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The Effects of Feedback to Raters on Subsequent Performance Ratings

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THESIS APPROVAL

The abstract and thesis of A. Cybelle Lyon for the Master
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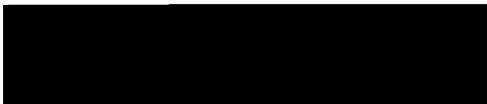
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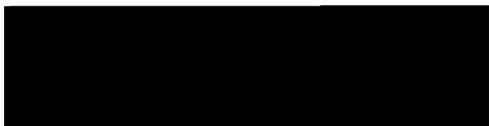
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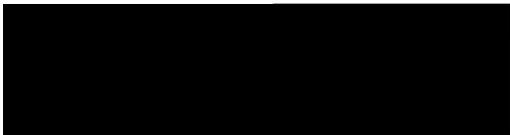
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Abstract

An abstract of the thesis of A. Cybelle Lyon for the Master
of Science in Psychology presented October 28, 1996.

Title: The Effects of Feedback to Raters on Subsequent
           Performance Ratings

     Performance evaluations are often of critical
importance in an organization's decisions concerning
compensation, training, promotion, and termination.
Although the area of performance appraisal has been
researched extensively, a gap in the literature appears to
remain. No published research has explored how the
favorability of feedback individuals receive on their own
performance will affect the favorability of subsequent
ratings they give to others. This gap is critical
considering that this type of feedback chain is common in
the work place.

     The purpose of the present study was to assess the
effects of feedback (positive, average, or negative) on the
mean rating given by participants to a standardized example
of ratee performance. Mood and self perception were tested
as mediators of the feedback received--ratings-of-others
relationship.

     Participants were 57 male and 86 female students ($\underline{N}$ =
149) recruited from undergraduate psychology classes at

Portland State University. Participants created advertising display boards and then received feedback on their displays. Participants then rated the display board of another individual.

Among those who accepted the feedback, an ANOVA revealed significant differences among the three feedback groups on ratings of others ($p < .01$). As expected, participants in the positive feedback condition rated others significantly higher than the average feedback group rated others ($p < .01$), and the average feedback group rated others significantly higher than the negative feedback group did ($p < .01$). Path analysis was conducted to test the mediating effects of mood and self-ratings in this relationship. The path suggested a different, better fitting model in which mood and self-ratings did not act as mediators; instead, feedback had a direct effect on ratings-of-others, mood and self-ratings. An explanation of the results in terms of theory and implications for both research and practice were discussed.

THE EFFECTS OF FEEDBACK TO RATERS

ON SUBSEQUENT PERFORMANCE RATINGS

by

A. CYBELLE LYON

A thesis submitted in partial fulfillment
of the requirements for the degree of

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The Effects of Feedback to

Raters on Subsequent Performance Ratings

Performance ratings are an integral part of the human resource function of most organizations. A performance rating can generally be defined as a rating which "represents a recorded judgment by one individual regarding the behavior of another individual" (Bayroff, Haggerty, & Rundquist, 1954, p. 94). The most common reasons for obtaining individual performance ratings are: (a) for promotion and placement, (b) to validate selection devices and training programs, (c) for reward allocations, and (d) to provide development-oriented feedback to individuals (Kane & Lawler, 1979). Due to the importance and widespread use of such ratings, the accuracy and validity of these ratings have been areas of concern to researchers for many years. Because such consequential decisions are based on the outcomes of performance appraisals, it is somewhat surprising that their reliability, validity, and freedom from bias remain somewhat questionable (Banks & Murphy, 1985; Kane & Lawler, Mohrman, Resnick-West, & Lawler, 1989). Many studies have attempted to identify factors which contribute to the accuracy of the performance appraisal process. Research in three areas has revealed ways in which performance appraisal systems can be improved: (a) factors affecting rater accuracy, (b) ratee

reactions, and (c) models explaining the feedback process (e.g., Ilgen, Fisher, & Taylor, 1979; Larson, 1984).

A Gap in the Literature

Traditionally, researchers have looked at either people's reactions to ratings or at the variables influencing how people rate others. Several factors affecting individuals' reactions to feedback such as rater source (Yammarino & Waldman, 1993), satisfaction with ratings (Russell & Goode, 1988), favorability of feedback (Hammer & Stone-Romero, in press; Stone & Stone, 1985), and self-esteem (Brockner, Derr, & Laing, 1987) have been explored. In addition, factors affecting a person's rating behavior such as rater errors (Lance, LaPointe, & Fisicaro, 1994), personal characteristics of the rater and ratee (Bayroff et al., 1954), training (Sulsky & Day, 1992; 1994; Woehr, 1994), and mood (Buchwald, 1977) have been studied.

Although factors affecting both individuals' reactions to feedback and individuals' rating behavior have been thoroughly investigated, there appears to be a gap in the literature concerning the combination of these two areas. For example, how people react to positive versus negative feedback (e.g., Hammer & Stone-Romero, in press; Stone & Stone, 1985; Trope & Neter, 1994) and what influences people to rate positively versus negatively (Landy, 1989; Murphy & Cleveland, 1995) have been investigated; however,

no published research has explored how a person's reactions to performance appraisal feedback will affect the favorability of subsequent performance ratings that a rater provides. This gap in the literature is surprising considering that this type of feedback chain is common in the work place: Middle managers are often asked to do performance appraisals for their subordinates after having received a performance appraisal from their own supervisor. Similarly, in 360° performance feedback systems, employees are sometimes asked to rate their peers after having already received feedback from their peers. How people will rate others after receiving a particularly harsh or particularly complimentary performance appraisal from either a supervisor or a peer is a valid organizational concern that has not yet been investigated by researchers. Information on how previous feedback affects rater behavior could have important implications for organizations using performance appraisal systems. It could have a profound impact on evolving appraisal systems such as 360° feedback systems.

The present study explored how reactions to feedback affected subsequent rating behavior. Ilgen et al. (1979) and others (e.g., Stone & Stone, 1985) have shown that acceptance of feedback is necessary for it to affect people's reactions to feedback. This study used Ilgen et

al.'s model to explore how feedback from others affects rating behavior as a function of feedback acceptance. A review of the issues concerning (a) reactions to feedback (including feedback acceptance) and (b) the factors affecting ratings assists in predicting this relationship.

