Giving Up Control Without Losing Control

TRUST AND ITS SUBSTITUTES' EFFECTS ON MANAGERS' INVOLVING EMPLOYEES IN DECISION MAKING

GRETCHEN M. SPREITZER
University of Southern California

ANEIL K. MISHRA
Wake Forest University

Because involving lower echelon employees in decision making requires risk on the part of managers, we suggest that certain contextual features must be in place for managers to be more willing to do so. We hypothesize that managers' trust in employees, and two impersonal substitutes for trust—performance information and incentives—will increase managers' involvement of lower echelon employees in decision making. Managers' involvement of lower echelon employees is further hypothesized to enhance organizational performance. Path analysis of survey data from the automotive industry provides support for the hypotheses.

Given the fast rate of change resulting from increased customer expectations, innovative technology, and globalization, the efficacy of traditional command-and-control systems is being questioned in today's increasingly competitive marketplace (Daft & Lewin, 1993; O'Toole & Bennis, 1992). Rather than needing top-down management control, contemporary organizations require the initiative of employees to seek out opportunities and respond to customers' needs (Creed & Miles, 1996; Simons, 1995). In short, organizational performance rests increasingly on the involvement of lower echelon

An earlier version of this article was presented at the 1996 annual meeting of the Society for Industrial and Organizational Psychology. We would like to thank Dan Brass, Bill Cooke, Marta Geletkanycz, Ed Lawler, Karen Mishra, Nandini Rajagopalan, Denise Rousseau, Bob Schoeni, Tom Tyler, and Karl Weick for helpful comments on an earlier version of this article. Both authors contributed equally to the article. *Correspondence concerning the article should be addressed to Gretchen M. Spreitzer, Department of Management and Organization, Marshall School of Business, University of Southern California, Los Angeles, CA 90089-1421; e-mail: gspreitzer@sba.usc.edu.*

Group & Organization Management, Vol. 24 No. 2, June 1999 155-187

employees in decision making (Arthur, 1994; Daft & Lewin, 1993; Davidow & Malone, 1992; Hirschhorn & Gilmore, 1992). With specialized knowledge about how to perform their work, lower echelon employees often have the capacity to make better decisions than do their superiors regarding how their work is accomplished (Lawler, 1992).

Although there is growing evidence that managers' involvement in lower echelon employees is necessary in today's business environment (e.g., Arthur, 1994), many managers are hesitant to involve lower echelon employees because they fear losing control. The very act of involving lower echelon employees requires some risk on the part of managers who make themselves vulnerable by ceding authority to lower echelon employees, authority that was previously restricted to the manager (Donaldson, 1990; Locke & Schweiger, 1979; Pfeffer, 1994). The involvement of lower echelon employees creates the potential for managerial vulnerability in several ways. First, involved employees may behave opportunistically, as agency theorists would predict (Arrow, 1985). Because the needs of lower echelon employees may conflict with the collective interests of the organization (Argyris, 1964), managers often are concerned with how to ensure that involved employees will work in the best interests of the organization and not only in their own self-interest (Eisenhardt, 1989). Second, even if the assumption of opportunism is removed, the potential for managerial vulnerability still remains due to the possible incompetence or ignorance on the part of those receiving authority (Leana, 1986).

Not surprisingly, managers are anxious about how to maintain some essence of control when lower echelon employees are encouraged to use their own discretion in performing their work (Simons, 1995). Managers wonder about how they can ensure that employees will act in the best interests of the organization and not shirk when managers do not have complete knowledge of their employees' actions (Cotton, 1993; Levine & Tyson, 1990). Thus, a fundamental problem facing managers is how they can give up control through the involvement of employees in decision making without losing control—how to simultaneously make themselves vulnerable by involving lower echelon employees in decision making yet not be taken advantage of by employee self-interest or misfeasance (Simons, 1995). This paradox—giving up control without losing control—is a core issue for the effective involvement of lower echelon employees in decision making. Unfortunately, we have limited knowledge about the factors that help to ease managers' concerns about self-interest or misfeasance among lower echelon employees in decision making. We address this issue in our article by examining the roles of trust and two substitutes for trust in facilitating managers' willingness to involve lower echelon employees in decision making.[1]

First, we discuss why traditional methods to manage authority relations with lower echelon employees are more difficult in today's business environment. We instead argue that trust or various substitutes for trust will increase managers' willingness to become vulnerable in their relationship with lower echelon employees by involving them in decision making. Next, we elaborate on the ways in which this vulnerability on the part of managers can be expected to enhance organizational performance. Drawing these hypotheses together, we further hypothesize that such vulnerability on the part of managers, as manifested in acts of delegation and empowerment, will mediate the relationship between trust, or its substitutes, and organizational performance. After describing the research design using data from a set of automotive firms in the United States and Canada, and discussing the results, we identify the potential contributions of the research and suggest several directions for future research.

THEORETICAL BACKGROUND

TRADITIONAL MECHANISMS FOR MAINTAINING CONTROL

Traditionally, one way that managers have managed authority with, or maintained control of, lower echelon employees is by telling them how to do their jobs and then monitoring them with constant surveillance to guard against surprises (Miles & Creed, 1995). Although this approach has its roots in 19th-century managerial philosophy that emphasized the "limited competence of the rank and file," it persists in modern notions such as agency theory and transactions cost economics, with their emphasis on distrust and opportunistic behavior (Creed & Miles, 1996). But, new approaches to organizing work such as self-managing teams (Cohen, Ledford, & Spreitzer, 1996) and cross-functional collaboration (Denison, Hart, & Kahn, 1996; Hirschhorn & Gilmore, 1992) make monitoring more difficult because it is more difficult to assess individual contributions to performance outcomes. Moreover, the trend toward downsizing (Cameron, Freeman, & Mishra, 1993) has resulted in larger managerial spans of control, leaving fewer managers to monitor more employees (Gomez-Mejia & Balkin, 1989). Thus, monitoring may be more difficult in today's business environment.

Another way to reduce the potential for lower echelon employees to act only out of self-interest is to hire employees whose personal goals fit with the goals of the organization or to socialize employees to those goals through long-term arrangements. This approach has its roots in the human relations and human resources philosophies of management, with their emphasis on

creating and sustaining individual-organizational goal congruence (Miles & Creed, 1995). However, most organizations implementing employee involvement are not in the position of a "greenfield" operation, in which they have the luxury of hiring all new employees. Moreover, socialization of employees to organizational goals through elaborate training programs and formal career planning is becoming more difficult, given the growth of the contingent workforce and increasing fluidity of reporting relationships (Rousseau, 1995). Given that these traditional mechanisms for control appear more difficult in today's business environment, what might be effective alternatives to formal control in a context of employee involvement?

ALTERNATIVES TO FORMAL CONTROL: TRUST AND TWO SUBSTITUTES FOR TRUST

This article deals with an inherent paradox—how can managers keep from feeling like they are out of control without the traditional mechanisms for maintaining control? Are there alternatives to traditional mechanisms of control? We propose that trust and two substitutes for trust may help managers to be more willing to involve lower echelon employees in decision making. Recently, growing attention has been focused on the notion of trust as an alternative to traditional control mechanisms. Trust becomes more important when direct observation of employees becomes impractical (Mayer, Davis, & Schoorman, 1995). Managers' trust in lower echelon employees reflects a belief on the part of managers that lower echelon employees care about the goals of the organization and are competent to make good decisions (Leana, 1986). It also reflects a belief that these employees are reliable in their actions and are honest about their intentions. Scholars argue that these beliefs mitigate the risks that managers ascribe to involving lower echelon employees in decision making and thus make managers more likely to empower lower level employees (Mayer et al. 1995).

Mayer et al. (1995) argue that risk taking in a relationship by a manager is not only a function of the level of trust that the manager has in subordinates but also situational factors that contribute to the level of perceived risk of the trusting behavior. These situational factors may be viewed as impersonal substitutes for trust that reduce the risks inherent in working relationships (Mayer et al. 1995; Sitkin & Roth, 1993). Two such substitutes include (a) obtaining and disseminating information on performance, and (b) aligning employee and organizational interests through reward systems. They are substitutes for trust in that they help to reduce the vulnerability that managers inevitably face as they involve lower echelon employees in decision making.

