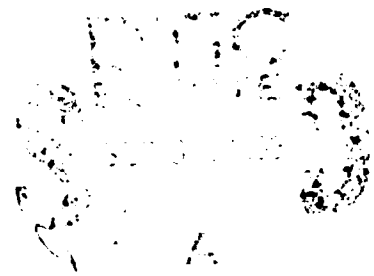


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PERFORMANCE ATTRIBUTIONAL EFFECTS ON FEEDBACK FROM SUPERIORS

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Item 20 (Continued)

they significantly distorted their feedback to make it more positive for low performers; this effect was most pronounced for those for whom they believed poor performance was due to lack of ability. In addition, the nature of specific feedback given to subordinates varied as a function of performance attributions.

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FOREWORD

The Leadership and Management Technical Area of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) has developed and is executing an extensive program of research to increase the efficiency and operational effectiveness of Army organizations. A major element of this program is the development of improved group and unit leadership.

The present report is a product of the Organizational Effectiveness Technology Development Team. It is one of a series of reports produced at Purdue University under the direction of Dr. Daniel Ilgen. The objective of this research effort is to investigate aspects of performance feedback that produce either positive or negative outcomes in terms of subsequent performance.

Findings of this and other reports in this series show that process aspects of feedback have consistently influenced the accuracy and effectiveness of the communication to the subordinate. These and other findings from the Leadership and Management Technical Area research program are forming the technology base for improving leader effectiveness.

This report was prepared under Army Project 2Q161102B74F under contract with Purdue University, under the title "The Effective Use of Feedback in Organizational Settings: A Process Centered Approach."


JOSEPH ZEIDNER
Technical Director

PERFORMANCE ATTRIBUTIONAL EFFECTS ON FEEDBACK FROM SUPERIORS

BRIEF

Requirement:

The need to provide employees with accurate feedback about their job performance is well recognized. However, in the past the focus has been on the use of evaluations and on methods of appraisal instead of on the process and communication of the evaluation. The purpose of this research is (1) to evaluate the communication of performance feedback to subordinates and (2) to explore the effects of performance attributions on feedback.

Procedure:

Forty undergraduate male and female students voluntarily participated as supervisors of three-person work groups composed of confederate undergraduates. A 2 x 2 x 2 factorial design was employed with two levels of performance, attribution, and feedback. Independent variables (performance, ability, and effort) were manipulated, and supervisors gave specific performance evaluation and performance feedback (the dependent measures) to one of the three subordinates, according to directions. Performance was deliberately manipulated to be either high or low, and specific feedback recommendations were designed to increase effort or to offer encouragement.

Findings:

The accuracy of feedback to subordinates was significantly influenced by the supervisor's perception of the cause of poor performance and by the known requirement to give feedback to the subordinate. Given the requirement to provide feedback, supervisors rated subordinate performance more positively than they had in the absence of the requirement. Further, they also evaluated the same performance consistently more harshly if they attributed it to lack of effort as opposed to lack of skill. These findings suggest that subordinates may receive misleading performance feedback when they have performed poorly and supervisors are required to counsel them on that performance.

Utilization of Findings:

This study provides basic research on performance feedback. It stresses the need for further exploration of why supervisors give less appropriate feedback when poor performance is attributed to ability rather than to effort. Although previous research has focused on development of accurate rating scales or on the needs of subordinates, this study stresses the need for an in-depth study on the communication process and on the supervisor's role as an evaluator rather than as a facilitator in the goal-setting process. The findings of this study may promote more effective performance feedback to soldiers for more accurate evaluation of soldier performance.

PERFORMANCE ATTRIBUTIONAL EFFECTS ON FEEDBACK FROM SUPERIORS

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INTRODUCTION

Performance appraisal systems, management by objectives, and guidelines for job design all emphasize the need to provide employees with accurate feedback about job performance. Also, much recent work on work motivation and supervision recognizes the importance of feedback. Although we applaud the attention given to performance feedback, two major weaknesses remain. First, much of the emphasis upon superiors' evaluation of subordinates' performance has been on the administrative use of the evaluations. The feedback function often is treated as secondary and simply accompanies the administrative process. This has occurred in spite of the fact that the classic work at General Electric clearly showed that both administrative and feedback functions were not well served with the same performance appraisal information from the supervisor (Meyer, Kay, & French, 1965).