Factors Affecting Reactions to Feedback

Acceptance of and willingness to respond to feedback. Ilgen et al. (1979) reviewed the literature investigating the process by which feedback influences behavior and the factors that contribute to how a person responds to feedback. The researchers concentrated on feedback recipients' perception, acceptance, and willingness to respond to the feedback and developed a model of feedback's influence on behavior. The model demonstrates how recipients' responses to the feedback depend on their personal characteristics, the nature of the message, and the characteristics of the feedback source. The three possible sources of feedback specified by Ilgen et al. were: (a) An observer of the individual's behavior who is in a position to evaluate it (i.e., the supervisor), (b) the task environment, and (c) the individual him or herself, who may be able to judge his or her own performance. They explained that if the person is being rated by the first source, another individual, this individual must be perceived as credible, possessing the

expertise necessary to judge the person's behavior accurately. In addition, if the rater is a high power source, the recipient is more likely to respond in line with the feedback. Lastly, the message must be easy for the recipient to understand and interpret.

Ilgen et al. (1979) concluded that source, message, and personal characteristics of the recipient work together to determine people's acceptance of feedback, which, in turn, determines people's willingness to respond. However, they did not consider how feedback adjusts one's subsequent rating behavior. Nonetheless, in terms of rating someone else's behavior after receiving feedback, Ilgen et al.'s model suggests that in order for feedback to have an effect on behavior (e.g., subsequent ratings given to others), the feedback must be accepted. In other words, participants must perceive the feedback as accurate and the feedback source as possessing the knowledge and expertise qualifying them to give valid feedback in order for the feedback to affect their rating behavior. Other researchers (e.g., Stone & Stone, 1985; Waldersee & Luthans, 1994) also believe in the importance of assessing feedback acceptance. Stone and Stone, and Waldersee and Luthans developed feedback acceptability scales so that participants' feedback acceptance could be explored in performance appraisal research.

Perceived accuracy and acceptance. Ilgen et al. (1979)
equate the term "acceptance" with perceived feedback
accuracy when they state that "Acceptance refers to the
recipient's belief that the feedback is an accurate
portrayal of his or her performance" (p. 350). This
importance placed on perceiving feedback as accurate so as
to facilitate the acceptance of feedback is supported by
other researchers. Roberts (1994), for example, stated that
"ratee acceptance is maximized when the performance
measurement process is perceived to be accurate" (p. 526).
He found that the most important determinants in predicting
employee acceptance were information validity (accuracy),
employee voice (ability to influence the decision making
process), participation in the appraisal interview and goal
setting, and degree of employee feedback.

In summary, it appears to be important to assess
perceived feedback accuracy as a measure of feedback
acceptance; and it appears to be important to assess
feedback acceptance when investigating responses to
feedback.

Acceptance of positive versus negative feedback. There
is evidence that the acceptance of positive feedback is not
parallel to that of negative feedback. In fact, the
favorability of feedback appears to be vital in determining
the level of acceptance. Ilgen et al. (1979) stated that

"The most important message characteristic that influences acceptance is the sign of the feedback" (p. 357). In support of this conclusion, Stone and Stone (1985) found that ratings were perceived to be more accurate when they were positive rather than negative. Similarly, Trope and Neter (1994) found that positive feedback was more easily accepted than negative feedback. Lastly, Ilgen et al. stated that positive feedback tends to be perceived accurately and accepted more, while negative feedback may be denied by the recipient and thus be less accepted.

Due to this increased acceptance of positive feedback, positive feedback conditions may induce stronger effects than negative feedback conditions. As a result, subsequent reactions and behavior (e.g., rating behavior) may show a greater correlation with positive feedback than with negative feedback. In support of this idea is Fedor, Eder, and Buckley's (1989) finding that sign of feedback had significant effects on subordinate reactions and responses to feedback.

Other factors affecting acceptance. It should be mentioned that other factors, such as self-esteem and stability of self-esteem, affect acceptance of feedback (e.g., Kernis, Cornell, Sun, Berry, & Harlow, 1993; Schlenker, Soraci, & McCarthy, 1976; Sweeney & Wells, 1990). Personality characteristics, such as defensive

style, have also been shown to affect feedback acceptance (Juni, 1982). In addition, there appears to be some controversy over the impact of feedback source on acceptance. Ilgen et al.'s (1979) model describes the importance of feedback source, but Kernan, Heimann, and Hanges (1991) found that it had no effect. These factors, however, will not be included in this study; only the favorability of the feedback will be manipulated.

Factors Affecting Ratings

In addition to the factors affecting people's reactions to feedback, there is a large body of research on factors affecting performance ratings. Numerous factors have been shown to affect performance ratings. Characteristics of the ratee unrelated to performance, such as gender (Lewis & Stevens, 1990), have been shown to affect ratings. Furthermore, organizational differences (Zammuto, London, & Rowland, 1982) and group differences (Amir, Kovarsky, & Sharan, 1970) have been shown to affect performance ratings.

Based on previous research, Landy and Farr (1983) compiled an extensive list of rater characteristics and their effects on performance appraisals. The list included such characteristics as rater gender, race, age, education, personality variables, cognitive variables, and type of rater. Other researchers have supported the use of accurate

raters to increase validity of ratings (Bayroff et al., 1954; Mullins & Force, 1962). Performance measures such as job performance and test scores also appear to positively correlate with rating accuracy, indicating that better performers tend to be better raters (Kirchner & Reisberg, 1962; Saavedra & Kwun, 1993). Training of raters has been found to be useful in increasing rater accuracy and particularly in reducing rater errors (Lance, LaPointe, & Fisicaro, 1994; Sulsky & Day, 1992; Wagner & Hoover, 1974).

Despite the prevalence of literature on factors affecting ratings, the effects of feedback on subsequent rating behavior remain unexplored. As this is a common organizational process (e.g., the performance rating process moving down through the organizational hierarchy), two lines of research provide a basis for the effects of received performance ratings on subsequent performance ratings. They are the research on the cognitive process of self-ratings following feedback, and the research on mood effects.

