent variable and the dependent variable, between the independent variable and the mediating variable, and between the mediating variable and the dependent variable. Here, empowerment climate had to be positively related to individual performance and job satisfaction; empowerment climate had to be positively related to psychological empowerment; and psychological empowerment had to be positively related to individual performance and job satisfaction. Given these three conditions, support for the mediation hypotheses would be provided if the relationship between empowerment climate and individual performance or job satisfaction were no longer significant when psychological empowerment was included in the model.

The first precondition for mediation, the direct relationship between empowerment climate and (1) individual performance and (2) job satisfaction is itself a cross-level relationship. We therefore first needed to show that systematic between-groups

variance existed in the dependent variables of interest. Two separate null hierarchical models provided evidence of significant between-groups variance for individual performance ($\tau_{00} = .28$, $df = 47$, $\chi^2 = 165.61$, $p < .01$) and job satisfaction ($\tau_{00} = .20$, $df = 47$, $\chi^2 = 89.35$, $p < .01$). Calculation of the interclass correlation coefficient showed that 32 percent of the variance in individual performance and 13 percent of the variance in job satisfaction existed between groups in this sample.

In order to test the direct relationship between empowerment climate and the two outcome variables, we ran two separate intercepts-as-outcomes models with empowerment climate as a level 2 predictor and individual performance and job satisfaction as the level 1 outcomes, respectively. The results using individual performance failed to reach significance ($\gamma_{01} = .08$; $t[46] = 0.48$, n.s.), indicating no support for a direct relationship between empowerment climate and individual job performance. The results for job satisfaction were significant ($\gamma_{01} = .70$; $t[46] = 5.75$, $p < .01$), indicating that empowerment climate was positively and significantly related to job satisfaction. The computation based on the reduction in unexplained variance in this model relative to the null model showed that empowerment climate explained 98 percent of the between-groups variance in job satisfaction. Since 13 percent of the variance in job satisfaction existed between groups, these results indicated that empowerment climate explained 12.7 percent of the total variance in job satisfaction.

The second precondition for mediation was a positive relationship between empowerment climate and psychological empowerment. Recall that this relationship was our Hypothesis 2 and that evidence of a significant, positive relationship between these two empowerment constructs was provided there. The third precondition for mediation was the presence of positive relationships between psychological empowerment and both individual performance and job satisfaction. These two relationships were supported in our tests of Hypotheses 4a and 4b. Thus, Baron and Kenny's (1986) three preconditions for mediation were met for job satisfaction (Hypothesis 5b) but not for individual performance (Hypothesis 5a).

To test for the mediation effect specified in Hypothesis 5b, we used a random-intercepts hierarchical model with psychological empowerment as a level 1 predictor and job satisfaction as a level 1 dependent variable. Examination of the variance component from this model indicated that the between-groups variance in job satisfaction failed to reach significance when psychological empow-

erment was used as a level 1 predictor (τ_{00} = .05, χ^2 [47] = 50.52, n.s.). Further analysis using the level 2 variable was not justified (Hofmann, 1997). That is, after psychological empowerment was entered as a level 1 explanatory variable, empowerment climate was no longer a significant predictor of job satisfaction because there was not a significant amount of between-groups variance to be explained. Thus, psychological empowerment fully mediated the significant effect of empowerment climate on job satisfaction.

Kenny, Kashy, and Bolger (1998: 260) noted that step 1, in the present case establishing a direct relationship between empowerment climate and individual performance, is not required to demonstrate mediation. Only steps 2 and 3 are essential. Since empowerment climate is significantly related to psychological empowerment and psychological empowerment is significantly related to individual job performance, our results demonstrate what might best be termed an indirect relationship between empowerment climate and job performance mediated by psychological empowerment.

