Due Process in Performance Appraisal: A Quasi-experiment in Procedural Justice

M. Susan Taylor
University of Maryland
Kay B. Tracy
Gettysburg College
Monika K. Renard
West Virginia University
J. Kline Harrison
Wake Forest University
Stephen J. Carroll
University of Maryland

This field experiment extended research on procedural justice by examining effects of a due-process performance appraisal system on reactions of both employees and managers. Employee-manager pairs were randomly assigned to either a due-process appraisal system or the existing system. Even though due-process employees received lower evaluations, they displayed more favorable reactions: perceived system fairness, appraisal accuracy, attitudes toward the system, evaluations of managers, and intention to remain with the organization. Managers also responded positively, reporting greater ability to resolve work problems, satisfaction with the system, job satisfaction, and less distortion of appraisal results to further their own self-interests.[•]

In many organizations performance appraisal systems remain one of the great paradoxes of effective human resource management. On one hand, appraisal systems can provide valuable performance information to a number of critical human resource activities, such as the allocation of rewards, e.g., merit pay, promotions; feedback on the development and assessment of training needs; other human resource systems evaluation, e.g., selection predictors; and performance documentation for legal purposes (Cleveland, Murphy, and Williams, 1989). In the abstract, appraisal systems seem to offer much potential for enhancing the effectiveness of human resource decisions and for satisfying employees' need for performance feedback (Ilgen, Fisher, and Taylor, 1979). On the other hand, there is evidence that appraisal systems are a practical challenge to the academics who often design them and to the managers and employees who must use them. As Banks and Murphy (1985: 335) noted: "Organizations continue to express disappointment in performance appraisal systems despite advances in appraisal technology. Appraisal reliability and validity still remain major problems in most appraisal systems, and new (and presumably improved) appraisal systems are often met with substantial resistance. In essence, effective performance appraisal in organizations continues to be a compelling but unrealized goal." This negativity is echoed by practitioners in the private and public sectors (George, 1986; Meyer, 1991). It seems fair to conclude that many organizational appraisal systems have failed to realize their full potential contribution to organizational effectiveness.

Such a conclusion raises questions about why appraisal system effectiveness remains an elusive goal. One explanation has been offered by Folger, Konovsky, and Cropanzano (1992), who observed that appraisal systems have traditionally been designed and implemented around a "test" metaphor that treats performance disagreements between managers and employees as disputes over the most accurate view of reality, in which truth can be measured against some precise, consistent standard. Appraisers become "truth seekers who record objective reality using reliable and valid measures" (p. 3). The underlying assumptions of the test metaphor become questionable, however, when applied to performance appraisal. For example, work settings are assumed to permit

the reliable and valid measurement of objective performance, but increasing numbers of employees now work in service jobs, where objective results are unavailable, or in groups, where individual performance results are difficult to measure. Further, rather than assessing performance objectively and accurately, raters' evaluations are often subjectively biased by cognitive and motivational factors (Longenecker, Gioia, and Sims, 1987; DeNisi and Williams, 1988). Finally, supervisors often apply very different standards to employee performance, resulting in inconsistent, unreliable, invalid evaluations across the organization (Folger, Konovsky, and Cropanzano, 1992). In light of these questionable assumptions, Folger, Konovsky, and Cropanzano (1992) suggested that performance appraisals may be viewed more appropriately as disputes over the allocation of outcomes such as merit pay, promotion, or status. They argued that a due-process metaphor, consistent with theories of procedural justice, may better address the appraisal situation than does the test metaphor.

Applying the Due-process Metaphor to Performance Appraisal

Due process of law, a right guaranteed under the Fifth and Fourteenth Amendments of the United States Constitution, is intended to ensure individuals fair treatment when charged with legal violations. There are three essential features of due process: (1) adequate notice—that individuals be held responsible for obeying laws only when they have been published or otherwise communicated and for satisfying only those charges explicitly presented; (2) a fair hearing—that all relevant evidence to a proposed violation be presented and considered and that charged parties be given the opportunity to provide commentary; and (3) judgment based on evidence—that judicial decisions be free from external pressures, personal corruption, and more evident sources of bias (Folger, Konovsky, and Cropanzano, 1992).

Folger, Konovsky, and Cropanzano (1992) have developed three characteristics of a due-process appraisal system. *Adequate notice* in the context of performance appraisal requires organizations and their agents to publish, distribute, and explain performance standards to employees, to discuss how and why such standards must be met, and to provide for regular and timely feedback on performance. *Fair hearing* requires a formal review meeting in which an employee is informed of a tentative assessment of his or her performance and how it was derived by his or her manager, who should have a familiarity with the employee's performance based on sufficiently frequent observation of the individual's work or work product. Employees are also permitted to challenge this assessment and to provide their own commentary by conducting and presenting a self-appraisal. Finally, fair hearing requires that employees receive training in the appraisal process to ensure that they possess the knowledge needed to challenge assessments perceived to be unfair. *Judgment based on evidence* requires the organization and its agents to apply performance standards consistently across employees,

without yielding to external pressure, corruption, or personal prejudice. Evaluations should reflect the organization's efforts to use principles of honesty and fairness, and employees should be given an explanation of performance ratings and of reward allocations and be provided with an opportunity for discussion. Further, the appraisal system should be based on the best technology available in form content, format, and appraiser training to minimize bias. Thus the due-process appraisal system provides employees with substantial input into the appraisal process.

Relationship of Due-process Appraisal System to Procedural Justice Theories

Procedural justice research emphasizes the *process* through which decisions are made in conflicts of interests as the primary determinant of disputing parties' perceptions of fairness (Leventhal, 1976; Folger, 1977; Thibaut and Walker, 1978; Lind and Tyler, 1988; Tyler and Lind, 1992). Researchers generally have proposed two theoretical explanations for the psychological processes underlying procedural justice effects: (1) instrumental control and (2) relational concerns. The instrumental control explanation has been best articulated by Thibaut and Walker (1978), who argued that disputing parties or those affected by an institutional or organizational decision want control over the conflict resolution or decision process because they view it as instrumental to improving their own outcomes or their relationship with the other party in the dispute. Parties take a short-term perspective. Control over process assures each party that a third party who will resolve the dispute or make the decision will receive sufficient information about the party's contributions and outcomes to resolve the dispute or make the decision equitably. Conversely, Lind and Tyler (1988), proponents of the relational explanation, argued that concerns about dispute resolution or decision-making procedures arise because people care about their long-term social relationship to the authorities or institutions that employ the procedures. Such procedures have important implications for individuals' feelings of self-worth and group standing. Because the procedures are viewed as manifestations of basic process values in the institution or organization, they take on value in and of themselves, not simply because they promote the attainment of goals outside the process. Thus procedures reflecting a positive, full-status relationship are viewed as fair, while those indicative of a negative or low-status position within the institution are judged unfair (Tyler and Lind, 1992). To date, both the instrumental control and the relational explanations have been supported by several empirical studies, stimulating Lind and Tyler (1988) to conclude that both are accurate but incomplete explanations of the psychology of procedural justice.

The due-process metaphor of performance appraisal is consistent with prior theoretical models of procedural justice, whether based on the instrumental control or relational explanation. Thibaut and Walker's (1978) instrumental control model, for example, emphasized disputing parties' opportunity to present arguments supporting their case as a central determinant of their perceptions of fairness.

Due-process appraisal systems provide considerable opportunity for employees and organizational representatives to present their views throughout the appraisal process. Leventhal and his associates (Leventhal, 1976; Leventhal, Karuza, and Fry, 1980) proposed that six procedural rules affect individuals' judgments of fairness, largely for instrumental reasons. All six rules are present in a due-process appraisal system: (1) the consistency rule—maintaining consistency in performance standards over time and among employees, resulting from the due-process appraisal system's requirement that performance expectations be discussed and recorded at the beginning of the period; (2) the bias-suppression rule—constraining self-interest by discussing performance expectations and discrepancies at the final review; (3) the accuracy rule—training managers and employees to record performance accurately throughout the period and use this record to prepare and justify performance evaluations; (4) the correctability rule—instructing managers to listen to the employee's case and change the evaluation if appropriate; (5) the representativeness rule—discussing concerns of the employee and manager throughout each stage of the process; and (6) the ethicality rule—using procedures that are compatible with existing moral and ethical standards.