Self-ratings After Receiving Feedback

While there is a lack of research on the effects of feedback on subsequent ratings-of-others, there has been some research investigating the effects of receiving performance feedback on subsequent self-ratings (Atwater, Roush, & Fischtal, 1995; Wyer & Frey, 1983). The body of

research concerning the effects of feedback on self-ratings suggests that subsequent ratings given to others will be in the same direction as the feedback received. The research on this cognitive process proposes that raters change their opinion of their own performance after receiving feedback and alter their subsequent behaviors (e.g., rating behavior) accordingly. In addition, this effect can be partially explained by the research on frame of reference (FOR) training.

A change in self-perception. Atwater et al. (1995) found that leaders altered their self-ratings after receiving subordinate ratings that were inconsistent with their initial self-rating. Specifically, leaders significantly raised their self-ratings after receiving feedback that their leadership was better than their initial self-rating. Those whose self-ratings were similar to the follower ratings did not significantly change their behavior nor their ratings. Leaders who had overestimated the quality of their leader behavior significantly increased their leadership behavior and decreased their self-ratings after receiving feedback. Hence, feedback recipients appeared to accept the ratings of their subordinates and alter their self-ratings in the direction of this feedback.

While feedback on intelligence measures may not be equivalent to feedback on performance measures, Wyer and Frey (1983) obtained results that may have implications for the present study. Wyer and Frey assessed how participants rated themselves after receiving feedback on intelligence measures. Participants took an intelligence test and were asked to make subsequent estimates of their own intelligence. Participants then received feedback that they either did better (positive feedback) or worse (negative feedback) than they predicted. They then made a second estimate of their own intelligence. Results showed that recipients of positive feedback increased their second estimates of their intelligence, while recipients of negative feedback decreased their estimates. This result is consistent with Atwater et al.'s (1995) in that participants appeared to believe the feedback they received was more accurate than their own perceptions and altered their subsequent self-ratings to be consistent with the feedback. In summary, these results show that feedback led to a change in self-perception which then led participants to make subsequent ratings in the same direction as the feedback received.

Change in frame of reference. A change in self-perception can be likened to a change in FOR, and the effects shown in studies suggesting a change in

self-perception can be further supported by the theory behind FOR training. FOR training is intended to facilitate more accurate ratings by standardizing raters' perceptions of the behaviors defining good and poor performance (Athey & McIntyre, 1987). This is accomplished partly through decreasing a reliance on unstable, subjective, social comparisons. As VanYperen (1992) explained

> If objective standards are available to evaluate one's opinions, abilities, or performances, Festinger's (1954) social comparison theory proposes that people are less inclined to fall back on social criteria, because social standards provide them with less stable and accurate appraisals of themselves. (p. 1186)

In sum, when lacking any other FOR, participants may use themselves as an anchor by which to judge others. For example, if they receive specific information on their own performance (e.g., a numerical score), they may use this rating as an anchor to which others' performance is compared and by which decisions concerning assignment of a numerical score to others are determined. As of yet, this effect has not been measured directly.

The studies by Atwater et al. (1995) and Wyer and Frey (1983) suggest that once participants accept feedback, they shift their image of what constitutes good and poor performance (as seen by the change in their

self-ratings). In other words, they have a new perception

of what defines good and poor performance. The

participants' altered perceptions of themselves may serve

as a new FOR or anchor to which others' performance is

compared. If participants receive positive feedback,

perhaps they will rate others they believe to be equally

qualified positively. Because participants were given an

operational definition of their own performance as

positive, perhaps they will define similar behavior in

others as positive. If their actual performance was

mediocre yet they were given an operational definition of

their performance as "above average," one would expect that

person to rate others demonstrating similar mediocre

performance as "above average." Thus actual performance of

the rating object might be less predictive of ratings than

the operational definition given to the rater's

performance. If they were rated positively, their anchor

and FOR would be on the positive end of the scale. If they

were rated negatively, their anchor and FOR would be

shifted downward towards the negative end of the scale. In

summary, the theory behind FOR training also suggests that

people will rate others in the same direction as the

feedback they receive on their own performance.

However, while studying self-ratings after receiving

feedback is in some ways similar to studying

ratings-of-others after receiving feedback, the two processes cannot be equated for two reasons. First, because the feedback given to the rater from a superior contains no information on the performance of the rater's subordinate, it cannot directly affect ratings-of-others. In contrast, when rating one's own performance, the feedback received from a superior can be used as direct information about one's own performance and can thus alter self-ratings. Second, research has shown discrepancies in the ratings of self and others (Klimoski & London, 1974; Meyer, 1980). However, research on self-ratings following performance feedback may offer insights into the effects that feedback on one's own performance would have on the ratings given to others. Specifically, feedback could affect ratings-of-others in the same way it affects self-ratings.

Mood Effects

The second body of literature that allows us to predict the direction of ratings following feedback concerns the rater's mood. Isen (1970) found that people's moods were affected by the feedback they received. Specifically, she found that receiving feedback that participants had succeeded on a skills-task affected their mood state in a positive direction. This finding demonstrated that the feedback given to participants influenced their moods in the same direction as the

feedback they received. In other words, positive feedback induced positive moods. With the understanding that feedback affects mood, we can now consider how mood would affect rating behavior.

Researchers have found that mood affects both self-ratings and the ratings-of-others. For example, Buchwald (1977) found that mood affected self evaluations. His results revealed that participants in a depressed mood tended to underestimate their level of successful performance and the positive feedback they received on this performance. If these results generalize to situations in which people rate others, then raters in a negative mood might underestimate the positive performance of others and, consequently, give them a negative evaluation. In fact, this effect has been shown to carry over to ratings-of-others. A study by Carnevale and Isen (1986) found that participants in whom positive affect had been induced were more likely to positively evaluate other participants in the study. Similarly, Baron (1987) found that participants in a positive mood rated a job applicant more favorably on personal and job related dimensions than did participants in a negative mood. This finding that people in a positive mood rate others positively was further supported by Sinclair (1988). Therefore, if feedback affects people's mood and mood affects subsequent

ratings, one could expect that receiving feedback would
affect people's mood which then would affect their rating
behavior.

