INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI®

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

EFFECTS OF FEEDBACK ATTRIBUTIONS AND TYPE OF FEEDBACK ON PERCEPTIONS OF FEEDBACK UTILITY AND AFFECTIVE REACTIONS

by

DANIEL HICKEY

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, the City University of New York.

2000

This manuscript has been read and accepted for the Graduate Faculty in Industrial/Organizational Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

3/31/2000
Date

Roger E. Mullisaf
Chair of Examining Committee

4/27/2000
Date

Executive Officer

Sheldon Zalkind, Ph.D.

Walter Reichman, Ph.D.

Nita Lutwak, Ph.D

Paula Post, Ph.D

Supervisory Committee

The City University of New York

Abstract

EFFECTS OF FEEDBACK ATTRIBUTIONS AND TYPE OF FEEDBACK ON PERCEPTIONS OF FEEDBACK UTILITY AND AFFECTIVE REACTIONS

by

Daniel Hickey

Adviser: Professor Roger Millsap

Prior research shows that feedback providing insights into process as opposed to results of performance only is more useful to recipients (e.g., P.C. Earley, et al., 1990.) However, feedback delivered in a hostile fashion attributing performance to internal attributes of the performer lead to denigration of the feedback (e.g., R.A. Baron, 1990.) The present study integrates these lines of research to determine if internal attributions for performance lead the recipient to devalue the input of process feedback. A sample of 115 undergraduate students responded to a simulated feedback in a 2 X 2 design manipulation of attribution (internal vs. external) and feedback type (process vs. outcome only.) Instead of internal attributions resulting in the devaluation of process feedback, results showed that external attributions appeared to enhance the perceived utility of outcome only feedback. Results also showed that internal attributions for performance did not result in a greater tendency to engage in impression management on the part of recipients of the feedback.

Contents

List of Tables

List of Figures

Introduction

The role of feedback in enhancing performance on the job has long been a subject of research in the field of I/O psychology. From both a research and applied perspective, feedback on one's job performance has been seen as a means of improving the level of performance. Erez (1977) found that feedback interacted with goal setting to increase performance, confirming theoretical work begun by Locke and associates in the area of goal setting (Locke, 1968; Locke & Bryan, 1969). Since that time, feedback research has attempted to understand the feedback process and its relationship to job performance. Greller and Herold (1975), in one of the earlier seminal research studies, identified, through factor analysis, five distinct sources of feedback in the workplace including self, task, co-workers, supervisor, and the organization itself. Subsequent research focusing on these sources has examined such phenomena as the impact of negative as well as positive feedback from various sources (Herold & Parsons, 1985); the amount, consistency, and perceived utility of feedback from different sources (Herold, Liden, and Leatherwood, 1987); and the relationship between types of organizational feedback and job performance (Becker and Klimoski, 1989). Other research has addressed the role of quantity of feedback on performance (Chhokar and Wallin, 1984; Ilgen and Moore, 1987) with the latter demonstrating that the impact of feedback quantity on performance is moderated by the ability to choose when to access information.

Empirical investigations of feedback have most typically focused on quantity of feedback as the primary measure. However, as demonstrated by the findings of Ilgen, et al (1979), quantity of feedback alone does not determine its impact but rather, the timeliness and informativeness as well as the quantity of feedback impact on performance. Nevertheless, quantity of feedback may be a useful yardstick in determining the degree of exposure to various types and sources of feedback.

Early research has focused on the various sources of feedback related to job performance available to organizational members. Greller and Herold (1975) noted that the five distinct sources of feedback identified provided differing degrees of information, with self and task providing the greatest level of information followed by supervisor, co-worker, and organization, respectively. It was hypothesized that the informativeness of feedback decreased as the psychological distance from the individual increased. The greater informativeness accorded supervisor feedback relative to co-worker feedback may be attributed to a perceived greater validity or importance attached by the subordinate to the supervisor's judgment of job performance. In a subsequent inquiry, Herold, et al. (1987) investigated the perceived usefulness and reliability of information from different sources and, congruent with the earlier findings of Greller and Herold (1975), the self was found to provide the most consistent and useful information followed by task, supervisor, co-workers, and organization.

Further research expanded upon the initial identification of distinct feedback sources to include different types of feedback or feedback environments within sources. Herold and Parsons (1985) developed, through factor analysis, an instrument by which to assess the amount and type of feedback available in organizations. A total of fifteen factors were found that identified positive and negative behavior and statements from three feedback sources.[1] The resulting Job Feedback Survey (JFS) assessed the amount of feedback received from each of the following: 1) supervisor/organization (positive supervisory behavior, positive formal recognition, positive formal data reports, negative consequences, negative expressions) 2) co-workers (positive co-workers, direct negative co-workers, indirect negative co-workers) and 3) self/task (positive comparisons with others, positive comparisons with self, positive internalized standards, positive task/mastery, negative comparisons with others, negative task mastery, negative time problems). Again, the most consistent feedback was from the self followed by co-workers and the supervisor/organization, respectively. In this case, consistency was operationalized as the relationship between positive and negative feedback rather than availability of information.

Becker and Klimoski (1989) expanded on the notion of feedback environments using the JFS to explore the relationship between the perceived feedback and job

---

[1]Note: Organizational and supervisory feedback were considered as a single factor as were task and self for the purposes of scale development.

performance. Although all three feedback sources were investigated, the focus of the analysis was on the relationship of different types of supervisory/ organizational feedback. The results indicated that negative expressions from the supervisor/organization, such as the supervisor expressing anger, were related to lower performance. Conversely, positive job changes, such as increasing responsibility, were related to higher performance. These results were interpreted in a motivational framework with negative expressions viewed as de-motivating while positive job changes are viewed as providing higher goals as well as serving as a reward. The researchers acknowledge that since performance was assessed by means of supervisory ratings with no pre-feedback measurements, it is not possible to determine conclusively whether the performance levels were the result of the type of feedback received or vice-versa.

A second line of inquiry in the area of feedback has focused on the feedback-seeking behavior of an individual. Ashford (1986) found that individuals reported frequent feedback-seeking when they feared they were not attaining goals. In addition, how and when an individual seeks feedback has been found to be related to the perceived costs in terms of self-image and subsequent organizational rewards (Ashford & Cummings, 1983). Individuals high in self-esteem have been found to seek more feedback than individuals low in self-esteem (Van Dyne, Earley, & Cummings, 1990) while individuals with longer tenure with an organization have been found to seek less feedback (Ashford, 1986). Perhaps, the greatest contribution of this line of research is the

explicit recognition that feedback, whether solicited or not, is a complex process in the organizational setting fraught with implications for future rewards as well as public and privately held images of the self. To this end, the role of feedback research should be to focus on those factors that relate to how an individual reacts to feedback as well as the extent to which feedback provides a means and motivation to improve performance as suggested by Ilgen, et al

(1979).

A number of factors related to feedback have been assessed in prior research either in terms of their relationship to feedback acceptance or job performance. While current research has contributed appreciably to our understanding of feedback, the study of feedback still lacks a strong theoretical framework in which to present hypotheses just as Ilgen, Fisher, and Taylor (1979) noted in a review a decade ago. Surprisingly, the model that they present has been noticeably absent from subsequent research designs, particularly in the choice and operationalization of appropriate dependent measures. Ilgen et al. note that feedback at its most basic level must provide information as to the accuracy, appropriateness, and/or adequacy of performance. Thus, actions that do not provide information that is useful to assessing performance (e.g. a nod of the head) cannot be viewed as feedback unless the recipient imposes some interpretation on the action. Further, they note two basic functions of feedback, described as either directional or motivational, that are consistent with goal setting literature in the area of motivation

(see Locke, Bryan, and Kendall, 1968). Essentially, the purposes of feedback are to provide an approach for improving performance or assessing one's role (directional function) and to stimulate higher levels of performance (motivational function). Arguably, feedback may serve neither, either or both of these functions. However, to affect performance feedback must serve both functions. Therefore, it would seem appropriate to assess the impact of feedback from different organizational sources in terms of providing a direction for future performance and influencing motivation toward higher performance goals. Herold et al. (1987) have come close to this model in an examination of feedback sources in terms of frequency, consistency, and utility as related to role ambiguity, stress, and thoughts of leaving the job. Although these measures intuitively would be thought to be negatively related to motivation, it is nevertheless not a direct assessment of the model outlined by Ilgen et al (1979).

While Greller and Herold (1975) identified the self and task among the five sources of feedback, these may be considered as conceptually distinct from the remaining sources in that, unlike supervisor, co-worker, and organization, self and task feedback do not involve attributions from others. Indeed, the task can only provide information when filtered through one's own knowledge base for the task and thus may be thought of as an extension of self feedback. The other sources of feedback, however, provide information from a source outside the individual. As such, the feedback recipient is evaluating not only the feedback but the feedback source as well. Indeed, most feedback research has

focused on the feedback source as external to the recipient. Self-regulation of the type exemplified by self and task feedback may be thought of as a wholly different process with a different set of antecedent factors. Thus, the present model will be confined to a discussion of feedback from sources external to the recipient, and more specifically supervisory feedback since it is supervisory feedback that has been demonstrated to be perceived as most useful by recipients (Greller and Herold, 1975).

Once the feedback has been received from an external source (e.g. the supervisor), the recipient must evaluate the feedback in a process that includes an assessment of the source. The evaluation process may be thought of as having two separate though related components. On the one hand, the recipient has an affective reaction to the feedback. In other words, he/she becomes angry, anxious, elated, etc. as a result of having received the feedback (Baron, 1988; Larson, 1989; Liden & Mitchell, 1985). The recipient also goes through a cognitive evaluation of the feedback assessing its utility (Greller, 1978).