First, the dissemination of performance information can work to reduce opportunistic behavior by providing feedback to managers and employees themselves on the performance of lower echelon employees. In contrast to monitoring which focuses on the behavior of lower echelon employees, performance information is less intrusive because it focuses on the performance outcomes of lower echelon employees. Such information allows employees to determine the appropriate means to achieve the specified performance outcomes. Second, incentives can be used to minimize self-interested behavior by creating accountability on the part of lower echelon employees. Incentives align lower echelon employees by tying their economic fate to the interests of the organization. Specific logic linking trust and these two impersonal substitutes for trust to managers' willingness to involve lower level employees is provided below.

Managers' trust. Trust is an individual's willingness to be vulnerable to another based on the belief that another party is competent, honest, reliable, and concerned about the individual's own interests (Hart & Saunders, 1997; Mayer et al., 1995; Mishra, 1996; Shapiro, 1987). Vulnerability is defined as the potential for significant risk of loss (Granovetter, 1985; Luhmann, 1979; Mayer et al., 1995; Moorman, Zaltman, & Deshpande, 1992). This definition of trust as a willingness and a belief is consistent with several other prior conceptualizations of trust (Barber, 1983; Lewis & Weigert, 1985; Luhmann, 1979; McAllister, 1995).

We argue that managers' trust in lower echelon employees will be important for managers to involve lower echelon employees in decision making because each dimension of trust reduces perceived vulnerability. Through the concern dimension of trust, managers believe that lower level employees will not take advantage of the shared decision-making authority because the latter are concerned with the interests of the organization (Cummings & Bromiley, 1996; Kanter, 1977; Mayer et al., 1995). Through the reliability dimension of trust, managers believe that lower echelon employees each, in fact, will do what they say they will do (Butler, 1991; Gabarro, 1987; McGregor, 1967). The competence and openness dimensions of trust help assure managers that employees have the skills and abilities necessary to perform their jobs well and have not misrepresented these capabilities (Butler, 1991; Cook & Wall, 1980; Gabarro, 1987; Mayer et al. 1995).

Several scholars have argued that managerial trust in lower echelon employees enhances their involvement of those employees in decision making. Lawler (1986) states that the involvement of lower echelon employees requires "people (who) can be trusted to make important decisions about

their work activities" (p. 193). McGregor (1967) also posited that managers are more likely to involve their employees in decision making if they are able to trust that employees care about the interests of the entire organization. In addition, Mayer et al. (1995) argue that trust facilitates the use of self-directed work teams and delegation of decision making by supervisors that require employee involvement. To date, however, the evidence for these arguments has been largely anecdotal or limited to single organization case studies (Davidow & Malone, 1992; Ouchi, 1980; see Schoorman, Mayer, & Davis, 1996 for an exception). Thus, we argue that trust may serve as an important facilitator in managers to be more willing to involve lower echelon employees in decision making.

Hypothesis 1: Managerial trust in lower echelon employees will increase the likelihood that managers will involve lower echelon employees in decision making.

Performance information. Performance information is data on organizational outcomes collected via methods such as benchmarking studies, evaluations by independent external organizations, customer surveys, and internal audits (Kanter, 1983; Lawler, 1992). Simons's (1995) "diagnostic control systems" and Rousseau's (1995) results-oriented measures are similar to what we call performance information. In contrast to monitoring, which focuses on the continual assessment of the behaviors of lower echelon employees, the measurement and dissemination of performance information is less intrusive because it focuses on performance outcomes. The use of performance information assesses predetermined ends while allowing employees to determine the appropriate means to those anticipated ends.

Sharing performance information is a critical component of any management process (Katz & Kahn, 1978). The types of performance information that are gathered and disseminated determine what employees ultimately pay attention to (Ilgen, Fisher, & Taylor, 1979; Porter, Lawler, & Hackman, 1975). For example, if information on quality is measured and disseminated to employees, then employees will pay more attention to quality. Second, performance information provides feedback to lower echelon employees and their managers and thus can provide guidance regarding areas for improvements (Ashford & Tsui, 1991).

Although important to any organization, performance information is crucial in a high-involvement system (Lawler, 1986). Performance information helps managers to track the progress of lower echelon employees, departments, or production facilities toward strategically important goals (Milgrom &

Roberts, 1992). Moreover, the measurement of performance information makes explicit what outcomes lower echelon employees should target through their decision making.

Thus, performance information lowers the perceived risk inherent in involving lower echelon employees by reducing the uncertainty about what outcomes are expected from those employees. To the extent that lower echelon employees are made aware of progress toward performance targets, managers will be more confident that employees' decision making will be used to fulfill those targets. Thus, the measurement and dissemination of performance information will help managers to be more willing to involve lower echelon employees in organizational decision making.

Hypothesis 2: The collection and dissemination of performance information will increase the likelihood that managers will involve lower echelon employees in decision making.

Incentives. Another mechanism for reducing the risks associated with trusting actions is incentives. In traditional hierarchical systems, a major determinant of individuals' pay is the type of work they do (Miles & Creed, 1995). A high involvement system requires a different reward system, one that rewards performance rather than the job per se (Lawler, 1992). Such rewards are termed *incentives*. Incentives contract on the outcomes of the employees' behavior rather than for specific behaviors per se (Eisenhardt, 1989). Incentives work to coalign employee preferences with those of the organization which reduces the risk of self-interested behavior.

We argue that the use of incentives will help make managers more willing to involve lower echelon employees in decision making because incentives decrease differences between employee and organizational goals (Hesterly, Liebeskind, & Zenger, 1990; Lawler, 1990). They also increase the motivation level of employees to achieve the goals and objectives of the organization (Blinder, 1990; Levine & Tyson, 1990). Empirical research has indeed shown that when rewards are tied to performance, employees will adjust their effort to optimize their own income and simultaneously boost organization performance (Cooke, 1994; Lawler, 1986). In effect, incentives enhance employees' concern for the organization by more closely tying their fate to the success of the organization (Miles & Creed, 1995), thus reducing the perceived risks associated with empowering employees. Thus, managers will be more willing to involve lower echelon employees in decision making when their interests are coaligned with the interests of the organization through incentives.

Hypothesis 3: The use of performance incentives will increase the likelihood that managers will involve lower echelon employees in decision making.

In sum, managerial trust in employees and two impersonal substitutes for trust—performance information and incentives—help managers to be more willing to involve lower echelon employees in decision making because they reduce the vulnerability and perceived risk inherent in employee involvement. Moreover, as described below, we expect that involvement can enhance organizational performance.

RELATIONSHIP BETWEEN EMPLOYEE DECISION MAKING AND ORGANIZATIONAL PERFORMANCE

Prior work has shown that the managerial involvement of lower echelon employees in decision making has a positive, albeit small, effect on individual performance (e.g., Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings, 1988; Miller & Monge, 1986; Wagner, 1994) and on organizational performance (e.g., Arthur, 1994; Denison & Mishra, 1995; Hansen & Wernerfelt, 1989; Kizilos, 1995). Through employee involvement, resources required to monitor employee compliance (e.g., supervision and work rules) can be minimized, thus reducing costs (Arthur, 1994). Besides cost considerations, both cognitive and motivational rationales for the performance effects of such managerial involvement of lower echelon employees in decision making have been documented in the literature.

From a cognitive perspective, employees often have more complete knowledge and information about their work tasks than do managers, and are in a better position to plan and schedule work and to identify and resolve obstacles to achieving optimal organizational performance (Cooke, 1994). In today's fast changing and uncertain environment, organizations face an environment that is too complex for top levels to make all decisions. Organizations seek to involve employees because they have untapped knowledge, problem-solving skills, creativity, and effort, which if used through their involvement in organizational decision making, can lead to enhanced organizational performance (Cooke, 1992). Employees come to understand which behaviors and task strategies are most effective, which do not work, and how work processes might be improved (Lawler, 1992). Because employees possess this knowledge, performance can be enhanced when employees are given a degree of control over their own work (Locke & Schweiger, 1979; Miller & Monge, 1986).

Increasing the degree to which employees make their own decisions also may increase performance through enhanced employee motivation. Larger

latitude in decision making provides employees with greater intrinsic rewards from work than traditional forms of management (Thomas & Velthouse, 1990). Bandura (1977, 1986) and Greenberger, Strasser, Cummings, and Dunham (1989) have argued that more involvement in decision making leads to the belief that there is a predictable relationship between effort and task-related outcomes. If individuals perceive outcomes as desirable, they will exert greater effort if they also believe their efforts will lead directly to increased performance (Conger & Kanungo, 1988). Thus, involvement increases organizational performance in these cases through its direct tie to motivation.