Tyler (1989), working from a relational perspective, proposed that three factors of the authority or institution-person relationship—standing, neutrality, and trust—are particularly strong determinants of perceptions of fairness. Information about individuals' standing, defined as status or recognition in the group, is thought to be conveyed by their interpersonal treatment during social interactions. Rude treatment conveys that the group or authority regards the individual as being of low status, and disrespect for individuals' rights communicates that their interests are unlikely to be protected. Elements of standing seem present in both the adequate-notice and judgment-based-on-evidence components of the due-process metaphor for performance appraisal. Neutrality concerns the authority or institution's tendency to create a neutral playing field on which all affected parties will benefit fairly from the application of fair decision processes. Neutrality is consistent with the judgment-based-on-evidence component of the due-process metaphor. Finally, trust is the individual's belief that the authority or institution intends to treat people in a fair and reasonable way. It seems likely that all three components of the due-process metaphor serve to enhance individuals' feelings of trust toward the organization and agents charged with implementing the performance appraisal system.

Finally, Folger and Bies (1989) have proposed seven suggestions for managers to assure procedural justice, based on both the instrumental control and relational literatures: (1) adequate consideration of employees' points of view, similar to Thibaut and Walker's (1975) control over process; (2) bias suppression; (3) consistency of standards across employees, as proposed by Leventhal (1976); (4) timely feedback about decision outcomes; (5) managers' truthfulness in communications with employees, one element of Leventhal's (1976) ethicality rule; (6) treating

employees with courtesy and civility, as proposed in Bies and Moag's (1986) development of interactional justice; and (7) providing employees with reasonable justification for an outcome decision. The due-process metaphor thus appears to be consistent with existing theories and models of procedural and interactional justice.

Just as the fairness of the procedures associated with organizational decisions ranging from layoffs to pay allocation have been shown to affect employees' reactions directly (Folger and Konovsky, 1989; Moorman, 1992), so are appraisal systems based on theories of procedural justice expected to affect the attitudes and behaviors of the employees and managers who use them. Although often ignored, employees' and managers' reactions to appraisal systems are essential to successfully attaining at least three purposes of appraisals—employee development, reward allocation, and legal documentation (Murphy and Cleveland, 1991). Employees' reactions to the fairness and accuracy of the appraisal system may affect their motivation to correct weak performance or develop unused potential. Similarly, managers' reactions to performance appraisals are a necessary, if not sufficient condition to collect the relatively unbiased performance information needed for reward allocation or legal documentation. Thus, from a practical perspective, examining how due-process appraisal systems affect reactions of employees and managers may provide valuable information about whether these systems can contribute to organizational effectiveness.

Employees' Reactions to Due-process Appraisal Systems

There is considerable evidence that appraisal systems often violate employees' due process by providing them with infrequent and relatively general performance feedback (Ilgen, Fisher, and Taylor, 1979), allowing them little input into the appraisal process, and knowingly introducing bias into performance ratings (Bernardin and Villanova, 1986; Longenecker, Gioia, and Sims, 1987). The three features of due-process systems—adequate notice, fair hearing, and judgment based on evidence—should both increase individuals' perceptions of instrumental control over the appraisal process and enhance their sense of self-worth and group standing.

Although no previous study has examined the effects of a full due-process appraisal system on employees' reactions, prior research has investigated the impact of one or two components. Studying a sample of managerial employees, Greenberg (1986) found that two-way communication during the review, opportunities to rebut evaluation (fair-hearing feature), and the consistent application of a priori performance standards (adequate notice) were significantly related to individuals' perceptions of the fairness of the appraisal. Similarly, in a laboratory setting, Kanfer et al. (1987) reported that subjects permitted to provide information about their own performance to their manager (fair hearing) perceived the appraisal to be fair. Using a survey methodology, Fulk, Brief, and Barr (1985) reported that engineering employees perceived their evaluations as accurate and fair when their managers were more

knowledgeable and trustworthy, and thus freer from bias (judgment based on evidence). Therefore, we hypothesized:

Hypothesis 1: Employees evaluated under a due-process appraisal system will report greater fairness of the appraisal system and greater accuracy in their own appraisal than those evaluated by an appraisal system providing less due process.

Due-process features should also increase employees' satisfaction with the appraisal system (process satisfaction) and with their performance rating (outcome satisfaction). Thibaut and Walker's (1978) research clearly demonstrated that people prefer to have as much control over the decision process as they can, particularly when they cannot control the decision itself. Employees working under a due-process appraisal system should have their preferences for greater process control met to a greater extent than do those working under a more traditional system and express greater satisfaction with the appraisal process (Locke, 1976). Correspondingly, satisfaction with the appraisal process should be directly related to satisfaction with one's performance rating. Under a due-process system, performance ratings reflect not only the level of evaluation but also one's positive group standing. Thus a high rating will be even more satisfying because the employee realizes that it has high integrity, while a low rating will tend to be offset by the realization that one is well regarded enough to be treated fairly. As Lind and Tyler (1988: 207) concluded in their extensive review of the procedural justice literature, "In most situations, procedural justice judgments lead to enhanced satisfaction" with both the process and the outcome.

The procedural justice-satisfaction relationship is supported by several correlational studies of performance appraisal. Dipboye and de Pontbriand (1981) reported that discussing performance objectives and plans (adequate notice), providing employees with the opportunity to state their side of the issues (fair hearing), and using job-relevant performance dimensions in the appraisal (judgment based on evidence) were related to employees' favorable reactions toward the appraisal system, while the first two system characteristics were also related to their satisfaction with their rating (e.g., Burke and Wilcox, 1969; Nathan, Mohrman, and Milliman, 1991). Therefore, we hypothesized:

Hypothesis 2: Employees evaluated under a due-process appraisal system will report greater satisfaction with the appraisal system and greater satisfaction with their appraisal score than those evaluated by an appraisal system providing less due process.

Heightened satisfaction with a due-process appraisal system and with the appraisal score should generalize to employees' overall job satisfaction. Consistent with the relational explanation of procedural justice effects, a due-process appraisal system should enhance employees' feelings of self-worth and their feeling of positive standing within the organization. Consequently, individuals' job satisfaction should increase and their overall attitude toward their work and their job situation (Locke, 1976) should improve under the due-process appraisal system. This prediction is consistent with findings in the legal arena, where procedural justice has been shown to increase individuals' overall

satisfaction with the legal experience (Lind and Tyler, 1988). Further, in an organizational setting, Moorman (1992) found that the perceived justice of employers' decision-making and decision-implementation procedures was positively related to employees' job satisfaction.

More relevant to the performance appraisal process, Kanfer et al. (1987) found that subjects who were permitted to provide their manager with information about their performance reported greater satisfaction with their job assignments. Similar results were found in two correlational field studies. Burke and Wilcox (1969) found that employees who reported relatively open communications with their manager about performance appraisal also had higher job satisfaction, while Nathan, Mohrman, and Milliman (1991) reported that employees' opportunity to participate in the appraisal review was positively related to satisfaction with their work. Therefore, we hypothesized:

Hypothesis 3: Employees evaluated under a due-process appraisal system will report greater job satisfaction than those evaluated by an appraisal system providing less due process.

Similarly, the procedural justice effects of a fairer performance appraisal system are expected to generalize to employees' evaluations of their managers and to their satisfaction with their employing organization. According to the relational explanation of procedural justice, individuals are concerned with the long-term social relationships with authorities and institutions. The implementation of a due-process appraisal system should reaffirm employees' self-worth and convey that the organization and participating agents hold them in high standing and are committed to protecting their rights in the context of organizational decisions. As Lind and Tyler (1988: 209) concluded in their extensive review of the procedural justice literature, "Judgments of procedural justice enhance the evaluation of authorities and institutions." This effect has been supported by correlational research in the legal arena and the organizational context. Alexander and Rüderman (1987) reported that procedural justice was significantly related to government employees' evaluations of management. Similarly, McFarlin and Sweeney (1992) found a procedural justice main effect on employees' evaluation of their manager. Therefore, we hypothesized:

Hypothesis 4: Employees evaluated under a due-process appraisal system will evaluate their manager more favorably and report greater satisfaction with their employing organization than those evaluated by a system providing less due process.

Beyond attitudinal effects, performance improvement is a primary goal of appraisal in many organizations, and participation behaviors such as staying in the organization may have a strong impact on organizational effectiveness. Thus it is important to determine whether due-process appraisal systems positively affect critical work behaviors. Work by Tyler and Lind (1992) suggests that behavioral effects may result because procedural justice increases the legitimacy of the implementing organization in employees' eyes and thereby their willingness to comply with the goals of the organization for high performance. Nevertheless, reviews of the procedural justice literature (Lind and Tyler,

1988) have found that behavioral changes result less consistently from increased procedural justice than do attitudinal effects. Although Earley (1984) reported that allowing people to voice opinions about performance goals improved their subsequent performance in both lab and field settings, Earley and Lind (1987) found that significant performance effects emerged only in the laboratory, not in the field. Similarly, Nathan, Mohrman, and Milliman (1991) found that the opportunity to participate in their performance review was only marginally related to employees' subsequent performance improvements. Two studies, however, have tested and supported the negative relationship between perceived procedural justice and employees' intentions to leave the organization (Alexander and Ruderman, 1987; Tyler and Schuller, 1990).