Second, the thrust of the work on supervisor evaluations of performance has been upon techniques and methods of appraisal. Most work in performance appraisal has concentrated on the construction of reliable and valid measures. This focus developed prior to an understanding of the process by which individuals evaluate each other's performance and communicate the evaluation to the performer.² Fortunately, the focus is shifting. For example, Landy and Farr (1978) conducted an extensive review of the performance appraisal literature and concluded that few breakthroughs were likely if the focus remained upon techniques; they felt that advances were possible only through an understanding of the process of appraising others. Green and Mitchell (1979) have developed a model describing how leaders attempt to ascertain the causes of performance through an attributional analysis and how these attributions affect feedback to subordinates. Finally Ilgen, Fisher, and Taylor (1979) reviewed a large segment of the performance feedback literature to understand how individuals process information about their own performance. The consensus of these researchers and others (e.g., Greller & Herold, 1975; McCall & DeVries, 1976; Nadler, 1979) is that performance feedback from supervisors is an important aspect of behavior in organizations, but that we do not at present well understand the evaluation process itself.

¹The research was supported in part by a grant from the Organizational Effectiveness Unit of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), although the views expressed herein are those of the authors and not of the agency. The research was conducted while the first author was a visiting faculty member in the Department of Management and Organization at the University of Washington, Seattle, Wash., during the academic year 1978-79. We also thank Terence R. Mitchell and Cynthia D. Fisher for their comments on an earlier version of this paper.

²A notable exception to this generalization is Robert J. Wherry's extensive work, which was guided by an attempt to develop a theory of rating (Wherry, 1952).

Feedback Distortion

The present research addressed two factors related to the process of giving feedback to subordinates. Our first concern was the evaluation communicated to subordinates. Fisher (1979) hypothesized that superiors will tend to inflate the feedback given to low performers so as to decrease the degree of unpleasantness associated with giving feedback they are sure that their subordinates do not want to hear. Implied support for her hypothesis existed in the communication literature related to transmitting favorable or unfavorable messages (see Tesser & Rosen, 1975). She found that individuals who were required to give feedback rate poor performers significantly higher than those not required to give feedback.

The possibility exists that those who give feedback may misperceive performance rather than accurately perceive performance and then distort their evaluations. That is, these individuals may selectively perceive performance-related behaviors by looking more for positive aspects than negative ones. Therefore, to separate the effects of perceptions from feedback, the same individuals must be asked to make two evaluations of performance--one before they are aware of the need to give feedback and one after they are told they must give feedback. The present research created this condition. Specifically, we hypothesized the following:

- Hypothesis 1. Performance evaluations of low performers will be significantly higher as feedback than they will be before the supervisor is aware of his or her need to give feedback.

Attribution Effects

The second purpose of the research was to explore the effects of performance attributions on feedback. Considerable work in social psychology has demonstrated that when people observe the performance of others (or themselves), they attribute the causes of the performance to various factors (Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971). Even though individuals may observe the same "objective" level of performance, they may have different beliefs about the causes of performance. Because of these different beliefs, we would expect the nature and type of feedback to vary.

According to the fourfold attributional model of Weiner et al. (1971), performance attributions can be located in two-dimensional space. One dimension refers to whether it is believed performance is due to characteristics of the performer or to characteristics of his or her environment; these are labeled internal and external factors, respectively. Attributions also are classified on the basis of their stability. Stable causes of performance are those that are seen as relatively permanent characteristics of the performer or his or her environment, whereas unstable characteristics can change relatively quickly. This two-dimensional system defines four regions in a 2 x 2 table, with ability as the primary stable internal factor; effort, the unstable internal factor; task difficulty, the stable external factor; and luck, the unstable external factor.

With regard to performance feedback, the primary attributional concerns are those related to internal factors. Since feedback is information directed at the subordinate in order to change or maintain his or her behavior, we can assume that the conveyer of the feedback believes that the individual to whom the feedback is directed can and did have some effect on performance (Knowlton & Mitchell, 1979). Therefore, in the present study information about subordinates' abilities or propensities to put forth effort was studied as it affected the nature of specific feedback given to subordinates, as well as the extent to which the feedback was distorted.