Similarly, research on participative decision making has shown that employees who have a say in the introduction of new work procedures are motivated to do what is necessary to make them work. Internal work motivation also has been linked to autonomy by researchers investigating outcomes of various job characteristics (Hackman & Lawler, 1971; Hackman & Oldham, 1976). Furthermore, employees who have greater choice regarding how to do their own work have been found to have high job satisfaction and thus contribute to high performance (Spreitzer, Kizilos, & Nason, 1997). People who feel they have a degree of control over their work are also less likely to feel alienated (Seligman, 1975).

In summary, we argue,

Hypothesis 4: More managerial involvement of lower echelon employees will be positively associated with organizational performance.

MEDIATING EFFECT OF MANAGERIAL INVOLVEMENT OF EMPLOYEES IN DECISION MAKING

Integrating Hypotheses 1 through 4, we argue that managerial involvement of lower echelon employees in decision making is expected to mediate the direct relationship between the three alternative mechanisms for control (i.e., managerial trust, performance information, and incentives) and organizational performance. In other words, it is through the act of involving employees in organizational decision making that managerial trust, performance information, and incentives can influence organizational performance. Trust, as a set of beliefs, influences organizational outcomes through specific behaviors such as delegation (cf. Barber, 1983; Luhmann, 1979; Mayer et al. 1995). When managers' trust in lower echelon employees is translated into those employees being able to take initiative and act autonomously, such trust is likely to have a significant effect on organizational performance. Performance information and incentives are designed so that the

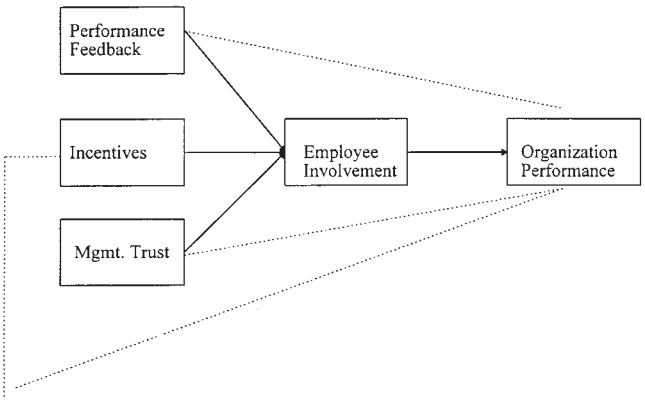

Figure 1: Theoretical Framework

employees' interests and consequent actions will be in line with those of managers, and so depend on such actions in influencing outcomes. In short, these alternatives to traditional control mechanisms are believed to affect organizational performance through the employee behaviors they facilitate or reinforce. Thus,

> *Hypothesis 5:* Managerial involvement of lower echelon employees will mediate the direct effects of trust, performance information, and incentives on organizational performance.[2]

To summarize, as indicated by the above hypotheses, the three alternative mechanisms for control are viewed as antecedent conditions to managers becoming more willing to involve lower echelon employees in decision making. In turn, such decision making is hypothesized to be associated with organizational performance. In this way, the involvement of lower echelon employees is modeled as a mediating factor in the relationship between the three control mechanisms and organizational performance. The overall theoretical framework is illustrated in Figure 1.

METHODS

SAMPLE AND PROCEDURES

Although the theoretical framework may be tested at the level of manager-employee dyad, we test the framework at the firm level. Because

much of the research based on employee involvement has been conducted at a more micro level, we know little about the firm-level effects. Thus, we test the framework using data collected from top managers. These managers provide data on their own level of trust in employees as a whole, as well as on the firm's dissemination of performance information and incentives. These managers also provide data on the extent to which employees as a whole are involved in decision making and in the performance of the firm. Data from top managers are appropriate because the focus of our theoretical framework is on managers' willingness to involve employees rather than the extent to which employees feel involved. In this way, top managers are acting as key informants who provide information on the total organization in terms of the variables in the theoretical framework. With this data, we will be able to draw conclusions about the roles of trust and the two substitutes for managerial trust as well as managers' willingness to involve lower echelon employees as a whole.

Survey data were collected from 43 firms in the U.S. automotive industry, including one of the Big Three firms (Chrysler, Ford, and General Motors). Only business units of each firm that were classified as suppliers exclusively to the automotive industry were surveyed. In total, 92 business units in the United States and Canada were identified, including 21 operating units from the Big Three firm. Based on analysis of variance, no significant differences between the 21 business units of the Big Three firm and the other business units were found for any of the variables in the model. Of the business units, 23% were not unionized; however, analysis of variance revealed that no significant differences in means were found between unionized and nonunionized firms on any of the variables in the theoretical framework.

Surveys were sent to all top managers of each business unit, as identified by the CEO of the organization. To ensure a consistent definition of top managers across business units, the head of each business unit was contacted personally by the second author and asked to identify all individuals who directly reported to this person. Each person participating in the study was either a functional head (e.g., human resources, manufacturing, finance, product engineering) or the head of the entire business unit. To encourage cooperation with the study, each business unit head and CEO was promised a copy of a feedback report based on the study's aggregated findings, which would preserve the anonymity of individual responses. As part of the feedback report, each organization received confidential feedback comparing aggregated data from their own organization to averages for the entire sample.

Surveys were received from all 92 business units, for a 100% response rate at the business unit level. At the individual level, 517 of 792 surveys were

returned for a response rate of 65%. Response rate within a given business unit was uncorrelated with any of the variables in the model. The mean age for respondents was 47 years, with 27 years of work experience on average. The average tenure within an organization was 19 years, with 7.2 years being the average tenure as a member of top management within a business unit. As is typical for the industry, the vast majority of this sample of top managers was male (92%), and 89% possessed at least a college degree. Given that our dependent variable was organizational performance, we aggregated our data to the business-unit level prior to testing of hypotheses. To be able to assess the reliability of the respondents prior to aggregation to the level of the business unit, four business units with less than two respondents were not included in the analyses.

MEASURES

Data were collected using survey data assessed by multiple top managers of the firm. To minimize the potential for common method bias between the different components of the model, the alternative control mechanisms and managers' involvement of lower echelon employees (i.e., independent and mediating variables) were measured with the assessments from half of the top managers responding from each business unit. In contrast, the performance outcomes (i.e., dependent variables) were measured with the assessments from the other half of top managers responding. The assignment of respondents to assess the two different sets of variables was randomly determined. In this way, common method bias was minimized.

The survey items for all of the variables are included in the appendix and were assessed on a 7-point Likert-type scale, where higher values indicate more agreement with a given item. Performance information and incentives were measured with items developed for this study to capture the organizational control systems specific to these firms. The performance information items address issues of common performance assessments such as customer surveys, internal audits, and benchmarking. The incentive items address recognition and rewards that are part of a performance management system. Both the performance information and incentive scales achieved acceptable levels of reliability ($\alpha = 0.79$ and $\alpha = 0.87$, respectively).

Managers' trust in employees was measured with 16 items that assess the four dimensions of trust in the theoretical framework—concern, competence, reliability, and openness. These items have been shown to have acceptable levels of validity and reliability and were found to load onto a single factor in a factor analysis (Mishra, 1993). The trust construct composed of the four dimensions achieved a Cronbach alpha reliability of 0.93. The

mediating variable was measured as the extent to which managers involved lower echelon employees in decision making. It was measured with three items that have been shown to have acceptable levels of validity and reliability (Denison & Mishra, 1995). This employee involvement scale achieved an acceptable level of reliability ($\alpha = 0.75$). Note that managerial assessments of employee involvement were used instead of employee assessments because we were interested in the extent to which managers were willing to make themselves vulnerable in their working relationships with lower echelon employees, rather than in employees' assessments of their actual involvement.

Results of a confirmatory factor analysis demonstrated adequate discriminant and convergent validity among the independent variables (i.e., trust, performance information, and incentives) and mediating variable (i.e., managerial involvement of lower echelon employees in decision making). (Specific results are available from the authors; root mean squared residual = 0.05, adjusted goodness of fit index = 0.85, comparative fit index = 0.85.)

Organizational performance was assessed with three indicators: labor productivity, innovation, and employee morale. These outcomes were chosen because they are likely to be influenced by the behavior of employees, in contrast to other performance measures such as profitability, which are more likely to be influenced by external factors such as product demand, degree of competition, and buyer or supplier power. Our choice of organizational performance measures is also consistent with those used in previous research in this area (Arthur, 1994). Although labor productivity and innovation were measured with single items (see the appendix for the actual items), employee morale was measured with three items and attained excellent reliability ($\alpha = 0.90$). The correlation among the three performance measures ranged from 0.35 to 0.50.