Hypotheses

The literature on changes in self-ratings and on mood
suggests that receiving feedback on people's performance
affects self-ratings and mood which in turn influences
ratings of others. The favorability of these ratings should
be in the same direction as the feedback received (e.g.,
Baron, 1987; Carnevale & Isen, 1986; Sinclair, 1988; Wyer &
Frey, 1983) (See Figure 1). Hence, the following was
hypothesized:

Hypothesis 1: Participants receiving positive feedback

will subsequently rate others more positively than

will participants receiving negative feedback.

Although it is likely that several variables affect
the feedback received--ratings-of-others relationship, the
literature supports the possibility that both mood and
self-ratings may play a strong role in this relationship.
Since the favorability of feedback received has been shown
to affect both mood (e.g., Isen, 1970) and self-ratings
(e.g., Atwater et al., 1995; Wyer & Frey, 1983); since mood
affects ratings-of-others (Baron, 1987; Carnevale & Isen,
1986; Sinclair, 1988), and the literature suggest that
self-ratings may affect ratings-of-others, mood and

self-ratings were explored as mediators of the
feedback--ratings-of-others relationship. Therefore, the
following was hypothesized:

Hypothesis 2: Self-perception (self-ratings) will be
positively related to ratings-of-others, such that
more positive self-ratings will be associated with
higher ratings-of-others.

Hypothesis 3: Mood will be positively correlated with
ratings-of-others such that positive mood will be
associated with higher ratings-of-others.

Ilgen et al.'s (1979) model explained that people must
perceive feedback as accurate in order to accept that
feedback, and people must accept the feedback in order to
respond to it. This implies that behavioral reactions to
feedback occur only when the feedback is perceived as
accurate.

In addition, a review of the literature demonstrated
that the sign of the feedback is influential in determining
the level of acceptance of the feedback (e.g., Ilgen et
al., 1979; Stone & Stone, 1985; Trope & Neter, 1994).
Specifically, the review revealed that positive feedback is
perceived as more accurate and accepted more than is
negative feedback. Furthermore, the literature suggests
that unless feedback is accepted, it has no effect on
subsequent behavior. In sum, it appears that the level of

feedback acceptance is an important variable to include in
this research. However, since feedback acceptance is not
linearly related to either feedback received or
ratings-of-others, it was explored by comparing the
acceptance of feedback in the three feedback conditions
(positive, average, and negative). The final data set was
divided into two groups: one group that accepted the
feedback, and another group that did not accept the
feedback. Feedback was expected to have an effect on the
rating behavior of those who accepted the feedback, but not
on those who did not accept the feedback. Therefore, these
hypotheses are only for those who accepted the feedback.

Summary

This literature review revealed that while the area of
performance appraisal and feedback has been thoroughly
explored, no research has evaluated how receiving feedback
on one's own performance affects how one evaluates others.
The present study attempted to bridge this gap by
investigating the effects of receiving positive versus
negative feedback on the direction of subsequent ratings-
of-others.

Method

Overview

This study assessed the effects of one independent
variable (positive, average, or negative feedback) on one

dependent variable (mean rating given by participants to a standardized example of ratee performance). Mood and self-perception were tested as mediators of this relationship.

Participants

Fifty-seven male and 86 female (N = 149) students recruited from undergraduate psychology courses at an urban Northwestern university participated in the study. Participants were between the ages of 18 and 58 (M = 26). Twenty-seven percent were freshmen, 9.1% were sophomores, 37.8% were juniors, 37.1% were seniors, and 3.5% were post-baccalaureate students. Participants received extra-credit in their courses for participating.

The data from two participants were excluded due to a procedural error during the experimental session. Another participant's data were not included because she had participated in the pre-rating of the rating object. Another three participants' data were discarded due to missing items. Therefore, analyses were conducted on a final sample of 143 participants.

Materials

Task. The task completed by participants consisted of an advertising task developed by Hammer (1989). This task involved the development of titles and slogans for four hypothetical companies (a grocery store, an insurance

agency, a clothing store, and a variety store). To create their advertisements, participants were provided with a display board, pictures collected from magazines, pencils, thumbtacks, and strips of paper. All participants received identical materials.

Since participants were recruited from psychology courses, an advertising task was chosen to maximize the possibility of students' unfamiliarity with the rating object. The intention was to have participants work with an unfamiliar task and rating object to decrease possible bias or experience with real advertising material. Previous experience with advertising could cause participants to have established rating standards which could have influenced the results. In this study, the possible effects of this bias were intentionally limited by minimizing the chance of familiarity with the task.

Rating object. The experimenter and research assistants conducted a pre-test to develop the rating object by first completing five display boards; attempting to create boards which demonstrated average performance. These boards were then taken to an undergraduate class in psychology where students were asked to remain after class to participate in the pre-test for extra-credit. The experimenter told participants that the boards contained magazine ads designed by students in psychology. The

experimenter then instructed the participants to rate each
board independently on the performance evaluation measure
handed to them. Seventeen students rated the five boards
with the same performance evaluations used in the
experiment. The board with the average rating closest to
5.5 (on a scale from 1 to 10), and with the most normal
distribution, was chosen to represent average performance.
This board was used as a the rating object for the present
study.

Performance ratings. Performance ratings were given in
written form only. The written evaluations consisted of
ratings on five separate dimensions and one global
dimension. Performance ratings were designed to range from
1 (poor) to 10 (excellent) on each of the six dimensions
(i.e., ability to get attention, ability to hold interest,
ability to arouse desire, relevance of title, relevance of
slogan, and an overall rating) (see Appendix A). Because
the feedback used in Hammer's (1989) study appeared to
adequately represent positive and negative feedback,
similar ratings were used in this study. Positive
evaluation forms consisted of the ratings of 7, 9, 9, 10,
8, and an overall rating of 9. Average evaluation ratings
consisted of the following scores: 5, 5, 6, 4, 5 and an
overall rating of 5. Negative evaluation ratings contained
scores of 4, 5, 3, 4, 3, and an overall rating of 3.