DISCUSSION

Most authors view the process of empowerment as a change in employees' intrinsic motivation resulting from changes in organizational structures, policies, and practices. Yet, to date, this fundamental insight into the multiple-level nature of empowerment has not been made theoretically explicit and empirically tested. The current work is the first empirical study we are aware of to integrate the macro and micro views of empowerment found in the literature. To accomplish this integration, we developed empowerment climate as a work-unit-level construct conceptualized as employee perceptions of the managerial practices associated with empowerment. Our results support the multiple-level conceptualization implicit in the literature and suggest that empowerment climate must be considered an important aspect of an organization's effort to foster employees' experiences of psychological empowerment. We have shown that work-unit empowerment climate is positively related to work-unit performance outcomes. Our results also indicate that psychological empowerment mediates the effects of empowerment climate on job satisfaction and is a link in an indirect relationship between empowerment climate and job performance. Our findings have important implications for advancing empowerment theory and practice.

Perhaps our most important findings concern the validity of the empowerment climate construct itself. Our confirmatory factor analysis showed that the dimensions of empowerment climate loaded onto a single higher-order factor that was distinct from psychological empowerment. The high level of within-group agreement in employee perceptions of empowerment climate suggests that these perceptions are important understandings that work-unit members share concerning organizational structures, policies, and practices related to empowerment. The use of mean work-unit perceptions is a strength of the climate approach because mean ratings tend to cancel out both random variance in individual responding and systematic differences that may contaminate individual perceptions, such as an individual's background, previous experiences, and personality (James, James, & Ashe, 1990). Thus, aggregate perceptions are likely to have yielded a more accurate representation of work-unit context, and they allowed us to examine relationships specified at a level of analysis above the individual, something rarely done in the empowerment literature. We found a positive relationship between empowerment climate and work-unit performance, as hypothesized. We also found empowerment climate positively related to between-group differences in psychological empowerment, as hypothesized. These findings provide initial evidence for the construct validity of empowerment climate at the work-unit level of analysis and justify future research with the construct.

Empowerment climate explained 22 percent of the variance in work-unit performance in this study. The specific dimensions of the empowerment climate scale suggest a number of processes, including decision quality, work-unit coordination, and work-unit potency, that could account for the explained variance. Examination of each process related to work-unit performance was beyond the scope of the current study but would be justified in future research by the moderately strong results reported here. An even finer-grained understanding of work-unit performance could be gained by examining the unique effects of each dimension of empowerment climate on each process variable or on other work-unit outcomes such as cooperation and cohesiveness. However, we found the average intercorrelation among the three dimensions of empowerment climate to be quite high (average r = .76). Improvement in the discriminant validity among the dimensions of empowerment climate will be necessary before such an examination will be possible.

In the current study, 20 percent of the variance in psychological empowerment was manifest between groups. This finding necessarily implies that there was a significant degree of within-group clustering

and could be used to justify the aggregation of psychological empowerment to the team level. Thus, it is important to note that our decision to treat psychological empowerment as an individual-level variable in this study was based on theoretical, conceptual, and measurement considerations. Psychological empowerment has been defined and conceptualized in previous literature as an individual-level psychological state. The items measuring psychological empowerment are consistent with this conceptualization in that they focus on the individual and his or her subjective experience of empowerment. On a theoretical level, we viewed the within-group clustering of psychological empowerment as an outcome of the higher-level empowerment climate factor, a factor experienced by all of the members of a work unit. Thus, we treated within-group agreement as a necessary but not sufficient condition for the aggregation of a variable to a higher level.

Work-unit empowerment climate explained 62 percent of the between-groups variance in psychological empowerment. This finding shows that it is important for managers interested in empowerment to understand the way employees perceive the organizational structures and practices identified by the empowerment climate dimensions—information sharing, clear boundaries, and team accountability—because these perceptions are strongly related to the average level of psychological empowerment reported by work-unit members.

The finding that 20 percent of the variance in psychological empowerment was manifest between groups in this study means that 80 percent was within-group variance that can only be explained by individual-level variables. This finding is consistent with previous research that has shown a number of individual-level variables related to psychological empowerment, including job characteristics, role ambiguity, sociopolitical support, and self-esteem (Kraimer et al., 1999; Liden et al., 2000; Spreitzer, 1996). Because our focus was on the relationship between empowerment climate and psychological empowerment, inclusion of the full set of individual-level variables that we might expect to influence psychological empowerment was beyond the scope of this study. However, inclusion of these individual-level variables is an important direction for future research and could increase the precision and explanatory power of our multiple-level model. According to Spreitzer (1995: 1444), the overall experience of psychological empowerment reflects an active, rather than a passive, orientation to one's work role. Thus, proactive personality (Crant, 2000) would appear to be one promising individual difference variable to explore

in future research. It may be that proactive people essentially empower themselves, making their own independent choices, establishing competence, and having an impact regardless of contextual influences or situational constraints.

