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Re-Examining Employee Participation Through the Lens of Stakeholder Management

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Abstract
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Keywords
worker, performance, research, employee, team, manager, supervisor, service, organization

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RE-EXAMINING EMPLOYEE PARTICIPATION
THROUGH THE LENS OF STAKEHOLDER MANAGEMENT

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research available to others interested in preliminary form to encourage discussion and suggestions.
RE-EXAMINING EMPLOYEE PARTICIPATION THROUGH THE LENS OF
STAKEHOLDER MANAGEMENT

ABSTRACT

This paper uses a stakeholder framework to examine the differential outcomes of participatory strategies for a stratified random sample of 1,191 middle managers, supervisors, and workers in a large service organization. Self-managed teams are associated with significantly higher levels of autonomy, satisfaction, employment security, and support of management strategy among workers; significantly lower levels among supervisors; and modest negative effects among middle managers. By contrast, involvement in total quality teams has no significant outcomes for any employees.

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RE-EXAMINING EMPLOYEE PARTICIPATION THROUGH THE LENS OF STAKEHOLDER MANAGEMENT

Stakeholder theory has received increasing academic attention as evidenced in recent issues of major journals, such as the *Academy of Management Review* (e.g., January, 1995; October, 1997; April, 1999) and *Business Ethics Quarterly* (1994). While the theoretical literature has debated ways to conceptually clarify and delineate a series of testable propositions relating to stakeholder theory, the growing body of empirical literature has focused on understanding the relationship between the firm and external stakeholders – shareholders, customers, suppliers, special interest groups, and public regulators. By contrast, few studies have examined the strategic management of employees explicitly from a stakeholder perspective, even though employee participation figured prominently in Freeman’s classic articulation of stakeholder theory (1984). Instead, studies of employee participation have adopted other theoretical lenses, including theories of motivation and job design and "high involvement" or "high performance" work systems (HPWS).

In this paper I explore why the stakeholder framework helps address two limitations in the employee participation literature. I use the term "employee participation" or "participatory management" broadly to include the literature on employee involvement and teams, and on the HPWS literature where teams and participation figure prominently. First, stakeholder theory provides a framework for disaggregating the effects of participatory management on differently situated groups of employees – such as managers, supervisors, and non-managerial workers. The existing participation literature, by contrast, has focused largely on workers’ attitudinal, behavioral, and performance outcomes. Almost no empirical research simultaneously assesses the effects of participation on middle managers, supervisors, and non-managerial employees alike, even though management theorists argue that successful implementation requires "buy in" from all parties. Second, instead of viewing worker attitudes as important to the extent they mediate performance outcomes, the self-interests of employees are of legitimate theoretical interest in and of themselves. Moreover, instrumental stakeholder theory would suggest that the self-interests of employees – for example, job security – are as important as attitudes such as job satisfaction for enhancing the alignment of their interests with those of the organization.

This empirical examination of employee participation also contributes to advancing the stakeholder management literature. While that literature suggests that different groups of employees may have distinct or competing interests, I could find no empirical tests of that proposition. This study provides an empirical test of two questions. First, from a normative perspective, how do different types of participatory management affect the self-interests of
distinct groups of employees as stakeholders? Second, from an instrumental perspective, does participatory management lead to the better alignment of employee interests and attitudes with those of the organization and top management, and why?

**PREVIOUS LITERATURE**

In this paper, I draw on the participation literature as it relates to the stakeholder concept. That literature has distinguished between various forms of employee participation, such as quality improvement teams, cross-functional teams, or self-managed teams. This study focuses on two common approaches: “parallel” teams such as total quality teams; and self-managed teams (SMTs). Parallel teams consist of groups of workers, supervisors, and/or managers who meet away from their work to discuss ways to solve problems. They form a structure that is parallel to the way work is organized. Parallel teams involve “shared decision-making” (Leana, 1987) or consultation (Levine and Tyson, 1990): employees make recommendations, but do not have “substantive” decision-making rights to make changes on their own.

Self-managed teams are defined as groups of workers who are self-managing, who have significant interdependent relations, who perceive themselves and are perceived by others as a group, and who have significant interdependent relations with other groups in a larger social system (Alderfer, 1977). They are “self-managing” in that they have considerable substantive discretion to set goals, arrange work, and make operational changes without consulting their supervisor. Compared to parallel teams, they represent a form of “delegation” (Leana, 1987) or “substantive” involvement in decision-making (Levine and Tyson, 1990). They are not “autonomous” as they are embedded in a large hierarchical organization (Hackman, 1987).

I draw on the stakeholder concept as an aid to analyzing the effectiveness of these different approaches to participation, and how these differences play out for managers, supervisors, and non-managerial employees. The stakeholder concept, as developed by Freeman and others, includes “any group who can affect or is affected by the achievement of the organization’s objectives” (Freeman, 1984:46). The definition includes a broad array of “non-traditional” stakeholders, such as governments, communities, and special interest groups. These non-traditional stakeholders have received most of the attention in the stakeholder literature because, as Freeman noted early on, “The point of a stakeholder approach to organizations is to force organizational managers to be more responsive to the external environment” (1984:216). In this paper, by contrast, I focus on employees as stakeholders, who
along with shareholders and customers, are viewed as having the most salient stake in the residual claims on the corporation (Clarkson, 1995; Mitchell, Agle, and Wood, 1997).

