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**Interpersonal Relations as a Context for  
Improving the Effect of Performance  
Appraisal Interviews on Employee  
Performance and Satisfaction: A  
Longitudinal Study**

**CEO Publication  
T 89-10 (153)**

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## ABSTRACT

INTERPERSONAL RELATIONS AS A CONTEXT FOR IMPROVING  
THE EFFECT OF PERFORMANCE APPRAISAL INTERVIEWS ON EMPLOYEE  
PERFORMANCE AND SATISFACTION: A LONGITUDINAL STUDY

A field study was conducted to determine the effect of supervisor-subordinate interpersonal relations and the content and conduct of the appraisal review on reactions to the performance appraisal review, and job satisfaction and job performance after the review. Relations were measured one to two months before the reviews; subordinates' reactions to the review, job satisfaction, and the managers' evaluation of their performance were measured one to two months after the review. Hierarchical regressions showed that reactions to the review were affected by interpersonal relations and the appraisal content and conduct variables, even after statistically controlling for the level of the evaluation. The conduct and content of the appraisal resulted in changes in job performance and satisfaction, even after controlling for interpersonal relations and the level of evaluation.



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Few topics in personnel research have received as much attention as performance appraisal. Accurate feedback about performance is regarded as critical to an employee's ability to perform effectively in organizations. However, research on the performance review process has been limited in two ways. First, most of this research generally has ignored the interpersonal context within which the review takes place (Wexley & Klimoski, 1984). Instead, much of this research "has treated raters as faulty but motivationally neutral elements of the appraisal process and has concentrated on improving their accuracy by minimizing these faults with improved rating scales formats, and training" (Hogan, 1987, p. 364). Second, most of the studies of the performance appraisal review and feedback process have used employee reactions to the appraisal, such as one's self-reported motivation to improve performance, as the dependent variables for evaluating the review (Bernardin & Beatty, 1984). Whether performance appraisal reviews actually change subsequent employee performance and work attitudes is still very much an open question. Many managers are often skeptical that it does (Mohrman, Resnick-West, & Lawler, 1989).

This paper investigates the efficacy of performance appraisal within organizational settings by considering not just what took place in the review, its content and conduct, but also the typically overlooked interpersonal context within which performance appraisals are conducted. In addition, a longitudinal design is adopted in order to study whether performance appraisal reviews result in actual changes in employee performance and job satisfaction. Specifically, we tested whether appraisal

reviews will have any effect on employee reactions to the review, subsequent work performance and job attitudes, and whether these effects are moderated by the supervisor-subordinate relationship.

#### The Interpersonal Context of Appraisals

The performance appraisal interview is only one incident in the ongoing relationship between supervisors and subordinates that takes place day-in and day-out, year after year. The effect of this once-a-year review on employee motivation, performance, satisfaction, attitudes toward the company, the supervisor, and even reactions to the appraisal, must be considered within the broader context of the ongoing interpersonal relationships between employees and their supervisors. Clark and Reis (1988) describe a relationship as an interdependence between two people, where "two people's behaviors, emotions and thoughts are mutually and causally interconnected . . . . A relationship is close to the extent that it endures and involves strong, frequent, and diverse causal interconnection" (p. 611). By definition, the jobs of supervisor and subordinate are interconnected; the success of one is ultimately dependent on successful performance by the other. Beer (1981) states, "There is no substitute for a good supervisor-subordinate relationship. Without such a relationship, no performance appraisal system can be effective" (p. 32).

Surprisingly, the interpersonal relationship between the supervisor and the subordinate as a factor affecting the performance appraisal review has received only limited attention. Burke and Wilcox (1969) found that the level of openness in supervisor-subordinate communication was related to greater subordinate satisfaction with the company, job satisfaction, and the performance appraisal. Perceptual congruence, the extent to which the subordinate-supervisor pair are perceptually aware of each other's

work-related attitudes, has been shown to affect supervisor perceptions of the subordinate's performance and both the subordinate's job satisfaction and evaluation of the supervisor's leadership performance (Pulakos & Wexley, 1983; Wexley, Alexander, Greenawalt, & Couch, 1980; Wexley & Pulakos, 1983). Finally, researchers studying leader-member exchange (LMX), or the vertical dyadic linkage between managers and their supervisors (VDL), have found that subordinates who are part of the supervisor's in-group experience greater trust, more support, increased interactions, and receive more informal and formal rewards compared to out-group members (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986; Graen, Novak, & Sommerkamp, 1982).