The direct relationship between empowerment climate and individual job performance failed to reach significance in our study, although there was evidence of an indirect link mediated by psychological empowerment. The magnitude of the relationship between empowerment climate and psychological empowerment is strong, so it appears that the weak link in the path is the small yet significant relationship between psychological empowerment and individual performance. Previous research has also shown a small but significant, positive correlation between psychological empowerment and individual performance (e.g., Liden et al., 2000; Spreitzer et al., 1997). From a theoretical point of view, psychological empowerment should be seen as a theory of intrinsic motivation (Spreitzer, 1995), not as a comprehensive theory of work performance. Many scholars have argued that a comprehensive model of work performance must include not only motivation, but also factors related to ability and opportunity (e.g., Blumberg & Pringle, 1982). Thus, we would expect the impact of empowerment on individual work performance to be stronger only when these other factors are taken into account.

Limitations

Our study identified a number of limitations in the empowerment climate scale (Blanchard et al., 1995) as currently written. We have already mentioned poor discriminant validity among the dimensions, which limited our ability to examine more detailed relationships between empowerment climate and psychological empowerment. Future research should develop and test new items in order to refine the level of discriminant validity among these dimensions. Another issue is the wording of three items from the empowerment climate scale; their use of "I" as their referent was inconsistent with our research approach. We chose to drop the three inconsistent items from the scale, but they could be included in future research if they were rewritten with the referent "we" to emphasize the collective nature of empowerment climate perceptions. Finally, we note that the label for one of the dimensions of empowerment climate, "autonomy through boundaries," is somewhat con-

fusing since it conflates an organizational practice (setting clear boundaries) with the presumed individual reaction to those boundaries (an individual's sense of autonomy). The scale itself does not suffer from this problem as the items focus on managerial structures and practices and not on individual reactions. An updated version of the scale might rename this dimension to better reflect the actual content.

A second limitation of the current research is the cross-sectional design of the study, since a cross-sectional design does not allow for strict causal conclusions. For example, individuals with higher levels of psychological empowerment might perceive a work-unit climate to be more empowering because they tend to see more opportunities for constructive action in all work situations. Even reciprocal causation is possible. There could be a tendency for a work unit initially high on empowerment climate to attract, select, and retain individuals who have high levels of psychological empowerment, who in turn report even higher levels of empowerment climate in the work unit. Future research could use a longitudinal research design to strengthen conclusions about the causal direction between empowerment climate and psychological empowerment.

A third limitation of the current approach is the subjective nature of empowerment climate perceptions. Problems with the subjectivity of perceptions have been raised before, for example in the climate (e.g., Guion, 1973) and job design (e.g., Roberts & Glick, 1981) literatures. These controversies have generally been resolved in favor of the value of perceptions as useful and veridical descriptions of organizational or job characteristics (e.g., James & Jones, 1974; Reichers & Schneider, 1990; Schneider, 1985; Taber & Taylor, 1990). Still, the inclusion of more direct or objective measures of the structural characteristics of an organization or work unit would enhance the validity of the conclusions drawn in this study. These measures could be sought in archival or documentary records of a company, collected from interviews with higher-level managers, or recorded by trained research observers. Such data would allow researchers to assess the effects of specific structures and policies on empowerment climate perceptions and psychological empowerment. Objective data would also help to establish the causal direction of the modeled effects, since the perceptions of lower-level employees are unlikely to have much immediate effect on the objective structures and policies determined at higher levels of an organization.