Prior to aggregation of the multiple respondents for each business unit on each construct, a test of the interrater reliability among the responding top managers for each of the survey measures was conducted using the measure developed by James, Demaree, and Wolf (1984). The interrater reliability of the involvement of lower echelon employees was 0.77, trust was 0.92, performance information was 0.82, and incentives was 0.63. Each of these reliability coefficients met James et al.'s criteria for acceptability.

An objective measure of organization size, the total number of employees in a given business unit, was included as a control variable because previous research had indicated that unit size was associated with unit performance differences (Govindarajan, 1988). Thus, business unit size was controlled for in the analysis.

RESULTS

Descriptive statistics and correlations for all of the variables included in the analyses are provided in Table 1. Following James, Mulaik, and Brett (1983), we used both correlational and path analysis to investigate our hypotheses. We used path analysis to explore more fully the relationships among the three control mechanisms, employee involvement, and organizational performance. We ran separate models for each of the different performance measures. We now turn to examining the paths representing the various hypotheses.

HYPOTHESES 1 THROUGH 4

We used ordinary least squares regression analysis to assess Hypotheses 1 through 4. Hypotheses 1 through 3 specify the relationships between the three alternative mechanisms for control and managerial involvement of employees. Trust, performance information, and incentives were each predicted to be positively related to managerial involvement of lower echelon employees in decision making. In support of Hypotheses 1 through 3, the correlations (see Table 1) indicated that all three were significantly related to managers' involvement of employees. The path coefficients between the three independent variables and managers' involvement of employees were consistent with the zero-order correlations (see Table 2), and the overall equation was significant ($R^2 = .56$, $p < .001$). Using a one-tailed test of significance given that all path coefficients were in the expected direction, significant paths (see Figure 1) were found for trust ($\beta = .41$, $p < .001$), performance information ($\beta = .34$, $p < .001$), and incentives ($\beta = .19$, $p < .05$). Thus, these findings provide general support for Hypotheses 1 through 3.

Hypothesis 4 posited a positive relationship between managerial involvement of lower echelon employees in decision making and organizational performance. Correlational analysis (see Table 1) supported this hypothesis. As expected, managers' involvement of employees was found to be positively related to productivity improvement ($r = .34$, $p < .01$), innovation ($r = .39$, $p < .001$), and employee morale ($r = .35$, $p < .01$). Path coefficients supported the correlational findings for the three outcome variables, even when the three independent variables (i.e., trust, performance information, and incentives) were controlled for (see Table 3 and Figures 2-4). Managers' involvement of employees was found to be positively related to productivity improvement ($\beta = .47$, $p < .05$), innovation ($\beta = .36$, $p < .05$), and employee morale ($\beta = .45$, $p < .05$). These results provided support for Hypothesis 4.

TABLE 1
Descriptive Statistics and Correlations

Construct	*Mean*	SD	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1. Employee involvement	4.93	.70	(.75)							
2. Trust in employees	5.69	.41	.62****	(.93)						
3. Performance information	5.42	.71	.59****	.37****	(.87)					
4. Incentives	4.01	1.09	.54****	.40****	.52****	(.79)				
5. Size	2,853	3,699	-.07	.07	.07	.06	(NA)			
6. Improved labor productivity	4.57	1.13	.34***	.21**	.34***	.24**	.01	(NA)		
7. Increased innovation	3.25	1.10	.39****	.25**	.39****	.29***	.06	.40****	(NA)	
8. Employee morale	3.72	1.19	.35***	.21**	.33***	.19*	.10	.36**	.50****	(.90)

NOTE: NA = not applicable. Cronbach alpha reliabilities are provided in the diagonal.
5. Size figures are number of employees.
*$p < .10$. **$p < .05$. ***$p < .01$. ****$p < .001$, two-tailed test.

TABLE 2
Regression Analysis of the Direct Effect of Information, Incentives, and Trust on Employee Involvement

Independent Variable	*Dependent Variable: Employee Involvement*
Information	.34****
Incentives	.19**
Trust in employees	.41****
R-Square	.56
F	36.9****
N	91

NOTE: Beta coefficients are reported.
**$p < .05$. ***$p < .01$. ****$p < .001$, one-tailed test.

TABLE 3
Regression Analysis of the Effect of Control Mechanisms and Employee Involvement on Organizational Performance

	Dependent Variable		
Independent Variable	*Labor Productivity*	*Innovation*	*Employee Morale*
Performance information	–.07	.18	.17
Incentives	–.04	.00	–.27
Trust in employees	.12	–.01	–.03
Involvement	.47**	.36**	.45**
Size	.04	–.04	.14
R-Square	.24	.25	.22
F	3.85***	4.03***	3.54***
N	68	67	68

NOTE: Beta coefficients are reported.
**$p < .05$. ***$p < .01$. ****$p < .001$, two-tailed test.

These results, coupled with the support for Hypotheses 1 through 3, suggest that trust, performance information, and incentives are associated with the managerial involvement of lower echelon employees and that such risk taking in involving lower echelon employees is related to the three organizational performance outcomes (innovation, quality, and employee morale). But further analysis was needed to determine whether managers' involvement of employees mediated the relationship between the three alternative mechanisms for control and the performance outcomes. We needed to show that any direct effect of the three control mechanisms on performance was

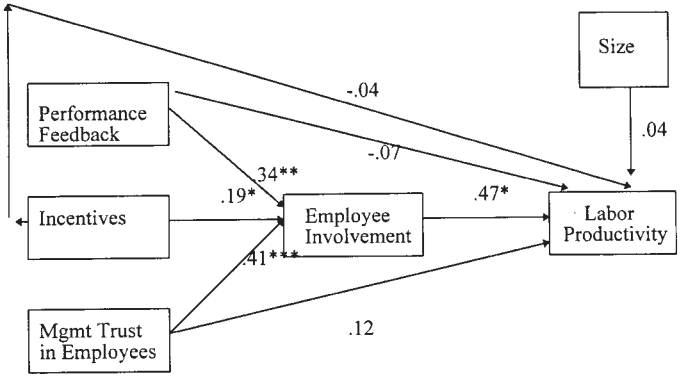

Figure 2: Path Diagram of Control Mechanisms, Employee Involvement, and Productivity Relationships
*p < .05. **p < .01. ***p < .001.

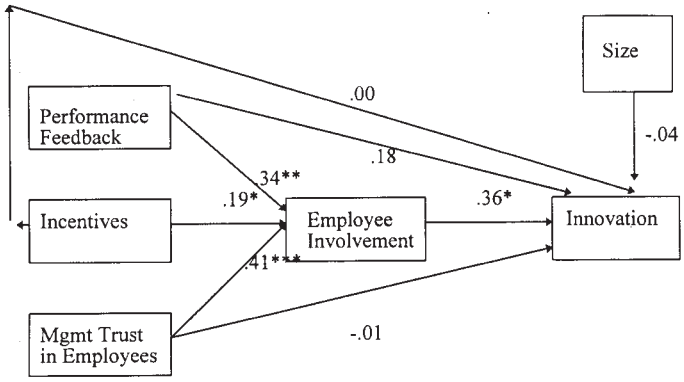

Figure 3: Path Diagram of Control Mechanisms, Employee Involvement, and Innovations Relationships
*p < .05. **p < .01. ***p < .001.

reduced or went to zero when managerial involvement of employees was entered into the regression equation.

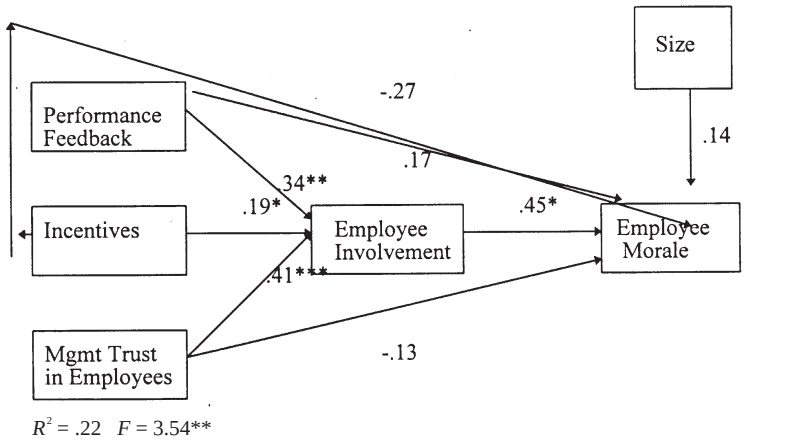

Figure 4: Path Diagram of Control Mechanisms, Employee Involvement, and Employee Morale Relationships
*p < .05. **p < .01. ***p < .001.