Researchers have identified three dimensions of stakeholder theory: descriptive, normative, and instrumental (Donaldson and Preston, 1995). It describes the corporation as an organization responsible for meeting the legitimate claims of an array of stakeholders, not only shareholders. It is normative in arguing that “the interests of all stakeholders are of intrinsic value. That is, each group of stakeholders merits consideration for its own sake and not merely because of its ability to further the interests of some other group, such as the shareowners” (Donaldson and Preston, 1995: 67). It is instrumental in hypothesizing that corporations that practice stakeholder management will be relatively successful in terms of organizational and financial performance. I treat these dimensions as highly interdependent (e.g., Freeman, 1999), and focus in this paper on the normative and instrumental dimensions of the theory.

Framing the Question: The Stakeholder Interests of Employees

The stakeholder concept is useful for framing the research question. It begins by asking, “who are the relevant stakeholders?” From a research perspective, the question is, “who are the relevant research subjects?” The participation literature has focused on non-managerial employees as subjects because of the underlying assumption that improvements in production depend on changing the attitudes and behaviors of workers. Cordery and Wall, for example, reviewed the job characteristics and sociotechnical systems literature in the 1980s, and concluded that the “…theoretical and empirical research has tended to ignore supervisory variables” (1985: 426). While subsequent researchers made significant advances in recognizing the role of supervisors and managers in implementing organizational change (e.g., Manz & Sims, 1987; Stewart & Manz, 1997), the bulk of the empirical research on participation and teams has continued to focus on workers, or team members, as the sole subjects of research. Studies of successful implementation of teams rarely mention the attitudes or behaviors of supervisors or managers (e.g., see reviews by Cohen and Bailey, 1997; Cotton, 1993). In studies where the focus is squarely on supervisors (e.g., Buchanan and Preston, 1991; Kerr, Hill, Broedling, 1986; Klein, 1984; Walton, 1980), the outcomes of participation for workers’ are unexamined. My literature review located one empirical study that compared the job satisfaction of supervisors and workers in a team-based plant; it found that both groups were more satisfied with their jobs than were their counterparts in a more hierarchically-organized plant (Denison, 1982).

In addition, discussions of the effects of employee participation on supervisors and managers often lump the two together, assuming that effects will be negative and equally
applicable to all managerial employees alike (e.g., Fenton-O’Creevy, 1998). While the management literature recognizes that managers at different levels of the organization have fundamentally different roles and interests (Conger and Kotter, 1987; Schlesinger and Klein, 1987), these distinctions are not systematically tested in the participation literature. By contrast, stakeholder theory would begin with the assumption that multiple stakeholders are involved in, and affected by, changes in production-level work. Jones, for example, notes that the term stakeholder refers not only to groups such as employees, but to subgroups, “...(e.g., shopworkers and middle managers) who may have distinct (and competing) interests” (1995: 408). From a stakeholder perspective, then, this suggests that studies of participation should measure the simultaneous changes that take place for managers, supervisors, and workers alike.

It should be noted, however, that the stakeholder literature has not developed this concept of competing employee subgroups beyond an initial insight. Rather, employees usually are treated as a homogenous stakeholder group. Studies of participation and organizational change provide an opportunity to examine whether and why it is useful to examine the separate interests of employee subgroups.

The stakeholder perspective also suggests that we re-examine what are the relevant dependent variables. The participation literature has focused primarily on attitudinal and behavioral outcomes for workers. In many cases, the underlying premise was “humanistic”: participation and greater autonomy would lead to more intrinsically satisfying jobs for workers. However, intrinsic motivation and satisfaction more frequently are viewed as instrumental to better performance and greater discretionary effort. The literature on high performance work systems has used more objective outcome measures (productivity, quality) (e.g., Ichniowski, et. al. 1996; MacDuffie, 1995), but the focus is still on the relationship between production level workers and organizational outcomes of interest to top management and shareholders.

From the normative perspective of the stakeholder concept, however, the legitimate interests of employees should be taken into account. They are broader than intrinsically rewarding work and are likely to vary by organizational context. In recent years, for example, employment security has been a primary concern. Do participatory strategies designed to improve organizational performance also create employment security? Do all employees benefit equally? In this study, therefore, the outcome variables of interest are not only the changes in work design (especially autonomy) and intrinsic rewards (e.g., satisfaction), but also perceptions of job security. Also, an instrumental stakeholder perspective would argue that in addition to objective performance outcomes, sustainable performance gains require the
alignment of the interests of employees with those of top management. In this study, therefore, I examine the relationship between participation and employee support for top management’s strategies.

**Participation and Stakeholder Management**

Once the relevant stakeholders and their interests have been identified, a second question concerns the appropriate strategies for aligning stakeholder interests with those of the organization. Stakeholder participation in management decision-making has been viewed as a general solution for managing stakeholder interests, not just those of employees (e.g., see Freeman’s history of the concept, 1984: 31ff). There are a number of reasons why participation should enhance the alignment of employee interests with those of top management, and many of these have been elaborated in research on job satisfaction and organizational commitment. First, employees are likely to be more satisfied and to feel that top management is responding to their needs if work is designed to allow greater discretion and intrinsic rewards (e.g., Hackman & Oldham, 1980). Second, the fact of participating in operational decisions is likely to increase employees’ sense of felt responsibility, which is an antecedent to organizational commitment (e.g., Mowday, Porter, and Steers, 1982). Third, to the extent that top management portrays participatory strategies as central to firm competitiveness, employees may feel that their role is more significant to the survival of the organization, and this may lead to higher perceptions of job security. In addition, if participatory strategies are associated with better performance, then employment security may be a real outcome.