Interpersonal relations may affect what information is conveyed in the appraisal review, how it is conveyed, and whether the employee will be motivated to react to the information in a manner consistent with the desires of the supervisor. Subordinates may self-impose or "enact" limitations or barriers to their own behavior based on past experiences (Weick, 1977, 1979). In so doing, subordinates can limit their participation in the review process (regardless of the "opportunity" they are given to speak), when other experiences with the supervisor suggest that their comments will be rebuffed or ineffectual. Conversely, past openness on the part of both individuals is likely to foster further discussions during the review. Weick (1979) also notes that, ". . . people invent [emphasis in the original] rather than discover part of what they think they see" (p. 166). In other words, rather than what is actually said, what the subordinate believes was said can determine employee reactions to the appraisal interview.

If Weick is correct, then subordinate reports of what took place during the appraisal interview will be related to the quality of the supervisor-

subordinate relationship. Three aspects were used to evaluate the content and conduct of the appraisal. Two characteristics of effective performance appraisal reviews frequently mentioned in the literature are: (1) the degree to which the discussion is focused on less personal criteria such as goals, specific behaviors, or results, and (2) whether the subordinate has an opportunity to participate in the review (Burke, Weitzel, & Weir, 1978; Burke & Wilcox, 1969; Dipboye, 1985; Dipboye & de Pontbriand, 1981; Greller, 1978; Landy, Barnes, & Murphy, 1978; Landy, Barnes-Farrell, & Cleveland, 1980; Nemeroff & Wexley, 1979). In addition, Lawler, Mohrman, & Resnick (1984) suggest that a third characteristic of reviews, discussions of career issues, is important to subordinates. Unlike feedback that is directed at performance of the work itself, career discussions let people know where they stand by focusing on how performance can lead to desired career outcomes.

Hypothesis 1: Supervisor-subordinate interpersonal relations before the review will be related to the following aspects of the review: (a) the evaluations criteria of the appraisal, i.e., the degree to which the evaluation was based on behavioral and results-oriented criteria, (b) if it covered career issues as well as performance issues, and (c) if the subordinate had an opportunity to participate in the discussion.

The above discussion also suggests that subordinate reaction to the performance appraisal interview is dependent on more than just the content and conduct of the interview. Subordinate satisfaction with the review, and evaluations of its quality and utility, also will depend on the ongoing interpersonal relations between the supervisor and the subordinate at the time of the review.



Hypothesis 2a: The three review variables (content and conduct of the appraisal), will be related to three measures of employee reactions to the review: their ratings of satisfaction with the review, its quality, and the utility of the review.

Hypothesis 2b: There will be a significant interaction effect between supervisor-subordinate relations and the content and conduct of the review on the three reactions to the review.

### Changing Job Performance and Job Satisfaction

While positive reactions to the appraisal are desirable, the ultimate purpose of the performance review is to change employee performance. Only a few studies have used actual performance measures, and these have been methodologically limited, relying on the correlations between various review variables and performance. Simple correlations between employee reactions to the appraisal and job performance are not sufficient; employees who are better performers may report higher quality reviews, rather than appraisal reviews actually leading to higher performance (Dorfman, Stephan, and Loveland, 1986). Thus, to evaluate the effectiveness of a performance review, the change in performance since the review must be determined. To measure change statistically, performance before the review must be controlled for in any measure of after-review performance. In one of the few studies to measure actual changes in performance as a result of a performance review, Dorfman, et al. (1986) found the appraisal interview did not result in a change in job performance measured one year later. However, their inability to find an effect of the appraisal on subsequent performance may have been caused by the severe range restriction occurring in the performance measures they were able to collect; their pre- and post-review

performance ratings averaged 3.48 and 3.51 on a four-point scale, with standard deviations of only .33 and .35, respectively.

To summarize, while it is often assumed that performance appraisal affects employee performance, support for this assumption is weak. Furthermore, as with reactions to the appraisal, how much employee performance changes due to the appraisal review is likely to depend on the ongoing interpersonal relationship between the supervisor and the subordinate.

Hypothesis 3a: The content and conduct of the review will be related to a change in subordinate performance from before the review to after it.

Hypothesis 3b: There will be an interaction effect between interpersonal relations and the review variables on the change in performance.

Change in performance is not the only possible outcome of an effective performance appraisal; satisfaction with work, the supervisor, and the organization may also be affected. Systems theorists have long argued that to be successful, organizational practices must integrate not only the needs of the organization, but also those of individual actors within the organization (Argyris, 1964). Berrien (1976) takes a similar position; for a social system to survive and grow requires both its "formal achievements" (FA), the products of the organization's work groups, as well as Group Need Satisfaction (GNS), "arising out of the interactions of the role incumbents themselves" (p. 48). Performance appraisal reviews would seem to be an important vehicle for exchanging expectations about GNS and FA.

As with performance, how much the review changes employee attitudes will be affected by the nature of the ongoing supervisor-subordinate relation-

ship. Thus, this paper also investigates whether performance appraisals can change employee attitudes about their work, the supervisor, and even the organization.

Hypothesis 4a: The content and conduct of the performance review will be related to a change in subordinate satisfaction with work, the supervisor, and the organization from before to after the review.