Measures

Ratings-of-others. Excluding the directions at the top
of the page, the forms participants used to rate others'
performance (the rating object display board) were
identical to the performance evaluation forms on which
participants received ratings of their own performance (see
Appendix B).

Feedback acceptance. Acceptance, or perceived feedback
accuracy, was measured by a 9-item summated scale used in
previous studies (Stone, Geutal, & McIntosh, 1984; Stone &
Stone, 1984; 1985) (see Appendix C). Participants rated
each item on a 4-point scale with items anchored by
"strongly disagree" and "strongly agree." Coefficient alpha
reliability estimates for the full scale have ranged from
.94 to .96 in previous research (e.g., Stone et al.; Stone
& Stone). Participants scoring an average of 2.5 or above
on this measure were placed into the accepted feedback
group ($\underline{n}$ = 91). Those scoring below an average of 2.5 were
placed in the did not accept feedback group ($\underline{n}$ = 52).

Self-perception. Self-perception was measured by the
same form used to give performance feedback to participants
and to measure subsequent ratings, except directions were
altered so that participants were asked to rate their own
performance (see Appendix D).

Mood. Mood was measured using a scale originally developed with two separate dimensions by Watson, Clark, and Tellegen (1988). One dimension contained 10 adjectives representing negative mood (e.g., distressed, scared). The other dimension had 10 adjectives representing positive mood (e.g., interested, excited). Participants rated to what extent they were feeling the listed emotions at the present moment on a 5-point scale with items anchored at endpoints by "very slightly or not at all," and "extremely" (see Appendix E). For this study, the words assessing negative affect were reverse coded and the two dimensions were combined so that higher scores represented better moods. This scale had a coefficient alpha reliability estimate of .85 in this study.

Procedure

The experimenter went to undergraduate psychology courses and asked students to sign up for one of the hour-long sessions for which students would receive extra-credit in their courses. To minimize diffusion of treatment effects, participants from each class were scheduled to participate in the study before their class met again. In this manner, all participants completed the study before returning to their next class session where they could have shared information about the experiment. Four participants at a time were instructed to meet the

experimenter at the laboratory (see Appendix F for purpose and instructions script, and see Figure 2 for a flow chart of experimental steps). After arriving at the laboratory, all participants were read a script explaining the purpose of, and instructions for, the experiment. They were told that the experimenter was interested in investigating aspects of attention getting and information communication and were asked to sign a consent form. This minor amount of deception was necessary in order to assess the effects of feedback on future rating behavior. However, the negative effects of deception and of receiving feedback were minimized by having participants role play the part of an advertising manager and by telling participants that all rating would be done without knowledge of who completed which board.

The instructions for the advertising task were then explained and all participants were given 20 min to work on the task individually. After 20 min, the experimenter escorted the participants into an adjacent room saying that they needed to leave the room so that the team of two marketing graduate students could evaluate their display boards anonymously before they began the second half of the experiment. The experimenter entered the adjacent room with the participants and asked them not to discuss the experiment with each other. Then either a research

assistant or the experimenter entered the laboratory, removed participants' display boards from the stations, and randomly placed performance evaluations (either positive, average, or negative) in their place. The evaluations were shuffled and placed upside down on the desks.

Participants were told the raters were marketing graduate students to increase credibility of the raters. In addition, participants were told that they needed to leave the room while the ratings were completed so that ratings could be done anonymously, to avoid any embarrassment of the ratees, and to increase perceived trustworthiness of the raters. Since Ilgen et al. (1979) indicated that credibility and trustworthiness of the source affected feedback acceptance, these precautions were taken to increase perceived feedback accuracy.

After about 10 min, the experimenter led the participants back to the laboratory and asked them to return to their stations and read their performance evaluations. The experimenter then handed out the forms assessing perceived feedback accuracy, mood, and self-perception. The order of these three measures was counterbalanced across experimental sessions so that the measures were distributed in six different orders. These forms directed participants to rate themselves on how well they believe they performed on the task (to assess

self-perception), to rate how much they agreed with the

feedback they were given (acceptance), and to rate how they

were feeling at the present moment (mood). The experimenter

answered any questions concerning the forms. When they were

finished, the experimenter explained that participants

would next have the opportunity to see and evaluate a

display board completed by a participant before the

experiment started. The experimenter then turned the rating

object display board around so that participants could see

it. All participants were asked to rate the board

independently on the rating form handed out by the

experimenter. Lastly, participants completed a demographic

information sheet and self-esteem measure used for

different research purposes. Participants were then told

they were given bogus feedback, were debriefed and

dismissed. All forms completed by each participant were

then stapled together, given an identification code, and

collected.

After running 50 participants, data analyses were run

on acceptance levels of feedback. The number of

participants who had high feedback acceptance scores were

uneven for the three conditions (positive, average, and

negative feedback). In an attempt to obtain more even cell

sizes for the high acceptance group, the remaining

participants were placed primarily into either the negative

or positive feedback conditions. This explains the uneven cells in the final statistics.

Results

Means and standard deviations of mood, self-rating, ratings-of-others, and acceptance by condition are presented in Table 1. Coefficient alpha reliabilities of the scales and intercorrelations of the dependent variables for the entire sample are presented in Table 2.

In Phase 1 of the analyses, a one-way MANOVA with six levels (presentation order of the measures) and three measures (self-rating, mood, and acceptance) was run on the total data set to test for order effects. The MANOVA (Wilk's Lambda of .885, F = 1.12, p = .335) revealed no differences among the six orders which counterbalanced the measures.

An ANOVA to examine the effects of the three levels of feedback received (positive, average, or negative) on feedback acceptance revealed that as the favorability of feedback increased, acceptance of the feedback increased, F (2, 140) = 4.88, p < .01. Participants in the positive feedback group had the highest acceptance (M = 2.89), followed by the average feedback group (M = 2.77), and the negative feedback group (M = 2.52). Planned comparisons revealed a significant difference in feedback acceptance only between the negative and positive feedback groups, t

(140) = 3.12, $\underline{p}$ = .002. Age was not correlated with acceptance level, $\underline{r}$ = -.058, $\underline{p}$ = .488. Chi-square tests revealed that gender and previous experience also did not affect acceptance levels, Chi-square = 1.15, $\underline{p}$ = .28 and Chi-square = 2.74, $\underline{p}$ = .10, respectively.