In terms of the affective reaction, feedback should, at its best, engender a desire to use the information provided to modify behavior in such a manner as to successfully improve or maintain performance. At the very least, feedback should not inhibit the desire to modify behavior. Nevertheless, motivation may be seen as varying along a continuum from motivating (enhancing) to de-motivating (inhibiting). A wealth of literature (e.g. Becker & Klimoski, 1989) has provided evidence of the motivating aspects of positive

feedback. However, the boundary conditions under which negative feedback may either enhance or inhibit the desire to modify behavior warrants further investigation.

Previous research has yielded a number of factors that appear to be particularly germane to a model that attempts to assess the motivational and informational components of feedback as precursors to improved performance.

In terms of the motivational aspects of feedback, the supervisor's style of delivering feedback plays a critical role in the subordinate's response. Prior research has suggested that supervisors may be more reluctant to give negative feedback and may therefore tend to distort such feedback when presenting it to a subordinate (Fisher, 1979) while subordinates at the same time attempt to avoid being presented with negative feedback (Ashford, 1986 and Larson, 1989). Part of the reluctance on the part of supervisors to give undistorted negative feedback to subordinates is the perception that future interactions with the subordinates will be unpleasant (Fisher, 1979; Larson, 1989). Such a perception may be well-founded in light of research that notes that individuals receiving destructive rather than constructive criticism (constructive criticism being defined as specific, considerate, and not attributing poor performance to personal attributes) are more likely to respond to future interactions with resistance and/or avoidance (Baron, 1988). Thus, some distortion of negative feedback may not only be a supervisory preference but may also serve a legitimate organizational purpose in that it

diffuses negative, and potentially disruptive, responses on the part of subordinates receiving feedback.

In terms of the perceived utility of feedback, a variable that has received some attention in the literature is process versus outcome feedback. Process feedback involves information concerning the manner in which the task is performed while outcome feedback involves information regarding performance outcomes. A recent study examining the type of feedback given using a stock investment computer simulation found process feedback to be more strongly related to the quality of information search and task strategy while outcome feedback was found to be more strongly related to self-confidence and effort (Earley, Northcraft, Lee, & Lituchy, 1990). The authors suggest that process feedback may be a more efficient means of improving task performance than outcome feedback that may serve more to lure individuals into a false sense of security that may hinder future performance. The results clearly suggest a greater informational value associated with process feedback. Given the controlled conditions of a computer simulation, the effect is only likely to be more pronounced in a job context in which competing extraneous information would doubtless make it more difficult to extrapolate information concerning the effectiveness of particular task behaviors from outcome feedback alone. Consider, for example, the sales manager who has only third quarter sales figures (outcome feedback) from which to determine which strategies were effective or ineffective. In essence, the individual who receives only outcome feedback must

improve performance through a process of trial and error rather than exploiting already known information about the effectiveness of the strategy used. Thus, the process and outcome feedback distinction is likely an important one to consider in terms of the utility of feedback for subordinates, particularly in complex organizational settings.

Feedback Model

Prior research has identified various elements of the nature and utility of feedback. The current task is to bring together these different ingredients into a useful model of the feedback process in organizations. Perhaps the most useful approach is to begin with the desired outcome of feedback and trace back to the source factors. Clearly, the ultimate goal of feedback, at least from an organizational perspective, is to improve performance outcomes. In order to achieve this goal, feedback must provide information concerning the quality of performance and motivate an individual to use such information to modify behavior.

Affective Reaction

In order for feedback to be utilized in such a manner, it is necessary for feedback to be accepted. Feedback that is rejected would, of course, not be perceived as useful. Given the results of past research, a number of factors would seem to be related to the feedback acceptance. The work of Baron (1988) indicates that extremely negative feedback (i.e. angry, sarcastic, threatening statements) is likely to be rejected and further to lead to resistance in future interactions. Becker and Klimoski's (1989) findings that

negative feedback was related to lower job performance when considered in light of these results suggests that certain types of negative feedback, as opposed to negative feedback per se, may result in lower performance levels. Thus, it would seem that the tone of the feedback might impact directly on motivation with destructive negative feedback being negatively related to motivation. Further support for this notion is offered by research findings that the overall perceived quality of the formal performance appraisal was related to the interpersonal relations between the supervisor and subordinate (Nathan, Mohrman, & Milliman, 1991). A tendency toward nurturant versus hostile feedback can be seen as an outgrowth of that interpersonal relationship. As the tone of the relationship deteriorates and the feedback becomes more hostile, the reaction to that feedback is likely to become more negative.

In a follow-up investigation of destructive criticism, Baron (1990) found that such criticism was reported as moderately infrequent among a sample of employees and managers. As in his prior research, subjects who received destructive criticism perceived the feedback as significantly more unfair and were significantly angrier and less happy. Baron's conceptualization of destructive criticism includes at least two distinct elements. At one level is the hostility of the criticism that is characterized by sarcasm, threats, and a generally inconsiderate tone. At a second level, destructive criticism is characterized by internal attributions concerning the feedback recipient's performance, e.g. lack of skill, lack of effort.

While not the focus of Baron's research, it is likely that the latter is critical in engendering reactance on the part of the recipient. On the one hand, the recipient is likely to actively avoid attributions that place blame for poor performance on the self. Such tendencies are consistent with the literature on self-serving biases (see Harvey & Weary, 1984) as well as Ashford and Cumming's (1983) work on feedback-seeking which showed that individuals were less likely to seek feedback when doing so might threaten the self-image. Further, when the feedback giver attributes poor performance to internal factors, it is likely to lead to conflict and a derogation of the feedback itself. Baron (1990) posits that destructive feedback contributes to such conflict as a function of the perceived harmful intent of the supervisor's outburst. Research suggests that actions that cause harm to a recipient will lead to anger and conflict (Weiner, Amirkhan, Folkes, & Verette, 1987). Feedback that incorporates internal attributions may be viewed as potentially harmful by the recipient in an organizational context where attributions questioning one's motivation, skill, etc. may decrease one's stature in the organization if these attributions are shared with powerful figures in the organization.

The feedback giver is also likely to be perceived as going beyond the scope of his/her knowledge as an observer in making such attributions. Indeed, the supervisor is arguably not in a favorable position to make internal attributions given his/her limited knowledge of both the recipient's internal state and environmental constraints. It is fully likely that given the fundamental attribution error the supervisor may well be mistaken

when attributing unsuccessful performance to internal causes. Thus, while one may accept that the performance did not meet the observer's expectations, one is not equally likely to accept an observer's judgment that the cause is a personal flaw such as lack of effort or skill. In fact, such attributions, even when applied tactfully, may well lead the recipient to question the motivation of the feedback giver.

Thus, the present study proposes a refinement of Baron's concept of destructive criticism to focus on attribution processes, specifically, the tendency to attribute poor performance to internal causes. It is not implausible to conceive destructive criticism as an internal attribution process carried to an emotional extreme. Baron (1990) himself notes that destructive criticism does not occur frequently. However, criticism which does attribute poor performance to internal causes without the inconsiderate tone (e.g. "I don't think you put enough effort into this project. Why don't you give it another try?") is likely to occur far more frequently. Indeed, conventional wisdom often suggests that such criticism may spur the recipient into greater levels of effort. Nevertheless, in light of research concerning attribution processes and interpersonal conflict, it is the premise of the current study that a tendency to make internal attributions is at the core of the reactance inducing nature of destructive criticism. Therefore, even when delivered in a considerate manner, it is likely that such criticism will generate the same counter-productive behaviors (e.g. making excuses, refusing to change), albeit to a lesser extent, which Baron (1990) found to be a product of destructive criticism.

It should also be noted that within the context of an attributional framework, affective reactions toward feedback become a more appropriate dependent measure than the traditional behavioral intention of motivation to improve performance. Indeed, the attributional framework may betray an inherent flaw in the construction of the dependent measures related to feedback. Liden & Mitchell (1985) expressed disappointment in not finding a significant difference in students' intended effort in studying under more specific feedback conditions. Given their findings that students were more likely to reject internal attributions, it is then inconsistent to believe that these same students would indicate that future success is dependent upon greater effort on their parts. Rather, a more appropriate behavioral intention measure would involve an assessment of the willingness to modify behavior in the direction of feedback. For example, if feedback suggests that longer study is required, students might be expected to indicate that they will study longer for the exam. This would be a modification of behavior rather than a modification of an internal motivational state.

Integrating Feedback with the System's Perspective

As an alternative to the traditional focus on the individual's contribution to organizational performance, Deming (1986), as well as subsequent researchers following in his paradigm, argues that most performance variance is attributable to the operating system rather than the person. According to Deming's theory, variability in performance may be attributable to common causes, i.e. inherent in the system and common to all

performers, and special causes, i.e. non-random sources of variation within the system. Variations that result from common causes, e.g. quality/availability of materials, nature of supervision, time constraints, are by definition systemic and, therefore, beyond the control of any individual employee. As viewed from an attributional framework, common causes may be seen as external factors affecting individual outcomes. While Deming advocates a complete cessation of performance appraisals, a number of researchers have begun to explore the degree to which supervisors can recognize system influences, or common causes, as part of the broad performance appraisal process (Carson and Dobbins, 1991; Cardy, Caranikas-Walker, Sutton, and Wade, 1991; and Nathan, Milliman, and Backaitis, 1991). The premise of Deming's call for the abolition of performance appraisals rests with his belief that managers are incapable of accurately assessing the impact of systemic variations on individual performance. In the context of the long history of research in social psychology documenting the tendency of observers to disproportionately, and erroneously, attribute the failure of others to internal factors to the exclusion of external factors, Deming's perspective may not be wholly unwarranted. The aforementioned research, while still in the early stages, has produced results that suggest that managers do not recognize, or at least do not adjust performance ratings, in response to information that clearly indicates a systemic cause for individual performance problems.