In addition to employees, other stakeholders stand to gain from successful employee participation programs: top management, to the extent that they enjoy a workforce that supports management’s strategic initiatives; customers, to the extent that participation leads to better product quality; and shareholders, to the extent that participatory strategies improve firm competitiveness. In sum, employee participation may be understood as a vehicle for achieving gains for multiple stakeholders (e.g., Kochan and Osterman, 1994).

**Participatory Management and Stakeholder Outcomes**

In this section, I elaborate the hypothesized effects of participatory management on employee interests and attitudes. To maintain a comparative perspective, for each hypothesis I discuss the outcomes for managerial and non-managerial employees. I begin by examining the implications of existing management structures for all employees, and then turn to how participatory strategies alter existing relationships. Under traditional hierarchies, for example, autonomy and responsibility rise with higher level positions (e.g., from workers to supervisors to managers, etc.). Longer tenure is often associated with managerial position, and longer tenure
employees have a greater investment in firm-specific skills and knowledge, which is likely to lead to higher organizational commitment and support for top management. An employee's position in the organization, therefore, is a strong determinant of work content, pay, and work related attitudes such as satisfaction and commitment (e.g., Mowday, Porter, and Steers, 1982; Lincoln and Kalleberg, 1990). Similarly, as employees rise in management, they are viewed as more trusted and vital resources, and have traditionally enjoyed more employment security.

Employees’ functional role or business unit affiliation is also an important predictor of interests and attitudes, as some functions are more critical to the survival of the organization. Those functions that involve the firm’s core competencies are likely to employ more highly skilled workers; and higher skilled work is associated with higher levels of autonomy, responsibility, and intrinsic rewards. Employees with skills in a firm’s core competencies are also likely to hold more bargaining power and more employment security. These observations suggest a direct relationship between organizational position and stakeholder outcomes.

**H1**: Compared to lower level employees, those who occupy higher management levels will have more autonomy, more satisfaction, and more employment security; they are likely to be more committed to the organization and align their interests more closely with those of top management.

**H2**: Employees who work in the area of the firm’s core competency will have greater autonomy, more satisfaction, and more employment security compared to their counterparts in less critical functional areas. As more highly valued employees, they are also more likely to align their interests with those of top management.

Participatory strategies, however, change the relative roles and responsibilities of employees in the hierarchy; but the extent of change is likely to depend significantly on the form of participation. While the management literature often assumes that supervisors and managers will resist all forms of participation equally, the empirical literature suggests otherwise (e.g., Cotton, 1993). Lowe (1993), for example, found that the role of first-line supervisors actually increased in the shift from mass production to lean production in two manufacturing plants.

The empirical literature on participation shows that employee involvement in parallel teams has a fairly modest, but not consistent, positive effect on worker attitudes, particularly satisfaction with participation in decision-making (Adam, 1991; Cotton, 1993; Griffin, 1988; Steel et. al., 1990). It is unlikely to affect a worker’s autonomy on the job, although it may indirectly. In fact, the research on parallel teams associated with Total Quality Management shows that they have little effect on organizational hierarchies. Bradley and Hill (1987), for example, found that quality circles had only minor effects on the jobs of supervisors and managers and required
relatively minor changes in organizational hierarchy. In other words, existing research suggests that shared decision-making forums do not threaten the decision-making autonomy or job security of supervisors and managers in any serious way.

Delegation through self-managed teams, however, has quite different results. The classic case studies identifying supervisory resistance to participation were primarily focused on the displacing effects of more decentralized forms of participation such as self-managed teams (e.g., Klein, 1984; Schlesinger, 1982; Schlesinger and Klein, 1987). For supervisors, case study evidence suggests that the use of self-managed teams often leads to supervisors’ displacement or complete elimination (e.g., Bradley & Hill, 1987; Buchanan & Preston, 1991; Klein, 1984; Wall et. al., 1985; Walton, 1980). Case studies are relatively silent, however, with respect to the specific outcomes of SMTs for middle managers. For non-managerial employees, both theory and empirical research suggest that the changes associated with the use of self-managed teams are much more significant than those associated with parallel teams. For workers, participation in self-managed teams or autonomous work groups is associated with greater autonomy and control at work, intrinsic motivation, and associated attitudes and behaviors such as satisfaction and absenteeism (e.g., Cohen & Bailey, 1997; Cotton, 1993; Macy & Izumi, 1993).

In sum, the participation research suggests the following two propositions with respect to different types of participation and their distinct outcomes for employee groups as stakeholders.

H3: For workers, participation in parallel teams will have a modest positive relationship with satisfaction, perceptions of job security, and support for top management strategies.

H4: For workers, participation in self-managed teams will have a significant positive relationship with perceptions of autonomy, job security, and satisfaction, and support for top management strategies. For supervisors, involvement with self-managed teams will be significantly negatively related to perceptions of autonomy, job security, satisfaction, and support for top management strategies.

Because the literature suggests that parallel teams have little effect on the content of supervisors’ and managers’ jobs, I assume a null effect and make no formal propositions. Moreover, because the literature on participation and middle management is generally quite thin, I make no formal propositions about the outcomes for middle managers, but I explore them in the analysis of the data. As a general principle, however, the effects of innovations on the jobs and work-related attitudes of employees should diminish the further they are from the point of intervention. It is likely, therefore, that participatory strategies introduced at the level of
production will have significantly less impact on the jobs and interests of middle managers than on those of workers or first-line supervisors.