In the next phase of the analysis plan, the data set was divided into two groups according to participants' acceptance of the feedback received. Participants scoring an average of 2.5 or above on the acceptance scale were placed into the high acceptance group ($\underline{n}$ = 91). Participants scoring an average of below 2.5 were placed into the low acceptance group ($\underline{n}$ = 52). A Chi-square test revealed that as feedback increased in favorability, participants were significantly more likely to be in the high acceptance group, Chi-square = 6.67, $\underline{p}$ = .04.

An ANOVA to examine the effects of the three levels of feedback received (positive, average, or negative) on ratings-of-others for the low acceptance group revealed, as expected, that the feedback had no effects on participants' subsequent ratings-of-others, $\underline{F}$ (2,49) = 1.10, $\underline{p}$ = .341. Means, standard deviations, and $\underline{n}$'s for each measure by condition for the low acceptance group are presented in Table 3. No further analyses were conducted using this group.

To test Hypothesis 1, that participants receiving positive feedback would subsequently rate others more positively than would participants receiving negative feedback, an ANOVA to examine the effects of the three levels of feedback received (positive, average, or negative) on ratings-of-others was examined for the high acceptance group. Results revealed a significant difference among the three feedback received groups on ratings-of-others, $\underline{F}$ (2, 88) = 34.27, $\underline{p}$ < .01. Means, standard deviations, and $\underline{n}$'s for each condition are presented in Table 4. Ratings-of-others decreased as feedback received went from positive to negative. Planned comparisons revealed a significant difference between the negative and average feedback groups, $\underline{p}$ = .007, and between the average and positive feedback groups, $\underline{p}$ < .001.

Next, Hypothesis 2, that self-ratings would be positively related to ratings-of-others, and Hypothesis 3, that mood would be positively related to ratings-of-others were tested with correlations. Results revealed that self-ratings and ratings-of-others were significantly correlated ($\underline{r}$ = .62, $\underline{p}$ < .01), however, mood and ratings-of-others were not correlated ($\underline{r}$ = .14, $\underline{p}$ = .176). Additional analyses were conducted with the mood scale divided into its original two dimensions: negative affect

and positive affect. The negative affect and positive
affect dimensions were also not correlated with
ratings-of-others, r = -.03, p = .79 and r = .14, p = .19,
respectively.

To further explore the role of mood and self-ratings
in the feedback received--ratings-of-others relationship,
the model in Figure 1 was tested using path analysis. The
GFI for this model was good (GFI = .948, p = .005), however
the chi-square was significant implying that the model did
not fit the data, and the adjusted goodness-of-fit index
dropped to below acceptable levels (AGFI = .742). All path
coefficients were significant and positive except for the
path from mood to ratings-of-others (See Figure 3 and see
Table 5 for fit measures). This first model accounted for
39.3% of the variance in ratings-of-others. A large
modification index (9.625, which indicates that the chi-
square would decrease 9.625 units from 10.57) for the path
directly from feedback received to ratings-of-others
suggested that incorporating this path in the model would
greatly improve the fit of the model.

A second model including the path directly from
feedback received to ratings-of-others was tested. The fit
of the model improved substantially, GFI = .999, AGFI =
.990, p = .666, and the chi-square was no longer
significant (See Figure 4 and Table 5). All paths showed

significant positive relationships except two paths: the path from self-ratings to ratings-of-others, and the path from mood to ratings-of-others. This model accounted for 46% of the variance in ratings-of-others.

A third model with the two non-significant paths dropped was tested, GFI = .972, p = .157 (See Figure 5). All paths in the third model were significant and positive. The fit of the model remained good (AGFI = .906) with a non-significant chi-square, and this model accounted for 42.9% of the variance in ratings-of-others. Since the third model is nested in model two, a chi-square difference test was used to test whether the two models differed significantly. Results revealed that the third model fit the data as well as model two (chi-square difference = 5.02, $\underline{df}$ = 2, p > .05). The third model is a more parsimonious model and was selected over the second model as the best fitting model. The third model also accounted for a greater amount of variance than the first model. The first and third models could not be statistically compared as the models are not nested.

Discussion

Consistent with previous research (e.g., Ilgen et al., 1979; Stone & Stone, 1985; Trope & Neter, 1994), this study found that as feedback received became more positive, it was more readily accepted by the participants. Results were

also consistent with the expectation that Hypothesis 1

(ratings-of-others would be affected by feedback received)

would be supported only for participants who accepted the

feedback they received. The participants in this study were

divided into two groups (participants with high feedback

acceptance and participants with low feedback acceptance).

In the negative feedback condition, the number of

participants who had high acceptance versus those who had

low acceptance was nearly equal. In the average feedback

condition, 26 participants had high acceptance and 10 had

low acceptance; in the positive feedback condition, 36 had

high acceptance and 14 had low acceptance. Therefore,

participants were more likely to be in the high acceptance

group if they had received more positive feedback. A

relationship between feedback received and

ratings-of-others was not found in the group who did not

accept the feedback. Therefore, further discussion of the

results concern the group who accepted the feedback.

Participants who received positive feedback

subsequently rated others more positively than participants

who received negative feedback. In other words, whether

receiving negative, average, or positive feedback,

participants tended to rate others similarly to the way

they were rated on their own performance. Participants in

the positive feedback condition rated others the most

positively ($\underline{M}$ = 7.32), followed by the average feedback group ($\underline{M}$ = 5.8) and the negative feedback group ($\underline{M}$ = 4.92). This finding is parallel to the literature on self-ratings which indicates that, after receiving feedback on their own performance, participants tend to rate themselves in the same direction as the feedback received (Atwater et al., 1995; Wyer & Frey, 1983).