Some theorists have suggested that this lack of understanding on the part of management of the constraints within an operating system may lead to a level of guarded communication such that management has insufficient information for planning purposes (Nathan, Milliman, Backaitis, 1991). In other words, a management tendency to attribute poor performance to staff rather than the work system may lead staff members to conceal information that may indicate poor performance but could help in modifying the system to enhance performance. Thus, while a tendency to make internal attributions for poor performance has already been hypothesized to lead to a discounting of the feedback, it may also contribute to a tendency to conceal information that could serve to improve overall performance by making management aware of modifications required in the operating system. Alternatively, some of the research concerning the impression-management value of feedback seeking has noted the tendency of those anticipating negative feedback to offer additional information, or excuses, in order to offset the negative impression created by poor performance. To the extent that the information offered accurately represents the constraints presented by the system, the "excuse" is a source of valuable information to management for planning purposes. However, to the extent that extraneous, or even erroneous, information is offered as part of the "excuse," the manager is presented with the task of assessing the validity of each external factor invoked.

System constraints may be broadly conceptualized as divided into two categories: system constraints that are outside the scope of organizational intervention (e.g. economic factors, legislation) and system constraints that are amenable to organizational intervention (e.g. rewards, availability of resources, standard operating procedures, supervision). The latter category includes those system constraints that are beyond individual control (e.g. rewards and allocation of resources) as well as those constraints that an individual may modify (e.g. standard operating procedures and supervisory instructions). Thus, while an employee may not increase his/her pay to a level that is sufficiently motivating or improve the quality of resources available, he/she may choose to ignore supervisor's instructions or standard operating procedures that are inhibiting performance. Indeed, recent research has suggested that employee behavior that is counter to management instructions is actually highly productive when performed in response to counterproductive procedures (Staw and Boettger, 1990). Such counter-role behavior may be conceptualized as excellent performance leading to innovation. In addition to acting counter to instructions and practices that inhibit performance, an employee may bring such information to the attention of management so that changes may be made to the overall management system.

From a management perspective, the ideal conditions would involve employees only offering that additional information, or "excuses," that accurately reflect flaws in the operating system and excluding any excuses that do not accurately reflect flaws in the

operating system. However, given the need for impression management in the appraisal context, it is conceivable that employees faced with negative feedback concerning performance may choose to offer as many potential "excuses" as possible to offset any negative impressions. It is further hypothesized that this tendency is likely to be exacerbated by any tendency on the part of managers, or feedback givers, to attribute failure to internal factors such as motivation or ability. In other words, those feedback recipients whose failures has been attributed to their own shortcomings may feel compelled to offer as substantial a body of excuses or other extraneous information, e.g. the amount of time put into producing the results, to offset the feedback giver's negative impression. By contrast, those feedback recipients whose failures have not been attributed to internal factors may feel less compelled to offer "excuses" and may, therefore, more accurately represent actual systems constraints that may then, in turn, be responded to by management.

Perceived Utility of Feedback

Motivation in terms of affective reaction is only one component in the feedback process model. In order to affect performance, feedback must also provide useful information. A number of researchers have found that for feedback to be effective it must be specific and therefore function to reduce uncertainty (Locke, 1968; Fedor, 1990). In formal performance appraisal sessions, supervisors and subordinates have been found to differ significantly on perceptions of the specificity and usefulness of feedback sessions

(Ilgen, Petersen, Martin, & Boeschen, 1981). But, perhaps even more than specificity, the type of feedback may affect the degree to which feedback provides useful information. As found by Earley et al. (1990), process feedback is more useful than outcome feedback in shaping task strategy. Indeed, it is arguable whether outcome feedback can ever be seen as specific in the organizational setting given the complexity of the environment. Under most conditions, it is unlikely that the subordinate could link outcome feedback to any specific behaviors that may have produced the outcome, thus limiting the utility of the feedback.

Beyond the tone and specificity of the feedback given, the work of Ashford (1986) and others on feedback-seeking behavior suggests that factors related to an individual's privately and publicly held images will affect the acceptance of feedback. Ashford (1986) found that longer tenured individuals sought less feedback while Van Dyne et al (1990) found no relationship between course self-efficacy and feedback seeking in the classroom. Presumably long-tenured individuals would for the most part be more confident of their job skills and subsequently may be less likely to seek feedback. Indeed, self-efficacy was found to be strongly related to past performance (Locke, Frederick, Lee, & Bobko, 1984). These results suggest that individuals who have a history of successful past performance on the job are likely to have higher self-efficacy. To extend this principle further, it is possible to hypothesize that individuals high in self-efficacy who receive unsolicited feedback may be more likely to reject such feedback.

Such a proposition could be further supported by Swann's (1987) review that found that people actively sought and were more likely to accept feedback that confirmed existing self-perceptions. Therefore, it would be interesting to note whether or not individuals who are confident in their abilities are more likely to reject feedback as well as whether or not they are more likely to reject some forms of feedback more than others are.

Hypotheses

The role of the current study is to integrate past research on feedback into a model of the feedback process as it impacts the recipient's reactions, both cognitive and affective, to the feedback received. In addition, the current research will attempt to place reactions to feedback in a systems perspective in order to assess the extent to which internal attributions made by the feedback giver precipitate excuse giving on the part of the feedback receiver.

Attribution

Consistent with the findings of Liden and Mitchell (1985), internal attributions are predicted to lead to a less favorable appraisal of the utility of the feedback as well as more strongly negative affective reactions. The effects are predicted to be similar to those demonstrated by Baron (1988) relative to the receipt of destructive feedback, albeit to a lesser degree given the more considerate tone of the feedback in the current design. The following hypotheses are generated for feedback type:

H_1: A main effect is hypothesized for type of attribution on affective reactions such that internal attributions will elicit significantly H_{1a}) less satisfaction with the feedback, H_{1b}) greater anxiety, H_{1c}) greater derogation of the feedback, and H_{1d}) less positive feedback affect (i.e. perceptions of fairness, liking for feedback-giver, and agreement with feedback-giver).

H_2: An effect of attribution on perceived usefulness with feedback containing internal attributions perceived as significantly less useful than feedback that offers external attributions for performance.

Feedback Type

Perceived usefulness is expected to vary as a function of the feedback type with process feedback being perceived as more useful than outcome feedback. When feedback contains internal attributions it is predicted that the feedback will be rejected regardless of type. Thus, an interaction is predicted between attributions and feedback type with significant differences in the perceived usefulness of process feedback over outcome feedback for which possible external attributions have been made. No significant differences are predicted between process and outcome feedback under conditions in which internal attributions have been made. The following hypotheses are generated for feedback type:

H_3: An effect of feedback type on perceived usefulness with process feedback perceived as more useful than outcome feedback.

H_4: An interaction effect between attribution and feedback type for perceived usefulness with process feedback perceived as significantly more useful than outcome feedback in the external attribution condition only.

Systems perspective

As noted earlier, theorists have suggested that a lack of understanding on the part of management of the constraints within an operating system may lead to a level of guarded communication such that management has insufficient information for planning purposes, i.e. staff are less willing to acknowledge problems for fear that staff rather than the system will be blamed for the performance problems (Nathan, Milliman, Backaitis, 1991). Under ideal conditions, the feedback receiver will offer only information concerning legitimate impediments to successful task performance. However, when he/she perceives the feedback giver to be questioning his/her ability or motivation, the feedback receiver may be tempted to engage in excuse giving, i.e. offer extraneous information about effort expended or obstacles never encountered in actuality.

H_5: A main effect for attribution with internal attributions resulting in a greater tendency to offer effort explanations for poor performance as well as to offer excuses that did not operate to inhibit performance.

Method

Sample and Procedures

Subjects consisted of a sample of 115 undergraduate level students. Subjects were contacted in undergraduate psychology courses and asked for voluntary participation in the study. Conditions were randomly assigned through a randomization of the stimulus materials. All subjects received the same overall instructions and survey questions. (See appendix A for a sample of the complete stimulus materials and survey questions.) Only the background scenario containing the stimulus for attribution type and feedback type varied between subjects. (See Appendix B for a description of the scenario corresponding to each experimental condition.) The instruction asked each subject to read the background scenario [randomly distributed for each of the four experimental conditions] and project himself/herself into the situation responding as he/she would to the circumstance. Subjects were solicited for participation during the class period [introductory and advanced psychology courses] with an introduction by the classroom instructor followed by in-class distribution of the stimulus materials. Participation rates within classes were high [generally 80-90%.] The study was 2x2 factorial design manipulating attribution type and feedback type.

	Experimental Condition			
	Outcome Feedback		Process Feedback	
	External Attribution	Internal Attribution	External Attribution	Internal Attribution
# Subjects	29	19	32	35

The sample was 70% female and 26% male (with 4% unidentified.) The sample self-identified as 20% Black, 17% Hispanic, 22% Asian, 2 % Native American, and 30% Caucasian with the remainder declining to identify. Self-reported GPA ranged from 2.0 to 4.0 with a mean of 3.2 and a standard deviation of .54. The self-reported GPA breaks down as 9% reporting a 4.0, 25% reporting a 3.5 to 3.9, 36% reporting a 3.0 to 3.49, 21% reporting a 2.5 to a 2.99, and 10% reporting below 2.5. This distribution approaches normal and while perhaps somewhat higher than actual GPA distributions does, nevertheless, reflect a self-reported grade in line with actual grades.