Hypothesis 4b: There will be an interaction effect between supervisor-subordinate relations and the review content and conduct variables on subordinate satisfaction with work, organization, and the supervisor.

## METHOD

### Sample and Design

Questionnaires designed to study the organization's performance appraisal practices were administered to randomly selected supervisor-subordinate pairs at two points in time, three to four months apart, with the performance review in the middle. The sample in this study consisted of exempt employees (mostly professionals and managers) and their supervisors in a large multinational, multi-industry corporation. In all cases, the immediate supervisor was the sole appraiser. Pre-review data were collected in September and October ("before" data). The reviews were conducted from October to December (though some ran into early January). The second wave of data collection took place in late December and January ("after" data).

Originally, 593 pairs were identified. In this "before" sample, 530 subordinates and 519 supervisors responded, approximately 89% and 88% of the total, respectively. The "after" questionnaires were sent to only these respondents; 417 subordinates and 391 supervisors responded, 79% and 75%, respectively. The bulk of the unreported questionnaires were due to

turnover, primarily promotion and transfer. Additional data were lost due to missing data on the variables.

### Measures

Independent variables consisted of subordinate responses to an interpersonal relations scale, and three variables measuring the content and conduct of the review. Interpersonal relations were measured before the appraisal interview. Subordinates responded to the following question: "At the present time my relationship with my supervisor is . . . ," followed by seven semantic differential items: tense/relaxed, cautious/free, distrusting/trusting, bad/good, productive/destructive, friendly/hostile, pleasant/unpleasant. These items constitute a general measure of the quality of the interpersonal relationship, not specific aspects of the relationship.

As mentioned previously, the three review variables (content and conduct) were measured along three dimensions: criteria upon which the evaluation was based (criteria), career discussion (career), and opportunity of the subordinate to participate in the appraisal discussion (participation). The criteria scale consisted of four five-point items measuring the extent the actual evaluation was based on: results achieved, job-related behaviors, skills and abilities, and predetermined goals. The more an evaluation was perceived to be based on these criteria (versus personality traits, impression, etc.), the better or more appropriate the evaluation criteria were assumed to be. Career discussion was based on two five-point items: how much career and personal development were discussed, and how much specific career development goals were discussed. Participation was measured by three five-point items from Greller's (1978) six-factor contribution scale indicating whether or not the employee made

suggestions about the job, had an impact on how things would be done in the future, and influenced goal setting during the performance review.

The first set of dependent variables, reactions to the performance appraisal review, was measured along three dimensions: quality, satisfaction, and utility of the review. Quality was measured by the subordinates' response to five semantic differential items regarding the review: tense/relaxed, friendly/hostile, constructive/destructive, trusting/distrusting, and open/reserved. Satisfaction was measured by the three-item scale used by Greller (1978) indicating the degree they were satisfied with the review, received an accurate and fair evaluation, and would have improved working relations with their supervisor. Finally, utility of the review was based on a three-item scale also from Greller (1978), measuring the degree to which subordinates felt the review gave them a clearer idea of what the supervisor expected of them, they obtained information enabling them to make specific changes to better performance, and they more clearly understood exact job duties and responsibilities.

Job satisfaction and performance made up the second set of dependent variables. Subordinates rated their job satisfaction one to two months after the review on three seven-point items measuring how satisfied they were with the nature of their work, their supervisor, and their company. Job performance consisted of managers' ratings of their subordinates at the time of the second questionnaire (i.e., one to two months since the review). A single item, seven-point anchored rating scale ranging from "below minimum standards" (1), through "met normal standards" (4), to "far exceeds normal standards" (7), was used.

A series of control variables were also measured in order to assess changes in performance and satisfaction. These included job performance

ratings by the supervisor, and the three elements of job satisfaction rated by subordinates, all measured one to two months before the review. These control variables allowed us to determine if performance and satisfaction changed due to the performance review.

Finally, just as a "performance cue" can affect leadership perceptions (Lord, Binning, Rush, & Thomas, 1978; Rush, Thomas, & Lord, 1977), and perceptions about group processes (Binning & Lord, 1980; Binning, Zaba, & Whattam, 1988; Downey, Chacko, & McElroy, 1979; Staw, 1975), it also can seriously bias reactions to the appraisal (Dipboye & de Pontbriand, 1981; Landy, Barnes-Farrell, & Cleveland, 1980). Therefore, the effect of the favorability of the rating was controlled for by including subordinates' recall of their performance evaluation rating.

### Analyses

Since scales differed in length, scores were standardized prior to analyses. Correlations and hierarchical regressions were used to test these hypotheses. All regression analyses used listwise deletion of missing data (SPSSx, 1986). Listwise deletion computes regressions only on cases that have complete data on all variables in the full equation. Because of its lower sample size compared to pairwise deletion, listwise deletion results in a more conservative, i.e., less powerful, but more appropriate test of whether the additional variables in the regression equation for the same individuals increases the predicted variance in the dependent measure.

