The Effects of Performance Rating Discrepancies on Supervisors and Subordinates

GERALD L. BLAKELY

West Virginia University

This study, employing 96 undergraduate business majors in a dyadic design, examined the effects of performance rating discrepancies, causal attributions, and subordinate willingness to contest, on subsequent responses of subordinates and supervisors. Subordinates who received relatively higher supervisory ratings were more satisfied with the appraisal and the supervisor. The supervisor's attributed locus of cause did not interact with the favorability of the rating to affect subordinate responses. Supervisors who were made aware of relatively higher subordinate self-ratings positively modified their initial ratings, gave larger raises, and were less desirous of discussing the appraisals with subordinates. The subordinate's willingness to contest did not interact with the direction of the discrepancy to affect the supervisor's responses. Implications for management and for future research are discussed. © 1993 Academic Press. Inc.

Systematic performance appraisal with feedback is a popular but widely questioned and criticized practice. Specific problems arise with respect to the effects of performance appraisal feedback on subordinates' attitudes and behaviors. The sign of the feedback, positive or negative, is a major determinant of subordinates' responses (Ilgen, Fisher, & Taylor, 1979). For example, Meyer, Kay, and French (1965) concluded that negative appraisal information causes defensiveness on the part of the ratee. On the other hand, lack of performance feedback or appraisal information which is vague or which is positive but inaccurate may impair subsequent subordinate performance.

To minimize negative employee reactions to appraisal feedback, subordinate participation in the appraisal process has been advocated (Bernardin & Beatty, 1984). Current research in procedural justice indicates that for many employees, having a "say" in appraisal of their own performance may be as important as the outcomes of the appraisal. In a

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review of the procedural justice literature, Folger and Greenberg (1985) concluded that allowing people to provide input into reward allocation procedures enhanced their acceptance of the reward decisions. Results of surveys by Dipboye and de Pontbriand (1981) and Greenberg (1986) also supported the positive effects of subordinate participation in the appraisal process.

Although the fairness argument is persuasive, difficulties arise when the parties disagree about performance levels. There is considerable evidence that subordinates rate their own job performance higher than it is rated by their supervisors (Holzbach, 1978; Kirchner, 1966; Klimoski & London, 1974; Parker, Taylor, Barrett, & Martens, 1959; Shore & Thornton, 1986; Thornton, 1968; Zammuto, London, & Rowland, 1982). There are, however, exceptions to these findings. A study by Heneman (1974) found lower ratings by subordinates while a study by Ferris, Yates, Gilmore, and Rowland (1985) found lower ratings by younger subordinates. Although a number of factors may account for rating discrepancies between supervisors and subordinates [e.g., attending to and weighting performance dimensions differently (Schmitt, Noe, & Gottschalk, 1986)], the evidence suggests that agreement between supervisors and subordinates about subordinate performance level is infrequent, particularly for jobs which lack objective output.

Discrepancies between supervisory and subordinate self-ratings may also have effects on supervisors. For example, supervisors may tend to avoid providing subordinates with negative performance feedback (Fisher, 1979) or may simply rate leniently to avoid unpleasant reactions from subordinates (Bernardin & Beatty, 1984).

Although rating discrepancies may have important effects on the individuals involved and ultimately on the organization, little is known about these effects. The first phase of this study examined the effects of discrepancies on subordinates and the second phase examined the effects on supervisors.

STUDY OVERVIEW

In this study, subordinates and supervisors, both randomly assigned to their respective positions, evaluated the subordinate's performance on an ambiguous task. Subordinates were provided with bogus supervisory performance ratings which were manipulated to be either higher or lower than the self-rating and which attributed the subordinate's performance to either the person or the situation. Dependent variables were the subordinate's satisfaction with the appraisal, liking for the supervisor, and perceived supervisory competence.

Supervisors were provided with bogus subordinate self-ratings which were manipulated to be either higher or lower than the supervisory rating

and which indicated whether the subordinate would contest a discrepant supervisory rating or not. Dependent variables were the supervisor's modification of his or her initial rating, the amount of salary raise awarded, and the supervisor's preference for appraisal discussion.

PHASE I: EFFECTS OF RATING DISCREPANCIES ON SUBORDINATES

One of the most important characteristics of performance feedback which determines its effects is its sign, whether it is positive or negative (Ilgen et al., 1979). As noted by Shore and Thornton (1986), even when organizations do not formally include self-ratings as part of the performance appraisal process, individuals are likely to evaluate performance feedback relative to their a priori self-evaluations. The individual's interpretation of the feedback may depend on the direction of the rating discrepancy, regardless of the actual performance level.

Noting Meyer's (1975) findings that most employees rate their own performance very highly, Pearce and Porter (1986) suggested that receipt of an appraisal that one is "satisfactory," rather than "outstanding," may be perceived as negative by many employees. In their study of management and nonmanagement employees of two federal agencies over a 30-month period, Pearce and Porter (1986) found a significant reduction in organizational commitment among those who were rated "satisfactory," versus no change among those who were rated higher.

At General Electric Co., Kay, Meyer, and French (1965) found that when perceived ratings were lower than self-ratings, the result was increased defensive behavior such as attaching reduced importance to the job and the appraisal as well as expressing more negative attitudes toward the supervisor.

Another potential influence on subordinate reactions is the supervisor's attributed locus of cause, either internal or external, for performance (Bannister, 1986; Weiner, 1986). If the supervisor attributes low performance to external factors such as bad luck and an extremely difficult task, the subordinate may react less negatively. On the other hand, attributing low performance to internal factors such as lack of ability and effort may cause more negative reactions.