MEDIATING EFFECT

We used path analysis to assess Hypothesis 5, the mediating hypothesis. To ascertain the extent of mediation, we tested the relationships between (a) the three alternative control mechanisms and organization performance, (b) the managerial involvement of lower echelon employees and organizational performance, and (c) the three alternative mechanisms for control and the managerial involvement of lower echelon employees. Although no direct effect between the three control mechanisms and organizational performance was explicitly hypothesized, these effects must be estimated in the assessment of the mediating effect. If no direct effects or reduced direct effects were found, then we will have support for our mediation hypotheses.

Testing the mediation effect involved three steps (Baron & Kenny, 1986). The first step entailed computing the correlation between the three alternative mechanisms for control and organizational performance to ascertain the total association between the independent and dependent variables. In the second step, two sets of ordinary least squares regressions were conducted. In the first set, the managerial involvement of employees was regressed against the three alternative mechanisms for control. The resulting standardized beta values represented the path coefficients of the paths from the three alternative mechanisms of control in relation to managerial involvement of employees. This regression analysis allowed us to test Hypotheses 1 through 3. In the

TABLE 4
Regression Analysis of the Three Control Mechanisms on the Performance Outcomes

	Dependent Variables		
Independent Variables	*Labor Productivity*	*Innovation*	*Employee Morale*
Performance information	.14	.34**	.37**
Incentives	.04	.06	.20
Trust in employees	.29**	.12	.14
Size	–.02	.09	.08
R-Square	.16	.20	.15
F	2.90**	3.89***	2.74**
N	68	67	68

NOTE: Beta coefficients are reported.
**$p < .05$. ***$p < .01$. ****$p < .001$, two-tailed test.

second set of regressions, each organizational performance measure was regressed against the three alternative mechanisms for control, employee involvement, and the control variable, size. The standardized beta values represented path coefficients showing the direct paths from the independent variables to organizational performance and from managerial involvement of employees to organizational performance. These regression analyses allowed us to test Hypothesis 4, that managerial involvement of employees was related to organizational performance.

When managerial involvement of lower echelon employees was not controlled, several of the mechanisms for control were found to be related to the three outcome variables (see Table 4). Performance information was found to be positively related to innovation and employee morale, and trust in employees was found to be positively related to labor productivity, using two-tailed tests. Using a one-tailed test, the rewards variable also was found to be positively related to employee morale. However, as shown in Table 3, when managerial involvement of employees was controlled for, the significant relationships between the three alternative mechanisms for control and the performance outcomes became insignificant. This suggested support for our hypothesis that managerial involvement of lower echelon employees mediated the relationship between the three alternative control mechanisms and organizational performance.

The third step in the analysis involved decomposing the correlations between the three alternative mechanisms for control and organizational performance (Alwin & Hauser, 1975; James et al., 1983). The association

TABLE 5
Decomposition of the Association between Control Mechanisms and Organizational Performance

	Causal Effects				
Bivariate Relationship	*Total Covariance Spurious (A)*	*Direct Effect (B)*	*Indirect Effect (C)*	*Total (D = B + C)*	*(E = A – D)*
Trust-productivity	.21**	.12	.19	.31	–.10
Trust-innovation	.25**	–.01	.15	.14	.11
Trust-morale	.21**	–.03	.18	.15	.06
Information-productivity	.34***	–.07	.16	.09	.25
Information-innovation	.39****	.18	.12	.30	.09
Information-morale	.33***	.17	.15	.32	.01
Incentives-productivity	.24**	–.04	.09	.05	.19
Incentives-innovation	.29**	.00	.07	.07	.22
Incentives-morale	.19*	–.27	.09	–.18	.37

**$p < .05$. ***$p < .01$. ****$p < .001$.

between the three alternative mechanisms for control and organizational performance was examined using their zero-order correlations and standardized regression coefficients. The direct effect of the three control mechanisms was the part of the total effect that was not transmitted by the mediating variable, managerial involvement of employees. The indirect effect of the three control mechanisms on organizational performance was the part of the total effect that was mediated by managerial involvement of employees. The spurious effect of each of the three control mechanisms was due to its unanalyzed correlations with all remaining independent variables (Prescott, Kohli, & Venkatraman, 1986). These analyses allowed us to further examine Hypothesis 5, the extent to which the managerial involvement of employees mediated the relationship between the three control mechanisms and organizational performance. Once the direct and indirect effects were obtained, the spurious effects could be calculated by subtracting the causal effects from the correlation coefficients. This analysis allowed us to identify the specific nature of the relationships between the three alternative mechanisms for control, the managerial involvement of employees, and organizational performance.

Table 5 broke down the covariance between the three independent variables and the three organizational performance variables into direct, indirect, total, and spurious effects. Column "(D = B + C)" indicated which of the three alternative mechanisms for control had the strongest influence on each of the outcome variables. These results indicated that although trust was most

important in improving levels of productivity (total effect is .31), performance information was most important for achieving both high levels of innovation (total effect is .30) and morale (total effect is .32). Compared to the other two alternative mechanisms for control, incentives played a much less important role in achieving any of the three outcome variables. As such, the moderate spurious calculations in Table 5, Column "(E = A – D) indicated that there was still substantial unexplained variance in the relationships between incentives and the outcome variables and between performance information and the productivity outcome. However, our purpose was not to reproduce the correlation matrix but to understand the comparative contribution of direct and indirect effects (cf. Ancona & Caldwell, 1992). Thus, these results helped us better understand the magnitude of the relationships among the three alternative mechanisms for control and managerial involvement of lower echelon employees in decision making.

DISCUSSION

Overall, the results indicate support for the theoretical framework linking trust, performance information, and incentives to an increased willingness on the part of managers to involve lower echelon employees in decision making and ultimately to organizational performance. First, in support of Hypotheses 1 through 3, we found that all three alternative mechanisms for control had significant relationships with the managerial involvement of employees. These findings suggest that managers were not likely to involve lower echelon employees unless performance information was measured and disseminated, unless incentives were used to coalign employee interests to those of the organization, or unless managers had trust in lower echelon employees. These findings are consistent with Cooke's (1994) research on employee involvement in unionized firms, Lawler's (1990) work linking incentive pay systems to employee involvement, and Leana (1986) and Schoorman et al.'s (1996) work that found that trust contributed to delegation.

Second, in support of Hypothesis 4, higher levels of managerial involvement of employees were found to be associated with all three measures of organizational performance. Managers' involvement of lower echelon employees in decision making was found to be related to increased productivity, more innovation, and enhanced employee morale. Given the efforts to minimize common method bias by using one set of respondents to assess the performance outcomes and another set of respondents to assess the independent and mediating variables, the magnitude of these relationships was quite strong. These results confirmed some of the real organizational benefits of

managerial involvement of employees that are specified in the literature (Bowen & Lawler, 1992; Kizilos, 1995).

Third, in support of Hypothesis 5, managerial involvement of lower echelon employees in decision making was found to mediate the relationship between the three alternative mechanisms for control and organizational performance. These findings suggest that trust, performance information, and incentives affected performance when they were accompanied by involving lower echelon employees in decision making. In other words, trust, performance information, and incentives must be employed in tandem with a willingness of managers to involve lower echelon employees in decision making to achieve desired performance effects. The results also indicated that trust and performance information had the highest magnitude effects on the performance outcomes, substantially more so than incentives.

CONTRIBUTIONS OF THE RESEARCH

This study may contribute to the organization studies literature in several ways. First, Daft and Lewin (1993) have called for research on new paradigms of management that rather than emphasizing centralized control on the part of management, emphasize greater trust and involvement of all levels of employees. However, practitioners and scholars have argued that one reason why employee involvement has not experienced more widespread adoption (Lawler, Mohrman, & Ledford, 1995) is managers' fear of losing control over subordinates (Klein, 1984). Some managers see the involvement of lower echelon employees as encompassing too great a risk, a fear of losing control. Managers fear that lower echelon employees, when involved in decision making, will act in their own best interests rather than for the good of the firm (Eisenhardt, 1989). Unfortunately, the research literature provides few theories and models that elucidate alternatives to traditional, hierarchical control mechanisms such as monitoring (Daft & Lewin, 1993).