Several researchers have speculated that the findings have been mixed because behaviors are multiply determined by ability, motivation, and opportunity (Lind and Tyler, 1988); thus increased compliance alone may not be sufficient to bring about increased performance. At the low-compliance end of the spectrum, employees may be unwilling to jeopardize their employment security by lowering their performance even though they feel little inclination to comply with organizational goals (Greenberg, 1986). Greenberg (1986) also argued that the effect of procedural justice on withdrawal behaviors such as absenteeism or turnover is likely to be less constrained than its effects on performance. In light of these proposals, behavioral effects seem more likely to emerge from procedurally just appraisal systems when the dependent variable examined is relatively unconstrained by other factors such as ability. Therefore, in this study we investigated the effects of a due-process appraisal system on employees' motivation to improve performance, rather than actual changes in performance over time and on their intentions to remain a member of the organization. We hypothesized:

Hypothesis 5: Employees evaluated under a due-process appraisal system will report greater motivation to improve their performance and stronger intentions to remain organizational members than employees evaluated by a system providing less due process.

Managers' Reactions to Due-process Appraisal Systems

Managers' reactions to performance appraisal systems are even more important for system effectiveness than employees' because of managers' greater power to distort appraisal results and sabotage its reward, developmental, and documentation purposes. Nevertheless, relatively few studies of the appraisal process have examined the reactions of managers (for exceptions, see Mount, 1983; Dorfman, Stephan, and Loveland, 1986). Similarly, managers' reactions to procedural justice interventions are quite important, since they may either safeguard or sabotage fair policies and procedures through their interactions with employees. Thus, knowing how managers react to the implementation of enhanced procedural justice systems is critical to an understanding of the way such systems develop and are maintained in organizations. Yet the focus of procedural justice research on managers to date has been largely

limited to their role as third parties in disputes between peers or subordinates (Karambayya and Brett, 1989).

Pfeffer (1981) expressed doubt that multiconstituent systems of justice, similar to the due-process systems discussed here, can succeed, because (1) those with more power are unable to move beyond their own parochial concerns to make decisions that are fair to those with less power; and (2) those with less power possess fewer analytical resources, bargaining skills, and information to protect their own interests. Pfeffer's (1981) proposals received indirect support from previous studies showing that managers view cost, efficiency, and informality as more important criteria for organizational dispute resolution procedures than fairness, while employees take the opposite view (Lissak and Sheppard, 1983; Valley, 1989). Other research has shown that managers frequently distort appraisal results to further their own self-interests (Longenecker, Gioia, and Sims, 1987). For example, deflating an appraisal rating can send a message that an employee is not wanted in the manager's department, while rating inflation may occur in an attempt to make the manager and the department look good. Thus due-process systems may well provoke negative reactions from managers by decreasing the efficiency of dispute resolution procedures and constraining their ability to distort the results of the appraisal.

It is also true, however, that managers' own performance is highly dependent on the efforts of those who work for them. Consequently, it also might be argued that they will react favorably toward a due-process appraisal system under two conditions. First, the system must not negatively affect managers' own reward contingencies in the organization, such as merit pay or promotions. Second, constraints on their power to distort appraisal results must be offset by more valued gains in the long term. One outcome that might offset the constraints placed on managers under a due-process system is an increased ability to resolve work problems that result from ineffective communication with employees about work processes and priorities. Considerable research (Graen, 1976) has documented the high incidence and negative impact of discrepant role perceptions between employees and managers. Whereas appraisal systems traditionally have been shown to strain managers' relationships with their employees (Bernardin and Villanova, 1986; Murphy and Cleveland, 1991), due-process appraisal systems inform employees of managers' performance expectations from the very beginning, provide opportunities for open exchanges about factors that may impede employees' ability to meet expectations, and provide ongoing performance feedback. Further, because due-process systems are also expected to yield favorable employee attitudes toward appraisal (hypothesis 2), as well as increase the resolution of unit work problems, due-process appraisal systems should also increase managers' satisfaction with the appraisal system. Therefore, we hypothesized:

Hypothesis 6: Managers who evaluate employees using a due-process appraisal system will report greater resolution of work

problems and express higher satisfaction with the performance appraisal system than those evaluating with a system providing less due process.

A second gain managers receive from implementing due-process appraisal systems may be their increased legitimacy in the eyes of employees. Prior research suggests that, as the organizational agents responsible for implementing the procedurally just appraisal system, managers will gain increased legitimate power, i.e., ability to win employee acceptance of work goals and rules (Tyler and Lind, 1992). Thus managers' ability to influence employees' behavior without relying on the distortion of appraisal results or coercion should increase. Since influencing others' behavior through the use of legitimate power is assumed to be more pleasant and easier than using manipulation or coercive power for these ends, managers should experience greater satisfaction with their job and job situation:

Hypothesis 7: Managers who evaluate employees using a due-process appraisal system will report greater job satisfaction than those who evaluate with a system providing less due process.

In the implementation of a due-process system, managers should also distort appraisal results less to achieve their own interests, because this implementation will increase the legitimacy of the organization in their own eyes as well. Since managers may benefit less than employees from a due-process system, their reactions may be closer to those of observers of just procedures than of participants. Nevertheless, Thibaut and Walker (1978) found that observers also expressed a preference for and greater satisfaction with dispute resolution procedures that provided disputing parties with a high degree of control over the decision process. Tyler and Lind (1992) have proposed that the organization implementing a due-process appraisal system will gain increased legitimacy in the eyes of its employees. Combining their work with the findings on observers' reactions (Thibaut and Walker, 1978), it seems that the implementation of a due-process system also may enhance the organization's legitimacy in the eyes of managers and thereby make them more willing to comply with its goals, which in this case include increasing procedural justice in performance appraisal for employees. Information about how managers determine that the distortion of appraisal results is inconsistent with organizational goals is provided by research on managers' distortion of appraisal results. Longenecker, Gioia, and Sims (1987) reported that organizational leaders cued managers about the organization's tolerance for distortion of appraisal results. As one manager put it (Longenecker, Gioia, and Sims, 1987: 186): "At some places the PA (performance appraisal) process is a joke—just a bureaucratic thing that the manager does to keep the IR (industrial relations) people off his back. At the last couple of places where I've worked the formal review process has been taken really seriously; they train you how to conduct a good interview, how to handle problems, how to coach and counsel. You see the things (appraisal) reviewed by your boss and he is serious about reviewing your performance in a thorough manner. . . . I guess the biggest thing is that people are led to believe

that it is a management tool that works; it's got to start at the top."

Thus by implementing a due-process system of appraisal, complete with training for employees and supervisors, an organization is expected to signal to managers that there will be little tolerance for behavior that distorts appraisal results. The organization's enhanced legitimacy from implementing a procedurally just appraisal system should increase managers' willingness to comply with its goals for appraisal:

Hypothesis 8: Managers who evaluate employees using a due-process appraisal system will report less distortion of appraisal ratings to serve their own self-interests than those who evaluate with a system providing less due process.

We examined the eight hypotheses developed above in a field experiment covering a three-month period. The study makes several contributions to the existing literatures on procedural justice and performance appraisal. First, it can be distinguished from other tests of enhanced procedural justice effects in organizations by its field-experiment design, the breadth of the procedural justice manipulation, the assessment of both specific and global job attitudes, and a longer follow-up period. Second, this research extended the study of procedural justice to include the reactions of managers, a population largely unexamined in the procedural justice literature to date. Finally, this study makes a valuable practical contribution to the performance appraisal literature by determining whether the design of evaluation systems around the due-process metaphor may lead to favorable reactions by managers and their employees. If so, due-process appraisal systems seem likely to achieve the developmental, reward allocation, and documentation purposes of appraisal and thereby to enhance organizational effectiveness.

METHOD

Overview

This research was conducted in a government agency (1,400 employees) of a northeastern state. The majority of employees (some 900) administered unemployment benefits and provided job-search services, while the remainder were responsible for building the state's economy through cultivating new business. Most employees held administrative (section head), clerical (typist, clerk) or professional (lawyer, auditor, administrator) positions. Approximately 20 percent of the workforce worked in managerial positions.

Organizational leaders requested that the researchers develop, pilot, and revise a new performance appraisal system for the department, stipulating that they must do so while incorporating a high level of employee participation in the development process. The participation requirement provided a unique opportunity to discover what aspects of the current performance appraisal system employees considered fair and unfair and to tailor those aspects into an experimental field study to test the due-process metaphor of performance appraisal.