Self-perception (self-ratings) was positively related to ratings-of-others. Participants who rated themselves more positively rated others higher as well. However, contrary to previous research (e.g., Baron, 1987; Carnevale & Isen, 1986; Sinclair, 1988), mood was not positively correlated with ratings-of-others, but results were in the direction hypothesized.

The model predicting that feedback received would affect ratings-of-others through self-ratings and mood was partially supported. Feedback received was shown to affect self-ratings which in turn affected ratings-of-others. In other words, consistent with the findings of Atwater et al. (1995) and Wyer and Frey (1983), as feedback received was more positive, self-ratings were more positive; and as self-ratings were more positive, ratings-of-others were more positive. However, when a direct path from feedback received to ratings of others was included in the model, the path from self-ratings to ratings-of-others was no

longer significant. This suggested that self-ratings did not mediate the feedback--ratings-of-others relationship. In contrast, the path from feedback received, through mood, to ratings-of-others was not supported. Consistent with Isen's (1970) research, feedback did appear to affect mood such that the higher the favorability of the feedback, the more positive the mood of the participant. However, the path from mood to ratings-of-others was both nonsignificant and negative. Therefore, in contrast to previous research (e.g., Baron, 1987; Carnevale & Isen, 1986; Sinclair, 1988) mood appeared to have no effect on ratings-of-others.

Although the analysis did not support the originally hypothesized model, modifications to the model suggested a different, better fitting model. In this model, feedback received had a direct effect on mood, self-ratings, and ratings-of-others. Self-ratings and mood did not affect ratings-of-others. Therefore, self-ratings and mood could not act as mediators in the feedback received--ratings-of-others relationship. Rather, there was a direct path from feedback received to ratings-of-others.

Among those who accepted the feedback, the relationship between feedback received and ratings-of-others appeared to be direct. Thus, the first hypothesis, that feedback received affects

ratings-of-others, was strongly supported by all analyses.
Specifically, as feedback received became more positive, so
did recipients' ratings-of-others.

It should be noted that the second hypothesis, that
self-ratings would be positively correlated with
ratings-of-others, was supported by preliminary analyses.
In addition, the path from feedback received, through
self-ratings, to ratings-of-others was supported when the
original model was tested with path analysis. However, when
a direct path from feedback to ratings-of-others was added,
the path from self-ratings to ratings-of-others was no
longer significant (See Figure 5). This implies that
although self-perception may partially explain the
relationship between feedback received and
ratings-of-others, it is not a strong mediator of this
relationship. However, one must consider the possibility
that this relationship would be significant in future
research if, for example, participants performed a task
with which they were familiar.

The third hypothesis, that mood would affect
ratings-of-others, was not supported by any of the
analyses. The path analysis results suggested that feedback
received does affect mood such that more positive feedback
is associated with more positive mood. However, none of the
analyses supported the prediction that mood would affect

ratings-of-others. It is possible that mood, in fact, does
not affect ratings-of-others and is not a mediator in the
feedback received--ratings-of-others relationship. However,
this finding is inconsistent with previous research which
suggests that mood does affect self-ratings and
ratings-of-others (e.g., Baron, 1987; Buchwald, 1977;
Carnevale & Isen, 1986; Sinclair, 1988).

Because this finding contradicts previous research
(e.g., Baron, 1987; Buchwald, 1977; Carnevale & Isen, 1986;
Sinclair, 1988), it is interesting that there was no
relationship between mood and ratings-of-others in this
study. It is possible that participants had two different
mood reactions to positive feedback preventing the data
from showing a consistent trend. Informal discussion with
the participants during the debriefing sessions led to the
speculation that participants differing in locus-of-control
may have reacted to feedback, and rated others,
differently. Since there are no data to support this
speculation, further discussion of this idea should be
reserved for future research which includes a measure of
individual locus-of-control.

Secondly, the lack of an effect of mood on
ratings-of-others may be due to the measure of mood used.
Even though this scale has demonstrated good reliability
and validity in previous studies (e.g., Watson et al.,

1988), it may have been inappropriate for this particular study. The list of emotions did not include words such as hurt, offended, angry, grateful, or generous. These emotions may have been important in the relationship between feedback received and ratings-of-others.

In sum, the findings reveal that people's subsequent ratings can be affected by the feedback they receive. However, the theoretical explanation for this relationship remains unclear. Perhaps the feedback received--ratings-of-others relationship can be explained better by cognitive processes involved other than self-perception or mood. Regardless of the reasons explaining this relationship, its existence has implications for both research and organizations.

The analyses seem to support the possibility that feedback changes one's internal performance standard, which then affects self-ratings and, perhaps, ratings-of-others. The existence of such an internal standard (or anchor) which is affected by feedback has been suggested in previous research (e.g., Atwater et al., 1995; Wyer & Frey, 1983) and by the principles of FOR training (Athey & McIntyre, 1987; VanYperen, 1992). Therefore, perhaps a model such as depicted in Figure 6 is most appropriate. In this model, feedback affects mood through a more affective path, and feedback affects an internal standard through a

more cognitive path. The internal standard would, in turn, affect both self ratings and ratings of others.

Limitations and Future Research

Before discussing the implications of the results, the limitations of this study should be addressed. The most obvious limitation is the artificial research setting and the use of college students as participants. Laboratory research cannot substitute field research, and it is difficult to generalize laboratory performance appraisal results to applied settings (Banks & Murphy, 1985; Ilgen & Favero, 1985). However, a laboratory study was necessary to create the amount of control needed to investigate this relationship for the first time. The participants in this study are probably less representative of the work force at large because of their limited work experience. However, the university from which the students were recruited has a student body comprised of older, returning students who commute to school and who have had previous work experience or are currently working. The sample reflected the demographics of this student body by having a wide age range (18 to 58) and an average age of 26 years. Although the student body of the urban university from which the participants were recruited is more representative than most, one must be cautious in generalizing the results of this study to the working population. The immediacy with

which participants rated others after receiving feedback may also not be appropriate for real work settings. In organizations, the time between receiving feedback and rating others may vary greatly.