It was reasoned that attributions should influence the nature of feedback by affecting the function served by the feedback. Most frequently, feedback is described as serving two functions--directing behavior and motivating behavior (Ilgen, et al., 1979; Locke, Cartledge, & Koepfel, 1968; Payne & Hauty, 1955). With regard to feedback in job settings, these functions translate into (a) feedback directed toward the development of specific task skills needed to accomplish the task and (b) feedback of a motivational nature designed to influence the recipient's desire to respond in line with the feedback.

Figure 1 represents our hypothesized effects of attributions on the type of feedback that should serve directional or motivational functions. When performance is good and is perceived as due to effort, it was hypothesized that if feedback were given concerning ways to improve performance, the feedback should focus on the need to acquire skills rather than to work harder. On the other hand, if low performance is seen as due to lack of effort, the focus should be on motivation rather than on skill acquisition.

		Primary Attributions to:	
		Effort	Ability
Level of Observed Performance	High	Task Skills Oriented	Motivational Orientation
	Low	Motivational Orientation	Task Skills Oriented

Figure 1. Hypothesized orientation of specific feedback as a function of observed performance and performance attributions.

The above arguments are reversed when attributions are made to ability. For high performance, the individual should be seen as possessing and using the requisite skills. Therefore, feedback toward improvement should emphasize motivation, as is illustrated in the upper right-hand quadrant of

Figure 1. Finally, low performance due to ability should be oriented toward skill acquisition. More concisely, these arguments lead to the following two hypotheses:

Hypothesis 2. Under conditions of high performance, skill-oriented feedback should be greater for those whose performance is attributed to effort than for those whose performance is attributed to ability, and the order of the means for skill-oriented feedback should be the reverse of this under low-performance conditions.

Hypothesis 3. Under conditions of high performance, motivationally oriented feedback should be greater for those whose performance is attributed to ability than for those whose performance is attributed to effort, and the order of the motivationally oriented feedback means should be reversed under low-performance conditions.

A final attributional issue was related to the degree of stability of the internal attributions. Recall that ability is labeled as a stable, relatively slow to change, internal factor; effort is less stable and more easily changed. If supervisors consider this stability notion when giving feedback, we would expect that feedback would vary more as a function of perceived effort causes of performance than as a function of perceived ability. If performance is seen as due to ability, supervisors may feel that there is little that the subordinates need to do or can do to maintain or change performance. If, on the other hand, supervisors feel that performance is due to a temporary changeable state, he or she may need to deal with it more. If, for example, subordinates do well, supervisors may feel they need to encourage the good performance to insure that it will continue. If performance is poor because of low effort, supervisors should feel a need to respond strongly to this. Indirect support for the poor performance case is offered by Knowlton and Mitchell (1979), who found lower evaluations of poor performance for those whose performance was attributed to effort as compared to those for whom it was attributed to ability. The above argument led to two hypotheses:

Hypothesis 4. Feedback will vary more as a function of performance when performance is attributed to effort than when it is attributed to ability.

Hypothesis 5. Attributions of performance to effort will lead to specific feedback which stresses working harder only under conditions of poor performance.

METHOD

Participants

Forty undergraduate psychology students at the University of Washington voluntarily participated as supervisors. They supervised three-person work groups composed of three confederates. A total of eight undergraduates, three males and five females, served as confederates during the experiment.

Sixteen of the supervisors were males and 24 were females. The median age of the subjects was 18 years.

Design

The basic design was a 2 x 2 x 2 design with two levels of performance, attribution, and feedback. In each group, two subordinates were trained to do well or poorly compared to the other subordinate. Feedback was directed only to the subordinate who performed differently. Attributions were manipulated so that the supervisor would believe that the high or low performance of the "key" confederate was due to either ability or effort. Feedback was treated as a repeated measures factor by having supervisors rate performance at one time, and then, after being told that they were to give the feedback personally, having them prepare a second performance rating to be shared with the subordinate. For the analyses of specific feedback effects, a 2 x 2 design was used; there were no pre- or post-measures in this case.

Procedure

One subject plus three confederates reported to the experimental site at one time. The three confederates acted as if they were also naive subjects who signed up for the study. In each case, two confederates were females and one was a male.