Employee participation was achieved in several ways. First, we held random interviews, and then administered a department-wide attitude survey to determine reactions toward the existing appraisal system and preferences for a new one. Two representative employee committees (total N = 40) were formed to assist in system design, pilot testing, and revision. Finally, we randomly selected representative groups of employees and managers in the department to participate in pilot testing the appraisal system. Only two members of the employee committees participated in the pilot testing. The data reported here are from the pilot project.

Interviews with a representative sample of employees revealed that they genuinely desired a performance appraisal system that would discriminate among high and low performers and provide them with feedback about their performance ("I haven't had an appraisal since I've been here"; "No one ever tells you how you are doing around here."). The interviews also indicated that the existing appraisal system, developed by the state personnel office more than a decade earlier, was disliked and distrusted by virtually everyone. Based on a relatively general, graphic rating scale that included three performance dimensions—quality of work, quantity of work, and job attitudes—the existing system generated perceptions of inequity ("The appraisal system is not fair; it does not distinguish between high and low performers."), inflation ("Everybody gets a satisfactory rating or above."), insensitivity ("My manager sends my evaluation through inter-office mail without marking it confidential, so other employees open it before I do."), and uselessness ("No one ever looks at performance ratings when making salary or promotion decisions.").

The agency provided a strong test of the due-process system because employees' and managers' dissatisfaction with the existing appraisal system was accompanied by an extremely pessimistic attitude toward the likelihood of positive change ("Nothing ever changes around here; what a waste of money to fund work on the appraisal system; why not put those resources in more pay for the employees?"). The organizational climate was one of dissatisfaction, distrust, and pessimism, providing no assurance that either employees or managers would be any more receptive to a new appraisal system than they were to the existing one.

The design for the study was a field experiment using experimental and control groups of employees and their managers, with pre- and post-study measures of the dependent variables. The independent variable was the due-process appraisal system.

Sample

We selected representative, matched pairs (111) of employees and their managers from the organization's personnel files and invited them to participate in the pilot project. Employees and managers were similar in age (mean = 43.86 and 44.91, respectively), job tenure (mean = 9.52 and 8.40), and organizational tenure (mean = 12.17 and 16.11). Most employees (58.5 percent) were female; most

managers, male (58 percent). Over 60 percent of employees and 72 percent of managers had at least some college education.

We paired managers with only one employee, although they may have supervised several in the organization. Random assignment placed 61 pairs into the experimental group and 50 pairs into the control group. Fifty-one pairs in the experimental group and 41 pairs in the control group began the study, a beginning participation rate of 84 percent and 82 percent, respectively. Because the pilot project ran into the summer and the experimental design was longitudinal, we lost participants from both groups. Forty-two employees and 40 managers in the experimental condition, and 21 employees and 29 managers in the control condition completed the study, resulting in final participation rates of 83, 78, 51, and 79 percent, respectively.

Final sample sizes revealed a higher dropout rate in the employee control group than in the experimental one. Discussions with participants suggested that the higher dropout rate in the control group resulted from their lower level of involvement in the pilot project: They were asked to participate in the pilot project by using the existing system, an appraisal system they had already been exposed to many times before and knew that they did not like.

Follow-up analyses revealed no significant differences in the demographic characteristics (i.e., age, education, gender, job or organizational tenure) or pre-survey reactions of those participants who completed the study and those who dropped out. Further, analysis of the pre-survey measures completed for the study revealed only one significant difference between stayers and leavers. Employee control-group dropouts were significantly more negative than control-group stayers on the pre-survey measure of perceived appraisal accuracy. These findings suggest that those who dropped out did not differ in a meaningful way from those who remained, although there is no way to determine definitively the effects of the differential dropout rate. If anything, they were initially somewhat more negative about the accuracy of the existing appraisal system that they were asked to use during the pilot study and therefore might be expected to have been somewhat more negative at its conclusion.

Procedure

Employees and managers selected for the pilot project received a letter from the department head encouraging them to participate. Individuals who agreed received a pre-survey identified by a code number and returned it to the researchers' university address. Those not returning the survey after ten days were given one to two reminders by telephone.

Experimental group participants were scheduled into training sessions during their work day. We trained managers first and instructed them to begin the performance period as soon as the employee with whom they had been paired was trained. We asked managers to meet with their employee on at least three occasions—to discuss performance

expectations at the beginning of the pilot period, to give feedback midway through the pilot period, and to conduct the formal appraisal session. If we did not receive forms verifying that these meetings had been held, within ten days of the scheduled date, we contacted the managers by phone and reminded them to conduct the meetings.

Control group managers and employees conducted the appraisal process "as they normally did" and began the appraisal period at the same point as the experimental group. We contacted them at the end of the three-month period and reminded them to conduct a formal appraisal using the organization's existing appraisal form.

All participants received a post-study questionnaire assessing their perceptions of and reactions to the performance appraisal system under which they worked. We gave them up to two reminders by phone if we did not receive the survey within ten days after the scheduled final review time.

Independent Variable—Due-process Performance Appraisal System

The due-process appraisal system developed for the department included a new appraisal form, process, manual, and training for managers and employees. The training, conducted in multiple groups of 15–20 participants, used the new appraisal forms and relied heavily on experiential learning. It included video-taped behavioral models illustrating desired behaviors, role-play exercises, and individual feedback. Differences between the measures and treatments given to control and experimental groups are summarized in Table 1. Table 2 shows the features of the new system, which incorporated elements from all three due-process features, as recommended by Folger, Konovsky, and Cropanzano (1992).

Table 1

Treatments and Measures in Experimental and Control Groups*

	Employees		Managers	
Treatment/Measure	Due process	Control	Due process	Control
Pre-survey questionnaire	X	X	X	X
First training session	X	0	X	0
Second training session	0	0	X	0
New appraisal form	X	0	X	0
New appraisal manual	X	0	X	0
Three-month performance period	X	X	X	X
Final performance evaluation	X	X	X	X
Post-survey questionnaire	X	X	X	X

* X = present, 0 = absent.

We collected measures of the due-process variables from employees and managers on the pre- and post-surveys to provide a manipulation check. Table 3 shows these variables, as well as a sample item from each scale, the total number of items used in the scale, and where appropriate, Cronbach's alpha coefficient, indicating the internal

Table 2

Content of Due-process Appraisal System*

System feature	Employees	Managers
Adequate notice		
Training to develop standards	X	X
Training to communicate/clarify standards	X	X
Expectation setting meeting	X	X
Training to negotiate standards	X	X
Training to give feedback	0	X
Training to participate in mid-study feedback session	X	X
Mid-study feedback session	X	X
Fair hearing		
Training to encourage two-way communication in final review	0	X
Training on how to use form	X	X
Training to conduct self-appraisal	X	0
Conduct self-appraisal	X	0
Judgment based on evidence		
Training to sample representative performance	0	X
Training to keep performance diary	X	X
Training to solicit performance information from employees	0	X
Training to make supervisor aware of accomplishments	X	0
Appraisal form fitted to job	X	X
Manual on appraisal process	X	X

* X = present, 0 = absent.

consistency of the scale. Except where noted, response options for survey items used a 5-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5). The score for a variable was the mean of participants' responses to the items included on a scale, and unless noted, a high score indicated a high level of the variable assessed.

In addition, we kept records that we used to validate responses to some of the due-process variable measures, such as training sessions attended and expectation meetings held. Correlations between participants' self-reports and archival records were high (low to high .80s).

Measurement of Check Variables

We included several items in the surveys to control for variables that were not of primary interest to the study but appeared likely to affect the dependent measures: managers' reward contingencies, performance ratings, and two measures of sensitization to the study.