**Explaining the Differential Outcomes of Self-Managed Teams**

The above discussion has focused on whether self-managed teams (SMT) have differential outcomes for managerial and non-managerial employees. The logical follow-up question is to ask why. That is, why does SMT participation change the work and employment conditions of different groups of employees in ways that do or do not improve their satisfaction with work? What is it about self-managed teams that differentially affect the job satisfaction of managers, supervisors, and service workers? For non-managerial employees, as noted above, the literature on self-managed teams has already demonstrated quite consistent relationships between the autonomy created by teams and job satisfaction. Little attention, however, has been paid to whether workers’ participation in teams is associated with perceptions of employment security and whether security, in turn, affects work-related attitudes such as satisfaction and commitment. If participation improves organizational performance, however, then workers in SMTs are likely to view their jobs as more secure; hence, both autonomy and security should mediate the positive relationship between SMT participation and employee satisfaction.

For supervisors and managers, there is considerably less research available, although case studies have found that the autonomy and job security of supervisors especially are undermined by self-managed teams (e.g., Cordery & Wall, 1985; Klein, 1984; Hackman & Oldham, 1980; Schlesinger, 1982; Schlesinger & Klein, 1987). However, I found few empirical tests of these arguments. The case study literature also argues that supervisors may be negatively affected by teams because the supervisors must learn new skills and adopt new roles, particularly coaching or facilitating (e.g., Manz & Sims, 1987; Stewart & Manz, 1997). As recently summarized by Heller et. al. (1998: 203), then, participatory programs are likely to negatively affect the job satisfaction of supervisors for three basic reasons: because their autonomy and control over work decisions is undermined; because their job security is threatened; and because they are required to learn new skills and roles, particularly with respect to coaching. In sum, the literature suggests that for both workers and supervisors, the relationship between SMT participation and job satisfaction will be mediated by autonomy and job security. In addition, for supervisors, the need to learn new skills and spend more time in a coaching role may also have a negative effect on job satisfaction, either because of the effort involved in learning new skills or because of the less powerful or directive role that coaching
involves. Again, the specific effects of self-managed teams on middle managers' jobs and employment conditions are less identifiable, and are less likely to be affected.

**H5:** For workers, autonomy and job security will mediate the relationship between SMT participation and individual satisfaction. For supervisors, autonomy, security, and their role as coaches will mediate the relationship between supervisors' oversight of self-managed teams and job satisfaction.

Research also indicates that organizational context plays an important role in the attitudes of employees (e.g., Lawler, 1986). Important HR practices and organizational climate, therefore, are controlled for in this study. Included are measures of training, compensation, managerial support, and labor-management relations climate. All are hypothesized to be positively associated with the outcomes of interest. Demographic characteristics are also included as control variables because research shows that they are correlated with attitudinal outcomes.

**METHODS**

The research strategy was to study employees in one company to help control for organization-level variables such as corporate "culture," business strategy, and HR/IR policies. In this case, a union contract also reduced variation in many HR practices (seniority-based job bidding, benefits, compensation, etc.). The research combined field observation of workers in self-managed teams and traditionally supervised groups, interviews at multiple levels of the organization, and surveys of managers, supervisors, and non-managerial employees.

**Organizational Context**

The research site for this study was a large regional telephone company that was introducing parallel teams and self-managed teams (SMTs) as part of an overall Total Quality Management program in order to streamline the organization and to compete more effectively on quality and customer service in deregulated telecommunications markets in the mid-1990s. The company had reduced its entire workforce by roughly 30 percent through attrition and early retirement buyouts over the prior decade. Employment security was a critical issue for employees even though no one had suffered forced layoffs and many had transferred to positions in growth areas such as cellular operations or data information services.

The subjects of the study were employees in network operations and customer service and sales, the two "core" business units central to maintaining telephone operations. In telephone companies, network operations is the critical core competency of the company because transmission and switching infrastructure make the telecommunications system possible. It also has been the domain of the more skilled, autonomous, and predominantly male
technical workforce. By comparison, the female-dominated customer service and sales business unit is less important as a critical core competency and employs a lower-skilled workforce.

Network operations is highly decentralized in structure: small offices (less than 75 employees) of skilled technicians, supervisors, and managers are responsible for building and maintaining the network infrastructure. Technicians include sub-specialties such as installers, linemen, cable splicers, electronic technicians, and switching technicians. As highly skilled craft workers, these employees enjoy considerable autonomy; and these characteristics coupled with the decentralized structure of operations made it relatively easy to introduce parallel teams and self-managed teams. Customer service and sales call centers, by contrast, are larger in size (between 75 and 200 employees), with two or three offices serving each state. Automated call distribution systems and advanced information technologies create a highly controlled work environment for managers and service agents alike, making it more difficult to implement both types of participatory innovations. The organizational structure includes roughly one supervisor for every group of ten customer service and sales representatives who answer in-coming calls for service and sales. For purposes of this study, therefore, both managerial and non-managerial employees in network are likely to have more autonomy and better work-related attitudes than those in customer service and sales (as related to Hypothesis 1).

The participation strategies in this case were jointly negotiated between corporate management and the regional union, which represented all of the non-managerial workforce. Participation in the parallel teams and self-managed teams was strictly voluntary. Consistent implementation was facilitated by pairs of union and management trainers, who designed and implemented participation initiatives, and a joint union-management “total quality” structure at the local, state, and corporate levels. Non-managerial employees who volunteered for participation were jointly selected by union stewards and local managers.