Feedback that one has done better than the self-assessment may be more positive for the subordinate when the supervisor attributes the performance to the internal factors of ability and effort, while external attributions to good luck and task ease may render the feedback less positive.

Bannister (1986) examined the effects of causal locus in performance feedback in a laboratory experiment. As predicted, subjects in the high performance-internal attribution condition assessed the source as more perceptive than subjects in the high performance-external attribution

condition. The opposite occurred in the low performance condition. There were similar findings related to satisfaction with the feedback. In Bannister's study performance level was unambiguous and there could be no disagreement between supervisors and subordinates regarding the level. Given the evidence regarding the pervasiveness of rating discrepancies, the generalizability of these findings may be limited. It is likely that there are different reactions to the causal attributions when performance level is subjective and the two parties disagree over the exact level of performance. As noted by Bannister (1986), the effects of causal attributions may be more pronounced when there is disagreement about performance level. For example, subordinate responses to supervisory ratings attributing performance to internal causes may be more negative when the supervisory rating is lower than the self-rating than when both agree on the performance level. The subordinate's negative responses to the negative feedback with which he or she disagrees are intensified if the subordinate is blamed for the low performance.

Based on the preceding arguments, it was hypothesized in the present study that subordinates' reactions are influenced by the relative favorability of the supervisors' ratings compared with the subordinates' self-ratings. Supervisory ratings which are higher than self-ratings were hypothesized to result in (1) greater satisfaction with the appraisal, (2) greater likeability of the supervisor, and (3) greater perceived supervisory competence.

It was further hypothesized that the relative favorability of supervisors' ratings interacts with the supervisors' expressed judgments of the locus of cause, to affect the subordinates' reactions, with the most positive responses resulting from a supervisor's higher appraisal with an ascription to internal causes, and the most negative responses resulting from a lower supervisor's appraisal attributed to internal causes.

Phase I Methods

Experimental Design

A 2×2 design was employed to test the effects of the relative favorability of the supervisors' ratings (higher or lower) and attributed causes of performance (internal or external) on subordinate responses.

Participants

Participants were 96 undergraduate business majors at the University of North Carolina at Chapel Hill. They were paid for their participation and were told that they would receive training either in performance appraisal or in managerial decision making. One-half were randomly assigned to the role of supervisor and the remaining 48 were assigned to the role of subordinate.

One problem with much of performance appraisal research conducted in laboratory settings is the lack of ongoingness of the supervisor—subordinate relationship. In permanent work settings, as noted by Ilgen and Favero (1985), the rater's evaluation of performance is likely to be influenced by the perceived impact which the evaluation may have on future interactions with the ratee. It is impractical if not impossible to replicate the ongoingness of a supervisory—subordinate relationship in a laboratory setting. A partial solution to this problem, employed in this study, was to create the expectation that there would be future interaction. This was accomplished by requiring participants to agree to participate in a multisession study in the same role in which they were initially assigned.

A second potential problem in using student participants is that they may lack experience in conducting performance appraisals and in providing performance feedback. This lack of experience could undermine the validity of the experimental manipulations (Schwab, 1980) and severely reduce any generalizability of the findings. However, pretest discussions with 32 undergraduates indicated that they had some experience and some sense of their efficacy at assessing others' performance and at providing performance feedback. To bolster the student supervisors' perceptions of self-efficacy at providing performance feedback they received a short period of training in conducting performance feedback interviews.

Procedure and Experimental Task

The nature of the experiment required that pairs of participants, rather than a single individual, attend an experimental session. Upon arrival of both members of the pair at the laboratory, the participants were randomly assigned, by flip of a coin, to the role of either supervisor or subordinate. To reduce suspicion about the role assignments, one of the participants was allowed to flip the coin after both participants were satisfied that the coin was fair.

The participants were told that they were involved in a study of training related to performance evaluation of managerial decision making. They were told that while the subordinate was performing a managerial decision task, the supervisor would be trained in some aspect of performance appraisal. The supervisor would thereafter rate the subordinate's performance. They were also told that after the completion of the performance ratings the two participants were to meet, face to face, to discuss the ratings. The task which the subordinate performed was an in-basket managerial decision-making simulation task which consisted of 17 memos and letters awaiting attention, similar to situations which might confront actual managers. The subordinate was to indicate the importance of each item and the action he or she would take. An advantage of the in-basket

decision-making task is that, for untrained participants, performance standards are somewhat ambiguous, thereby increasing the plausibility of the manipulations of rating discrepancy and causal locus. Further, the ambiguity of the task may approximate the ambiguity found in many, except for the most routine, organizational jobs. Thus another advantage of this task is that it may be more generalizable to managers and organizational settings than many other laboratory performance tasks.

To increase the plausibility of the manipulation of luck as a cause of performance, the subordinate was allowed to select one of three in-basket exercises, contained in plain envelopes, which supposedly differed in level of difficulty. The three in-baskets were actually identical to each other. After explanation of the exercise to the subordinate, in the presence of the supervisor, the supervisor was allowed to observe the subordinate performing the task for 5 min, after which time the supervisor was taken by the experimenter to an adjacent room.

The subordinate was given a total of 30 min to work on the in-basket exercise. During the last 25 min of this period the supervisor was allowed to review briefly the in-basket materials and was given training in performance appraisal feedback. The training was in the form of a written description of effective performance appraisal interview techniques followed by a tape-recorded example of an effective performance appraisal interview.