## RESULTS

Descriptive statistics and coefficients alphas of the predictor variables, criterion measures, and control variables are presented in Table 1. Pairwise zero-order correlations among all variables are included in Table 2.

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Insert Tables 1 and 2 About Here  
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Hypothesis 1 stated that interpersonal relations measured one to two months prior to the review would be related to subordinate reports of the degree the evaluation was based on the three review variables. Hypothesis 1 was supported. Pre-interview interpersonal relations was significantly correlated with all three appraisal variables: evaluation criteria, .43; career discussion, .21; and opportunity to participate, .18, ( $n=310$ ,  $p < .001$ ) (see Table 2). Even after controlling for the performance rating, the partial correlations remained highly significant, .37, .19, .14, ( $n=297$ ,  $p < .01$  or greater), respectively.

#### Employee Reaction to the Appraisal Interview

Hypothesis 2a predicted that the three performance review variables would affect subordinate ratings of their satisfaction with the review, its quality, and its utility, while Hypothesis 2b predicted the additional effect of an interaction between each of the review variables and interpersonal relations. Because the appraisal interview occurs in the context of the on-going supervisor-subordinate relationship, interpersonal relations was entered into the regression first.<sup>1</sup> Subordinate recall of the performance rating also was forced into the regression equation prior to the review variables since reactions to the review could be affected by the performance rating received. Thus, variables were entered hierarchically in the following order with separate sets of tests for each review variable: (1) pre-review subordinate evaluation of the supervisor-subordinate interpersonal relationship, (2) subordinates' recall of their performance rating, (3) a review variable, (4) the cross-product terms between interpersonal relationship and the review variable. The inclusion of the

two control variables makes for a stringent test of our hypotheses, and should be considered lower bounds of the effect of the last variable in each equation.

As can be seen in Table 3, Hypothesis 2a was supported for all three dependent variables; a significant increase in  $\underline{R}^2$  was found for each of the three review variables, evaluation criteria, career discussion, and opportunity to participate. In contrast, Hypothesis 2b was not supported. None of the three review variable x interpersonal relations cross-product terms added significant variance to the prediction of any of the dependent variables, satisfaction, quality, and utility of the performance appraisal interview.

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Insert Table 3 About Here  
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Interestingly, interpersonal relations and the review variables do not affect the three reactions to appraisal variables equally. The largest effects of career discussion and participation are on the perceived utility of the interview, with change in  $\underline{R}^2$ s of 15% and 16% of the variance in the dependent variable, respectively. In contrast, evaluation criteria has its largest effect on subordinate satisfaction with the review, change in  $\underline{R}^2$  of 14%, while interpersonal relations was most significantly related to perceived quality of the review. (This was also true when interpersonal relations was entered after the three review variables; see footnote 1.) This provides important discriminate validity to the data and the results obtained; despite the perceptual nature of the data, subordinates still made meaningful distinctions among their perceived relations with their supervisor, their recall of what took place during the interview, and their reactions to the review.



### Changes In Satisfaction and Performance

While reactions to the performance appraisal are interesting, the more important issue is whether or not the appraisal had an effect on subsequent employee performance and satisfaction. Hypothesis 3a stated that the review variables would have an effect on performance; hypothesis 4a stated that the review variables would have an effect on work satisfaction, supervisor satisfaction, and satisfaction with the organization. Hypotheses 3b and 4b predicted there would be interaction effects between interpersonal relations and the three review variables on performance and on the three satisfaction variables. Hierarchical regressions were again used to test for significant interactions.

The tests for changes in employee performance were four-step hierarchical regressions with variables entered in the following order: (1) pre-review supervisor-subordinate interpersonal relationship, (2) subordinates' recall of their performance ratings, (3) the review content and conduct variables, and (4) the cross-product term between interpersonal relationships and each of the three review variables. Subordinate recall of the performance ratings was not included in the regression because the job performance measure was obtained from the manager, not the subordinate. Five-step hierarchical regressions were used to test for changes in the three employee satisfaction variables, with the additional variable, subordinates' recall of their performance rating, entered between the pre-review ratings of subordinate satisfaction (step 2) and the review content and conduct variables (step 4).

As would be expected, Table 4 shows that the pre-appraisal measures of performance and satisfaction account for the vast majority of the predicted variance in the post-appraisal measures of these same criterion variables

(step 2 of the regression equations). By including these measures as control variables, these analyses provide a stringent conservative test of the effect of the performance review variables on the organizational outcome variables, performance and satisfaction. More importantly, they allow us to determine if the performance appraisal review results in a change in performance from before to after the review.