For the self-managed team effort, local managers and union leaders developed written agreements specifying what supervisory tasks SMTs would assume, such as daily assignments, covering breaks and schedules, and handling non-routine problems. The supervisor became a “coach,” to be called on as needed by the SMTs. Those supervisors who became coaches of SMTs usually assumed other responsibilities and increased their span of control. The SMTs were responsible for learning and problem-solving; they received additional training, but no additional pay, and remained under the same contractual provisions as other workers. They worked in the same offices and under the same managers as traditionally supervised groups (TSGs).
Sample

The data consist of a stratified random sample of middle managers, supervisors, and non-managerial employees in two business units in a nine-state area of a regional telephone company. To build the stratified sample, I first selected all existing self-managed teams in the two primary business units. Included were a total of 169 SMTs -- 115 teams of network technicians and 54 teams of customer service and sales agents. I then used the corporate HR information system to randomly select a similar number of traditionally supervised work groups (TSGs), matched by business unit and workplace location (geographic location for network teams and office location for service and sales teams). This produced a total of 330 work groups in the study. To limit the study’s intrusiveness in service operations, a random subset of employees in these groups were selected for the survey. Once the matched pairs of work groups were identified, their firstline supervisors and middle managers above them were added to the sample. This produced a total sample of 2,050 employees; 1,191 returned the survey for a response rate of 58 percent.

The final sample includes 190 middle managers, 204 supervisors, and 797 workers. Roughly equal numbers of employees at each level are associated with SMTs and traditional groups. Fifty percent of all respondents from network (and 40 percent from customer services) are involved with self-managed teams. In general, 63 percent of respondents are in network; 37 percent are in customer services. The sample also is reasonably representative of the percentage of employees in the company who were in each respective management level at the time of the study: of the survey respondents, 33.2 percent are managers and 66.8 percent are workers. In the real company at the time, 27 percent were management and 73 percent, non-management.

The sample of participants in parallel teams was drawn from the sample of employees in self-managed and traditionally supervised groups because the company did not keep a centralized record of these participants. The survey asked employees whether or not they were currently participating in a quality action team, problem-solving team, or quality of worklife team. On average 64.2 percent of middle managers, 53.7 percent of supervisors, and 19.6 percent of workers in this sample reported that they were participating in at least one type of parallel team. Roughly equal percentages of employees associated with self-managed and traditional work groups were also involved with parallel teams. Among workers, 18.9 percent of those in traditional groups and 21.1 percent of those in self-managed teams were also part of parallel teams. For supervisors, the corresponding participation rates were 51.8 percent and 56 percent; and for middle managers, 72 percent and 56.7 percent.
The demographic composition of the sample generally reflects the composition of the traditional Bell company. The average age of the sample is 44.5 years old, and the average education, 13.5 years. Eighty-five percent of the sample is white; 44.6 percent is female; and average company tenure is 21.6 years. Across network and customer service business units, the average education is not significantly different; but the network population is somewhat older (46.2 years versus 41.6 years), predominantly male (80 percent, versus 85 percent female in customer services), and has more company tenure (23.2 versus 18.8 years). Across management levels, the sample has predictable characteristics: with increasing level, the average age, education, tenure, male/female ratio, and white/non-white ratio increases.

**Dependent Variables**

The models test two sets of dependent variables. The first set captures three issues of interest to employees as stakeholders: a measure of autonomy or control over work (the central dimension of work that is likely to be effected by employee participation); a measure of perceived employment security; and a satisfaction scale. Autonomy is a three-item scale that includes control over tasks, tools, and procedures (Cronbach’s alpha = .81). Satisfaction is a three-item scale that includes satisfaction with participation in decision-making, the job, and promotion opportunities (Cronbach’s alpha = .79). Perceived job security is measured by two items: the extent to which employees feel less secure on their job than they “did several years ago,” and their satisfaction with their level of employment security (Cronbach’s alpha = .65).

The second set of dependent variables includes three measures of whether employees are "aligned with", or support, top management's initiatives. The measures were developed specifically for this study, and all use a five-point Likert scale. The first is an approval rating of top management, captured by a four-item scale (Cronbach’s alpha = .84). It asks employees to rank top management with respect to whether they commit sufficient resources, give employees a clear picture of the direction in which the company is headed, consider employee interests when introducing new technology and work processes, and show by its actions that quality is a top priority. Two other measures assess the extent to which employees support management's strategy of self-managed teams. The first is a three-item scale which assesses the extent to which employees view self-managed teams as contributing to better work performance: “self-managed teams help workers provide better quality and customer service; being a member of an SMT requires employees to work together more closely; and being a member of an SMT allows workers to take more ownership of work” (Cronbach’s alpha = .80). The second is a scale composed of three questions that focus on whether SMTs are associated with greater inter-group and intra-group conflict at work (Cronbach’s alpha = .72).
**Independent Variables**

Management level is a series of dummy variables that represent whether the employee is a middle manager, supervisor, or worker (omitted category). Business unit affiliation is a dummy variable where one is an employee in network operations, and zero is one in customer service and sales. Participation in parallel teams is measured by the number of times per month that an employee participates in any type of parallel team, including quality action teams, quality of worklife teams, or other problem-solving teams. Self-managed teams is a dummy variable where one is an employee who either participates as member of an SMT (non-managerial employee) or supervises or manages an SMT; zero is an employee who is member of traditionally supervised group or supervises or manages the TSG. “Coaching” is measured by the amount of time per week that supervisors and managers reported that they spent in coaching.

**Control Variables**

Control variables cover human resource practices, labor-relations climate, individual characteristics, and geographic location. HR practices include training, compensation, and managerial support. Training is a measure of the number of days of training that the employee received in the two years prior to the survey. Compensation is measured by annual earnings brackets. Managerial support is a scale of 5 items that measure the employee’s evaluation of the kind of supervision received. It includes an assessment of the supervisor’s (manager’s) ability to provide feedback and frequency of that feedback, support for employee participation and total quality, respect and fairness of treatment (Cronbach’s alpha = .84).