Independent Variables

Attribution type

The impact of attributions for poor recipient performance made by the feedback giver will be assessed. Feedback will vary as to whether or not statements reflecting an internal attribution for performance or the possibility of external attributions are made by the feedback giver. An internal attribution would involve characterizing performance difficulties as stemming from personal attributes of the recipient (e.g. laziness, lack of motivation, lack of skill). The external attribution condition will involve suggesting the

possibility of reasons external to the person (e.g., unclear instructions, lack of sufficient time) as the reason(s) for performance difficulties.

Feedback Type

Two types of feedback will be assessed: process and outcome feedback. Process feedback is defined as feedback that provides information concerning the effectiveness or appropriateness of task strategies. Outcome feedback is defined as feedback that provides information concerning the results of performance without relating the performance to specific task behaviors.

Manipulation Check

In order to assess the strength of the manipulation of the internal attribution condition, a modification of Liden & Mitchell's (1985) manipulation check item for internal attributions will be used. The item assesses the subject's perception that the feedback given attributes the cause for poor performance to internal or external causes using a ten point scale anchored at one end as "places the blame for failure entirely on me" to "places the blame for failure entirely on situational factors". (see Appendix B)

Dependent Variables

Perceived usefulness

Perceived usefulness is defined as the degree to which feedback is considered by the recipient to be helpful in maintaining or improving his/her level of performance.

Affective Reaction

Affective reactions reflect the willingness of the recipient to accept the integrity of the feedback and act to modify his/her behavior. Relevant affective components to be assessed are satisfaction with feedback, perceptions of fairness, anxiety, derogation of feedback, liking of the feedback giver, and acceptance of the feedback.

Impression Management

Systems constraints are defined conceptually as external factors operating to inhibit performance. These factors include time and resource constraints as well as imprecision in directions. For the purposes of the present study, effort is defined in impression management terms as an attempt to highlight effort expended on the task.

Design

In order to provide a feedback situation to which all subjects can identify, stimulus scenarios involved an academic setting similar to the methodology employed by Liden and Mitchell (1985). The academic scenario, while relevant to a student sample, should nevertheless include similar implications for achievement and future rewards as an organizational setting. Scenarios were developed to reflect the hypothesized distinctions in the types of organizational feedback. Specifically, scenarios were generated that correspond to internal or external attributions for performance. These scenarios, while modeled on the Liden and Mitchell scenarios, were constructed to incorporate the operationalizations for attribution, feedback type, and systems constraints under

investigation in the present study. Internal attributions for performance were defined as feedback that reflects an indication that academic job performance is the result of personal attributes of the recipient:

'Why don't you try rewriting this paper. I think you'll do just fine if you just give it a bit more effort. Try to focus a bit more and put a little more thought into your assessments. I know you can do well on this assignment -- I've seen you do it before when you just applied yourself a little more.'

The external attribution scenarios make statements that suggest that the feedback giver has allowed for external attributions of the performance:

'Why don't you try rewriting this paper. I think you'll do just fine. I've seen you do quite well on similar assignments. Perhaps you just need a bit more time or maybe my instructions weren't clear enough. Let me know if I can be of any help in clarifying the assignment or if you need any resources that aren't available.'

In addition, scenarios varied as to whether the feedback is outcome (results only):

'I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C.'

or process (specific behavioral explanations/examples given):

'I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C. I want to be sure we're both clear on the changes that are needed in this paper. What I'm looking for in this paper is more analysis. I want you to

go beyond the facts and really talk about what it means for the real world. For example, in this section, you summarize the economic trends but don't offer an assessment of their implications for the labor market. The summaries are excellent but they don't really answer the question. You have to tell me how these trends will affect the labor market and why based on the theories we've discussed.'

Thus, four separate scenarios were developed corresponding to each combination of attribution and feedback type. In addition, subjects in all conditions were presented information indicating that certain external resources that were under the institution's control were inadequate (i.e. reference material, time, etc.). (see Appendix A for scenarios).

Measures

The dependent variable of perceived usefulness was measured using Greller's (1978) utility of performance appraisal scale adapted for informal feedback sessions and an academic setting and Liden and Mitchell's (1985) feedback rating scale assessing perceived overall feedback quality and perceived helpfulness of feedback. Affective reaction was measured via several scales including Greller's (1978) satisfaction with appraisal, anxiety during appraisal, and derogation of appraisal. As with Greller's utility scale, the aforementioned scales were adapted for informal feedback sessions in an academic setting. (Two items were omitted from the anxiety scale since they are inappropriate to an informal feedback session). In addition, Liden and Mitchell's (1985)

feedback affect scale was used, again adapted for the academic setting. The scale measures perceived fairness of the feedback, liking for the supervisor (instructor), and agreement with the supervisor (instructor). All of the items in the aforementioned scales employ Likert rating scales. The Greller items are rated on a four point anchored rating scale with the following anchors: I do not feel this way at all, not at all; I feel somewhat like this, a little; I feel generally like this, pretty much; I feel exactly like this way, completely. Increasing numbers on the Greller utility of performance appraisal scale indicate greater perceptions of utility. Similarly, increasing numbers on the Greller satisfaction with appraisal scale indicate more positive affect. By contrast, higher numbers on the Greller anxiety during appraisal and derogation of the appraisal indicate more negative affect. The Liden and Mitchell items are rated on a 10-point scale anchored at the end points only with higher numbers indicating greater perceived utility or positive affect. (See Table 1 for scale items and sample reliabilities).

Finally, subjects were presented with a series of possible responses that they could give to the instructor as a justification for the subject's performance. Some of the responses presented had clearly operated to constrain performance as noted in the scenario. For example, one of the possible responses presented was that critical reference materials had not been available at the library. The scenario clearly indicated that critical reference materials were missing and, therefore, operated to constrain performance. Other possible responses presented would represent impression management since these

factors had not operated to constrain performance. For each possible response to the instructor's feedback, the subject rated the likelihood that he/she would offer such an explanation to the instructor in the interview as a justification for the performance. Feedback responses included two items for effort expended as well as external constraints operating to impede performance. Among the items representing external constraints were three that actually operated in the scenario as well as two additional factors that did not operate to constrain performance. The items are rated on a 10 point scale anchored at the end points only with higher numbers indicating greater likelihood to offer the explanation presented to the instructor (see Appendix C.)

In addition to the above items, demographic data was collected for each subject including gender, race, academic major, and academic standing.

Results

Manipulation Check and Correlations Between Measures

An independent samples t-test on the manipulation check was statistically significant ($t=2.98$, $p<.01$) providing support for the conclusion that subjects accurately perceived the attribution mindset, namely attributing poor performance to internal or external factors, of the feedback giver in the stimulus materials. Correlation coefficients between GPA and dependent measure items were non-significant with the exception of one of the 18 items included (The instructor overlooked important parts of my performance, $r=-21$, $p<.05$.) These results suggest that subjects did project themselves into the situation presented and were not overly influenced by prior academic performance history.

Scale Reliabilities

Scale reliabilities calculated using the data obtained from the present sample are presented in Table 1. All of the scales achieve acceptable alphas with the exception of the Greller Derogation scale with an alpha of .649 that is lower than the conventionally accepted standards. A review of the item correlations for the scale show that one item in particular (the instructor seemed too emotional) was not highly correlated to the other items. The item was, nevertheless, retained as part of the calculation of the scale score for hypothesis testing. The present study was designed to present feedback in a manner

that was deliberately neutral in nature. By contrast, the Greller Derogation Scales was constructed and used in applied work settings where one may expect a greater proportion of emotional feedback as posited by Baron (1988) and others. Therefore, the relatively low reliability found for the Greller Derogation Scale in the present study might be due in part to the nature of the feedback presented in the experimental manipulations.

Table 1
Feedback Rating Scales and Reliabilities

Scale	Alpha
Greller Utility Scale	.894
The feedback helped me learn how I can do my classwork better	
I learned a lot from the feedback	
The feedback helped me understand my mistakes	
I have a clearer idea of what my instructor expects from me because of the feedback	
Greller Satisfaction Scale	.829
I feel good about the way the feedback was given	
There are many ways in which I would have liked the feedback to be different	
I was satisfied with the feedback	
Greller Derogation Scale	.649
The instructor really did not have enough information about my performance	
The instructor overlooked important parts of my performance	
The instructor seemed too emotional	
The feedback seemed arbitrary	
Greller Anxiety Scale	.891
The feedback made me angry	
The feedback was upsetting	
Liden and Mitchell Feedback Affect Scale	.890
How fair were your instructor's comments	
To what extent to you agree with your instructor's comments	
How much do you like your instructor	
Liden and Mitchell Feedback Rating Scale	.847
How helpful was the feedback in understanding why the outcome was such	
Overall, how would you rate the feedback	

Descriptive Statistics

Descriptive statistics for the four measures of affective reaction and the two measures of perceived utility are presented in Table 2.