Managers' reward contingencies were included to check whether unintended negative changes occurred that might have offset the effects of the due-process appraisal system. We measured four reward contingencies with scales developed by Napier and Latham (1986) to assess managers' outcome expectancies for conducting valid performance appraisals. A central question asked managers to assess the likelihood that, if they took the time required to evaluate employees' performance accurately, reviewed the ratings with employees, and turned them in to the Personnel Office, (1) their rewards would increase; (2) their rewards would

Table 3

Measurement of Due Process and Check Variables

Variable	No. of Items	Sample item	Alpha
Due process variables—Employees			
Fair hearing			
Formal performance review meeting	1	Did you meet with your supervisor at the end of the Pilot Project to review how he/she evaluated your performance during the Pilot Project? (yes/no)	–
Conducted self-appraisal	1	Did you complete a self-appraisal by evaluating your own performance on the same appraisal form your supervisor used to evaluate you? (yes/no)	–
Adequate notice			
Input to process	6	During the Pilot Project I basically had no say about the performance expectations that were set for me. (Reverse-scored)	.76
Performance expectation meeting	1	Did you meet with your supervisor at the beginning of the Job Excellence Pilot Project to discuss expectations for your performance during the next three months of the project? (yes/no)	–
Supervisor communication of performance expectation	2	During the Pilot Project my supervisor let me know what he/she expected of me before evaluating my performance.	.75
Frequency of feedback from supervisor	3	During the Pilot Project my supervisor often told me how I was doing on the job.	.85
Held mid-study feedback meeting	1	Did you meet with your supervisor about midway through Pilot Project to discuss your performance? (yes/no)	–
Judgment based on evidence			
Validity of appraisal form	3	The form used to evaluate my performance during the Pilot Project measures things that are important for my job.	.83
Supervisor's honesty	6	My supervisor was very honest with me.	.89
Employee check variables			
Sensitization variables:			
Training satisfaction	2	(Company name) provides training that helps me do a better job.	.61
Performance recognition	2	(Company name) recognizes good performance.	.64
Due process variables—Managers			
Fair hearing			
Final performance review meeting	1	Did you meet with your assigned employee at the end of the Pilot Project to review how you evaluated his/her performance during the Project?	–
Employee self-appraisal	1	Did your employee complete a self-appraisal by evaluating his/her own performance on the same appraisal form you used to evaluate him/her?	
Adequate notice			
Employee input to process	1	The last time I evaluated my employee's performance, I asked him/her to tell me how well he/she thought he/she had done.	–
Performance expectation meeting	1	Did you meet with your assigned employee at the beginning of the Job Excellence Pilot Project to discuss expectations for performance during the next three months?	–
Communication of performance expectation	3	I let my employee know what I expected of him/her before I evaluated his/her performance at the end of the Pilot Project.	.76
Frequency of feedback	3	I often told my employee how he/she was doing on the job during the Pilot Project.	.76
Held mid-study feedback meeting	1	Did you meet with your assigned employee halfway through the Pilot Project to discuss his/her performance? (yes/no)	–
Judgment based on evidence			
Validity of appraisal form	3	The form used to evaluate my employee's performance during the Pilot Project doesn't really measure what he/she does on the job. (Reverse-scored)	.83
Honesty with employee	2	I am very honest with my employees.	.63

Table 3 (*continued*)

Variable	No. of Items	Sample item	Alpha
Managers' check variables			
Sensitization variables:			
Training satisfaction	2	(Company name) provides training that can help my employees do a better job here at (company name). (Reverse-scored)	.52
Performance recognition	2	(Company name) recognizes good performance.	.81
Demoralization variable: Self-esteem	4	On the whole, I am satisfied with myself.	.83
Reward contingencies:			
My rewards decrease	2	If I took the time required to evaluate my employees' performance accurately, reviewed the ratings with them, and turned them in to the company Personnel Office, it would hurt my chances of getting a raise.	.90
My rewards increase	2	It would help me get a raise.	.89
Unit productivity decrease	4	The productivity of my unit would decrease.	.70
Unit productivity increase	2	The productivity of my unit would increase.	.90

decrease; (3) unit productivity would increase; or (4) unit productivity would decrease (see Table 3).

Performance ratings. Employees' performance ratings were examined to assure that any favorable changes in the reactions of experimental-group employees and managers could not be accounted for by the fact that experimental-group employees received higher ratings. Two items were measured to determine if there were differences in the performance ratings between the experimental and control groups. These were the manager's report, assessed on the final survey, of the employee's performance rating, ranging from "deficient" (1) to "excellent" (5), and the final score on the appraisal form managers completed and returned to us. Since the due-process form was based on a 5-point scale and the existing appraisal form on a 3-point scale, we transformed scores on the two different forms to make them comparable.

Sensitization variables. We included two variables to determine whether positive reactions from the due-process group might be caused by the fact that the pre-study questionnaire sensitized them to the study hypotheses, which they then consciously may have attempted to support. Because the due-process appraisal system had no impact on training for improved job performance or the organization's recognition of good performance in the period of the pilot study, employees' and managers' satisfaction with employees' opportunities to receive training that would improve their job performance and their perception of the organization's recognition of good performance (see Table 3) were not expected to change as a result of the pilot project.

Dependent Variables

Dependent variables were measured by scales of items to assess employees' and managers' reactions (attitudes) toward the appraisal system. Although we used established

measures whenever possible, we had to develop some scales specifically for the study. Scale items typically used a 5-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5). The scales for employees and managers, a representative item from each scale, the total number of items in the scale, and where relevant, Cronbach's alpha coefficient for the scale are shown in Table 4.

Table 4

Measurement of Dependent Variable Scales

Variable	No. of Items	Sample item	Alpha
		Employees	
Fairness of appraisal	1	I don't think my performance appraisal during the Pilot Project was a fair one. (Reverse-scored)	–
Accuracy of appraisal	2	My performance evaluation from the Pilot Project tended to be pretty accurate.	.74
Satisfaction with appraisal system	4	I am satisfied with the way my performance evaluation was done during the Pilot Project.	.60
Rating satisfaction	2	I was very satisfied with the results of the performance evaluation I received during the Pilot Project.	.64
Satisfaction with job	3	All in all, I am satisfied with my job.	.74
Evaluation of supervisor	6	My supervisor is a good manager.	.89
Satisfaction with organization	3	I generally look forward to coming to work at (company name).	.74
Motivation to improve	2	My last performance appraisal did not motivate me to do a good job. (Reverse-scored)	.71
Intention to remain	1	I intend to keep working at (company name) for at least the next three years.	–
		Managers	
Decreased work problems	2	We have fewer work problems in my department because of the performance evaluation system.	.75
Satisfaction with appraisal system	4	I am satisfied with the way performance appraisals were done in the Pilot Project.	.61
Satisfaction with job	3	All in all, I am satisfied with my job.	.79
Appraisal distortion	9	During the Pilot Project, I evaluated my employee higher than he/she actually performed to keep my unit from looking bad to people outside. (Reverse-scored)	.90

Employees. Employees' reactions included the perceived fairness of the system, the perceived accuracy of their appraisal, their satisfaction with the appraisal system, their satisfaction with the performance rating, their job satisfaction, an evaluation of their manager, satisfaction with their employing organization, and two variables intended as behavioral surrogates—motivation to improve performance and intention to remain in the organization during the upcoming three-year period. *Fairness of appraisal* was assessed with a single item asking whether or not the appraisal received during the pilot project was a fair one. *Accuracy of appraisal* was assessed with two items asking how accurate the pilot project appraisal was and whether the evaluation showed how they "really performed" on the job. *Satisfaction with appraisal system* was assessed with four items asking whether the organization should change the appraisal system, whether there were fewer work problems in the unit as a result of the system, whether employees were satisfied with the way the organization did

appraisals, and whether having appraisals was a waste of time. *Satisfaction with performance rating* received in the pilot project was assessed with two items asking about employees' satisfaction with the results of the appraisal and with "how they did" on the last appraisal. *Evaluation of manager* was assessed by six items asking about their managers' people skills, knowledge of their job, competence at managing, etc. *Satisfaction with job and organization* were assessed with three items each from the short form of the *Index of Organizational Reactions* (*IOR*), a satisfaction survey developed for the Sears Corporation that has been found to be reliable and valid across many different organizational settings (Dunham and Smith, 1979). *Motivation to improve* as a result of the appraisal feedback received was assessed with two items asking employees if the appraisal motivated them to do a good job and made them want to work hard during the upcoming year. *Intent to remain* was assessed with a single item that asked the extent to which employees intended to continue working at the department for the next three years. Intercorrelations between the dependent variables for employees were generally moderate, ranging from .10 to .74 (appraisal satisfaction with appraisal accuracy). They are shown in Table 5.

Table 5

Correlation Matrix of Employees' Dependent Variables*

Variable	Mean	2	3	4	5	6	7	8	9
1. Fairness of appraisal	3.86 (1.01)	.73**	.52**	.66**	.21	.38**	.15	.32*	.41**
2. Accuracy of appraisal	3.58 (.91)		.55**	.74**	.28*	.53**	.24	.35**	.12
3. Satisfaction with system	3.38 (.61)			.44**	.12	.18*	.24	.28*	.15
4. Satisfaction with rating	3.78 (1.04)				.21	.44**	.18	.21	.10
5. Satisfaction with job	3.98 (.67)					.52**	.51**	.32*	.37**
6. Evaluation of supervisor	3.76 (.81)						.32*	.32*	.25*
7. Satisfaction with organization	3.73 (.71)							.11	.13
8. Motivation to improve	3.47 (.87)								.20
9. Intent to remain	3.94 (.89)								—

* $p < .05$; ** $p < .01$.
* Standard deviations are in parentheses. Degrees of freedom range from 65 to 51.