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Insert Table 4 About Here  
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Despite the overwhelming effect of past performance on subsequent performance, hypothesis 3a was supported. As can be seen in Table 4, both career discussion and evaluation criteria result in significant changes in managers' ratings of performance, from before the appraisal review to one to two months later. Opportunity to participate had a marginal effect on performance. While these effects are small, a change in  $R^2$  of only .01 for each variable, it is important to recall that these significant effects represent a change in performance where performance was already relatively high before the review, 4.97 on a seven point scale. The effects of the cross-products between interpersonal relations and the review variables on performance were not significant, and hypothesis 3b was not supported.

Hypothesis 4a was supported for satisfaction with the supervisor, and satisfaction with work. In other words, the better conducted the review, (i.e., those in which the performance evaluations were based on behaviors, results, goals, or skills and abilities, where career issues were discussed, and where the subordinate has an opportunity to participate in the discussion), the greater the improvement in the subordinate's satisfaction with the supervisor and, to a somewhat lesser degree, work satisfaction.

Only one of the three review variables significantly affects satisfaction with the organization, evaluation criteria.

Possibly, the most interesting effects are for satisfaction with the organization, where some support for hypothesis 4b was found. The significant cross-product between interpersonal relations and evaluation criteria, and the marginally significant interaction between interpersonal relations and career discussion both were found to affect subordinate satisfaction with the organization. The nature of the interactions is revealed by examination of the significant unstandardized betas. These are negative for both career discussion ( $b = -.48$ ) and participation ( $b = -.55$ ), indicating that good interpersonal relations between the supervisor and the subordinate compensates for a poor interview and vice versa. Other cross-product terms were not significant.

To summarize the results of this study, interpersonal relations measured one to two months before the appraisal interview was related to the content and conduct of the performance appraisal reported by the subordinate (hypothesis 1). These three content and conduct variables, in turn, affected subordinate reactions to the appraisal, even after controlling for the performance evaluation received in the interview, and interpersonal relations, supporting hypothesis 2a. The predicted interaction in hypothesis 2b between the content of the appraisal and interpersonal relations was not found. Changes in employees' performance, satisfaction with their supervisor, and satisfaction with their work were related to the review (hypotheses 3a and 4a). Finally, hypothesis 3b, which predicted an interaction effect between the review variables and interpersonal relations, was not supported. However, some support for hypothesis 4b was found, with the the hypothesized interaction between the review variables

and interpersonal relations resulting in a change in satisfaction with the company, though not in a change in satisfaction with work and the supervisor.

#### DISCUSSION

Organizations are often dissatisfied with the efficacy of performance appraisal (Campbell & Barron, 1982; Locher & Teel, 1977). Our results show that performance appraisal can affect important organizational variables such as performance and satisfaction. By using a longitudinal and highly controlled design (albeit statistical, rather than experimental control), we were able to eliminate many of the weaknesses and alternative explanations that have hampered previous studies. For example, many studies contained no true organizational outcome measures, relying instead on an assumption that appraisal reactions (e.g., feelings of greater motivation), would generalize to subsequent behavior on the job. Other studies had used cross-sectional correlational design, where the direction of causality is ambiguous. Finally, few studies had controlled for the effect of the favorability of the review itself on the subordinate evaluation of the review. The longitudinal design and hierarchical regression analyses used in this study allow us to dismiss all three criticisms. The effect sizes we found were small, but given the number of control variables entered hierarchically in these analyses, our results should be considered a lower limit for the impact of supervisor-subordinate relations and the three content and conduct review variables on reactions to the review and job performance and satisfaction. The actual sizes of the relationship lie somewhere between the results of the hierarchical regressions and the zero-order correlations.

In addition, this paper illustrates that the performance appraisal review cannot be treated as an event taking place outside an interpersonal

context. Researchers studying performance appraisal, as well as managers who administer the appraisals, must also consider the interpersonal relationship between the supervisor and subordinate. Interpersonal relations was viewed here as the general affective relationship (e.g., trust, friendliness, etc.) between the subordinate and supervisor. Interpersonal relations was related to subordinate perceptions of whether they are given an opportunity to contribute to the review discussion, the appropriateness of criteria used in the review, and the degree that career issues were discussed. Thus, previous findings of relationships of participation and goal setting in appraisals with appraisal review satisfaction (Burke, Weitzel, & Weir, 1978; Burke & Wilcox, 1969; Dipboye & de Pontbriand, 1981; Greller, 1978; Landy, Barnes, & Murphy, 1978; Landy et al., 1980; Nemeroff & Wexley, 1979), in part may have reflected the relationship between the subordinate and the supervisor. Since what takes place in the appraisal is in part a function of the interpersonal relationship that has developed between the supervisor and the subordinate, an important means of improving the efficacy of the review is to focus on ways that will improve this relationship.