Table 2
Descriptive Statistics

Scale	Mean	Standard Deviation	Minimum Obtained	Maximum Obtained
Affective Measures				
Greller Anxiety Scale[a]	1.45	.75	1	4
Greller Derogation Scale[a]	1.82	.65	1	3.25
Greller Satisfaction Scale	2.75	.94	1	4
Liden and Mitchell Feedback Affect Scale	6.74	2.00	1	10
Utility Scales				
Greller Utility Scale	2.56	.89	1	4
Liden and Mitchell Feedback Rating Scale	6.08	2.30	1	10

[a] Higher scale scores are associated with lower positive affect.

Correlations between the dependent scale measures are reported in Table 3. All of the dependent scales correlate to some degree. As expected, the Greller Anxiety and Derogation scales correlate negatively to the other affective and utility scales measures.

Table 3

Correlations Between Dependent Scales

		Greller satisfaction scale	Greller derogation scale	Greller anxiety scale	Liden & Mitchell feedback affect scale	Liden & Mitchell feedback rating scale	Greller utility scale
Greller satisfaction	Pearson Correlation	1.000					
	Sig. (2-tailed)	.					
	N	115					
Greller derogation	Pearson Correlation	-.626**	1.000				
	Sig. (2-tailed)	.001	.				
	N	113	113				
Greller anxiety	Pearson Correlation	-.638**	.383**	1.000			
	Sig. (2-tailed)	.001	.001	.			
	N	115	113	115			
Liden & Mitchell feedback affect	Pearson Correlation	.687**	-.443**	-.577**	1.000		
	Sig. (2-tailed)	.001	.001	.001	.		
	N	112	110	112	112		
Liden & Mitchell feedback rating	Pearson Correlation	.748**	-.540**	-.501**	.805**	1.000	
	Sig. (2-tailed)	.001	.001	.001	.001	.	
	N	114	112	114	111	114	
Greller utility	Pearson Correlation	.671**	-.439**	-.439**	.539**	.718**	1.000
	Sig. (2-tailed)	.001	.001	.001	.001	.001	
	N	115	113	115	112	114	115

**. Correlation is significant at the 0.01 level (2-tailed).

Differences were found by gender for the following two dependent scales measures: the Greller satisfaction scale ($t=.275$, $p<.01$) and the Liden and Mitchell feedback affect scale ($t=2.03$,$p<.05$.) In both cases, male subjects ($n=30$) reported greater satisfaction with and/or positive affect toward the feedback received than did female subjects ($n=81$.) Because the representation of male subjects in the study is relatively low, it would be premature to reach any conclusions about reactions to feedback as a function of gender. No differences were found as a function a race.

Main Effects and Interaction Effects

Main effects and interactions were tested using ANOVAs for each of the six dependent variable scales. Analysis revealed partial support for hypothesis 1 with significant differences found for the more subtle measures of affective reaction supporting using the Liden and Mitchell feedback affect scale [hypothesis 1d], the Greller satisfaction scale [hypothesis 1a], and the Greller anxiety scale [hypothesis 1b.] The more extreme measure of affect as measured by the Greller derogation scale [hypothesis 1c] showed no significant differences (see Table 4.). Although the results were not statistically significant they were directionally supportive of the hypothesis with derogation higher for internal attribution as measured by the Greller scale.

Table 4

Hypothesis 1: A main effect is hypothesized for type of attribution on affective reactions such that internal attributions will elicit significantly H_{1a}) less satisfaction with the feedback, H_{1b}) greater anxiety, H_{1c}) greater derogation of the feedback, and H_{1d}) less positive feedback affect

	Estimated Marginal Means			
	Internal	External	F	p value
Hypothesis H1a [Satisfaction with feedback]				
Greller Satisfaction Scale	2.50	2.87	4.494	.036
Hypothesis H1b [Anxiety with feedback]				
Greller Anxiety Scale	1.57	1.36	5.856	.017
Hypothesis H1c [Derogation of the feedback]				
Greller Derogation Scale	1.95	1.77	2.09	.151
Hypothesis H1d [Positive feedback affect] H1d				
Liden and Mitchell Feedback Affect Scale	5.99	7.13	9.707	.002

Note: Higher numbers indicate greater satisfaction or positive affect on the Greller Satisfaction and Liden and Mitchell Feedback Affect scales, respectively. Higher numbers indicate greater anxiety or derogation of the feedback giver (i.e., are more negative) for the Greller Anxiety and Greller Derogation scales, respectively.

Hypothesis 2 received partial support with the utility of feedback using the Liden and Mitchell feedback rating scale lower for the internal feedback condition. No differences were found using the Greller utility scale (see Table 5.)

Table 5

Hypothesis 2: An effect of attribution on perceived usefulness with feedback containing internal attributions perceived as significantly less useful than feedback that offers external attributions for performance.

	Estimated Marginal Means			
	Internal	External	F	p value
Hypothesis 2 [Feedback utility]				
Greller Utility Scale	2.48	2.49	.005	.945
Liden and Mitchell Feedback Rating Scale	5.35	6.32	5.86	.017

Note: Higher numbers indicate greater perceived utility.

Results revealed full support for hypothesis 3 with process feedback perceived as more useful than outcome feedback as measured by both the Greller utility scale and the Liden and Mitchell feedback rating scale (see Table 6.)

Table 6
Hypothesis 3: An effect of feedback type on perceived usefulness with process feedback perceived as more useful than outcome feedback.

	Mean			
	Outcome	Process	F	p value
Hypothesis 3 [Feedback utility]				
Greller Utility Scale	2.13	2.84	20.331	.001
Liden and Mitchell Feedback Rating Scale	4.94	6.74	19.926	.001

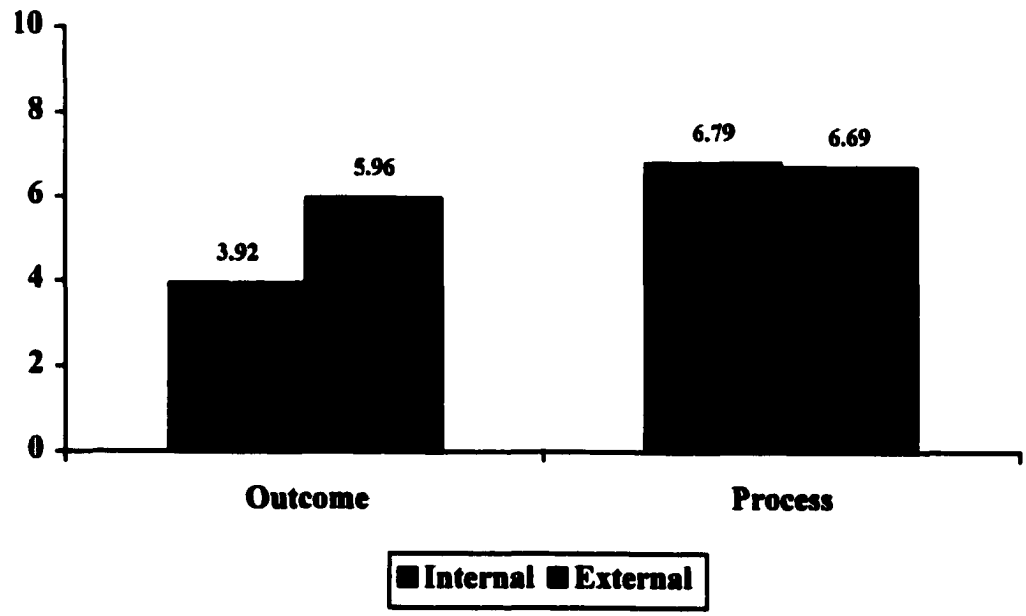
In order to test hypothesis 4, interaction effects were tested for the Greller utility scale and the Liden and Mitchell feedback rating scale. Results were significant for the Liden and Mitchell scale only, $F(1,123)=7.098$, $p<.01$ (see Table 7.)

Table 7
Hypothesis 4: An interaction effect between attribution and feedback type for perceived usefulness with process feedback perceived as significantly more useful than outcome feedback in the external attribution condition only.

	Mean					
	Internal Process	Internal Outcome	External Process	External Outcome	F	p value
Hypothesis 4 [Feedback utility: Attribution * Type]						
Greller Utility Scale	2.94	2.0	2.71	2.27	2.66	.105
Liden and Mitchell Feedback Rating Scale	6.79	3.92	6.68	5.96	7.10	.009

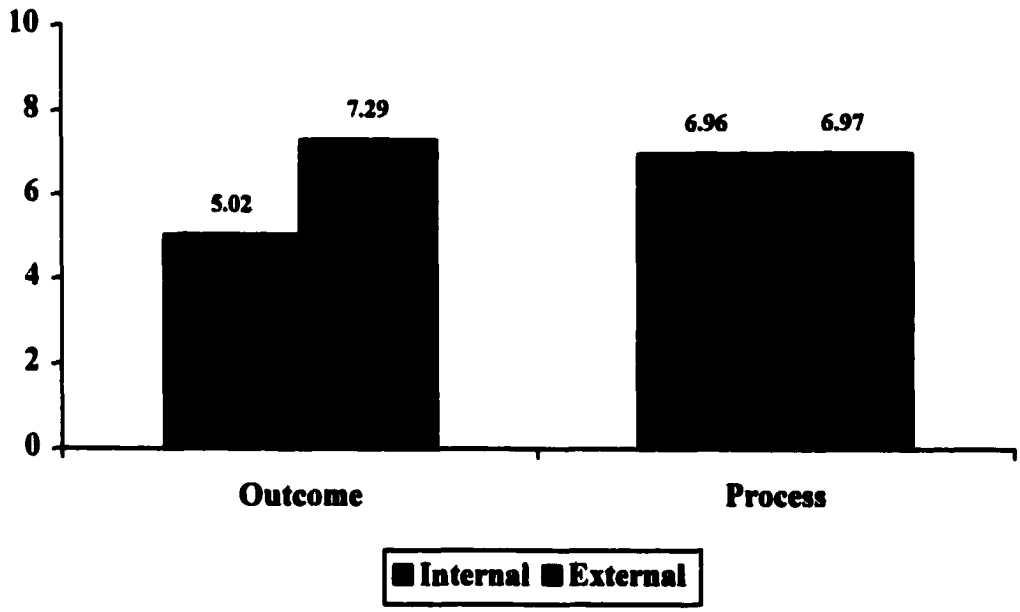
Using the Scheffe method of post hoc testing, outcome feedback with internal attributions were rated as significantly less useful than other feedback conditions, $F(3,118)=9.035$, $p<.001$. These results differed from the hypothesized interaction that anticipated internal attributions negating the positive impact of process feedback. By contrast, results showed process feedback to be equally useful in both the internal and external attribution conditions. The interaction effect is presented graphically in Figure 1.