Managers. Managers' reactions assessed for the study included the increased resolution of work problems, satisfaction with the appraisal system, job satisfaction, and level of distortion of appraisal results. Table 4 shows additional descriptive information for these variables. *Decreased work problems* was assessed by two items asking the extent to which the appraisal facilitated solving work problems and improved communications with employees. *Satisfaction with the appraisal system* was assessed with the same four items used for employees. *Job satisfaction* was measured with the same three items from

the IOR scale used for employees. *Appraisal distortion,* the extent to which managers tended to distort employees' performance appraisal ratings to further their own self-interests, rather than to assess employees' performance accurately, was measured by a nine-item scale developed from the research of Longenecker, Gioia, and Sims (1987). The items asked about the extent to which managers tended to inflate or deflate performance ratings for a variety of different purposes. These included (1) *inflation* because the unit would look bad to outsiders; the rating would become a permanent part of the individual's file; state salaries were low enough without making people lose merit money; conflict with the employee would likely result; and the employee's recent performance was better than his or her earlier performance; and (2) *deflation* to get employees back on track; remind them who is boss; and get them to think about leaving the unit because they were not welcome by the manager. A final item asked the extent to which the manager's own boss tended to distort appraisals. This scale was reverse-scored so that a high score reflected less appraisal distortion. Intercorrelations between the dependent variables assessed for managers were of moderate size, ranging from .07 to .68 (decreased work problems and satisfaction with appraisal system). These relationships are shown in Table 6.

Table 6

Correlation Matrix of Managers' Outcome Variables*

Variable	Mean	1	2	3
1. Decreased work problems	2.75 (1.04)	.67**	.24	.07
2. Satisfaction with system	3.26 (.74)		.28*	.68**
3. Satisfaction with job	2.99 (.55)			.52**
4. Appraisal distortion	4.24 (.58)			—

* $p < .05$; ** $p < .01$.
* Standard deviations are in parentheses. Degrees of freedom range from 67 to 62.

Analyses

We performed MANCOVAs, using the pre-survey measures as covariates, to check the effectiveness of the due-process appraisal manipulation. Separate ANCOVAs, using the pre-survey measure of the relevant dependent variable as a covariate, were performed to test hypotheses.

RESULTS

Due-process Manipulation Checks

MANCOVAs performed on the due-process manipulation checks provided strong evidence that the manipulation was perceived as intended by both employees and managers (Wilks $\lambda_{10,44} = .33$, $p < .00$; and Wilks $\lambda_{10,42} = .28$, $p < .00$, respectively). Table 7 shows the univariate ANCOVAs.

Table 7

ANCOVAs on Due Process Manipulation Checks

Variable	Control mean	Due process mean	d.f.	F
Employees				
Fair hearing				
Final review session held*	14.00	40.00	1	15.43**
Employee conducted self-appraisal	5.00	31.00	1	19.37**
Adequate notice				
Employee input to process	3.09	3.70	1, 43	9.20**
Performance expectation meeting	12.00	33.00	1	6.61**
Supervisor communicated				
performance expectations	2.48	3.45	1, 44	9.89**
Frequency of feedback	3.05	3.37	1, 50	1.43
Mid-study feedback meeting held*	4.00	33.00	1	15.61**
Judgment based on evidence				
Validity of appraisal form	2.68	3.53	1, 46	4.46*
Supervisor's honesty	3.59	3.92	1, 52	4.20*
Managers				
Fair hearing				
Final review session held*	19.00	38.00	1	10.18**
Employee conducted self-appraisal*	8.00	27.00	1	8.54**
Adequate notice				
Employee input to process	3.42	3.98	1, 49	6.47**
Performance expectation meeting*	16.00	38.00	1	14.44**
Supervisor communicated				
performance expectations	3.26	4.04	1, 44	11.02**
Frequency of feedback	3.38	3.50	1, 49	5.61*
Midway feedback meeting held*	8.00	29.00	1	13.64**
Judgment based on evidence				
Validity of appraisal form	2.54	3.71	1, 48	22.05**
Supervisor's honesty	3.68	4.07	1, 51	5.62*

* $p < .05$; ** $p < .01$.
* Variable is dichotomous; mean = number of yes responses; χ^2 statistic used instead of F.

Due-process-group employees reported significantly higher perceptions than the control group on all due-process manipulation check variables except the frequency of feedback received. Due-process-group managers reported significantly higher perceptions on all due-process variables than did control-group managers.

Sensitization Check Variables

No significant differences were found between control- and due-process-group employees on either their satisfaction with training opportunities ($M_c = 3.07$, $M_{dp} = 3.16$; $F_{1,53} = .75$, n.s.) or the extent to which they perceived that the organization recognized good performance ($M_c = 2.96$, $M_{dp} = 2.96$; $F_{1,50} = .001$, n.s.). Nor were significant differences found for managers on the satisfaction with training variable ($M_c = 3.02$, $M_{dp} = 3.07$; $F_{1,50} = .046$, n.s.) or their perceptions of the organization's recognition of good performance ($M_c = 3.21$, $M_{dp} = 3.00$; $F_{1,51} = .73$, n.s.). Since these two variables tended to display lower internal consistency reliabilities than did the majority of variables used in the study—possibly because participants had no

clear frame of reference for responding to them—the attenuation formula was used to determine whether any of the four relationships would be significant under conditions in which the measures had perfect reliability (Nunnally, 1978). Once again, none of the relationships was found to be significant. Thus, results failed to provide any support for the idea that study findings were biased by participants' sensitization to the treatment.

Performance Ratings

Analysis of variance results showed that control-group performance ratings were significantly greater than those of the due-process group on both the rating category assessed on the final survey and on the appraisal form itself (managers' reports: $M_c = 4.29$; $M_{dp} = 3.84$; $F_{1,56} = 3.05$, $p < .05$; appraisal form: $M_c = .82$, $M_{dp} = .29$; $F_{1,63} = 65.08$, $p < .00$). These findings are not surprising, given the existing appraisal system's reputation for rating inflation versus the judgment-based-on-evidence component of the due-process appraisal system. Once again, however, the preliminary results support the idea that more favorable reactions by due-process employees were caused by the due-process appraisal system, not by other factors such as higher performance ratings.

Managers' Reward Contingencies

We examined managers' perceptions of their reward contingencies to ensure that a perceived negative effect of the due-process appraisal system did not constrain their favorable reactions to the system. Only one of the four contingencies showed even a tendency to differ for the control and due-process groups. In this case, experimental-group managers felt it was less likely that providing accurate performance appraisals would decrease the productivity of their work units ($p < .10$). Thus, if anything, the due-process manipulation slightly increased managers' motivation to evaluate their employees' performance accurately and would not be expected to constrain their favorable reactions to the system.

Tests of Hypotheses

Employees' reactions. Table 8 shows the results of testing hypotheses 1–5, on employees' reactions to the appraisal system. Hypothesis 1 predicted that due-process-group employees would perceive the appraisal system as being fairer, and their own appraisal as being more accurate, than would control-group employees. This hypothesis received strong support, with significant effects on both dependent variables. Hypothesis 2, predicting a positive impact on employees' satisfaction with the due-process appraisal system and with their appraisal score, was also supported. Due-process-group employees expressed significantly greater satisfaction with the appraisal system and with their appraisal rating than did control-group employees, despite the fact that the overall mean appraisal rating for the due-process group was significantly lower than that of the control group. But hypothesis 3, predicting that due-process-group employees' would report greater job satisfaction than the control group, was not supported.

Table 8

ANCOVAs on Employees' Outcome Variables

Variable	Control group mean	Experimental group mean	d.f.*	F
Fairness of appraisal	3.46	3.96	1, 50	3.07**
Accuracy of appraisal	3.25	3.67	1, 48	3.01**
Satisfaction with appraisal system	3.15	3.46	1, 50	3.42**
Satisfaction with rating	3.44	3.97	1, 50	3.61**
Satisfaction with job	4.07	3.96	1, 52	.43
Evaluation of manager	3.59	3.92	1, 52	4.20**
Satisfaction with organization	3.77	3.66	1, 52	.43
Motivation to improve	3.38	3.55	1, 50	.49
Intention to remain	3.73	4.05	1, 53	2.31*

$p < .10$; $p < .05$.
* Degrees of freedom vary due to missing values on some scales.