However, even after controlling for interpersonal relations, the content and conduct of the review still significantly affected subordinate reactions to the appraisal. Examination of the pattern of relationships suggests that subordinate reactions to the appraisal interview are something more than generalized affective reactions to the supervisor, the rating, or even the specific content of the discussion. Satisfaction with the review was most strongly related to the degree the appraisal was based on criteria such as results, goals, behaviors, etc., i.e., observable rather than more impressionistic criteria. In contrast, utility of the review, measuring

such things as obtaining information useful for making changes and understanding exact job duties, was more closely related to career discussion and the degree the subordinate is given an opportunity to participate in the review. This makes sense; employee expectations about performing their work successfully and their ultimate success in the organization would be expected to be affected by the opportunity to suggest, impact, and influence goals and to discuss career-related issues, respectively. Quality of the appraisal, the most general dimension and the one measured by impressionistic ratings of bipolar descriptors rather than specific job-related items, was most strongly related to the interpersonal relations between the supervisor and the subordinate. These relationships between the reaction variables and the content and conduct of the appraisal were not due to the rating received; the actual evaluation was controlled for in this study, and therefore was not a contaminant.

Performance appraisal reviews have generally been regarded as an opportunity for supervisors to provide important performance feedback to their subordinates. However, as noted previously, Greller and Herold (1975) found that employees do not regard supervisors as important sources of performance feedback compared to that received from the job and their own self-perceptions. Stated another way, employees generally believe they have much of the information they need regarding their job performance, and even how they could improve performance in their jobs. Likewise, while we certainly would not disagree that giving performance feedback to employees is important, other explanations for the effects of the appraisal review on subordinate performance and satisfaction must be considered. For example, the significant effects of career discussion and opportunity to participate on subsequent changes in performance and satisfaction, suggest that the

performance appraisal review is something more than just part of a performance-feedback loop. Within the performance appraisal context, supervisors may be more valuable in their role as representatives of the organization than as experts in the subordinate's job. As representatives of the organization, supervisors' responses to employee suggestions can provide important path-clearing resources that allow the subordinate to perform effectively, as well as provide information about what it takes to be successful in the organization, i.e., career information. Finally, supervisors signal a norm of fairness concerning their own evaluation procedure and about the organization as a whole, through the manner by which they conduct the review and the things they discuss during it. In this way, well conducted performance reviews can satisfy important personal growth and equity needs of subordinates.

The appraisal interview also provides employees with a rare opportunity to discuss concerns and observations about their jobs, and make suggestions about work in general, unrelated to those specific problems that arise daily or weekly. This opportunity to contribute has both real and symbolic importance. On the one hand, the review provides the supervisor with an opportunity to exhibit "participative leadership" (House and Mitchell, 1974), taking into account subordinate suggestions and opinions, and removing obstacles that impede progress toward subordinate work and career goals. As such, it allows the employee some control over his or her work performance. This may have been responsible for the change in subordinate performance reported by supervisors who were more participative during the review.

In addition, the opportunity to participate, as well as the criteria the supervisor based the performance evaluation on, can have considerable

symbolic importance, signaling to the employee that the supervisor is fair. Feldman and March (1981) argue that in the presence of uncertainty, a fair or rational procedure will be interpreted favorably. By its very nature, judging performance is an inferential process (Nathan & Alexander, 1985), one where the supervisor's subjectivity can produce a great deal of anxiety or uncertainty on the part of the subordinate. Reviews that focus on the "right" criteria, e.g., goals, behaviors, results, etc., signal that the appraisal was conducted fairly, resulting in a more favorable attitude toward the supervisor, work, and the organization.

This is further evidence for the importance of procedural justice described by Folger and Greenberg (1986). Folger and Konovsky (1989), using cross-sectional data, reported that procedural justice, which included providing performance feedback, performance planning, and providing a recourse to discuss performance and pay increases, was related to organizational commitment, satisfaction with pay increase, and trust in the supervisor. Our longitudinal study using related, though not identical, variables found similar results, with basis of the appraisal, career discussion, and opportunity to participate all being at least marginally directly or indirectly related to satisfaction with the supervisor, the company, the work itself, and performance.

Some limitations of this study should be noted. First, since all measures were perceptual, we cannot know for certain exactly what took place in the review sessions. However, as noted previously, actual events have instrumentality only through the socially constructed reality they stimulate (Weick, 1977). Ultimately, the efficacy of a performance review is the result of what the subordinate believes took place in the interview, not what actually occurred. It is the phenomenological events that the



subordinate acts upon, not "reality." Another problem is that measures of what took place in the appraisal interview, reactions to the interview, and job satisfaction measures were all collected on a common survey. Despite this potential for common method variance, the varying patterns of results between various predictor and criterion variables suggest that these results are much more than a general response bias. In contrast, the performance ratings were not subject to this problem since these ratings came from the supervisor. Neither are the measures of interpersonal relations subject to the same degree of common method variance, as these scores were from a survey administered one to two months prior to the appraisal interview. In addition, the use of hierarchical regression presents a very stringent test for each variable entered last in the regression equation. As noted earlier, given the number of control variables entered in these analyses, our results are lower limits for the impact of these variables on the dependent variables.