Figure 1
Hypothesis 4: An interaction effect between attribution and feedback type for perceived usefulness with process feedback perceived as significantly more useful than outcome feedback in the external attribution condition only.
Liden and Mitchell Feedback Rating Scale



While not hypothesized, a significant interaction was also found for Liden and Mitchell's feedback affect scale, $F(1, 304)=9.59$, $p<.01$. The pattern was similar to that found for the Liden and Mitchell feedback rating scale with internal feedback receiving significantly lower ratings in the outcome feedback condition only. The interaction effect is presented graphically in Figure 2.

Figure 2
Interaction effects for feedback attribution and feedback type on affective ratings
Effects of feedback attribution * feedback type
Liden and Mitchell Feedback Affect Scale



Hypothesis 5 was tested using independent sample t-tests for the internal and external attribution condition for those items representing performance obstacles that had not operated to inhibit performance. Results of t-tests are presented in Table 8. No difference was found for likelihood to offer reasons that had not operated to constrain

performance as a function of attribution type. Indeed, results revealed that attribution type also did not affect the likelihood of offering reasons that had operated to constrain performance (as presented in the simulation.) Moreover, subjects overall were more likely to offer actual constraints (again, as presented in the stimulus materials) to performance in discussions with the instructor. On a 10 point scale, actual constraints received a mean likelihood to discuss rating between 6.6 and 7.6 while factors that did not operate as constraints received a mean likelihood to discuss rating between 3.8 and 4.3.

Table 8
Hypothesis 5: A main effect for attribution with internal attributions resulting in a greater tendency to offer effort explanations for poor performance as well as to offer excuses that did not operate to inhibit performance.

	Mean			
	Internal	External	t value	p value
Presented as an obstacle in background scenario				
Was not enough time	6.5	6.66	.324	.746
Some references not available	7.31	8.0	1.697	.092
PCs were not available	7.19	7.02	-.367	.714
Not presented as an obstacle in background scenario				
Put a lot of effort in	4.11	4.51	.910	.365
Had personal problems	3.69	3.85	.314	.754
Had two other papers due	3.8	4.28	.906	.367
At library after others left	4.26	4.44	.35	.727

Discussion

The results of the present study confirm the utilitarian value of process feedback over outcome feedback found in prior research. These results should come as no surprise given the added informational value of process feedback. Only in the most controlled environments would outcome feedback alone provide any directional information for modifying one's performance. In other words, knowing that the outcome was unsuccessful does little to help one determine what specific aspects of performance need to be changed in order to have a successful outcome. These findings may be particularly germane in the business setting where the impact of individual performance on business outcomes such as sales or retained customers may be difficult to separate from external factors such as market conditions and competition. The results of the present and prior research suggest that any added insights regarding the impact of the individual's behavior on the outcome that can be incorporated into the feedback will increase the usefulness of that feedback for the recipient. One important caveat to note here is that the outcome feedback presented in the simulation was much shorter in length than the process feedback. It is, therefore, possible that subjects may have perceived the feedback with the greater amount (i.e., process feedback) as more useful without necessarily evaluating its content. While outcome will be necessarily brief given the limited information conveyed, future research should attempt to control for length by adding additional non-

informational statements. By controlling for the amount of feedback provided, one can establish whether it is quantity or quality of feedback that is influencing the perceived utility.

The primary thrust of the present study was to explore the impact of internal attributions on the receiver's emotional receptivity to the feedback and, ultimately, to his/her judgment of the feedback's overall utility. While the negative effect of Baron's destructive criticism could be an anticipated outcome of its hostile and sarcastic nature; more benign forms of internal attribution are often seen in a very different light in terms of the potential impact on future performance. Indeed, conventional wisdom suggests that gently phrased internal attributions may enhance future performance through increased motivation. Statements to the effect "I have confidence in you. I know you can succeed if you just give it a little more effort" are often seen as inspirational. Of course, embedded in such beliefs is the presumption that the cause of the poor performance does lie within the individual, e.g., motivation or ability, as opposed to outside the individual, e.g., lack of resources or lack of clarity regarding performance goals. Absent clear behavioral evidence of the individual's lack of motivation or general inability, the feedback attribution is based on the suppositions of the individual giving the feedback.

The departure of the present study from the earlier work by Baron is in terms of the tone of the internal attributions. While Baron's destructive feedback was hostile and sarcastic; the tone of the internal attribution in the present study was far subtler. The

internal attribution was specifically designed to elicit the feeling that the feedback giver (instructor) had confidence in the feedback recipient and intended the feedback to be a source of motivation.

The mixed results of hypotheses 1 and 2 suggest that not only was the internal attribution more subtle, but so too was the reaction of the feedback recipient. Contrary to the hypothesis, the subjects who received feedback with internal attributions did not rate the feedback as less useful. Nor did the subjects have the more extreme emotional reactions to the internal attribution. The Liden and Mitchell Feedback Affect Scale demonstrated significantly lower ratings by subjects for whom internal attributions had been made for performance. The items on this scale involved agreement with the instructor's comments, liking for the instructor, and a feeling that the feedback was fair. By contrast, the Greller Derogation Scale that did not demonstrate significant differences as a function of attribution involved being angry and upset with the feedback. One should note that directionally, all of the utility and affect scales demonstrate a pattern in the hypothesized direction, i.e., internal attribution result in less positive affect and perceived utility of the feedback. Nevertheless, only the more subtle reactions measured, e.g., the Liden and Mitchell Feedback Affect Scale, proved significantly lower in the internal attribution condition.

From an applied perspective, these results suggest that internal attributions, no matter how benignly they are conveyed, engender some sense of resentment in the recipient.

However, the results also suggest that such resentment may be relatively mild. In practice, the feedback giver may never come to know the negative reaction to the feedback precisely because the reaction to the feedback is less extreme. Thus, not only may the recipient be less predisposed to incorporate the feedback, but he/she may also be less likely to convey his/her dissatisfaction with the feedback giver's conclusions and, therefore, limit future dialogue.

An additional finding of note is the interaction effect for the affect as measured by the Liden and Mitchell affect scale. Only internal attributions made in the absence of process feedback was rated as less appealing. Recall that the Liden and Mitchell scale includes a fairness item. Providing process information may mitigate the negative impact of internal attributions by providing the necessary information to correct one's performance. In other words, the feedback may be seen as more fair when the feedback giver provides some process insights. Under those circumstances, the feedback receiver may be more willing to overlook the internal attributions. By contrast, when only outcome information is provided the feedback may appear even more unfair to the recipient. Under those circumstances, not only has the recipient been blamed on a personal level for the performance but also he/she has been given little actionable information with which to adjust the performance and reverse the attributions of personal blame for the poor performance.

The impact of internal attributions on the overall effectiveness feedback is, perhaps, best illustrated by the interaction of attribution and feedback type. Recall that the original hypothesis suggested that the information value of process feedback would be negated when internal attributions were made for performance. Instead, the results showed that only when internal attributions were made in conjunction with outcome feedback did the perceptions of the usefulness of the feedback decrease. One can readily see how these findings make sense. Outcome feedback offers little insight into the process for changing behavior to improve performance. When combined with an internal attribution for performance, the recipient may feel somewhat defensive and helpless. On the one hand, he/she may feel the need to defend against the perception that he/she is unmotivated or unskilled. Further, without more insight into how to impact future performance, the recipient may feel at a loss as to how to regain his/her stature with the feedback giver. By contrast, while the internal attributions may be somewhat annoying when accompanying process feedback, the added information may enhance the recipient's feelings of being in control and able to impact performance and, ultimately, the feedback giver's perceptions of his/her abilities and/or motivation. Interestingly, the recipients still find outcome feedback useful when an external attribution is made for performance. A possible explanation would be that when the feedback giver allows for the possibility that external factors have played a role in the performance, the feedback recipient may feel that there is more room to explore with the feedback giver possible

explanations for what is affecting performance and come to some shared understanding of what actions can be taken. Thus, while the feedback itself does not provide direction regarding how to modify behavior, the willingness of the feedback giver to explore other factors contributing to the failure may give the recipient a greater feeling of confidence in his/her ability to explore different options for impacting future performance.