Labor relations climate is measured by a single question that asks employees to rate labor-management relations in their workplace on a 1-5 scale of very poor to very good. Individual demographic variables include age, gender, race, years of education, and company tenure. A series of dummy variables control for state location. State location is an important control variable because the management structure was organized on a state by state basis.

**RESULTS**

Table 1 reports the means, standard deviations, and correlation matrix for the variables. The independent variables of interest are modestly correlated with outcome variables in the predicted direction. Increasing management level is positively associated with outcomes of interest, as is participation in SMTs. Employment in network operations (compared to the customer service and sales) is positively related to most outcomes of interest.
TABLE 1: Means, Standard Deviations, and Correlation Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Std. D.</th>
<th>1</th>
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<th>4</th>
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**TABLE 1: Means, Standard Deviations, and Correlation Matrix**

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<td>0.00</td>
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<td>-0.09</td>
<td>-0.09</td>
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</tr>
<tr>
<td>21. Job tenure</td>
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<td>-0.07</td>
<td>0.06</td>
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<td>-0.05</td>
<td>-0.03</td>
<td>0.03</td>
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<td>-0.20</td>
<td>0.11</td>
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Outcomes of Interest to Employees

Table 2 presents the results of ordinary least squares (OLS) regressions for the dependent variables of autonomy, employment security, and satisfaction. For each dependent variable, there are two equations. The first set of equations (1, 3, and 5) estimates the direct effects of management level, business unit affiliation, self-managed team and parallel team participation on the outcomes of interest (autonomy, employment security, and satisfaction). The second set of equations (2, 4, and 6) adds the interactive effects of management position and involvement with a self-managed teams. All equations include appropriate controls for HR practices, labor-management climate, demographic characteristics, and location. Standardized beta coefficients are reported for these and all subsequent results.

The results show support for most of the hypothesized relationships, but some surprising results as well. As predicted in hypothesis one, relative to being a service worker, being a supervisor or middle manager is significantly positively related to perceptions of autonomy (p. <.001). Contrary to hypothesis one, however, being a supervisor or manager has no significant relationship with satisfaction, and a significant negative association with perceptions of employment security (p. <.001). Also, as predicted (hypothesis two), being employed in network operations (the “core competency” of the organization) has a significant positive relationship with autonomy and satisfaction (p. <.001), (although no relationship to employment security).
Contrary to hypothesis three, participation in parallel teams has no significant effects for workers. It also has no effects for supervisors and managers. By contrast, there are large, statistically significant relationships between participation in SMTs and autonomy (p. < .001) and satisfaction (p. < .01). The relationship between SMTs and employment security is positive but not significant. This analysis suggests that all employees benefit from SMT participation.

The addition of the interaction terms changes the above interpretation, however. Consistent with hypothesis four, the direct relationship between SMT participation and workers’ autonomy and satisfaction continues to be positive (p. < .001); and the effect on their employment security becomes significant (p. < .05). Relative to workers, however, oversight of
SMTS is associated with significantly lower levels of autonomy, job security, and satisfaction. While being a supervisor in general is significantly positively related to autonomy and satisfaction, being a supervisor of an SMT has a significant negative effect (p. < .001). In addition, when the interaction term is added in the second set of equations, the negative relationship between supervisory status and employment security becomes insignificant, but it becomes highly significant and large for supervisors of SMTs (p. < .01). There is a similar, but not as large or pervasive effect associated with being a middle manager involved with SMTs, as logic would suggest, because the jobs of middle managers are less affected by SMT interventions than are those of supervisors. Nonetheless, relative to workers, being a middle manager of SMTs is significantly negatively related to autonomy and satisfaction (p. < .01), but not employment security. With respect to the human resource and labor-management control variables, virtually all are significant and have the predicted direction of association with the outcomes of interest.

**The Alignment of Employee Interests with Top Management**

For the second set of dependent variables, the same set of OLS regression equations were employed. The analyses assess whether the significant positive outcomes of SMTs for non-managerial employees (and negative for managerial employees) translate into attitudinal differences towards top management. Table 3 presents the results of these analyses, which show mixed support for the hypotheses. For the set of direct effects, being a supervisor or manager (relative to a production worker) is positively, but not significantly, associated with approval of top management leadership. At the same time, supervisors and managers strongly disapprove of top management’s self-managed team initiative (p. < .001 for all coefficients, equations 4 and 6). Compared to workers, supervisors and managers are significantly less likely to believe in the positive performance effects of SMTs and more likely to believe that they create conflict in the workplace. The differences in the attitudes of managerial and non-managerial employees towards SMTs are more pronounced with respect to the disapproval rating (equation 6).
### TABLE 3: Approval of Top Management and Management Strategy

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<th>Approval of SMTs</th>
<th>Disapproval of SMTs</th>
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<td>Eq. 1</td>
<td>Eq. 2</td>
<td>Eq. 3</td>
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<td>Network business unit</td>
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<td>-0.06</td>
</tr>
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<td>0.15 ***</td>
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<tr>
<td><strong>Control Variables</strong></td>
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<td></td>
<td></td>
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<tr>
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<td>0.05 +</td>
<td>0.06 +</td>
</tr>
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<td>-0.02</td>
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<tr>
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<td>0.23 ***</td>
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</tr>
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<td>Labor-Mngnt. relations</td>
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<td>0.29 ***</td>
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<td>Chg. R-squared</td>
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Standardized Beta Coefficients reported. *** = p < .001; ** = p < .01; * = p < .05; + = .10.