When all four were present, the experimenter explained the nature of the task and the general procedure. He then administered the Wonderlic Personnel Test. Following completion of the test, a "random drawing" was held to select a supervisor, and the naive subject was always the winner. The task was then explained in more detail. The confederates then worked for 1 hour while the supervisor observed their work. Upon completion of the work, supervisors filled out an evaluation form for each subordinate. It was emphasized that the workers would not see the evaluation and that the supervisor should be as honest as possible in completing the evaluation. When that was completed, the experimenter collected it and informed the supervisor that there was one final task. This task was to prepare an additional evaluation for one of the three subordinates and to deliver performance feedback in a face-to-face conference with the subordinate. The supervisor was given a booklet to fill out for the feedback session. When this booklet was completed, the supervisor was informed that the feedback session would not occur due to lack of time. The supervisor was then debriefed and dismissed. The entire session lasted approximately 2 hours.

Manipulation of Independent Variables

Performance. Performance was manipulated by having one of the three confederates do considerably better or considerably worse than the other two on a questionnaire coding task. Two confederate coders, always one male and one female, served as the comparison persons and coded 12 or 13 questionnaires with 6 errors in the final 12 questionnaires. The high-performing confederate, a female, coded 18 questionnaires with only 2 errors; the low-performing one, also a female, completed only 8 questionnaires

with 7 errors on the first 6 questionnaires. Feedback was always prepared for the confederate whose performance was at variance with the other two, which created conditions of high or low performance.

Ability. Upon arrival at the experimental session, the supervisor and the three confederates were all administered the Wonderlic Personnel Test. Following the selection of the supervisor, false information about the test performance of the three confederates was provided to the supervisor as an indication of each one's work ability. For the two conditions in which an ability attribution was induced, a very high or very low Wonderlic score was provided for the high- or low-performing confederate. In the other two conditions (in which an effort attribution was induced), an average score was provided for the high- or low-performing confederate. In all conditions, average scores were provided for the other two confederates. Thus, in two of the four conditions the test scores provided a salient ability cue against which to judge task performance.

Effort. To manipulate effort, the two average performers worked at a steady pace for 1 hour, taking one break during that time. For the two conditions in which an effort attribution was induced, the third confederate either displayed high or low effort by taking either no breaks or two breaks and by displaying other behavioral cues, such as by being enthusiastic or unenthusiastic, by concentrating or daydreaming, or by working constantly or dawdling. In the other two conditions, where effort was not a salient cue, the third confederate worked steadily and took only one break.

When either effort or ability was designed to be the focal cause of performance, that factor was either high or low and the other factor was set at average. For example, when effort was to be the primary cause to which high performance was attributed, the subordinate displayed high effort and was reported to be of average ability as measured on the Wonderlic Test. Likewise, if effort was the primary cause of low performance, effort was manipulated to be low, and ability again was average. These manipulations created the following four groups: Group 1 (high effort, average ability), Group 2 (low effort, average ability), Group 3 (average effort, high ability), and Group 4 (average effort, low ability).

Performance Feedback. At the end of the work session, supervisors were told that they were to evaluate the performance of all three workers, and they were told that this information would not be used or seen by the subordinates. Upon completion of the questionnaire in which performance evaluations were obtained, all supervisors were asked to perform one last supervisory function. This was to provide feedback to one worker in order to allow him or her to get the maximum benefit from the experience. The supervisor was told that the experimenter had asked all subordinates if they would be willing to serve in the same capacity for one more work session later in the week. Next, the supervisor was told that when this was done one person had agreed to return. In each case, the one the supervisor was told would return was either the high or low performer. The supervisor was then asked to provide some feedback for his or her subordinates in the next work session. To do this, he or she filled out a feedback report form under the assumption that when it was completed he or she would sit down with the subordinate and go over the feedback ratings with the subordinate.

Specifically, they were given a form which stated that "This form is to be filled out. Then supervisors are to sit down with the coder, show the individual the rating, and discuss and defend each rating to the coder."

Dependent Measures

Performance Evaluation and Performance Feedback. Superiors evaluated performance of the subordinate of interest on six items on two occasions. (The first measure was called performance evaluation and the second was called performance feedback.) Each item was rated on a 7-point scale with anchors of "unsatisfactory" at the low end and "outstanding" at the high end. The six items were quality of work, quantity of work, job knowledge, working relationships with others, job attitudes, and overall performance. The items were completed immediately after completion of the work sessions and again as part of the feedback booklet. Coefficient alphas of the first and second administration were .94 and .95, respectively. The index of performance for the pre- and post-feedback treatment analyses used the sum of these six items as the dependent variable.