Hypothesis 4, which proposed that due-process-group employees would evaluate their managers more favorably and report greater satisfaction with the employing organization than control-group employees, received only partial support. While due-process-group employees did evaluate their managers significantly more favorably than did the control group, the two groups did not differ significantly in their satisfaction with the employing organization. Finally, hypothesis 5, which predicted that due-process-group employees would report a greater increase in their motivation to improve performance and their willingness to remain in the organization than those in the control group, also received partial support. Due-process-group employees did not express significantly greater motivation to improve performance than did those in the control group, but they did report a greater tendency to remain organizational members.

Managers' reactions. Table 9 reports the results of testing hypotheses 6 through 8, on managers' reactions to the due-process appraisal system. Hypothesis 6, which predicted that due-process-group managers would report greater resolution of unit work problems and greater satisfaction with the appraisal system than would control-group managers, received strong support. Hypothesis 7, predicting that due-process-group managers would express significantly greater job satisfaction than would control-group managers,

Table 9

ANCOVAs on Managers' Dependent Variables

Variable	Control group mean	Experimental group mean	d.f.*	F
Decreased work problems	2.34	3.02	1, 48	5.05*
Satisfaction with appraisal system	3.09	3.50	1, 48	3.59*
Satisfaction with job	2.87	3.01	1, 51	3.83*
Appraisal distortion†	4.03	4.35	1, 48	2.98*

$p < .05$.
* Degrees of freedom vary due to missing values on some scales.
† Variable is reverse-scored.

was also supported. Finally, hypothesis 8—that due-process-group managers would display less tendency to distort appraisal results to further their own self-interests than would those in the control group—was also supported.

DISCUSSION

This field experiment tested the impact of a due-process performance appraisal system (Folger, Konovsky, and Cropanzano, 1992) on employees' and managers' perceptions of fairness and on their attitudinal and behavioral reactions over a three-month period. Overall, results provided fairly strong support for the effects of a due-process appraisal system on the reactions of employees and managers.

The research makes at least three contributions to the existing literature on procedural justice, two theoretical and one practical: (1) extending research on the determinants of procedural justice judgments (Lind and Tyler, 1988) to a due-process intervention and providing additional support for the external validity of procedural justice effects; (2) examining managers' reactions to an intervention increasing procedural justice for their employees at the expense of their own freedom to distort appraisal results; and (3) investigating the impact of a due-process appraisal system on the reactions of employees and managers to their jobs and their organization.

Readers should consider these contributions in light of three potential limitations. First, the public sector organization studied is one that places more emphasis on employment stability than on pay and employee development. This fact may have heightened the salience of the due-process manipulation for employees and strengthened its favorable effects. Second, the employee control group displayed a greater dropout rate than did the due-process group. Although analyses of demographics and pre-survey measures suggest that this did not bias the results, this possibility cannot be completely ruled out. Finally, it may be that the study's pre-post research design may have sensitized participants to the purpose of the research or that differences in the treatment of the due-process and control groups may have demoralized control group members. Analyses of the check variables, however, suggest that neither sensitization nor demoralization were major determinants of the results presented here. Having identified potential weaknesses in the research, we now examine its contributions in greater depth.

Extension of Procedural Justice Research

Employees in the due-process condition of this study perceived greater accuracy and fairness in the appraisal system and greater satisfaction with appraisals than did those in the control group, even though they received significantly lower performance evaluations. Thus it appears that due-process features, including elements of procedural and interactional justice, can increase employees' sense of fairness about organizational processes (Lind and Tyler, 1988).

Surprisingly, the due-process appraisal system did not affect broader job and organizational attitudes for employees, although such results have emerged from previous research, both lab experiments and field studies (Burke and Wilcox, 1969; Lissak, 1983; Kanfer et al., 1987; Nathan, Mohrman, and Milliman, 1991; Moorman, 1992). It seems likely that in actual work settings, employees' reactions to their jobs and organization are affected by many different human resource procedures, including performance appraisal. Employees in this study may have been waiting to see whether changes in the performance appraisal system would lead to other job and organizational changes.

It is also noteworthy that procedural justice effects on behavioral variables, such as the motivation to improve, were nonexistent in this study, despite the fact that the variables were chosen to minimize potential contaminants such as ability and opportunity. This finding strengthens Lind and Tyler's (1988) tentative conclusion that performance increments from enhanced procedural justice have been less consistent in cases of performance evaluation. Due-process-group employees, however, did tend to report stronger behavioral intentions to remain in the organization than did the control group, a finding that replicates results from two earlier studies (Alexander and Ruderman, 1987; Tyler, 1990). In light of growing evidence of procedural justice effects on organizational citizenship behaviors (Konovsky and Folger, 1991; Moorman, 1992), we conclude that increased procedural justice in organizations is more likely to affect the display of discrete behaviors reflecting loyalty and commitment to the organization than ongoing, day-to-day job performance.

Finally, due-process-group employees evaluated their supervisor's competence more favorably than did control-group employees, despite receiving significantly lower evaluations. This result supports Tyler's (1990) proposal that a managerial strategy based on procedural justice will be more effective in maintaining employees' loyalty and commitment toward the work organization and its representatives than one based on distributive justice or outcome favorability. A quote from one of the due-process-group employees indicates that improved communication may be responsible for more favorable evaluations of supervisors: "I like discussing the expectations about what you have to do on your job ahead of time because supervisors tend not to tell you this. With the new method, you don't have any surprises, unlike with the current system, and it tends to get rid of some of the politics."

Future research and theorizing are needed to integrate the growing number of conceptual models specifying the determinants of procedural justice. As noted in the introduction, the due-process metaphor examined here is consistent with different, yet similar formulations presented by Thibaut and Walker (1975, 1978), Leventhal (1976), and Tyler and Lind (1992). But, because clear statements of the similarities and differences in these models do not appear in the literature, it is increasingly difficult to determine the consistency of findings across different procedural justice

manipulations and to evaluate critically the contribution of existing theory.

Managers' Reactions to Increased Procedural Justice

Previous research on procedural justice has largely ignored managers' reactions to human resource systems that safeguard employees' interests. This is unfortunate because, without managers' support and cooperation, it is unlikely that employees can experience *true* due process in organizations (Longenecker, Gioia, and Sims, 1987). Some researchers (e.g., Pfeffer, 1981) have argued that multiconstituent decision-making systems, such as the due-process one presented here, cannot succeed because of differences in the power, information, and negotiation skills of the two parties. Others (e.g., Folger, Konovsky, and Cropanzano, 1992), however, have noted that a due-process system does not require the full equalization of power, only that managers remain open to employee input and be responsive to the reasoned questioning of standards and evaluations. Further, managers seem likely to benefit considerably from such a sharing of power, since their own effectiveness is heavily dependent on the long-term efforts of their employees.

In this study, due-process-group managers reported greater satisfaction with the appraisal system, a greater ability to resolve work problems, and less distortion of appraisal results than did control-group managers. These results support Folger, Konovsky, and Cropanzano's (1992) contention that managers can move beyond their own self-interests to increase the procedural justice within the performance appraisal process, and that, when doing so, they and the organization will experience many benefits. Nevertheless, two observations about this study seem appropriate. First, this research addressed concerns about unequal negotiation skills and information between the parties by training both in how to negotiate disagreements and how to collect and document performance information. This training undoubtedly helped to overcome obstacles that typically make the sharing of power difficult in organizations. Second, in this study, the procedural justice intervention did *not* negatively affect managers' reward contingencies or directly threaten their self-interests; such effects would have most certainly undermined the working of the due-process system.

Future research is needed to examine the conditions under which the more powerful organizational members, such as supervisors, are willing to accept and support procedural justice interventions that constrain their ability to determine unilaterally the outcome of work disputes. Such knowledge will be very important to designers of organizational procedural justice systems. As Ury, Brett and Goldberg (1989: 74) stated, "Why should teachers participate in the design of a procedure that will make it easier for students to raise complaints about their grades? . . . Understandably, parties who are 'winning' with the current system may be unwilling to help change it." In this study, managers were willing to help change the system and came to prefer it over the previous system. As one manager put it, "I like the system and think it is a good one. It forces a manager to

spend time giving employees the feedback they need and helps them to communicate needed changes in priorities and performance expectations. Initially, having to set expectations made my job harder but a lot of misunderstandings came out in our initial expectation setting meeting and clearing these up then made my job easier."

This research supports the viability of the due-process metaphor (Folger, Konovsky, and Cropanzano, 1992) as a mechanism for increasing the contribution of performance appraisal systems to organizational effectiveness. The system studied here increased perceived appraisal accuracy, decreased rating inflation, and generated favorable reactions from both managers and employees, despite requiring significantly more time and effort from them. These results are quite exciting, given that both research and practice suggest that favorable reactions to performance appraisal systems are rare. A due-process approach seems likely to facilitate the design of appraisal systems that more fully achieve their potential contributions to employee development, reward allocation, and legal documentation. Rather than elusive, the goal of designing an effective appraisal system could even be a realistic one.