The direct effects of SMT participation, even after controlling for management and business unit position, are significant in the predicted direction for all three outcome variables. In other words, regardless of management level or business unit affiliation, those employees who are participating in SMTs report higher levels of approval of top management leadership (p. < .01), and support for SMTs as a management strategy (p. <. 001). There are no significant effects associated with business unit affiliation or parallel teams. The HR and labor-management relations variables are significant in the predicted direction in most equations.

In contrast to the equations that estimate the outcomes of interest to employees, however, there is only one significant interactive effect in Table 3. That is, while supervisors
and managers who oversee SMTs report significantly less autonomy, satisfaction, and employment security, they do not have significantly lower ratings of top management leadership or approval of the SMT strategy (equations 2, and 4). Supervisors and managers of SMTs, however, are significantly more likely to view these teams as creating conflict in the workplace (equation 6), while workers in SMTs are significantly less likely to believe this to be true.

**Explaining the Differential Effects of Self-Managed Teams**

The final analysis in this paper examines in greater detail the relationship between involvement in teams and the job satisfaction of employees (hypothesis 5). As reported in Table 2, SMT involvement had a significant positive relationship with workers’ perceptions of autonomy and job security, but the opposite association for supervisors. With respect to coaching responsibilities, compared to supervisors of traditional groups, those who oversee teams reported significantly greater time in coaching activities (10.7 hours per week vs. 7.1 hours). Table 4 reports the OLS regressions used to estimate the mediating effect of these three variables -- autonomy, security, and coaching (for supervisors) -- on satisfaction. There are two equations for each employee group. The first equations (1, 3, and 5) estimate the direct relationship between involvement in teams and job satisfaction; the second adds the effects of autonomy and security (and coaching for supervisors and managers) as mediating variables. The results largely confirm the hypothesized relationships. For workers, the addition of autonomy and security to the equation substantially reduces the size of the coefficient on self-managed teams (which becomes insignificant), and raises the r-squared by .18 (equations 1 and 2). Similarly, for the supervisory equations (3 and 4), the size and significance of the SMT effect is diminished when the mediating variables are added in the second equation. Job security has the largest and most significant relationship with supervisors’ satisfaction (p. < .001); autonomy also has a significant effect (p. < .01); and the addition of coaching tasks has a positive relationship that almost reaches significance (p. < .06). The change in r-squared is .08.

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</tr>
<tr>
<td></td>
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<td>Eq. 2</td>
<td>Eq. 3</td>
</tr>
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<td>Network business unit</td>
<td>-0.23 ***</td>
<td>-0.15 ***</td>
<td>0.06</td>
</tr>
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</table>

Mediating Variables

|                      |                |              |                |
|                      | Autonomy       | Job Security | Coaching tasks |
|                      | 0.31 ***       | 0.33 ***     | 0.14           |
|                      | 0.13 *         | 0.31 ***     |                |
|                      |                | 0.10         |                |

Control Variables

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<th>Labor-Mngmnt relations</th>
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<th>Prob &gt; F</th>
<th>R-squared</th>
<th>Adj R-squared</th>
<th>Chg. R-squared</th>
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Standardized Beta Coefficients reported. *** = p < .001; ** = p < .01; * = p < .05; + = .10.

The results for middle managers, however, are quite different. While autonomy and security are significantly related to job security, they do not mediate the relationship with teams. In other words, unlike supervisors, middle managers may disapprove of teams but not for self-interested reasons: these managers are not dissatisfied because of any direct negative effect that teams have on their own autonomy or job security.

I also explored whether there were other differences in the jobs of supervisors and managers of SMTs versus traditional groups, which might explain variation in work attitudes. I examined their spans of control, perceived workloads and understaffing, and daily work hours. While supervisors of teams had significantly larger spans of control (on average, 20.7 versus
they were not significantly different in their reported workloads and understaffing, or daily work hours, the latter of which averaged 9.3 hours per day for all supervisors. For middle managers, whether they oversaw teams or not had no effect on their span of control (on average 37 for all middle managers) or their daily work hours (which averaged 10.1 hours). In equations (not shown), none of these variables explained variation in work attitudes.

### Potential Confounds

A limitation of this research is that it lacks independent or objective outcome measures, suffering from common method bias where correlations between independent and dependent variables are likely to be inflated (Roberts & Glick, 1981; Wagner & Gooding, 1987). This methodological limitation is less problematic in this study, however, because the research question is comparative in nature. I am less concerned about the magnitude of the relationship between SMT involvement and attitudes than in the direction of that relationship across differently situated groups. The results are striking in that there are simultaneous findings of a positive relationship between SMTs and attitudes for non-managerial employees and a significant negative relationship for managerial employees.

Nonetheless, to explore the possibility of confounding factors in the positive relationship for workers, I undertook several additional analyses. To consider a potential Hawthorne effect, I examined whether there were systematic differences in early and later-forming teams. If SMT members feel they are being treated specially, the novelty is likely to wear off over time (e.g., Griffin, 1988). In this case, the self-managed teams were formed over several years -- about half between 1989 and 1993, and half thereafter. I analyzed employees in pre- and post-1993 teams, and found no systematic differences in their job characteristics and attitudes.