It should be noted that the questionnaire administered at the completion of the work session contained performance evaluation scales for all three subordinates, not just the one of interest to us. For our purposes the others' ratings were not analyzed. This questionnaire also included method checks. The method check items are described in a later section.

Specific Feedback. On the feedback report form, supervisors also were asked to rate the degree to which they would recommend several courses of action to their subordinates in the feedback session. Five items were presented to them to be rated on a 7-point scale, with anchors of "do not recommend" at the low end and "highly recommend" at the high end. These items were designed to reflect two primary courses of action. The first was directed toward the acquisition of more task skills. It was assumed that if attributions were made to ability, such actions would be salient. Two items, which intercorrelated $r = .72$, were summed for this score. The items were "attend a special training session" and "observe others a while to get the hang of it." The second set of specific feedback recommendations was related to effort. These items were included as possible courses of action relevant to those for whom attributions for performance were effort oriented. Again two items were used. Their intercorrelation was $r = .73$, and the items were "concentrate more on the task" and "try harder." One other specific feedback item was included that simply recommended that the subordinate relax more.

The content of specific feedback was tapped by one additional scale. In this case, supervisors were told that they were to discuss two issues. First they were to tell the subordinate how they felt he or she had performed. Second, they were to recommend some specific courses of action. To aid them in the first discussion, 12 statements were presented to them. The supervisors were to read through the 12 and select the one statement that best described the way they felt about the subordinate's performance.

The 12 items were constructed such that 4 dealt with good performance, 4 with average performance, and 4 with poor performance. Since the supervisor

gave feedback to only one subordinate, who was selected to be either a high or a low performer, only four of the items were applicable for each supervisor. Of these four, two were written to stress effort and two were written to offer encouragement. For example, high- and low-performance items stressing effort were (a) "You have done very well. I believe I would try to do even better next time if I were you," and (b) "Your performance is not good at all. You really need to put more into it." Examples of encouragement items were (a) "Your performance is very good. Keep up the good work," and (b) "Your performance is not very high. However, I really wouldn't get too concerned."

Depending on which of the 12 items were selected from this list, the supervisor's general orientation could be classified either as emphasizing the need to work harder or as offering encouragement. It was felt these two strategies should vary as a function of performance attributions and performance level.

Manipulation Checks

Performance was manipulated to be either high or low. Comparisons of performance evaluation ratings described earlier found a mean rating of 38.2 under the high performance condition and 17.4 under the low condition. This difference was highly significant ($t = 15.3$; $df = 29$; $p \leq .01$).

To check the effectiveness of the effort and ability manipulations, single-item ratings were obtained on the first questionnaire on 7-point scales, with higher scores indicating a greater amount of the attribute in question. One-way ANOVAs with three levels of the factor--high ($N = 10$), average ($N = 20$), or low ($N = 10$)--were significant for each factor. (For effort ratings, \bar{X} high = 6.5, \bar{X} average = 4.7, and \bar{X} low = 1.5; $F = 72.4$; $df = 2,37$; $p \leq .01$. For ability: \bar{X} high = 6.7, \bar{X} average = 4.5, \bar{X} low = 2.1; $F = 16.6$; $df = 2,37$; $p \leq .01$.) These data clearly indicate that the manipulation of effort and ability were effective.³

RESULTS

Feedback Effects on Performance Ratings

To test the effects of feedback on performance ratings, a $2 \times 2 \times 2$ fixed effects analysis of variance was run with two levels of performance, two levels of attributions, and repeated measures for pre- and post-feedback instruction. This analysis found main effects for performance level ($F = 44.9$; $df = 1,36$; $p \leq .01$), attribution ($F = 6.2$; $df = 1,36$; $p \leq .05$), and feedback ($F = 27.2$; $df = 1,36$; $p \leq .01$) and interactions of performance level with feedback ($F = 11.8$; $df = 1,36$; $p \leq .05$) and performance level

³The averaging of ability ratings over conditions of high and low performance masked the fact that the two "average" conditions differed from each other. However, this difference does not affect our interpretation of the data for this paper. See Knowlton and Mitchell (1979) for a discussion of the implications of this difference for attribution theory with regard to leadership.

with attribution ($F = 33.5$; $df = 1,36$; $p \leq .01$). The cell means are illustrated in Figure 2. It is clear from the figure that the feedback was distorted in the positive direction for low performers. Furthermore, the effect of attribution on performance ratings is greater under low performance than under high performance.