At this time the completed in-basket material was collected and the subordinate was told to assess his or her own performance. The in-basket material was provided to the supervisor who was instructed to rate the performance of the subordinate. To provide a basis for the ratings but to maintain the ambiguity of subordinate performance, limited scoring instructions were provided to both supervisors and subordinates. For these assessments pencils were provided so that the participant in the supervisor role could later modify his or her rating without difficulty.

The experimenter casually inspected the subordinate's self-ratings and then announced that he would check to see if the supervisor had completed his or her ratings. Upon leaving the subordinate's room the experimenter prepared the supervisor's bogus rating, according to the condition to which the subordinate was assigned. Then the experimenter casually inspected the ratings of the supervisor and announced that he would check to see if the subordinate had completed the self-rating. After leaving the supervisor's room, the experimenter recorded the supervisor's initial ratings and prepared the bogus subordinate self-rating, according to the condition to which the supervisor was assigned.

The supervisor's bogus rating was presented to the subordinate. After allowing the subordinate to examine the bogus rating for a short period of time, the experimenter told the subordinate that he would like to collect some additional information from the subordinate prior to the appraisal interview. At this time the subordinate's responses on the dependent measures and manipulation checks were collected.

A similar process was followed for the presentation of the subordinate's self-rating to the supervisor. After the supervisor had a few minutes to examine the bogus subordinate self-rating in the absence of the experimenter, so that the supervisor could modify his or her initial ratings without suspicion, the remaining supervisor responses on the dependent measures and manipulation checks were collected.

After both participants completed the measures and manipulation checks, they were pledged to secrecy regarding the purpose of the experiment, debriefed, and then paid.

Phase I Independent Variables

Relative favorability of supervisor's rating. The level of the subordinate's self-rating was noted by the experimenter as described in the procedure section. The supervisor's bogus rating, experimentally manipulated, was presented to the subordinate in the same format as the self-rating. This rating format consisted of three items, with 9-point scales, about quality, quantity, and overall performance. The size of the manipulated discrepancies was set to average 2½ points (two points on two of the items and three points on the other item). Discrepancies were rotated across the three items and randomly assigned to participants within each condition.

Locus of cause. A section of the supervisor's bogus rating form contained the supervisor's explanation about what caused the performance of the subordinate (whether it was the person or the situation). For the relatively favorable condition, the internal attribution was to high ability and effort while the external attribution was to an easy task and good luck. For the relatively unfavorable condition the internal attribution was to low ability and lack of effort while the external attribution was to a difficult task and bad luck.

It should be noted that to unambiguously determine the effects of the locus of cause, the effects of the controllability and stability dimensions of cause (Weiner, 1982) were necessarily confounded. For example, a manipulation attributing high performance to high ability would indicate a stable, uncontrollable, and internal cause, while a manipulation attributing high performance to effort would indicate an unstable, controllable, and internal cause. The manipulation attributing high performance to both ability and effort produces a counterbalancing on stability and controllability, with the desired emphasis on the locus of cause. On the basis of similar logic, the other causal factors (task difficulty and luck) were combined to complete the unconfounded manipulation of the locus dimension.

Phase I Dependent Measures

Subordinate satisfaction with the appraisal. Subordinate satisfaction with the supervisor's performance rating was measured by six items. The first item, adapted from Ilgen and Hamstra (1972), asked the subordinate to indicate on a 7-point scale the extent to which he or she was satisfied with the supervisor's performance rating. The second item dealt with the perceived fairness of the supervisor's rating. The third item asked subordinates to rate the extent to which they looked forward to additional sessions working for the same supervisor. The fourth item asked subordinates how much effort they planned to expend on the task at the next work session. The fifth item asked subordinates to what extent they would prefer to work for the same supervisor at the next session. The sixth item consisted of a "sign-up" sheet for additional sessions under the supervision of the same person and allowing the subordinate to "sign up." Cronbach's α for the six items was .84.

Likeability of supervisor. The subordinate's liking for the supervisor was assessed by a three-item affective relationship scale including items on admiration, respect, and liking (Tsui & Barry, 1986; Tsui & Gutek, 1984). Cronbach's α was .72.

Perceived supervisory competence. The subordinate's perception of the supervisor's competence was measured by three items adapted from Ilgen, Peterson, Martin, and Boeschen (1981). The items contained 5-point scales covering the supervisor's competence, managerial ability, and knowledge of the subordinate's job. Cronbach's α equaled .85.

Phase I Results: Effects of Rating Discrepancies on Subordinate Responses

Manipulation Checks

The manipulations of the relative favorability of the supervisor's rating and of the supervisor's attributed locus of the cause were successful. Subordinates who received relatively favorable ratings, compared with those who received relatively unfavorable ratings, reported significantly more positive supervisory ratings (M = 5.92 vs M = 2.50, t(46) = 10.05, p < .001) and reported that their supervisor thought their performance was significantly better than what they, the subordinate, had thought (M = 6.48 vs M = 2.09, t(44) = 21.27, p < .001). Also, subordinates who received an internal attribution of cause reported that their supervisor attributed their performance more to effort and ability rather than to luck and task difficulty (M = 6.26), compared to those who received an external attribution of cause (M = -6.32, t(43) = 13.54, p < .001).

Effects on Dependent Measures

Means, standard deviations, and intercorrelations for the dependent variables are presented in Table 1.