REFERENCES

Alexander, Sheldon, and Marian Ruderman
1987 "The role of procedural and distributive justice in organizational behavior." Social Justice Research, 1: 117–198.

Banks, Christine G., and Kevin R. Murphy
1985 "Toward narrowing the research-practice gap in performance appraisal." Personnel Psychology, 38: 335–345.

Bernardin, H. John, and Peter Villanova
1986 "Performance appraisal." In E. A. Locke (ed.), Generalizing from Laboratory to Field Settings: 43–62. Lexington, MA: D. C. Heath.

Bies, Robert J., and J. S. Moag
1986 "Interactional justice: Communication criteria of fairness." In R. J. Lewicki, B. H. Sheppard, and M. H. Bazerman (eds.), Research on Negotiations in Organizations, 1: 43–55. Greenwich, CT: JAI Press.

Burke, Ronald J., and D. S. Wilcox
1969 "Characteristics of effective employee performance review and development interviews: Replication and extension." Personnel Psychology, 25: 291–305.

Cleveland, Jeanette N., Kevin R. Murphy, and Richard E. Williams
1989 "Multiple uses of performance appraisal: Prevalence and correlates." Journal of Applied Psychology, 74: 130–135.

DeNisi, Angelo S., and Kevin J. Williams
1988 "Cognitive approaches to performance appraisal." In G. Ferris and K. Rowland (eds.), Research in Personnel and Human Resource Management, 6: 109–155. Greenwich, CT: JAI Press.

Dipboye, Robert L., and Rene de Pontbriand
1981 "Correlates of employee reactions to performance appraisals and appraisal systems." Journal of Applied Psychology, 60: 736–741.

Dorfman, Peter, W. G. Stephan, and J. Loveland
1986 "Performance appraisal behaviors: Supervisor perceptions and subordinate reactions." Personnel Psychology, 39: 579–597.

Dunham, Randall B., and Frank J. Smith
1979 Organizational Surveys. Glenview, IL: Scott-Foresman.

Earley, P. Christopher
1984 "Informational mechanisms of participation influencing goal acceptance, satisfaction and performance." Unpublished doctoral dissertation, University of Illinois, Champaign.

Earley, P. Christopher, and E. Allan Lind
1987 "Procedural justice and participation in task selection: The role of control in mediating justice judgments." Journal of Personality and Social Psychology, 52: 1148–1160.

Folger, Robert
1977 "Distributive and procedural justice: Combined impact of 'voice' and improvement on experienced inequity." Journal of Personality and Social Psychology, 35: 108–119.

Folger, Robert, and R. J. Bies
1989 "Managerial responsibilities and procedural justice." Employee Responsibilities and Rights Journal, 2: 79–90.

Folger, Robert, and Mary A. Konovsky
1989 "Effects of procedural and distributive justice on reactions to pay raise decisions." Academy of Management Journal, 32: 115–130.

Folger, Robert, Mary A. Konovsky, and Russell Cropanzano
1992 "A due process metaphor for performance appraisal." In B. M. Staw and L. L. Cummings (eds.), Research in Organizational Behavior, 13: 129–177. Greenwich, CT: JAI Press.

Fulk, Janet, Arthur P. Brief, and Stephen H. Barr
1985 "Trust-in-supervisor and perceived fairness and accuracy of performance evaluations." Journal of Business Research, 13: 299–313.

George, Jim
1986 "Appraisal in the public sector: Dispensing with the big stick." Personnel Management, 18: 32–35.

Graen, George
1976 "Role-making processes within complex organizations." In M. D. Dunnette (ed.), Handbook of Industrial and Organizational Psychology: 1201–1245. Chicago: Rand McNally.

Greenberg, Jerald
1986 "Determinants of Perceived Fairness of Performance Evaluation." Journal of Applied Psychology, 71: 340–342.

Ilgen, Daniel R., Cynthia D. Fisher, and M. Susan Taylor
1979 "Consequences of individual feedback on behavior in organizations." Journal of Applied Psychology, 64: 349–371.

Kanfer, Ruth, John Sawyer, P. Christopher Earley, and E. Allan Lind
1987 "Fairness and participation in evaluation procedures: Effects on task attitudes and performance." Social Justice Research, 1: 235–249.

Karambayya, Rekha, and Jeanne M. Brett
1989 "Managers handling disputes: Third-party roles and perceptions." Academy of Management Journal, 32: 687–704.

Konovsky, Mary A., and Robert Folger
1991 "The effects of procedural and distributive justice on organizational citizenship behavior." A.B. Freeman School of Business Working Paper Series, 91-HRMG-01, Tulane University.

Leventhal, Gerald S.
1976 "Fairness in social relationships." In J. W. Thibaut, J. T. Spence, and R. C. Carson (eds.), Contemporary Topics in Social Psychology: 211–240. Morristown, NJ: General Learning Press.

Leventhal, Gerald S., J. Karuza, and W. R. Fry
1980 "Beyond fairness: A theory of allocation preferences." In G. Miikula (ed.), Justice and Social Interaction: 167–218. New York: Springer-Verlag.

Lind, E. Allan, and Tom R. Tyler
1988 The Social Psychology of Procedural Justice. New York: Plenum.

Lissak, Robert I.
1983 "Procedural fairness: How employees evaluate procedures." Unpublished doctoral dissertation, University of Illinois, Champaign.

Lissak, Robert I., and Blair H. Sheppard
1983 "Beyond fairness: The criterion problem in research on dispute intervention." Journal of Applied Social Psychology, 13: 45–65.

Locke, Edwin A.
1976 "The nature and causes of job satisfaction." In M. D. Dunnette (ed.), The Handbook of Industrial and Organizational Psychology: 1297–1350. Chicago: Rand McNally.

Longenecker, Clinton O., Dennis A. Gioia, and Henry P. Sims
1987 "Behind the mask: The politics of employee appraisal." Academy of Management Executive 1(3): 183–193.

McFarlin, Dean B., and Paul D. Sweeney
1992 "Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes." Academy of Management Journal, 35: 626–637.

Meyer, Herbert
1991 "A solution to the performance appraisal feedback enigma." Academy of Management Executive 5(1): 68–76.

Moorman, Robert H.
1992 "Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship?" Journal of Applied Psychology, 76: 845–855.

Mount, M. K.
1983 "Comparisons of managerial and employee satisfaction with a performance appraisal system." Personnel Psychology, 36: 99–110.

Murphy, K. R., and Jeanette N. Cleveland
1991 Performance Appraisal: An Organizational Perspective. Needham Heights, MA: Allyn and Bacon.

Napier, Nancy K., and Gary P. Latham
1986 "Outcome expectancies of people who conduct performance appraisals." Personnel Psychology, 39: 827–837.

Nathan, Barry R., Allan M. Mohrman, and John Milliman
1991 "Interpersonal relations as a context for the effects of appraisal interviews on performance and satisfaction: A longitudinal study." Academy of Management Journal, 34: 352–369.

Nunnally, Jum C.
1978 Psychometric Theory. New York: McGraw-Hill.

Pfeffer, Jeffrey
1981 Power in Organizations. Marshfield, MA: Pitman.

Thibaut, John W., and Laurens Walker
1975 Procedural Justice: A Psychological Analysis. Hillsdale, NJ: Erlbaum.
1978 "A theory of procedure." California Law Review, 66: 541–566.

Tyler, Tom R.
1989 "The psychology of procedural justice: A test of the group value model." Journal of Personality and Social Psychology, 57: 333–344.
1990 "Using procedures to justify outcomes: Managing conflict and allocating resources in work organizations." Dispute Resolution Research Center Working Paper, Kellogg Graduate School of Management, Northwestern University.

Due Process

Tyler, Tom R., and E. Allan Lind
1992 "A relational model of authority in groups." In Mark Zanna (ed.), Advances in Experimental Social Psychology, 25: 115–191. New York: Academic Press.

Tyler, Tom R., and Randall Schuller
1990 "A relational model of authority in work organizations: The psychology of procedural justice." Unpublished manuscript, American Bar Foundation, Chicago.

Ury, William L., Jeanne M. Brett, and Stephen B. Goldberg
1989 Getting Disputes Resolved. San Francisco: Jossey-Bass.

Valley, Kathleen L.
1989 "Rank and relationship effects on procedural choice in conflict management." Dispute Resolution Research Center Working Paper, Kellogg Graduate School of Management, Northwestern University.