Future Research

Although empowerment climate was strongly related to psychological empowerment in this study, a significant amount of between-groups variance remains to be explained. Future research might seek to expand the conceptualization of empowerment climate used in this study by identifying other managerial structures and practices that might be incorporated into the construct. Other work-unit variables not directly associated with empowerment, such as leadership, work-unit structure, and work-unit technology, might also be used to explain the remaining between-groups variance in psychological empowerment. An important question for future research is whether these work-unit-level variables have a direct effect on psychological empowerment, or a mediated effect through their relationship with empowerment climate perceptions.

For example, it is likely that a work unit's manager has an important influence on employees' perceptions of empowerment climate. Some promising work has recently been conducted by Arnold, Arad, Rhoades, and Drasgow (2000); they reported on the development of an instrument specifically designed to assess empowering leader behavior. Their results show that empowering leader behavior partially overlaps with previously identified leadership constructs but cannot be entirely accounted for by these earlier measures. Although Arnold and colleagues noted that they expect their measure to be directly related to psychological empowerment, we would expect empowering leader behavior to be a work-unit-level variable related to work-unit empowerment climate and only indirectly related to work-unit performance and individual psychological empowerment.

Future research could also explore the extent to which variables such as leadership style or culture may act as boundary conditions for our model. For example, a work unit may be empowered because it has adequate information, clear goals, and established accountability, but the individuals in the unit may not feel psychologically empowered because the unit manager reserves control for him- or herself. Certain national cultures may also be more or less likely to be the settings for the relationships found here. For example, individuals from a culture in which "power distance" or uncertainty avoidance is high may react to a highly empowering climate with feelings of stress and withdrawal rather than with feelings of a sense of meaning, competence, self-determination, and impact. Future research could explore the extent to which these and other contextual variables establish the

boundaries in which the relationships reported here are likely to be observed.

A third direction for future research would be to view empowerment climate as the context in which other processes take place. Future research might elaborate upon this contextual view by examining the role empowerment climate might play in moderating the effects of individual-level variables on psychological empowerment. A number of interesting questions arise from this perspective. For example, is self-esteem a more important predictor of psychological empowerment in organizations with low-empowerment climates because individual differences act as a substitute for climate factors? Or does a high-empowerment climate enhance the effects of self-esteem on psychological empowerment because it legitimizes individual initiative?

Finally, future research could seek to examine empowerment climate at the organizational level of analysis. Empowerment efforts are often organization-wide, and the overarching structures and policies of an organization may provide the relatively distal context in which employee empowerment climate perceptions are formed. Our current findings show significant variance in work-unit-level empowerment climate that would need to be modeled in such an organization-level study. Thus, it seems that at a minimum an organization-level study would need to examine variance at the organizational and work-unit levels simultaneously.

The focus on empowerment climate is a particular strength of this study from an applied point of view. The relationship of empowerment climate to important work-unit and individual outcomes provides initial justification for its use as a diagnostic instrument by managers. Because the instrument refers to managerial structures and practices, it can be used to provide some guidance regarding the kinds of actions managers might take to enhance empowerment perceptions (e.g., Blanchard, Carlos, & Randolph, 1999).

Practitioners have provided numerous examples of specific policies and programs linked to the dimensions of empowerment climate measured in our study. For example, in one manufacturing company information sharing took the form of training new employees to read and understand the company's income statement and balance sheet. In another company, customer service employees were given direct access to information about their response times to customer inquires. In one utility company, autonomy through boundaries was practiced by translating cost-saving goals to the lowest feasible levels in the organization, often the individual. Team responsibility and accountability were implemented in a financial services company when teams were charged with the primary responsibility for developing solutions to company-wide budgetary constraints, including work process redesign. As these examples make clear, there are a great number of specific practices that managers can use to shape employees' empowerment climate perceptions. However, no single practice will be appropriate or will necessarily have the same effect in every work context. This observation highlights the value of using empowerment climate perceptions as a diagnostic tool for understanding the way specific practices affect employees' understanding of their organizations.

Managers often face the task of motivating large numbers of employees simultaneously. The climate perspective emphasizes the efficiency of thinking about employee motivation and performance in terms of the context in which employees work (Schneider, 1985). This study provides support for the notion that empowerment should be viewed as a multiple-level process and can be considered both an effective and efficient approach to employee motivation and performance.

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