Finally, the performance and satisfaction results are actually change scores, in which the post-appraisal dependent variables are first regressed on the same variable measured before the review. Given the relatively high level of performance and satisfaction of the subordinates prior to the review (means of 5.10 to 5.6 on a 7-point scale), the likelihood of additional improvement was quite small. The changes in performance and satisfaction found here attest to the efficacy of performance appraisal, even where the amount of improvement is limited. Since these changes in employee satisfaction or the manager's performance ratings took place only one to two months after the review, history effects are likely to be minimal. The changes are best attributed to the appraisal event.

Our results are more encouraging than those of Dorfman, et al. (1986), who found the performance appraisal review did not result in a change in subordinate performance. A likely explanation for this difference is that their lack of effect was due to severe leniency and range restriction in their performance measures. However, job and industry differences, and differences in the amount of time between performance ratings, may also have been contributing factors.

In conclusion, our initial intent was to point out that subordinate-supervisor interpersonal relations are an important determinant of the effectiveness of a performance appraisal review. Our data indicate that there is an effect of the general interpersonal relationship on both what takes place in the review and on subordinate reactions to the appraisal. We also found that the criteria used as a basis for performance evaluations, the presence of a career discussion, and the subordinate's participation in the review discussion, all significantly affect changes in subordinates' performance and attitudes toward their work, their supervisor, and the organization.

In the future, greater attention needs to be placed on the complex social system within which performance is assessed and feedback is given. Research should investigate other aspects of interpersonal relations such as communication, task interdependency, and reward interdependency that also may have important effects on reaction to the appraisal and subsequent changes in performance and satisfaction. Multiple dimensions of interpersonal relationships need to be identified if we are truly to determine the impact of the complete social relationship between the supervisor and subordinate on performance. Our results also suggest that career planning and discussion in the appraisal deserve further attention.

Finally, more appraisal studies need to go beyond measuring just appraisal reactions, and look at changes in performance and satisfaction.

## FOOTNOTE

1. Hierarchical regressions were also conducted with the three appraisal content variables entered simultaneously at step two and interpersonal relations entered last. Interpersonal relations measured one to two months before the performance appraisal interview had a significant effect on all three measures of subordinate reaction to the appraisal review, even after controlling for the performance evaluation received in the interview, and how well the interview was conducted.

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Table 1

Descriptive Statistics for Independent Variables, Control Variables, and  
Dependent Variables.

Variables	<u>N</u>	Items	Mean	<u>SD</u>	Alpha
Independent Variables:					
Relations (Before)	476	7	5.33	1.30	.92
Evaluation Criteria	337	5	3.53	.71	.80
Career Discussion	340	2	2.53	.94	.86
Participation	334	3	3.80	1.43	.78
Control Variables:					
Employee's Recalled Rating	340	1	5.17	1.27	--
Satisfaction with:					
work itself (before)	508	1	5.51	1.40	--
supervisor (before)	509	1	5.01	1.61	--
organization (before)	509	1	5.58	1.31	--
Rating by Manager (before)	500	1	4.97	1.27	--
Dependent Variables:					
Quality of Review	337	5	5.27	1.34	.89
Utility of Review	339	3	3.59	1.44	.87
Satisfaction with Review	341	3	4.23	1.54	.86
Satisfaction with:					
work itself (after)	337	1	5.50	1.29	--
supervisor (after)	339	1	5.10	1.53	--
organization (after)	339	1	5.62	1.27	--
Rating by Manager (after)	323	1	5.10	1.24	--