Skill- and Ability-Oriented Feedback

Two-by-two analyses of variance were performed on the specific feedback variables, skill orientation, motivation or effort orientation, and advice to relax. Table 1 presents the cell means for these analyses. Three sets of significant effects were found. First, there were main effects for performance on both skill- and motivation-oriented feedback, with low performers receiving higher scores for both types (for skill, $F = 34.51$; $df = 1,36$; $p \leq .01$. For motivation, $F = 17.03$; $df = 1,36$; $p \leq .01$). This finding was to be expected and is rather uninteresting. It simply suggests that supervisors tell subordinates to work hard and acquire skills more often when they perform poorly than when they perform well. Second, of more interest was the interaction between attributions and performance level for motivational feedback ($F = 10.69$; $df = 1,36$; $p \leq .01$). In this case, good performers for whom ability was seen as a major contributing factor in influencing performance received more motivationally oriented feedback than did higher performers whose performance was attributed to effort. The reverse was true for low performers. The pattern of these means offered support for Hypothesis 3. Third, on the other hand, the skill-oriented feedback data did not support Hypothesis 2 (for the interaction term $F = 1.56$; $df = 1,36$; $p = n.s.$), although the means were in the right direction.

Table 1

Cell Means for Specific Feedback Under Two Performance Levels and Two Attribution Conditions

Feedback dimension	Performance level	High	High	Low	Low
	Attribution condition	Ability	Effort	Ability	Effort
Skill oriented		3.00	3.80	9.50	8.50
Motivation oriented		8.00	5.50	10.00	12.58
Relax more		3.60	3.00	3.90	4.00