The initial hypothesis pertained to the effects of the relative favorability of the supervisory ratings. A multivariate analysis of variance (MANOVA) resulted in a significant Wilks' λ (.39, F(3,41) = 21.1, p < .001), which indicated that there were overall differences between the responses of those who received relatively favorable supervisory ratings and those who received relatively unfavorable supervisory ratings.

The results of the univariate ANOVAs for the dependent variables are presented in Table 2. As predicted under the hypothesis, those who received supervisory ratings higher than the self-rating reported greater satisfaction with the appraisal (M = 23.48 vs M = 16.08), expressed greater liking for the supervisor (M = 11.04 vs M = 8.76), and thought their supervisors were more competent (M = 10.38 vs M = 8.79).

The second hypothesis pertained to the interactive effects of the relative favorability of the supervisory rating and the supervisor's expressed judgment of the locus of cause. The MANOVA indicated no significant overall interactive effect (Wilks' λ .976, F(3.41) = .342, p = .795). Although the effect was not significant, it should be noted that the most positive responses on each of the dependent measures were in the higher-rated, internal locus condition, which is consistent with the second hypothesis.

Influence of Other Variables

Although no explicit hypotheses had been formulated regarding other variables which might have influenced subordinate responses, the potential effects of the subordinate's attributions were examined. The subordinate's attributed locus of cause for his or her own performance interacted with the relative favorability of the supervisor's rating and the supervisor's attributed locus of cause to produce a significant overall three-way interaction (Wilks' λ .731, F(3,37) = 4.5, p < .01). The three-way interactions for each of the univariate ANOVAs were significant with

TABLE 1 Means, Standard Deviations, and Intercorrelations of Phase 1 Dependent Variables (N=47)

Dependent variable	Mean	SD	(1)	(2)
(1) Satisfaction with appraisal	19.84	5.25		
(2) Likeability of supervisor	9.91	2.03	.74	
(3) Perceived competence of supervisor	9.60	2.20	.75	.67

Note. All correlations significant at p < .001.

TABLE 2						
ANALYSIS OF VARIANCE TABLES FOR SUBORDINATE RESPONSES						

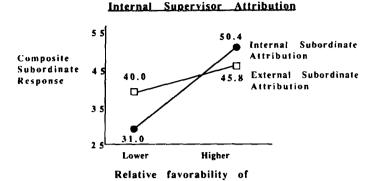
Source	SS	df	F	ω^2
Depen	dent variable: Sati	sfaction with a	appraisal	
Relative favorability				
Higher/lower (A)	649.36	1	48.41***	.50
Locus of cause				
Internal/external (B)	42.25	1	3.15	.02
$A \times B$.64	1	.05	.00
Еттог	576.80	43		
Deper	ident variable: Lik	eability of sur	pervisor	
Relative favorability				
Higher/lower (A)	62.27	1	23.04***	.31
Locus of cause				
Internal/external (B)	11.01	1	4.07*	.04
$A \times B$.16	1	.06	.00
Error	116.22	43		
Dependent	variable: Perceive	d supervisory	competence	
Relative favorability		-		
Higher/lower (A)	29.78	1	7.09*	.11
Locus of cause				
Internal/external (B)	10.10	1	2.41	.03
$A \times B$	2.93	1	.70	.00
Error	180.50	43		

^{*} p < .05.

probability levels less than .05. Also, the relative favorability of the supervisor's rating produced an overall effect (Wilks' λ .318, F(3,37) = 26.5, p < .001). The main effects for the relative favorability for each of the univariate ANOVAs were significant with probability levels less than .01. Because of the high intercorrelations among the dependent variables and to simplify presentation, the three dependent variables were combined to form a composite reaction measure. The three-way interaction for the composite dependent variable is depicted graphically in Fig. 1.

Post hoc comparisons were performed using Scheffe's multiple comparison procedure. Relative favorability of the supervisor's rating had a pronounced effect when the supervisor's attributed locus of cause agreed with the subordinate's attributed locus of cause. For example, when both agreed that performance was due to internal causes, the differences on each of the dependent measures between subordinates receiving relatively high and relatively low supervisory ratings were significant. Disagreement over the cause tempered the effect of the relative favorability of the rating. For example, when the supervisor attributed performance to internal causes and the subordinate attributed performance to external

^{***} p < .001.



supervisory rating

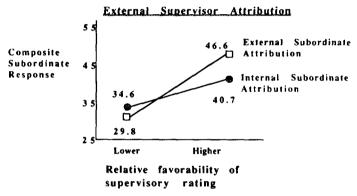


Fig. 1. Effects of subordinate's attribution of cause, relative favorability of supervisory rating, and supervisor's attribution of cause.

causes, the differences on each of the dependent measures between subordinates receiving relatively high and relatively low supervisory ratings were not significant.

Phase I Discussion

The lack of an interactive effect of the supervisor's causal attribution and the relative favorability of the supervisory rating on the subordinate's responses appears inconsistent with the findings of Bannister (1986). Perhaps the explanation lies in the degree of ambiguity of performance level. In Bannister's study performance level was unambiguous and hence undebatable. In the present study performance level was more open to question, perhaps rendering the causal attribution less salient. Being told

that one has done better or done worse than what one thought, when performance level is ambiguous, may be so influential that the supervisor's causal attribution has little or no effect. Limited support for this explanation is provided by performance feedback effect sizes (ω^2) which range from .11 to .5 in the present study, versus .01 or less in Bannister's study.