Another explanation for the positive attitudes of workers in SMTs is selection bias. Although joining teams was voluntary, managers and union leaders said that they purposefully formed teams of employees with different performance levels so as to avoid the charge that SMTs were being favored. Less than 10 percent of surveyed managers said that good performance was used as a criterion for selection. Also, participants in teams were no more likely to say they would accept a promotion to a higher position. Another way to examine whether members of SMTs are biased systematically is to analyze whether there are differences between “volunteers” and “non-volunteers” for teams. While I could not go back in time, I could compare current volunteers and non-volunteers. A survey question asked employees in traditional groups if they would volunteer for SMTs if given the opportunity. Using this question, I substituted SMT-volunteers for SMT-members in the models discussed above, and found that being an SMT volunteer had no significant effect on outcomes of interest.
DISCUSSION

The findings in this study may be summarized as follows. First, an employee’s location in the organizational hierarchy is significantly related to work-related attitudes, but not in entirely predictable ways. Employees at higher management levels and in core business units were more likely to have greater control over their work and more job satisfaction. However, management employees had lower perceived employment security than did workers; and managerial employees did not approve of top management’s team strategy. Moreover, managerial employees were no more likely than non-managerial employees to approve of top management’s leadership. These latter findings are surprising given traditional assumptions that managerial employees are highly loyal and given recent findings that middle managers remain loyal even amidst downsizing and displacement (e.g., Heckscher, 1995; Reilly, Brett, and Stroh, 1993).

A second set of findings relates to the differential effects of distinct forms of participation on all employees. In this case, the effects of parallel team and self-managed team initiatives were dramatically different. Participation in parallel teams had no relationship with the attitudes and interests of employees, or their support for top management strategies. Self-managed teams, by contrast, were associated with significant positive outcomes for workers, significant negative outcomes for supervisors, and to a lesser extent, negative outcomes for middle managers.

Third, compared to employees working under traditional hierarchies, all of those who participated in the team strategy had higher approval ratings of top management; but supervisors and managers of SMTs were more likely than workers to disapprove of the team strategy. A reasonable interpretation of these findings is that those managerial employees who were more committed or risk-taking to begin with, were more willing to participate in teams and more willing to support top management -- even when their own self-interests were undermined. This might suggest that top management is able to use the self-managed team strategy to increase the role of non-managerial employees as stakeholders in the organization without adversely affecting the support of managerial employees. However, qualitative research done in this case provides another, more plausible interpretation. The actual number of these more "risk-taking" managers was quite small; that is, only a small percentage of the managerial workforce was willing to volunteer to oversee a self-managed team. The company found that where self-managed teams were implemented, there were significant improvements in objective performance metrics, including labor productivity and sales. Because the diffusion of teams depended upon the voluntary cooperation of supervisors and managers, however, top
management's strategic initiative to improve performance never grew beyond five percent of the core workforce. In other words, the case represents an example in which islands of excellence failed to expand to an organization-wide strategy. Arguably, top management’s failure to consider the interests of supervisors and middle managers as stakeholders was an important contributing factor in limiting the spread of what was an effective strategy from an objective performance standpoint.

Limitations

There are several limitations to this study, including the usual limitations associated with cross-sectional analysis of survey data. Although several methods were employed to test for selection bias and alternative explanations, the limitations of this approach cannot be completely eliminated. In this case, however, the direction of causality is not the focal point, but rather the attitudes associated with participation in teams, and the variation in attitudes across differently-situated groups of employees. The findings show that the same SMT interventions are associated with radically different attitudes and perceptions of outcomes for different groups of employees in the same organization.

A second limitation concerns the generalizability of the findings. This study is a quantitative analysis of one large service bureaucracy, and the findings are context-specific. It is not a fair interpretation to argue that self-managed team interventions are inevitably associated with reductions in autonomy, security, and satisfaction of managerial employees. However, it is reasonable to use this case as an example of what can happen when top management fails to take into consideration the interests of supervisors and middle-managers as stakeholders. If, for example, self-managed teams are clearly used as a strategy to streamline the organization, supervisors in particular, and managers to a lesser extent, are likely to be thrown on the defensive and perceive that their decision-making position and security are threatened. Moreover, there is anecdotal evidence to suggest that many organizations have adopted self-managed teams as much for purposes of organizational streamlining as for purposes of group effectiveness at the team level. To the extent that team-based systems are motivated by the larger goals of organizational restructuring and streamlining, then the findings in this paper are likely to be relevant.

Conclusions

Despite these limitations, this study offers some contributions to understanding employee reactions to organizational change. First, a stakeholder framework provides a useful point of departure for analyzing participatory management specifically, and organizational change initiatives more broadly. The framework encourages researchers to examine potential
outcomes from multiple perspectives and using a range of subjective and objective measures. By doing so, they are likely to uncover a more complex story about the process and outcomes of interventions – a story that distills not only the immediate costs and benefits based on objective performance measures, but the importance of the embedded interests and attitudes of employees. The stakeholder perspective helps explain why "islands of excellence" in organizations never get to scale. In this case, top management could not count on its managerial workforce to implement a strategic initiative. While a minority of supervisors and managers were willing to put aside their own self-interests and participate in top management's team-based initiatives, the majority were not. Despite the fact that teams, where they existed, produced positive performance results, top management could not get its managerial workforce to broadly implement the strategy.

This study also has implications for the stakeholder theory. While participation as a general approach to stakeholder management may be useful, the particular form that participation takes matters significantly -- not only in terms of whether it is effective at all (as total quality teams in this case were not), but whether it has distinct consequences for different employee groups (as self-managed teams did). While stakeholder theory identifies different employee groups as having potential competing interests, it has not much gone beyond this initial insight. Studying organizational change provides the opportunity to identify where the interests of different groups are likely to compete. Where change initiatives weaken the job autonomy and security of one group relative to another, the competing interests of these groups are likely to undermine management initiatives. For participation to be a successful tool for stakeholder management, therefore, top management must develop a much more differentiated understanding of employees, and the ways that different approaches to change affect their separate interests.
References