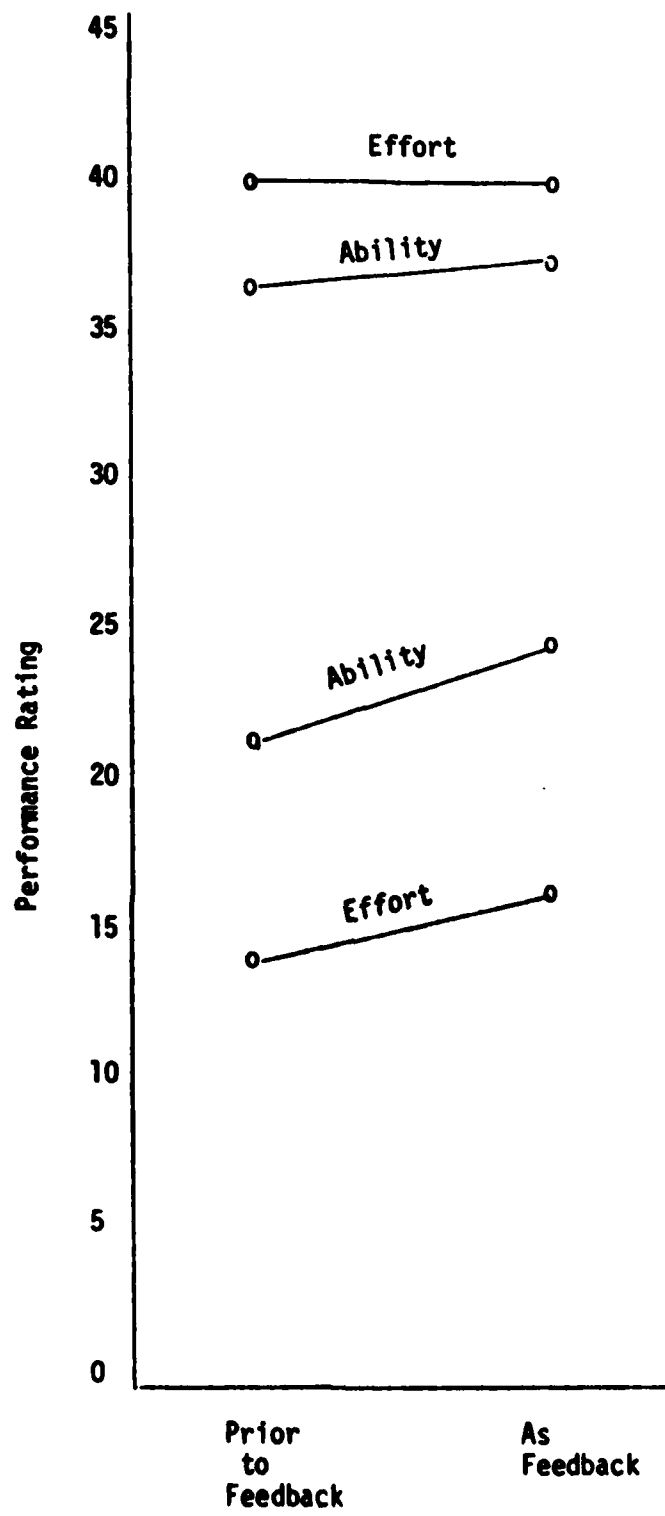


Figure 2. Rating of performance before and after being told that the information would be used in a face-to-face feedback session.

The final specific feedback effect that was significant showed that those whose performance was attributed to ability were more frequently advised to relax than if performance was seen as due to effort ($F = 5.75$; $df = 1,36$; $p \geq .05$).

General Orientation of Feedback

Recall that the supervisors were to select, from a list of 12 statements, the 1 statement that best described the way in which they would express their feelings about the subordinates' performance. These 12 statements were constructed so as to present the level of performance and to present a statement about the performance which either indicated a general level of encouragement to the subordinate or urged him or her to try to do better in the next work session.

These data were used to test Hypothesis 4, which stated that feedback will vary more as a function of performance when performance is attributed to effort than when it is attributed to ability. To analyze these data, two chi-square contingency tables were constructed using the frequency with which general orientation items were selected as the dependent variable. Within each attribution condition, the choice of general orientation was compared to the performance level. Table 2 shows the frequencies of choice and the chi-squared analyses for these data. It is clear from Table 2 that when performance was attributed to ability, the supervisors chose approximately equally to emphasize increasing effort or to offer encouragement. This, however, was not the case for effort attributions. When high performance was attributed to effort, most supervisors chose to offer encouragement rather than to suggest that subordinates try harder the next time. Low performers, on the other hand, received just the opposite advice. The results clearly indicate that the supervisors responded strongly to their perceptions of the degree to which their subordinates did or did not work hard.

DISCUSSION

Supervisors raise their evaluations of poorly performing subordinates when the evaluations must be fed back to subordinates. Earlier work by Fisher (1979) demonstrated this effect with a between-groups design. However, it was not possible from Fisher's design to tell whether the need to give feedback influenced supervisors' perceptions of low performance or whether supervisors recognized low performance but communicated higher performance. Our data support the latter interpretation. With a repeated measures design, it was clear that our supervisors made lower ratings prior to being aware of the need to give feedback, and they raised these evaluations when told they must use them for feedback.

With respect to the distortion of negative feedback observed here, one caveat should be mentioned: The design does not allow the separation of feedback effects per se from personal interaction effects. Perhaps if it were necessary to prepare feedback but not to deliver the feedback in person, the distortion would be less. Nevertheless, the confounding of feedback with the need for personal interaction reflects the situation most typically encountered in organizations when feedback is given.

Table 2

Frequency of Choices of Feedback Orientation for High- and Low-Performing Subordinates Whose Performance Was Attributed to Ability or Effort

Attribution condition	Performance level	Feedback orientation ^a		Chi-square	P-level
		Increase effort	Encouragement		
Ability	High	6	4	0.18	n.s.
	Low	4	4		
Effort	High	2	7	14.88	≤.01
	Low	9	1		

^aThree subjects were eliminated from this analysis. Therefore, in two cases the rows do not sum to 10. Two subjects left the item blank, and one subject chose feedback for high performance rather than low when the subordinate was a low performer.

If we accept the notion that low performers need to receive relatively accurate feedback in order to change and correct past mistakes, the positive distortion observed is particularly problematic when two other factors are considered. The data from this study showed that performance was rated higher for low performers whose performance was attributed to a lack of ability (see Figure 2). Since there was no interaction between attributions and feedback, the influence of attributions and the requirement to give feedback was an additive one on the ratings which were fed back. That is, supervisors who gave feedback to those who did poorly because of a lack of ability inflated their feedback ratings both because of the attributions and because of the effect of giving feedback itself. The first effect may have been due to an affect on the supervisor's perceptions of performance; the second seems to have occurred after perceptions but before communicating the performance.