It may be that the supervisor's causal attribution is highly salient only when different from the subordinate's causal attribution. Consistent with this latter explanation, it was found, post hoc, that the subordinate's own attributed locus of cause interacted with the supervisor's attributed locus of cause and the relative favorability of the performance rating to affect the subordinate's responses on the three dependent measures. These post hoc comparisons revealed that relatively favorable supervisory ratings, accompanied by external attributions by the supervisor but internal attributions by the subordinate, evoked subordinate responses about as negative as those under unfavorable ratings. When the subordinate agreed that the high performance was attributable to external factors, the supervisor's external attribution did not have a negative effect.

PHASE II: EFFECTS OF RATING DISCREPANCIES AND SUBORDINATE WILLINGNESS TO CONTEST ON SUPERVISOR RESPONSES

This phase of the research addressed the effects on supervisory responses, of feedback to the supervisor about the subordinate's self-assessed performance level, and about the subordinate's willingness to contest discrepant supervisory evaluations and thereby create a potentially unpleasant situation for the supervisor.

Most psychological theories of motivation are grounded in the principle of hedonism (Steers & Porter, 1983; Weiner, 1986). According to this principle, individuals tend to seek pleasure and avoid pain. Accordingly, supervisors may avoid the unpleasant task of providing subordinates with negative performance feedback (Fisher, 1979).

Among the possible painful consequences for the supervisor are hostile, disruptive, or challenging behavior on the part of the subordinate. Also, the low rated employee, on whom the supervisor is dependent, may withdraw from the organization by exerting less effort on the job, being absent more frequently, or leaving the organization. Ultimately, the supervisor may lose authority over the work group because of being undermined by superiors' responses to appeals of the low rating by the subordinate or because of the development of greater cohesiveness among work group members against a common enemy, the supervisor. Rating subordinates leniently is one strategy supervisors use to avoid such negative consequences (Bernardin & Beatty, 1984).



Other "avoidance" strategies may involve giving a larger raise, delaying the appraisal interview, shortening the time devoted to the appraisal interview, and/or minimizing the subordinate's participation in the appraisal interview. Several of these potential strategies served as the dependent variables in this phase of the study.

Effects on Appraisal Modification and Salary Raises

It has previously been demonstrated that supervisors inflate ratings of low performers when those ratings are made for feedback purposes (Fisher, 1979; Ilgen & Knowlton, 1980; Klimoski & Inks, 1986). Klimoski and Inks (1986) found that subjects who anticipated providing face-to-face feedback rated subordinates higher than those who did not anticipate providing feedback.

In the Klimoski and Inks' (1986) study, subjects who observed high self-ratings by subordinates rated subordinates higher than those who observed low self-ratings although the actual performance level was moderately low for all evaluated work. It is possible that the effects of self-ratings on supervisors' ratings were due to the informational value of the self-rating rather than to supervisory avoidance behavior. To disentangle the informational effects from the avoidance effects it would have been necessary to compare the modification in ratings of higher self-rating subordinates with the modification in ratings of lower self-rating subordinates. Greater modifications of ratings of the higher self-rating subordinate than of the lower self-rating subordinate would be supportive of the avoidance explanation.

In the present study it was hypothesized that higher self-ratings by subordinates cause supervisors to resort to greater modification of their initial appraisal and to higher raises.

Also hypothesized was an interaction effect of relative favorability of the subordinate's self-rating and the subordinate's willingness to contest a discrepant evaluation on amount of modification on the initial appraisal and size of raise. It was hypothesized that relatively higher self-ratings by subordinates who are very willing to contest discrepant evaluations cause the greatest modification and largest raise. Since supervisors may resent subordinates' challenging behaviors and may resist these behaviors when able to do so at little costs, it was further hypothesized that relatively lower self-ratings by subordinates who are very willing to contest discrepant evaluations cause the lowest modification and lowest raise.

Effects on Supervisor Preferences for Appraisal Discussion

Fisher (1979), citing evidence that people attempt to avoid transmitting unpleasant messages (see Tesser & Rosen, 1975), hypothesized that supervisors delay giving feedback to poor performing subordinates. Fisher's

findings, however, were that feedback was provided to poor performers sooner than it was provided to good performers. Almost one-half of the supervisors explained that the negative feedback was provided sooner to enable the poor performing subordinates to improve. As noted by Fisher, since there were only nine work periods of about 3 min each in her study, the time frame for subordinate performance improvement was restricted; thus the same results may not be found in settings, such as actual organizations, which have longer time frames. Further, since performance standards, although vague, were provided to the supervisors, it is uncertain whether they thought that the provision of feedback about low performance might be contested by the subordinates.

It seems likely that in many situations in which performance standards are ambiguous and the supervisor is aware that the feedback will be perceived by the subordinate as negative relative to his or her own self-rating, the supervisor will prefer not discussing the appraisal with the subordinate and either delay providing the feedback or avoid it altogether. Accordingly, in the present study a main effect for rating discrepancy was hypothesized, with higher supervisory preference for discussion with subordinates who rate themselves lower rather than higher.

It was also hypothesized that the relative favorability of the subordinate's self-rating and subordinate's willingness to contest a discrepant evaluation interact to affect the supervisor's preference for discussion of the appraisal with the subordinate, with the greatest supervisory preference for discussion occurring when subordinates rate themselves lower and are very willing to contest the discrepant evaluation, and the least preference for discussion occurring when subordinates rate themselves higher and are very willing to contest the discrepant evaluation.