If our understanding of how flexibility and coordinated individual initiatives are to be achieved within and across organizations, new theories of control that de-emphasize unilateral power and dependence inherent in command-and-control systems (Aktouf, 1992; Alvesson & Willmott, 1992; Miles & Creed, 1995) need to be tested and refined. This research provides a small step in that direction. It offers several alternative mechanisms to traditional control systems, such as monitoring, that may enhance managers' willingness to make themselves vulnerable in their relationship with lower echelon employees. These mechanisms may enhance the willingness of managers to make themselves vulnerable in their relationships with lower echelon employees through acts such as delegation or empowerment.

Second, research on employee involvement has clearly lagged behind practice (Ledford & Lawler, 1994). Although extensive research has begun to examine the individual and organizational outcomes of managers delegating decision-making discretion to lower echelon employees (e.g., Wagner, 1994), little empirical research has focused on the antecedent conditions that make managers more willing to accept the inevitable vulnerability that comes with delegating decision-making authority. Cotton et al. (1988) call for a richer, more contextual understanding of employee involvement; we respond with an empirical examination of a theoretical framework articulating several alternative mechanisms for control, which may help managers become more willing to involve lower echelon employees in organizational decision making. These mechanisms may serve to reduce the managerial risk inherent in employee involvement and may enhance the potential for performance outcomes to be achieved. To our knowledge, no research has simultaneously examined both antecedents and outcomes of employee involvement.

This research also contributes to the growing literature on the role of trust in organizational behavior (Hosmer, 1995; Mayer et al. 1995). Several scholars have conceptualized trust at the organizational level as multidimensional (Barber, 1983; Hart & Saunders, 1997; Mishra, 1996). To our knowledge, this study is the first to operationalize a multidimensional conceptualization of trust and to relate it to organizational performance outcomes. This study is also among the first to explore the larger nomological network of trust in the workplace. It looks at the relationship between trust and several impersonal substitutes for trust in relation to managerial risk taking as operationalized as the managerial involvement of lower echelon employees in decision making.

In this way, the article begins to empirically examine several of the key linkages in the comprehensive theoretical model of trust offered by Mayer et al. (1995); this article examines the relationship between managerial trust, managerial risk taking in relationships (conceptualized as managerial involvement of lower echelon employees in decision making), and eventual outcomes of such trusting behaviors. This work is important because it is among the first to empirically distinguish trust as a willingness and belief from actual acts of trust that place the individual in a vulnerable position. These trusting actions have been variously labeled trusting behavior (Lewis & Weigert, 1985), risk-taking (Deutsch, 1973), or risk-taking in relationship (Mayer et al., 1995), but they rarely have been empirically examined independent of trust as a willingness and belief.

A final contribution of this research is that it suggests some extensions of agency theory to the employer-employee relationships. Although agency theory applies to a variety of macro- and microlevel issues, within

organizations, it primarily has been used to investigate only certain types of agents, typically boards of directors (Fama & Jensen, 1983) or top executives (Eccles, 1985) rather than lower echelon employees. Agency theory argues that incentives may be most appropriate in systems in which managers have a relatively complete knowledge of the transformation process (inputs to outputs) and the ability to effectively measure employee outputs (Arthur, 1994). These conditions enable employers to directly reward employee behavior. In the absence of these conditions, which is more likely in today's fast-changing global environment (Daft & Lewin, 1993), trust and sharing performance information may be more efficacious mechanisms for aligning employee interests with those of the firm (Barney & Hansen, 1994), as our results have suggested.

Furthermore, incentives require employees to bear additional risk in the exchange relationship (Arrow, 1985). Particularly in the context of contingent work forces (Kramer & Tyler, 1996; Rousseau, 1995) and of frequent downsizings (Cameron et al., 1993), employees may become increasingly risk averse and unwilling to reveal their full potentiality, where doing so may mean more effort in the short run and possible job loss based on process improvements in the long run. Thus, this research supports recent arguments in agency theory that calls for examining traditional control mechanisms in conjunction with trust (Barney & Hansen, 1994). As noted by Simons (1995), most effective organizations do not rely on one set of mechanisms for control but rather rely on several that work in concert to create a system that supports employee involvement in a way that minimizes the potential for opportunistic behavior on the part of lower echelon employees.

IMPLICATIONS FOR PRACTITIONERS

Although employee involvement in decision making has become increasingly prevalent among *Fortune* 1000 firms (e.g., Lawler et al., 1995), concerns still remain about the potential for opportunistic behavior by lower echelon employees who have been delegated decision-making authority (Pfeffer, 1994). How can employee self-interest be balanced with the collective interests of top management and the shareholders they are supposed to represent (Berlew, 1986; Culbert & McDonough, 1986)? How do senior managers maintain control when lower echelon employees are encouraged to use their own discretion in performing their work (Simons, 1995)?

A key issue for effective employee involvement is how to ensure that employees will behave in the best interests of the organization and not shirk (Levine & Tyson, 1990) when managers do not have complete knowledge or control of the employees' actions (Cotton, 1993). Any potential benefits from

greater employee involvement in decision making require that employee interests be aligned with organization interests (Ogden, 1992). In this article, we suggest that trust and two substitutes for trust (performance information and incentives) work to align employees to the goals of the organization. As Lawler (1992) argues, "Simply sharing power with low-level employees in organizations is both foolish and dangerous, . . . without giving them the knowledge and information to make good decisions and without holding them accountable through reward systems" (p. 58).

Our findings suggest that trust and the two substitutes for trust are related to a greater willingness of management to involve employees in decision making. Trust acts a social lubricant in the relationship between managers and lower echelon employees. Managers trust employees when they believe that employees are competent to make good decisions, concerned about the needs of the organization, reliable, and open to sharing sensitive information. But trust takes a long time to develop and can be easily broken by a brazen act on the part of either managers or lower echelon employees. Consequently, it may make sense for organizations to simultaneously use one or both of the substitutes for trust examined in this article. Incentives help to align employee self-interest with the goals of the organization. They tie lower echelon employees' financial success to the performance of the organization. Performance information provides direction to employee behavior. It also can provide feedback to employees to ensure that their actions are aligned with the needs of the organization. Thus, each of these mechanisms helps to reduce the potential for opportunistic behavior that is not aligned with the goals of the organization.

These findings provide some insights on the paradox that today's managers increasingly face—the need to foster employee involvement while limiting opportunistic behavior on the part of employees. In other words, how can managers begin to give up control to lower echelon employees without losing control? Clearly, alternatives to traditional control mechanisms such as trust or trust substitutes are critical in helping management to resolve this dilemma.

LIMITATIONS OF THE STUDY AND DIRECTIONS FOR FUTURE RESEARCH

In spite of its potential contributions to the literature, this research has a number of limitations and raises a number of questions for future research. First, it is not clear how the findings will generalize to different contexts and industries. The auto industry is cyclical and has had significant declines in employment in the last decade. It is also not clear how the findings would

generalize to firms in the automotive industry outside of the United States. For example, Japanese automotive firms have traditionally placed a higher premium on trust than have U.S. firms. Given the less adversarial nature of relationships within Japanese firms, trust may have a less positive effect on organizational performance than found for this sample, because it is more prevalent within Japanese organizations. Clearly, future research must replicate these findings in other industry contexts.

Second, because of the cross-sectional design of the research, we cannot assess true causality between the alternative mechanisms for control and managerial involvement of lower level employees. It may be that such acts of vulnerability on the part of managers enhances managers' propensity to provide performance information, to offer incentives, and to trust employees. Clearly, trust can be developed only over time through interactions (Luhmann, 1979). Future research must employ longitudinal field studies or experimental designs to tease out the causal relationships among the control mechanisms and the managerial involvement of lower echelon employees.

Third, a limitation of the research is that we collected data from only top managers and not lower echelon employees. It is possible that senior managers have a more positive view of morale than do lower echelon employees. However, given their broad perspective, we do feel that they provide a more valid assessment of organizational performance in terms of productivity and innovation than can lower-level employees. We also believe that in our efforts to ensure anonymity among our respondents, we have encouraged frank responses to the survey questions, including employee morale.

In addition, although the focus of this research was on how managerial trust facilitates managers' involving lower echelon employees in decision making, employee trust also may enhance lower echelon employees' willingness to take part in organizational decision making (Mayer et al., 1995). If decision outcomes are negative, the employee is likely to be held accountable (Schoorman et al. 1996). Future research must assess the relevant antecedents to employee involvement from the perspective of lower echelon employees. Such a study would require lower echelon assessments of their trust in management and the extent of involvement that lower echelon employees actually experience (Marchington, Wilkinson, Ackers, & Goodman, 1994).