Although the present results, like those of Liden and Mitchell, suggest that internal attributions inhibit rather than facilitate feedback integration, a substantial body of research (e.g., the Pygmalion effect) does show the value added of expressing confidence in the target's ability to perform as a means to increase self-efficacy and, ultimately, performance. Perhaps, the rapprochement between these seemingly contradictory results is that in the self-efficacy paradigm, the target of the feedback doubts his/her capabilities. By contrast, a target receiving an internal attribution for performance may not doubt his/her capabilities and, therefore, resent the assumptions of the feedback giver. It is also important to note that in the present study, the internal attributions were for a lack of effort. There was no corresponding suggestion that the lack of effort may be the result of a fear of failure. Thus, while expressing confidence in the target's capabilities may well enhance the target's self-efficacy, some caution should be taken regarding other internal attributions, particularly regarding effort. The present results suggest that a feedback giver may want to allow for the possibility of outside factors inhibiting performance (external attribution) while at the same time expressing confidence in the target's

capability thereby enhancing self-efficacy. Future research should explore the subtle differences between confidence building statements and internal attributions for poor performance. The key may well lie in the self-efficacy of the target at the time the feedback is received, a factor not considered in this study.

Finally, the results did not show any increased likelihood for excuse giving or active distortion of the work circumstances as a function of internal attributions for performance. As hypothesized, it would not be unreasonable to expect people to engage in more impression management when someone in a position of authority has attributed performance to one's motivation or ability. Nevertheless, the subjects in the present study were no more likely to offer excuses when such attributions were made. These findings are particularly germane in light of Deming's perspective that feedback givers tend to underestimate system influences on performance. Since the results found in the present study suggest that recipients are not more likely to distort the context in order to manage the impression, one could argue that there might be considerable wisdom in establishing a dialogue around poor performance outcomes. If people can be expected to be reasonably forthright in discussing obstacles to performance, the feedback giver may do well to elicit this information as part of the feedback process. The value of such a dialogue may be particularly high in the business context where the feedback giver is also often in a position of authority with some degree of influence over resources and other factors that may affect performance.

However, some caution should be taken in viewing the present results, particularly with regard to the stimulus situation. In the present study, the feedback recipient is given an opportunity to favorably alter the outcome. In other performance settings in which there is no opportunity to alter the outcome and/or future rewards are contingent on the feedback giver's (e.g., one's manager) perceptions, recipients may exhibit more impression management behavior. Nevertheless, the present results are encouraging in that they suggest that feedback recipients can and do offer realistic assessments of the operating environment. An additional caveat is that the present study is a paper-and-pencil simulation. Future research should explore the implications of feedback type and attribution in applied settings. Paper-and-pencil scenarios are free of the distractions of a real life setting and, as noted earlier, have no implications for actual positive or negative outcomes. While results of this study, as well as the Liden and Mitchell simulation, suggest clear implications for the applied setting, future research should attempt to replicate these findings in the applied setting.

A number of possibilities exist for future research to build on these findings. One possibility is to gather specific feedback commentary in the form of a written summary of what is discussed in a job performance appraisal. Independent raters could code the feedback for the presence of process information as well as the type of attribution made for performance improvement needs, i.e., internal, external possibilities, or no attribution. The feedback recipient's emotional and cognitive reaction to the feedback could be

solicited via interview or survey and matched to the feedback pattern. Thus, the reactions to actual feedback of the types studied could be assessed. A second possibility is to develop training programs designed around the optimal paradigm, namely, process feedback that allows for the possibility of external attributions for performance. The reactions of feedback recipients could be tested in a quasi-experimental pre- and post-design.

While much is still left to be learned about effective feedback, the present study builds on a body of research that confirms the importance of attending to the emotional context of feedback. While the negative impact of hostile feedback as noted in the Baron construct is almost self-evident, the impact of more subtle attributions may be even more important. Feedback that is intended to be encouraging and positive may unintentionally engender negative reactions, however mild, that may inhibit the ultimate goal of feedback, i.e., performance improvement. While providing encouragement that builds feelings of self-efficacy is important, the present study suggests that there may be a fine line over which the recipient begins to resent the assumptions made by the feedback giver. Clearly, more research is needed to understand the subtle emotional underpinnings of feedback acceptance that will allow us to help people learn techniques for giving feedback that is welcomed and acted upon.

Appendix A

Background:

You have just received the grade for your midterm paper which, at present, is a "C". You have an opportunity to rewrite the paper and improve your grade. You have scheduled an appointment with the instructor to discuss your paper. You want to be certain you understand exactly what the instructor is expecting before you revise the paper.

Although your instructor may not be aware of it, several factors outside your control contributed to your producing a lower quality paper than would otherwise have been the case. First, given the scope of the assignment, the assigned deadline of two weeks was not sufficient to both gather the information and develop a thorough analysis. In addition, certain critical reference materials were not readily available at the campus library and had to be ordered causing an additional two week delay. Finally, the department PCs used by students for word processing were not available for several hours each day for maintenance. However, in your favor, at least no other reports were due during that period and you had just resolved a dispute with your roommate, so you had no personal distractions. With this in mind, you go into your instructor's office where the you receive the following feedback:

> "Please, come in. Have a seat. I wanted to talk to you about your mid-term paper. I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C. Why don't you try rewriting this paper. I think you'll do just fine if you just give it a bit more effort. Try to focus a bit more and put a little more thought into your assessments. I know you can do well on this assignment -- I've seen you do it before when you just applied yourself a little more. "

Part I

Imagine that you have just received the feedback described on the previous page and answer the following questions as you would if you were the student who had just received this feedback from his/her professor.

For each of the questions that follow, rate your reaction on the following scale:

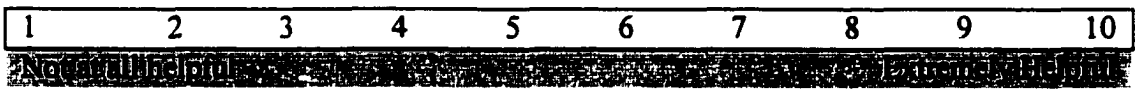
I do not feel this way at all, not at all	I feel somewhat like this, a little	I feel generally like this, pretty much	I feel exactly this way, completely

1. The feedback helped me learn how I can do my classwork better. ____
2. I learned a lot from the feedback. ____
3. The feedback helped me understand my mistakes. ____
4. I have a clearer idea of what my instructor expects from me because of the feedback . ____
5. I was satisfied with the feedback. ____
6. I feel good about the way the feedback was given. ____
7. There are many ways in which I would have liked the feedback to be different. ____
8. The instructor really did not have enough information about my performance. ____
9. The instructor overlooked important parts of my performance. ____
10. The instructor seemed too emotional. ____
11. The feedback seemed arbitrary. ____
12. The feedback made me angry. ____
13. The feedback was upsetting. ____

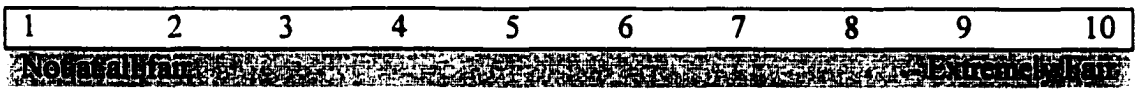
Part II

Please rate your reaction to each of the questions that follow by circling the appropriate response on the scale which follows the question.

1. How helpful was the feedback in understanding why the outcome was such?

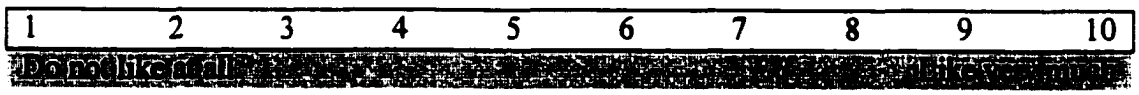


2. How fair were your instructor's comments?

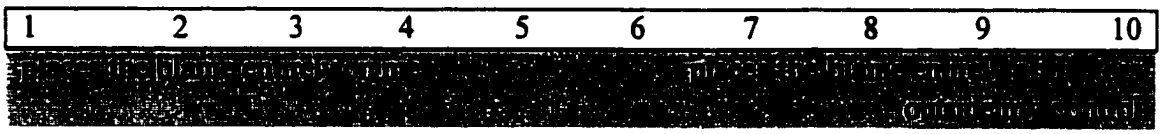


3. To what extent to you agree with your instructor's comments?

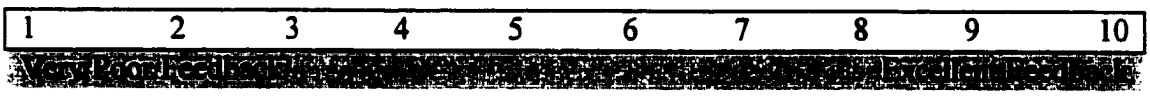
4. How much do you like your instructor?



5. To what extent does the professor's feedback suggest that he/she places blame for your poor grade on you rather than on factors outside your control?



6. Overall, how would you rate the feedback?



Part III

Having just received the preceding feedback from your instructor, he proceeds to ask you if there is anything that could have been done to assist you in preparing a better report. Please indicate on the scale below each item how likely you would be to offer each of the following in your response to your instructor:

1. "I put a lot of effort into this report, much more than for most other reports I've done."

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

2. "There wasn't enough time to do the kind of analysis you were looking for. If we had the assignment two weeks earlier it would have helped".

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

3. "Some of the critical references weren't available at the library. It would help if copies of those materials were available in the department."

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

4. "The PCs weren't available at critical times. It would help if the equipment could be serviced at off peak hours."

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

5. "I've had some personal problems. It would help if I had more time to deal with those issues first."

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

6. "I had two other papers due the same week. It was really hard to focus on all three."