Phase II Methods

Experimental Design

 $A 2 \times 2$ design was employed to test the effects of the relative favorability of the subordinate's self-ratings (higher or lower) and willingness to contest discrepant evaluations (high or low) on supervisor responses.

Phase II Independent Variables

Relative favorability of subordinate's rating. The level of the supervisor's rating was determined by the experimenter as described in the procedure section for Phase I. The subordinate's bogus rating, experimentally manipulated, was presented to the supervisor in the same format as the supervisor's rating. The supervisor was not presented with any actual or bogus subordinate causal attributions.

Willingness to contest. The manipulation of the subordinate's willingness to contest discrepant evaluations was contained on the subordinate's

self-rating form. One part of the manipulation indicated the amount of confidence the subordinate had in his or her self-rating and the second part indicated the extent to which the subordinate would demand a full explanation of a supervisory rating from a supervisor whose rating was different from the self-rating.

Phase II Dependent Measures

Rating modification. The manner in which the supervisor's modification of the supervisor's initial rating was measured is described in the Phase I procedures section. This measure was the signed difference between the rating initially observed by the experimenter and the rating which was collected after the experimental manipulation.

Size of raise. The size of the raise awarded to the subordinate by the supervisor was measured by asking the supervisor to make a salary increase recommendation, based on the subordinate's performance, of from zero to 20%. To provide a common anchor for the supervisors they were told that an average performer typically received an increase of from 9 to 11%.

Preference for discussion. The supervisor's preference for discussion was measured by four items. The first item, measured on a 7-point scale, asked the supervisor to what degree he or she was desirous of discussing the performance rating with the subordinate. The second item required the supervisor to specify the number of minutes which he or she wanted to allocate to the appraisal feedback discussion. The third item asked the supervisor if he or she would like to postpone the appraisal interview until the next work session. The final item asked the supervisor how much of his or her experimental pay he or she would be willing to forfeit in order to avoid the appraisal interview altogether. Each of these items was analyzed separately because of low intercorrelations.

Phase II Results: Effects of Rating Discrepancies and Subordinate Willingness to Contest on Supervisor Responses

Manipulation Checks

The manipulations of the favorability of the subordinate's self-rating and of the subordinate's willingness to contest a discrepant supervisory appraisal were successful. Supervisors who received relatively favorable subordinate self-ratings indicated that their subordinates believed they had performed at significantly higher levels (M = 6.79) than those who received relatively unfavorable subordinate self-ratings (M = 3.50, t(46) = 13.27, p < .001). Further, supervisors who were in the condition in which the subordinate was likely to contest a discrepant evaluation, compared to supervisors in the unlikely condition, reported that the appraisal

interview was likely to be significantly more demanding (M = 4.42 versus M = 1.83, t(46) = 7.19, p < .001), more unpleasant (M = 3.0 versus M = 2.4, t(46) = 1.69, p < .05), and more unfriendly (M = 2.75 versus M = 2.17, t(46) = 1.9, p < .05). There were no differences in the amount of hostility anticipated in the appraisal interview.

Effects on Dependent Measures

Means, standard deviations, and intercorrelations for the dependent variables are shown in Table 3.

The MANOVA resulted in a significant Wilks' λ (.508, F(5,34) = 6.6, p < .001), which indicated that there were overall differences between the responses of supervisors who received relatively higher subordinate self-ratings and supervisors who received relatively lower self-ratings. The univariate ANOVAs are presented in Table 4.

There was a main effect on the supervisor's modification of the initial appraisal. Of the 24 supervisors assigned to the relatively unfavorable subordinate self-rating condition, 11 supervisors modified their initial rating downward (none raised their initial rating). Of the 24 supervisors assigned to the relatively favorable subordinate self-rating condition, 4 supervisors modified their initial rating upward (none lowered their initial rating). As predicted, supervisors of relatively higher self-rating subordinates provided significantly higher raises (M = 12.76) than supervisors of relatively lower self-rating subordinates (M = 10.63).

There was also a main effect on the supervisor's preference for appraisal discussion. Supervisors preferred to discuss ratings more with relatively lower self-rating subordinates (M=4.42) than with relatively higher self-rating subordinates (M=3.46). However, there were no significant effects on the interview time allocation or experimental pay forfeiture measures. A final measure of the supervisor's preference for appraisal discussion was a yes or no response to whether the supervisor would prefer to postpone the appraisal discussion until the next work

TABLE 3

Means, Standard Deviations, and Intercorrelations of Phase II

Dependent Variables

Dependent variable	Mean	SD	(1)	(2)	(3)	(4)
(1) Appraisal modification	29	1.07				
(2) Salary raise	11.65	2.30	.10			
(3) Discussion preference	4.04	1.66	11	.01		
(4) Discussion time allocation	12.67	7.42	.19	.13	.28*	
(5) Pay forfeiture	.51	.94	.09	11	35*	09

^{*} p < .05.