Table 2

Zero order correlations among independent variables, dependent variables and control variables, based on pairwise deletion of missing data.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Satisfaction with PA															
2. Quality with PA	.60	--													
3. Utility with PA	.59	.33	--												
4. Satisfaction with Work (After) <sup>a</sup>	.29	.25	.18	--											
5. Satisfaction with Supervisor (After) <sup>a</sup>	.58	.55	.38	.36	--										
6. Satisfaction with Company (After) <sup>a</sup>	.25	.18	.15	.33	.23	--									
7. Satisfaction with Work (Before) <sup>b</sup>	.17	.19	.10 <sup>+</sup>	.52	.21	.19	--								
8. Satisfaction with Supervisor (Before) <sup>b</sup>	.48	.48	.32	.24	.60	.14	.33	--							
9. Satisfaction with Company (Before) <sup>b</sup>	.23	.16	.13	.30	.22	.53	.33	.27	--						
10. Recalled Perf. Rating (Subordinate)	.45	.39	.12 <sup>+</sup>	.28	.32	.11 <sup>+</sup>	.21	.23	.06 <sup>ns</sup>	--					
11. Perf. Rating-Manager (After) <sup>a</sup>	.31	.35	.12 <sup>+</sup>	.19	.21	.10	.25	.16	.02 <sup>ns</sup>	.53	--				
12. Perf. Rating-Manager (Before) <sup>b</sup>	.29	.29	.03 <sup>ns</sup>	.19	.22	.07 <sup>ns</sup>	.11	.19	-.03 <sup>ns</sup>	.55	.70	--			
13. Evaluation Criteria	.64	.49	.44	.27	.51	.27	.22	.44	.24	.42	.30	.23	--		
14. Career Discussion	.42	.33	.48	.15	.28	.08	.02 <sup>ns</sup>	.21	.07 <sup>ns</sup>	.14	.14 <sup>+</sup>	.08	.38	--	
15. Opportunity to Participate	.39	.30	.45	.21	.30	.17	.17	.22	.10 <sup>+</sup>	.23	.08 <sup>ns</sup>	.08	.39	.34	--
16. Interpersonal Relations	.43	.53	.28	.21	.54	.16	.24	.70	.22	.28	.18	.20	.43	.21	.18

Note: All correlations are significant of  $p < .01$  (one-tailed test) unless indicated as '+' ( $p < .05$ ) or NS (not significant).

<sup>a</sup> Measured after performance appraisal review.

<sup>b</sup> Measured before performance appraisal review.

Table 3  
Hierarchical Regression Results for the Effects of Evaluation Criteria, Career Discussion, and Opportunity to Participate on Subordinate Reactions to the Appraisal, Controlling for Interpersonal Relations with Supervisor, and Performance Rating Recalled by Subordinate.<sup>a</sup>

<u>Dependent</u>	<u>Step 1</u>	<u>Step 2</u>	<u>Step 3</u>	<u>Step 4</u>	
Review Variable Entered	Interpersonal Relations (df=1,283)	Recalled Ratings (df=2,282)	Review Variable (df=3,281)	Cross Product (df=4,282)	Multiple R
Satisfaction With Appraisal					
Criteria	.18****	.14****	.14****	.00	.68
Career	.18****	.14****	.08****	.00	.63
Participation	.18****	.14****	.07****	.00	.62
Quality of Appraisal					
Criteria	.27****	.09****	.04****	.00	.64
Career	.27****	.09****	.04****	.00	.63
Participation	.27****	.09****	.03****	.00	.63
Utility of Appraisal					
Criteria	.08****	.01	.09****	.00	.42
Career	.08****	.01	.15****	.01	.50
Participation	.08****	.01	.16****	.00	.50

<sup>a</sup> Coefficients are changes in  $R^2$  for each step.

\*\*\*\*p<001    \*\*p<.01    \*p<.05

Table 4

Hierarchical Regression Results for Evaluation Criteria, Career Discussion, and Opportunity to Participate and Their Interactions with Interpersonal Relation, on Changes in Employee Satisfaction and Job Performance, Controlling for Interpersonal Relations, Satisfaction and Performance Measured Prior to Appraisal Review, and Performance Rating Recalled by Subordinate.<sup>a</sup>

<u>Dependent</u>	<u>Step 1</u>	<u>Step 2</u>	<u>Step 3</u>	<u>Step 4</u>	<u>Step 5</u>	<u>Multiple</u>
<u>Review</u> <u>Variable</u> <u>Entered</u>	<u>Interpersonal</u> <u>Relations</u>	<u>Sat/Perf</u> <u>Before</u> <u>Review</u>	<u>Recalled</u> <u>Rating</u>	<u>Review</u> <u>Variable</u>	<u>Cross</u> <u>Product</u>	<u>R</u>
Performance Rated by Manager (N=194)						
Criteria	.01	.51****	NA	.01*	.00	.73
Career	.01	.51****	NA	.01*	.00	.73
Participation	.01	.51****	NA	.01+	.00	.73
Satisfaction with Work (N=278)						
Criteria	.04****	.24****	.03***	.01*	.00	.58
Career	.04****	.24****	.03***	.02****	.00	.58
Participation	.04****	.24****	.03***	.01+	.00	.57
Satisfaction With Supervisor (N=278)						
Criteria	.30****	.11****	.03****	.06****	.00	.70
Career	.30****	.11****	.03****	.02***	.00	.67
Participation	.30****	.11****	.03****	.02*	.00	.67
Satisfaction With the Organization (N=278)						
Criteria	.03***	.28****	.01+	.01*	.00	.57
Career	.03***	.28****	.01+	.00	.01+	.57
Participation	.03***	.28****	.01+	.01	.01*	.57

<sup>a</sup> Coefficients are changed in  $R^2$  for each step.

\*\*\*p≤.001    \*\*p≤.01    \*p≤.05    +p≤.10