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

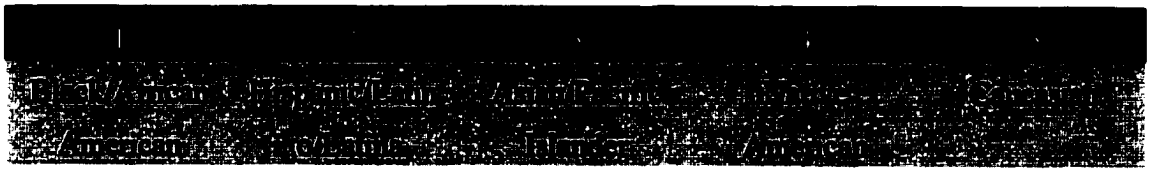
7. "I really put a lot of effort into this paper. I was still at the library working long after almost everyone else had gone home."

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

Demographic Information

My gender is:

The category which best describes my race/ethnicity is:



My major is: _____

My GPA for the last semester is: _____

Appendix B

Outcome/internal attribution condition

Please, come in. Have a seat. I wanted to talk to you about your mid-term paper. I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C. Why don't you try rewriting this paper. I think you'll do just fine if you just give it a bit more effort. Try to focus a bit more and put a little more thought into your assessments. I know you can do well on this assignment -- I've seen you do it before when you just applied yourself a little more.

Process/external attribution condition

Please, come in. Have a seat. I wanted to talk to you about your mid-term paper. I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C. I want to be sure we're both clear on the changes that are needed in this paper. What I'm looking for in this paper is more analysis. I want you to go beyond the facts and really talk about what it means for the real world. For example, in this section, you summarize the economic trends but don't offer an assessment of their implications for the labor market. The summaries are excellent but they don't really answer the question. You have to tell me how these trends will affect the labor market and why based on the theories we've discussed. Why don't you try rewriting this paper? I think you'll do just fine. I've seen you do quite well on similar assignments. Perhaps you just need a bit more time or maybe my instructions weren't clear enough. Let me

know if I can be of any help in clarifying the assignment or if you need any resources that aren't available.

Process/internal attribution

Please, come in. Have a seat. I wanted to talk to you about your mid-term paper. I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C. I want to be sure we're both clear on the changes that are needed in this paper. What I'm looking for in this paper is more analysis. I want you to go beyond the facts and really talk about what it means for the real world. For example, in this section, you summarize the economic trends but don't offer an assessment of their implications for the labor market. The summaries are excellent but they don't really answer the question. You have to tell me how these trends will affect the labor market and why based on the theories we've discussed. Why don't you try rewriting this paper. I think you'll do just fine if you just give it a bit more effort. Try to focus a more and put a little more thought into your writing. I know you can do well on this assignment -- I've seen you do it before when you just applied yourself a little more.

Outcome/external attribution condition

Please, come in. Have a seat. I wanted to talk to you about your mid-term paper. I'm afraid it's not quite what I was looking for in the report. As you know, your grade right now for this paper is a C. Why don't you try rewriting this paper. I think you'll do just

fine I've seen you do quite well on similar assignments. Perhaps you just need a bit more time or maybe my instructions weren't clear enough. Let me know if I can be of any help in clarifying the assignment or if you need any resources that aren't available.

Appendix C

MANIPULATION CHECK

To what extent does the professor's feedback suggest that he/she places blame for your poor grade on you rather than on factors outside your control?

1	2	3	4	5	6	7	8	9	10

places the blame entirely on me

places the blame entirely on factors outside my control

References

Ashford, S. J. Feedback-seeking in individual adaptation: A resource perspective. Academy of Management Journal, 1986, 29 (3),465-487.

Ashford, S. J. & Cummings, L.L. Feedback as individual resource: Personal strategies for creating information. Organizational Behavior and Human Performance, 1983, 32, 370-398.

Baron, R. A. Negative effects of destructive criticism: Impact on conflict, self-efficacy, and task performance. Journal of Applied Psychology, 1988, 73 (2), 199-207.

Baron, R.A. Countering the effects of destructive criticism: The relative efficacy of four interventions. Journal of Applied Psychology, 1990, 75(3), 235-245.

Becker, T. E. and Klimoski, R. J. A field study of the relationship between the organizational feedback environment and performance, Personnel Psychology, 1989, 42 (2), 343-358.

Beehr, T. A. Perceived situational moderators of the relationship between subjective ambiguity and role strain, Journal of Applied Psychology, 1976, 61 (1), 35-40.

Cardy, R.L., Caranikas-Walker, F.C., Sutton, C.L., and Wade, K.J. Person and system sources of performance variance: Empirical findings. Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, St. Louis, 1991.

Carson, K. P. and Dobbins, G.H. An expanded view of employee performance. Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, St. Louis, 1991.

Chhokar, J. S. & Wallin, J.A. A field study of the effect of feedback frequency on performance. Journal of Applied Psychology, 1984, 69, 524-530.

Deming, W.E. Out of the crisis. Cambridge, M.A.: Massachusetts Institute of Technology (1986).

Early, P. C., Northcraft, G. B., Lee, C., & Lituchy, T. R. Impact of process and outcome feedback on the relation of goal setting to task performance. Academy of Management Journal, 1990, 33 (1), 87-105.

Erez, M. Feedback: A necessary condition for the goal setting-performance relationship. Journal of Applied Psychology, 1977, 62 (5), 624-627.

Fedor, D. B. Feedback recipients' responses to negative feedback: Investigating the role of uncertainty. Presented at the 1990 Annual Meeting of the Society for Industrial and Organizational Psychology.

Fisher, C. D. Transmission of positive and negative feedback to subordinates: A laboratory experiment. Journal of Applied Psychology, 1979, 64 (5), 533-540.

Greller, M. M. The nature of subordinate participation in the appraisal interview, Academy of Management Journal, 1978 (21 (4) 646-658.

Greller, M. M. & Herold, D. M. Sources of feedback: A preliminary investigation. Organizational Behavior and Human Performance, 1975, 13, 244-256.

Harvey, J. H. & Weary, G. Current issues in attribution theory and research. In M.R. Rosenzweig & L. W. Porter (Eds.), Annual Review of Psychology, 1984, 427-459.

Herold, D. M., Liden, R. C., & Leatherwood, M. L. Using multiple attributes to assess sources of performance feedback, Academy of Management Journal, 1987, 30, 826-835.

Herold, D. M. and Parsons, C. K. Assessing the feedback environment in work organizations: Development of the job feedback survey, Journal of Applied Psychology, 1985, 70, 290-305.

Howard, G.S., Maxwell, S.E., Weiner, R.L., Boyton, W.M. Is a behavior measure the best estimate of behavioral parameters? Applied Psychological Measurement, 1980, Applied Psychological Measurement, 4, 23-311.

Ilgen, D., Fisher, C. D., & Taylor, M. S. Consequences of individual feedback on behavior in organizations. Journal of Applied Psychology, 1979, 64, 349-371.

Ilgen, D., & Moore, C. F. Types and choices of performance feedback. Journal of Applied Psychology, 1987, 72, 1-6.

Ilgen, D. R., Petersen, R. B., Martin, B. A. & Boeschen, D. A. Supervisor and subordinate reactions to performance appraisal sessions. Organizational Behavior and Human Performance, 1981, 28, 311-330.

Kagan, J. Validity is local. American Psychologist, 1990, 45, 294-295.

Larson, J. R. The dynamic interplay between employee's feedback-seeking strategies and supervisor's delivery of performance feedback. Academy of Management Review, 1989, 14 (3), 408-422.

Liden, R. C. & Mitchell, T. R. Reactions to feedback: The role of attributions, Academy of Management Journal, 1985, 28 (2), 291-308.

Locke, E. A. Relation of goal level to performance with a short work period and multiple goal levels. Journal of Applied Psychology, 1968, 67, 512-514.

Locke , E. A. & Bryan, J. F. The directing function of goals in task performance. Organizational Behavior and Human Performance, 1969, 4, 35-42.

Locke, E. A., Bryan, J. F., and Kendall, L.M. Goals and intentions as mediators to the effects of monetary incentives on behavior. Journal of Applied Psychology, 1968, 52, 104-121.

Locke, E. A., Frederick, E., Lee, C., & Bobko, P. Effect of self-efficacy, goals, and task strategies on task performance. Journal of Applied Psychology, 1984, 69 (2), 241-251.

Nathan, B., Milliman, J., and Backaitis, N. The Deming challenge to performance appraisal: Implications for research and practice. Paper presented at the Annual Meeting of the Society for Industrial and Organizational Psychology, St. Louis, 1991.

Nathan, B., Mohrman, A.M., & Milliman, J. Interpersonal relations as a context for the effects of appraisal interviews on performance and satisfaction: A longitudinal study. Academy of Management Journal, 1991, 34 (2), 352-369.

Staw, B. M. & Boettger, R. D. Task revision: A neglected form of work performance. Academy of Management Journal, 1990, 33 (3), 534-559.

Swann, W. B. Identity negotiation: Where two roads meet. Journal of Personality and Social Psychology, 1987, 53 (6), 1038-1051.

Van Dyne, L., Earley, P. C., & Cummings, L.L. Diagnostic and impression management feedback seeking behavior as a function of self-esteem and self-efficacy. Presented at the 1990 Annual Meeting of the Society for Industrial and Organizational Psychology.

Weiner, B., Amirkhan, J., Folkes, V. S., & Verette, J.A. An attributional analysis of excuse giving: Studies of a naive theory of emotion. Journal of Personality and Social Psychology, 1987, 52, 316-324.