TABLE 4
ANALYSIS OF VARIANCE TABLES FOR SUPERVISOR RESPONSES

Source	SS	df	F	ω^2
Depe	ndent variable: Ap	praisal modifi	cation	
Relative favorability				
Higher/lower (A)	13.71	1	14.42***	.24
Willingness to contest				
High/low (B)	1.22	1	1.28	.01
$A \times B$.27	1	.28	.00
Error	36.14	38		
	Dependent var	iable: Raise		
Relative favorability				
Higher/ lower (A)	46.10	1	10.55**	.18
Willingness to contest				
High/low (B)	6.18	1	1.41	.01
$A \times B$	8.23	1	1.88	.02
Error	166.06	38		
Depe	endent variable: Di	scussion prefe	rence	
Relative favorability				
Higher/lower (A)	10.50	1	4.07*	.07
Willingness to contest				
High/low (B)	9.55	1	3.70	.06
$\mathbf{A} \times \mathbf{B}$	2.81	1	1.09	.00
Error	97.93	38		
Depend	dent variable: Disc	ussion time al	location	
Relative favorability				
Higher/lower (A)	22.15	1	.42	.00
Willingness to contest				
High/low (B)	188.82	i	3.58	.06
$A \times B$	32.59	1	.62	.00
Error	2006.05	38		
1	Dependent variable	: Pay forfeitur	re	
Relative favorability	-			
Higher/lower (A)	.23	1	.24	.00
Willingness to contest				
High/low (B)	.21	1	.22	.00
$\mathbf{A} \times \mathbf{B}$	1.12	1	1.20	.00
Еггог	35.53	38		

^{*} p < .05.

session. The logit model of independence (Fienberg, 1985) could not be rejected ($\chi^2 = .77$, df = 4, p = .94), indicating insignificant effects of relative favorability and subordinate willingness to contest on the post-ponement decision.

The remaining hypotheses pertained to the interactive effects of the subordinate's willingness to contest a discrepant evaluation and the rel-

^{**} p < .01.

^{***} p < .001

ative favorability of the subordinate's self-rating. The MANOVA for these hypotheses indicated no significant overall interactive effect (Wilks' λ .846, F(5,34) = 1.24, p = .314). The logit analysis, noted above, also indicated no interactive effect on the supervisor's interview postponement decision.

Phase II Discussion

The results support the hypothesis that the relative favorability of the subordinate's self-rating affects supervisory salary raise decisions and performance ratings by causing supervisors to modify their initial ratings. The finding that supervisors may modify their initial ratings, after becoming aware of subordinates' self-ratings, indicates either a source of greater accuracy or another source of potential error in performance appraisal. In organizational settings it is likely that this source of accuracy or error would already be reflected in the supervisor's original ratings due to previous interactions with the subordinate outside of the formal appraisal context.

The pattern of the modifications by the supervisors provides some understanding of the reasons for the modifications and perhaps for the salary raise decisions. Of the 11 supervisors who lowered their initial ratings, 8 were assigned to the low contest condition and 3 were assigned to the high contest condition. It seems likely that these modifications were made because of the informational value of the subordinate self-ratings. These downward modifications are not easily explained by avoidance theory.

Four of the 12 supervisors assigned to the higher self-rating, high contest condition inflated their initial ratings. It seems that the avoidance explanation is more plausible for these modifications, since they were all in the condition in which their judgments were likely to be contested.

The results provide mixed support for the hypothesis that supervisors prefer appraisal discussions more with subordinates who self-rate lower than with those who self-rate higher. Supervisors with lower self-rating subordinates expressed a stronger preference to discuss the appraisals with subordinates, compared to supervisors of relatively higher self-rating subordinates. However, the latter group of supervisors were no more anxious to postpone discussions with the higher self-rating subordinates or to forfeit experimental pay in order to avoid the discussion. Further, there were no differences in the amount of time supervisors were willing to allocate to the appraisal discussions.

The inconsistent results may be due to several factors. A few minutes of unpleasantness in a laboratory setting with a subordinate on whom the supervisor is not dependent may not be aversive enough to try to avoid. Another possible explanation is that the experimentally manipulated dis-

crepancy had already been reduced by the salary raise decisions and the initial appraisal modifications. Because of these "adjustments," the appraisal discussion with relatively higher self-rating subordinates may not have been as aversive for the supervisor as was expected.

No support was provided for hypothesized interaction effects of subordinate's willingness to contest a discrepant evaluation and the relative favorability of the subordinate's self-rating. Although the manipulation checks indicated that the manipulation did indeed "take," the paper manipulation of willingness to contest may not have been sufficiently strong to create the expected effects.

GENERAL DISCUSSION

The present study has several limitations. First, there is the difficulty of capturing the ongoing and interdependent nature of a supervisor—subordinate relationship in a 1-h laboratory study. The consequences of discrepancies in ratings in a laboratory setting clearly are not the same as in actual organizations in which a variety of rewards and punishments, including the future of the supervisor—subordinate relationship, may depend on the resolution of those discrepancies. Although efforts were made to reduce the severity of this problem, difficulties undoubtedly remained.

The procedure employed to assign the participants to their roles was so obviously random to the participants that it may have undermined the credibility of the role of the supervisor to the subordinate. Also, because of the supervisors' lack of familiarity with the in-basket task, they may not have felt qualified to judge subordinate performance and consequently may have been more susceptible to the influence of subordinate self-ratings than actual supervisors would be. However, for many jobs, particularly those at the managerial level, objective performance criteria do not exist (Carroll & Schneier, 1982). Consequently, supervisors rely on subjective judgments about performance level and the problems with performance ratings are legendary (e.g., Landy & Farr, 1980). Regardless, field settings with the degree of ambiguity and lack of rater experience found in this study are probably rare. Thus, when compared with actual supervisors, it is likely that supervisors in this study were more greatly influenced by subordinate self-ratings.