An implicit goal of our research on the nature of feedback to subordinates is that the subordinates should perceive feedback from his or her supervisor that accurately reflects the subordinate's level of performance. Yet subordinate perceptions introduce a second problem. Ilgen et al. (1979) found that in general recipients perceive negative feedback in a more positive light than is reported to them. This fact, considered in conjunction with the tendency for supervisors to inflate feedback to subordinates, implies that subordinates may hold quite inflated views of their own performance. This may occur not because they receive little feedback, as has often been surmised, but because of the accumulation of several factors, some of which tend to inflate the feedback communicated by the superior and others of which lead the subordinate to misperceive his or her feedback in the positive direction. To improve the accuracy of subordinate performance perceptions, it would seem that both superiors and subordinates need to be made more aware of the tendencies to inflate feedback and factors that affect it.

With regard to specific feedback, the data demonstrated that supervisors alter their feedback as a function of attributions as well as performance level. However, this occurred only for motivationally oriented feedback. For this, the data clearly supported the hypothesized relationship (Hypothesis 3). Such was not the case for skill-oriented feedback, possibly due to two factors. First, the means were as predicted but the power of the design, with only 10 subjects in a cell, may have been too low to detect interaction effects. Second, high performance tended to lead to very little skill-oriented feedback regardless of the attributions. It is quite likely that if a high performer is perceived to have performed that way because of high effort, one must also assume he or she has the necessary skills to do the job. In other words, high performance implies the presence of the skills and, therefore, there should be little need to obtain them. If so, we would expect no difference between groups on skill orientation. That is, Figure 1 is not correct with respect to skill orientation under high performance. Further data are needed to explore the nature of skill feedback.

Looking at the extent to which supervisors varied their choice of a general orientation for the feedback between offering encouragement or stressing working harder, the data indicated that orientations were changed more when performance was seen as due to effort than when it was seen as due to ability. Again, the data supported the conclusion that attributions were important to the nature of feedback presented to subordinates.

With regard to specific feedback, the data imply that supervisors appropriately choose their feedback when they believe that performance is due to effort, but they do this to a much lesser degree when they believe performance is due to ability. This conclusion is supported both by data bearing on the selection of feedback by experimental treatment and by the general orientation data.

With regard to the first, it was hypothesized that the use of feedback directed toward skill-oriented behaviors would be appropriate for low-ability but not for low-effort subordinates. However, the use of skill-oriented behavior feedback was not affected by the experimental treatments. Supervisors did not select this type of feedback in accordance with the needs of low-ability people. Motivationally oriented feedback, on the other hand, did vary with effort attributions, as was expected (see Table 1).

With regard to the second, the general orientation data, feedback was designed to reflect either a need to increase effort or to offer encouragement. However, the selection of these two types of feedback was unaffected by the level of performance for those whose performance was due to ability, whereas there were large differences in preferences for those types when performance was attributed to effort (see Table 2).

CONCLUSIONS

Conclusions that can be drawn from these data are (1) that supervisors distort negative feedback when it must be given personally, and (2) that when performance of subordinates is attributed to ability rather than to effort, supervisors appear to give less appropriate feedback. The second factor needs further exploration. To the extent that it is commonly found

in working settings, it presents a major handicap for those perceived to be poor performers for reasons of their own low ability.

One final point should be made with regard to performance feedback. In the past it has been emphasized that subordinates need to receive accurate performance feedback for reasons related both to learning the job and to work motivation. Most frequently the supervisor is seen as one, if not the primary, source of such feedback. The focus of past research has been upon either the development of reliable or accurate scales for supervisors to rate subordinates, such as has been done in the area of performance appraisal (Landy & Farr, 1978), or it has been upon the needs of subordinates, such as management by objectives (MBO) (Reddin, 1971). In both cases, little specific attention has been given to the supervisor as an active participant in a complex interpersonal interaction which requires him or her to convey information about a sensitive subject--the performance of another individual. On the one hand, performance appraisal systems tend to ignore the communication process. MBO, on the other hand, concentrates on the supervisor's role as a facilitator in the goal-setting process for subordinates and tends to downplay his or her role as an evaluator who must at times explicitly communicate evaluations. We have shown that the nature of performance feedback is influenced by performance attributions and the need to give feedback. More work is needed to explore the feedback process in greater depth.

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