Fourth, our dependent variables were measured subjectively. Labor productivity and innovation were measured by single-item measures. Based on extensive interviews with executives in the automotive industry prior to conducting our survey research (Mishra & Mishra, 1994), strong consensus existed as to how labor productivity improvement was assessed: reduction in the number of hours per unit. Not surprisingly, less consensus existed as to

how innovation was evaluated, but most typically was defined in terms of the number of new products or new manufacturing processes introduced in a given year. Although the measure of innovation was left purposely broad to capture these different elements, it is not clear which elements are related most strongly to involvement.

Finally, employee involvement comes in many different forms, from self-directed work teams (Cohen et al. 1996) to suggestion systems and quality circles (Lawler, 1986). More intensive forms of employee involvement are likely to have stronger influences on organizational performance (Lawler, 1992). Although our data set is not able to identify the specific types of employee involvement implemented in each organization, this is clearly an important area for future research. More intensive forms of involvement are likely to require even higher levels of trust.

In conclusion, this article provides an initial understanding of the role that managerial trust in employees, performance information, and incentives play in enhancing managers' willingness to involve lower echelon employees in decision making. It is our hope that this initial research linking these alternative mechanisms for control and managerial acts of vulnerability with performance data provides the stimulus for future research integrating these concepts.

APPENDIX
Survey Measures

Managerial involvement of employees in decision making
- Most employees in our organization are highly involved in their work.
- Decisions in our organization are usually made at the level at which the best information is available.
- Working in our organization is like being part of a team.

Trust

"I trust that employees . . . "
- Are completely honest with me. (openness)
- Place our organization's interests above their own. (concern)
- Will keep the promises that they make. (reliability)
- Are competent in performing their jobs. (competence)
- Express their true feelings about important issues. (openness)
- Care about my well-being. (concern)
- Can contribute to our organization's success. (competence)
- Take actions that are consistent with their words. (reliability)
- Share important information with me. (openness)

Care about the future of our organization. (concern)
Can help solve important problems in our organization. (competence)
Have consistent expectations of me. (reliability)
Would make personal sacrifices for our organization. (concern)
Would acknowledge their own mistakes. (openness)
Can help our organization survive through the 1990s. (competence)
Can be relied on. (reliability)

Performance information
We use several types of quality assessments (such as benchmarks, independent evaluations, customer surveys, internal audits) to measure our quality performance.
The types of quality data collected and our analyses of them are continually improving.
We gather data, analyze it, and disseminate it throughout our organization.

Rewards
Rewards and recognition are given to our employees for improvement, not just for achieving a goal or target.
Awards, ceremonies, and/or other recognition are provided to individuals and teams who provide outstanding customer service.
We have well-defined recognition and reward systems to acknowledge group and individual quality improvements.

Organizational performance
Productivity
Labor productivity has improved.
Innovation
Experimentation and innovation have decreased among employees. (reverse coded)
Employee morale
Conflict is increasing among our employees. (reverse coded)
Morale is decreasing among employees in our organization. (reverse coded)
Criticisms and complaints by employees directed at management team members are increasing. (reverse coded)

NOTE: All items were measured using 7-point Likert-type scales.

NOTES

1. Our article focuses on the general involvement of employees by their managers in decision making within an organization. We do not focus our theory on a specific level of management and employees (such as first-line supervisors and assembly-line workers); instead, the involvement of lower echelon employees can reflect employees at almost every level of the organization, who are involved in decisions that were previously restricted to their managers.

2. Although we expect employee involvement to mediate the effects of trust and the two substitutes for trust on organizational outcomes, we do not necessarily expect complete mediation. Trust, incentives, and performance information may have independent effects on organizational performance, in addition to the mediating effects that we specify in this article. However, because some prior research has already addressed the direct effects, we focus our theory on the mediating effects of the involvement of employees in decision making.

REFERENCES

Aktouf, O. (1992). Management and theories of organizations in the 1990s: Toward a critical radical humanism. *Academy of Management Review, 17*, 407-431.

Alvesson, M., & Willmott, H. (1992). On the idea of emancipation in management and organizational studies. *Academy of Management Review, 17*, 432-464.

Alwin, D. F., & Hauser, R. M. (1975). The decomposition effects in path analysis. *American Sociological Review, 40*, 37-47.

Ancona, D. G., & Caldwell, D. F. (1992). Demography and design: Predictors of new product team performance. *Organization Science, 3*, 321-341.

Argyris, C. (1964). *Integrating the individual and the organization.* New York: John Wiley.

Arrow, K. J. (1985). The economics of agency. In J. Pratt & R. Zeckhauser (Eds.), *Principals and agents: The structure of business* (pp. 37-51). Boston: Harvard Business School Press.

Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal, 37*, 670-687.

Ashford, S. J., & Tsui, A. S. (1991). Self-regulation for managerial effectiveness: The role of active feedback seeking. *Academy of Management Journal, 34*, 251-280.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive view.* Englewood Cliffs, NJ: Prentice Hall.

Barber, B. (1983). *The logic and limits of trust.* New Brunswick, NJ: Rutgers University Press.

Barney, J. B., & Hansen, M. H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal, 15*, 175-190.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Berlew, D. E. (1986). Managing human energy: Pushing versus pulling. In S. Srivastva (Ed.), *Executive power* (pp. 33-50). San Francisco: Jossey-Bass.

Blinder, A. S. (1990). *Paying for productivity: A look at the evidence.* Washington, DC: Brookings Institution.

Bowen, D. E., & Lawler, E. E. (1992, Spring). The empowerment of service workers: What, why, how, and when. *Sloan Management Review, 33*, 31-39.

Butler, J. K. (1991). Towards understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management, 17*, 643-663.

Cameron, K. S., Freeman, S. J., & Mishra, A. J. (1993). Organizational downsizing. In G. Huber & W. Glick (Eds.), *Organizational change and redesign: Ideas and insights for improving performance* (pp. 19-65). New York: Oxford University Press.

Cohen, S., Ledford, G., & Spreitzer, G. (1996). A predictive model of self-managing work team effectiveness. *Human Relations, 49*, 643-676.

Conger, J. A., & Kanungo, R. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review, 13*, 471-482.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment, and personal non-fulfillment. *Journal of Occupational Psychology, 53*, 39-52.

Cooke, W. N. (1992). Product quality improvement through union participation: The effects of unionization and joint union-management administration. *Industrial and Labor Relations Review, 46*,119-134.

Cooke, W. N. (1994). Employee participation programs, group-based incentives, and company performance: A union-nonunion comparison. *Industrial and Labor Relations Review, 47*, 594-602.

Cotton, J. L. (1993). *Employee involvement: Methods for improving performance and work attitudes*. Newbury Park, CA: Sage.

Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L., & Jennings, K. R. (1988). Employee participation: Diverse forms and different outcomes. *Academy of Management Review, 73*, 103-112.

Creed, W.E.D., & Miles, R. E. (1996). Trust in organizations: A conceptual framework linking organizational forms, managerial philosophies, and the opportunity costs of controls. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 16-38). Thousand Oaks, CA: Sage.

Culbert, S. A., & McDonough, J. J. (1986, Summer). The politics of trust and organizational empowerment. *Public Administration Quarterly, 10*, 171-189.

Cummings, L. L., & Bromiley, P. (1996). The organizational trust inventory: Development and validation. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 16-38). Thousand Oaks, CA: Sage.

Daft, R. L. & Lewin, A. Y. (1993). What are the theories for the "new" organizational forms? An editorial essay. *Organizational Science*, *4*, i-vi.

Davidow, W. H., & Malone, M. S. (1992). *The virtual corporation: Lessons from the world's most advanced companies*. New York: HarperCollins.

Denison, D. R., Hart, S. L., & Kahn, J. A. (1996). From chimneys to cross-functional teams: Developing and validating a diagnostic model. *Academy of Management*, *39*, 1005-1023.

Denison, D., & Mishra, A. K. (1995). Toward a theory of organization culture and effectiveness. *Organization Science*, *6*, 204-223.

Deutsch, M. (1973). *The resolution of conflict: Constructive and destructive processes*. New Haven, CT: Yale University Press.

Donaldson, L. (1990). The ethereal hand: Organization economics and management theory. *Academy of Management Review, 15*, 369-381.

Eccles, R. (1985). Transfer pricing as a problem of agency. In J. Pratt & R. Zeckhauser (Eds.), *Principals and agents: The structure of business* (pp. 151-186). Boston: Harvard Business School Press.

Eisenhardt, K. (1989). Agency theory: An assessment and review. *Academy of Management Review, 14*, 57-74.