For the preceding reasons, generalizations from the present study to supervisors and subordinates in actual work settings must be treated with caution. Although there is considerable evidence (e.g., Ferris et al., 1985; Zammuto et al., 1982) that supervisors and subordinates frequently disagree about subordinate performance level in actual organizations, the extent to which the effects found in the present study actually exist in organizations requires further research.

Implications

Given the preceding limitations regarding generalizing from this research, the manipulation checks and results indicate that this experiment provided a realistic dyadic setting in which one person's performance level and its causes were the subject of earnest evaluation and anticipated discussion. It seems reasonable that the results may contribute to our understanding of the dynamics of interpersonal evaluation in a variety of situations, including those in organizational contexts.

The major finding of this study is that supervisors' ratings of their subordinates are influenced by subordinates' formal self-evaluations. Although studies by Klimoski and Inks (1986) and by Farh, Werbel, and Bedeian (1988) have demonstrated that self-ratings may influence supervisory ratings, in these studies supervisory ratings were obtained only after the supervisors had seen the subordinates' self-ratings. Thus it was uncertain whether supervisors actually modified their initial appraisals or attended to or recalled aspects of performance which were consistent with the subordinates' self-ratings. In the present study it was demonstrated that knowledge of subordinates' self-ratings causes some supervisors to modify their initial ratings.

Managers must be aware of this source of influence on their ratings and on subsequent administrative decisions which may, in part, be based on performance appraisals. Such sources of influence may cause unintentional bias in ratings of certain groups. For example, as was found in the present study, females may tend to evaluate their own performance lower than males (Deaux, 1979; Deaux & Farris, 1977). Additionally, younger individuals may rate their own performance lower than older individuals (Ferris et al., 1985). Since these self-ratings may influence supervisory ratings, the potential ramifications, particularly for younger, female workers are evident. Although supervisors may prefer to discuss the appraisal more with subordinates who self-rate low, the discussion may relate to an appraisal and a pay raise lower than that initially planned by the supervisor. The ultimate consequences for subordinates who self-rate low may be retarded progress up the organizational hierarchy and lower than average salaries.

When subordinate self-ratings contain new insights, for supervisors, about subordinate performance or the causes of performance, it may be appropriate to modify the initial supervisory ratings. However, supervisors must be aware of the potential for modifying performance ratings simply to avoid a confrontation. As noted by Bernardin and Beatty (1984), rating leniently to avoid the ramifications of a harsh appraisal is one of the major problems with performance appraisal. The implication is that supervisors need to be trained to distinguish between the informational





value and their own confrontation anxiety in considering subordinates' self-ratings. If these two sources of potential influence cannot be separated, then it is likely that Campbell and Lee (1988) are correct in their conclusion that self-ratings are of limited use except for developmental purposes.

Although the effects of the absolute level of the supervisory ratings were not examined, based on the results of this study it is likely that subordinates' evaluations of the favorability of performance feedback are, in part, relative to their own self-evaluations. While this may seem obvious, subordinates' negative responses to otherwise positive performance evaluations are not always anticipated or understood. If a subordinate believes that he or she has done even better than indicated by the supervisory rating, the consequences may be less satisfaction with the appraisal, and less confidence in and liking for the supervisor. Conceivably the consequences may ultimately be psychological withdrawal and perhaps resignation from the organization. Pearce and Porter (1986) found, consistent with this assertion, a decline in organizational commitment among employees who received only satisfactory rather than outstanding performance ratings.

Future Research

This study raises several interesting questions which should be considered in future research. One major question pertains to the extent to which supervisory ratings are influenced by subordinate self-evaluations. If the influence is as strong as it appears to be, does the self-evaluation have to be formally incorporated into the appraisal system to affect supervisory ratings? Further, does the supervisor's dependence on the subordinate moderate the effects of subordinate self-evaluations on supervisory ratings?

An important question yet to be fully addressed is what are the consequences of systematic inclusion of self-ratings in the appraisal process? In light of the procedural justice arguments previously advanced (Folger & Greenberg, 1985), incorporation of self-ratings in the process should lead to increased perceptions of fairness and more positive subordinate responses. However, do the benefits derived from inclusion of self-ratings offset the potential costs? For example self-ratings may possibly rigidify positions (Thornton, 1980) and may make communications between supervisors and subordinates more difficult. When supervisors fail to change their initial ratings in light of discrepant self-ratings, subordinates' responses may be more negative than what would have been without the formal self-rating.

Contrary to Fisher's finding that supervisors provide negative performance feedback to subordinates sooner than positive performance feed-

back (Fisher, 1979), in this study it was found that supervisors prefer to discuss performance ratings less with relatively higher self-rating subordinates. What actually occurs in work organizations? Do supervisors delay conducting the appraisal session when they know the rating will be perceived by the subordinate as negative? Is the amount of delay, if any, in providing negative appraisal information a function of the expectancy that the subordinate will improve performance?

A final issue concerns the attributed causes of performance. What are the consequences of systematically including causal attributions in the appraisal process? Agreement between supervisors and subordinates on the causes of performance, prior to the actual ratings, may reduce the size of the rating discrepancy between the two sources. Programs designed to train raters to identify potential constraints on subordinate performance and to develop consensus with subordinates about the causes of performance, prior to the performance rating, may reduce the discrepancy between supervisory ratings and subordinates' self-ratings (Bernardin, 1984; Bernardin & Villanova, 1986).

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