Fama, E., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, *26*, 301-315.

Gabarro, J. (1987). *The dynamics of taking charge.* Boston: Harvard Business School Press.

Gomez-Mejia, L. R., & Balkin, D. B. (1989). Effectiveness of individual and aggregate compensation strategies. *Industrial Relations*, *28*, 432-445.

Govindarajan, V. (1988). A contingency approach to strategy implementation at the business unit level: Integrating administrative mechanisms with strategy. *Academy of Management Journal*, *31*, 828-853.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology, 91*, 481-510.

Greenberger, D. B., Strasser, S., Cummings, L. L., & Dunham, R. (1989). The impact of personal control on performance and satisfaction. *Organizational Behavior and Human Decision Processes, 43*, 29-51.

Hackman, J. R., & Lawler, E. E., III (1971). Employee reactions to job characteristics. *Journal of Applied Psychology Monograph, 55*, 259-286.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*, 250-279.

Hansen, G. S., & Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal, 10*, 399-411.

Hart, P. & Saunders, C. (1997). Power and trust: Critical factors in the adoption and use of electronic data interchange. *Organization Science, 8*(1), 23-42.

Hesterly, W. S., Liebeskind, J., & Zenger, T. R. (1990). Organizational economics: An impending revolution in organization theory? *Academy of Management Review, 15*, 402-420.

Hirschhorn, L., & Gilmore, T. (1992, May/June). The new boundaries of the "boundaryless" company. *Harvard Business Review, 70*, 104-115.

Hosmer, L. T. (1995). Trust: The connection link between organizational theory and philosophical ethics. *Academy of Management Review, 20*, 379-403.

Ilgen, D. R., Fisher, C. D., & Taylor, S. M. (1979). Consequences of individual feedback on behavior in organizations. *Journal of Applied Psychology, 64*, 359-371.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology, 69*, 85-98.

James, L. R., Mulaik, S. A., & Brett, J. M. (1983). *Causal analysis: Assumptions, models and data*. Beverly Hills, CA: Sage.

Kanter, R. M. (1977). *Men and women of the corporation*. New York: Basic Books.

Kanter, R. (1983). *The change masters: Innovation and entrepreneurship in the American corporation*. New York: Simon & Schuster.

Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd. ed.). New York: John Wiley.

Kizilos, M. (1995). *Employee involvement, prosocial organizational behavior, and organization performance*. Unpublished doctoral dissertation, University of Southern California.

Klein, J. A. (1984, September/October). Why supervisors resist employee involvement. *Harvard Business Review, 62*, 87-95.

Kramer, R. M., & Tyler, T. R. (1996). *Trust in organizations: Frontiers of theory and research*. Thousand Oaks, CA: Sage.

Lawler, E. E. (1986). *High-involvement management.* San Francisco: Jossey-Bass.

Lawler, E. E. (1990). *Strategic pay: Aligning organizational strategies and pay systems*. San Francisco: Jossey-Bass.

Lawler, E. E. (1992). *The ultimate advantage: Creating the high involvement organization*. San Francisco: Jossey-Bass.

Lawler, E. E., Mohrman, S. A., & Ledford, G. E., Jr. (1995). *Creating high performance organizations: Practices and results of employee involvement and total quality management in* Fortune *1000 companies.* San Francisco: Jossey-Bass.

Leana, C. R. (1986). Predictors and consequences of delegation. *Academy of Management Journal, 29*, 754-774.

Ledford, G. E., & Lawler, E. E. (1994). Research on employee participation: Beating a dead horse? Dialogue in the *Academy of Management Review, 19*, 633-636.

Levine, D. I., & Tyson, L. D. (1990). Participation, productivity, and the firm's environment. In A. S. Blinder (Ed.), *Paying for productivity.* Washington, DC: Brookings Institution.

Lewis, J. D., & Weigert, A. (1985). Trust as social reality. *Social Forces*, *63*, 967-985.

Locke, E. A., & Schweiger, D. M. (1979). Participation in decision making: One more look. In B. M. Staw (Ed.), *Research in Organizational Behavior,* JAI series annual, Vol. 1, 265-339. Greenwich, CT: JAI.

Luhmann, N. (1979). *Trust and power.* New York: John Wiley.

Marchington, M., Wilkinson, A., Ackers, P., & Goodman, J. (1994). Understanding the meaning of participation: Views from the workplace. *Human Relations*, *47*, 867-894.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, *20*, 709-734

McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, *38*, 24-59.

McGregor, D. (1967). *The professional manager.* New York: McGraw-Hill.

Miles, R. E., & Creed, W.E.D. (1995). Organizational forms and managerial philosophies: A descriptive and analytical review. In B. Staw & L. Cummings (Eds.), *Research in organizational behavior,* JAI series annual, Vol. 17, 333-372. Greenwich, CT: JAI.

Milgrom, P., & Roberts, J. (1992). *Economics, organization, and management*. Englewood Cliffs, NJ: Prentice Hall.

Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, *29*, 272-253.

Mishra, A. K. (1993). Breaking down organizational boundaries during crisis: The role of mutual trust. Paper presented at the 53rd annual meeting of the Academy of Management, Atlanta, GA, August 8-11.

Mishra, A. K. (1996). Organizational responses to crisis: The centrality of trust. In R. M. Kramer and T. R. Tyler (Eds.), *Trust in organizations*. Thousand Oaks, CA: Sage.

Mishra, A. K., & Mishra, Karen E. (1994) The role of mutual trust in effective downsizing strategies. *Human Resource Management, 33*(2), 261-279.

Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of marketing research: The dynamics of trust within and between organizations. *Journal of Marketing Research*, *29*, 314-328.

Ogden, S. (1992). The limits to employee involvement: Profit sharing and disclosure of information. *Journal of Management Studies*, *29*, 229-248.

O'Toole, J., & Bennis, W. (1992, Summer). Our federalist future: The leadership imperative. *California Management Review,* 73-89.

Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly, 32*, 25-48.

Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the workforce*. Boston, MA: Harvard Business School Press.

Porter, L. W., Lawler, E. E., III., & Hackman, R. J. (1975). *Behavior in organizations*. New York: McGraw-Hill.

Prescott, J. E., Kohli, A. K., & Venkatraman, N. (1986). The market share-profitability relationship: An empirical assessment of major assertions and contradictions. *Strategic Management Journal*, *7*, 377-394.

Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.

Schoorman, F. D., Mayer, R. C., & Davis, J. H. (1996, April). *Empowerment in veterinary clinics: The role of trust in delegation*. Paper presented at the 11th Annual Meeting for Industrial and Organizational Psychology, San Diego.

Seligman, M. (1975). *Helplessness: On depression, development, and health.* San Francisco: Freeman.

Simons, R. (1995, March-April). Control in the age of empowerment. *Harvard Business Review, 73*, 80-88.

Sitkin, S. B., & Roth, N. L. (1993). Explaining the limited effectiveness of legalistic "remedies" for trust/distrust. *Organization Science, 4*, 367-392.

Spreitzer, G. M., Kizilos, M., & Nason, S. (1997). A dimensional analysis of empowerment in relation to performance, job satisfaction, and job-related strain. *Journal of Management, 23*(5), 679-704.

Thomas, K. W., & Velthouse, B. A (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Academy of Management Review, 15*, 666-681.

Wagner, J. A. (1994). Participation's effects on performance and satisfaction: A reconsideration of the research evidence. *Academy of Management Review, 19*, 312-330.

Gretchen M. Spreitzer is on the faculty of management and organization at the University of Southern California (USC) Graduate School of Business Administration, where she is also a faculty affiliate of the Center for Effective Organizations and the Leadership Institute. She completed her doctoral work at the University of Michigan. Her research on employee empowerment, leadership development, and strategic and organizational change has been published in leading management journals. She consults with companies in several industries on the managerial applications of her research. She is a member of several editorial boards and also has served on the executive board of the Western Academy of Management and the Organization Development and Change Division of the Academy of Management. Prior to joining USC, she worked with the management consulting group at Price Waterhouse's Government Services Office and with a not-for-profit urban planning firm in Washington, DC.

Aneil K. Mishra is associate professor of management, Babcock Graduate School of Management, Wake Forest University. He received his Ph.D. in business administration from the University of Michigan. His research on trust within and across organizations, organizational change under adversity, and organizational culture has been published in several leading management journals. He has consulted with several Fortune 500 firms on these issues, and previously, he worked for the General Motors Corporation as a human resource specialist and manufacturing engineer.