An additional limitation is the narrow scope of the study. This study intentionally focused on one factor's (feedback's) effect on performance ratings. However, such a limited scope was necessary to allow for observation of only this variable and for greater control. Factors such as work relationships ought to be considered when conducting future research in the field. It is possible that positive work relationships lead to a positive increase in performance which leads to a positive increase in performance appraisals. This and other potentially relevant factors should be considered in subsequent studies.

Another major limitation to the generalizability of these results was the use of an unfamiliar task. A task with which most participants would be unfamiliar was chosen intentionally so that participants would have similar (low) levels of expertise and performance confidence in the task. This was intended to facilitate the appearance of any biasing effects of feedback received on ratings-of-others. However, it is possible that people who are familiar with and confident in their work task (as is likely in real work

settings) would not accept either positive or negative feedback that was not consistent with their self-perception, and thus ratings-of-others would be little affected. Similarly, raters who have become familiar with their subordinate's or peer's performance over many observations may be less affected by feedback than raters who have limited experience with the rating object. These limitations indicate some of the areas available for future research, and with these limitations in mind, the implications of the results may now be discussed.

The findings help fill a gap in the literature concerning how feedback on one's own performance affects subsequent ratings-of-others. The effects of receiving feedback on ratings may be added to the long list of variables affecting performance ratings (Landy & Farr, 1983). Researchers should first take note that these results supported the implications of Ilgen et al.'s (1979) research which indicate that feedback acceptance is crucial in determining participant reactions. In this study, 36% of the participants did not accept the feedback received, and this group did not demonstrate similar behaviors to the group who accepted the feedback. Secondly, the discovery of a strong relationship between the feedback one receives and the ratings one gives to others in an unfamiliar, artificial setting should be a considerable contribution to

the available literature. The findings of this study can be added to both the body of research on reactions to feedback (e.g., Brockner et al., 1987; Hammer & Stone-Romero, in press; Stone & Stone, 1985; Russell & Goode, 1988; Yammarino & Waldman, 1993) and the research on factors which affect ratings (e.g., Bayroff et al., 1954; Buchwald, 1977; Lance et al., 1994; Sulsky & Day, 1992; 1994; Woehr, 1994). Most importantly, these results suggest a way to link the two bodies of research and indicate areas needing further study. Initially, however, the mechanism by which the phenomenon occurs needs more study.

Since the relationship between feedback received and ratings-of-others has been previously unexplored, several areas of additional research are necessary to understand the mechanism and to clarify the implications for organizations. For example, future research should address the issues concerning familiarity with task and rating object, the narrow scope of this study, time between receiving feedback and ratings-of-others, generalizability of results, and the artificial setting in the present study.

To further explore the possibility that expertise and confidence in one's work performance could affect the feedback received--ratings-of-others relationship, future studies should be done in which participants are familiar

with the task and in which expertise and confidence are measured. In addition, researchers should conduct studies which control for as many extraneous variables as possible. For example, variables shown to affect performance ratings such as personal characteristics (Ilgen et al., 1979; Landy, 1989; Lewis & Stevens, 1990), organizational characteristics (Zammuto et al., 1982), rater accuracy (Bayroff et al., 1954; Lance et al., 1994; Mullings & Force, 1962; Sulsky & Day, 1992), as well as purpose and use of the ratings (e.g., development, compensation decisions, promotion decisions), and work task could be controlled or manipulated. An additional manipulation in future studies could be the amount of time allowed between receiving feedback and rating others.

While the results may have implications for situations such as 360 degree feedback systems in which people rate others on the same task they perform themselves, they may not generalize to manager-subordinate situations in which the tasks performed are dissimilar. To test for generalizability of results, follow-up studies could be conducted in which the task participants perform is unrelated to the task of the rating object. Although this would limit any effects of FOR on ratings-of-others, this situation may be more common in work settings. Using different, dissimilar tasks for feedback and the rating

object would allow one to see if the effects of receiving feedback generalize to ratings-of-others on different versus the same type of task. Such research would be similar to situations in organizations where supervisors do not perform the same sort of tasks as their subordinates.

The research on performance appraisal as a product of social cognitive operations (e.g., Denisi, Cafferty, & Meglino, 1984) should also be incorporated into future models on this issue as well. Since a traditional focus on either improving the rating instrument or training the rater has proved insufficient in increasing rating accuracy, models of cognitive processes should be incorporated into future research designs (Denisi et al.; Feldman, 1986; Landy, 1989). Such a focus would include the processes of encoding, storage, and retrieval of information in the performance appraisal process. An emphasis on these processes would allow researchers to further explore the cognitive processes involved in the feedback received--ratings-of-others relationship.

Most importantly, follow-up research should be conducted in the field. For reasons cited in the limitations, the artificial setting is the most critical limitation in this study and needs to be addressed in future research. Such research might obtain performance ratings from archival data of an actual organization to see

if middle managers gave performance ratings in the same direction as the ratings received on their own performance from their superior. Field studies could also assess the effects of organizational culture and politics which cannot be explored in the laboratory.

The results of this study confirmed that feedback acceptance can significantly affect one's findings to the extent that effects will not be seen in people not accepting the feedback, but will appear in people who do accept the feedback. Because feedback acceptance plays such an important role in individuals' reactions to feedback, feedback acceptance measures should be included in future studies in this area.

Implications for Practice

Since this is preliminary research and there are many limitations in this study, implications for practice should be made with caution. The following implications, therefore, should be interpreted with the previously stated limitations in mind.

Practitioners should first take note of the differences between those who accept performance feedback and those who do not. Organizations need to realize that their members may have different reactions to feedback they receive. Members' acceptance levels should be revealed and attempts should be made to increase the acceptance level of

individuals who do not perceive the feedback as accurate.
Supervisors should also acknowledge the likelihood that
positive feedback will be accepted more readily than
negative feedback. When distributing negative feedback,
supervisors should, therefore, make an increased effort to
maximize acceptance by taking such actions as ensuring
credibility of feedback source (Ilgen et al., 1979).

The results may also have implications for
organizations implementing performance appraisal systems in
which employees receive feedback on their own performance
and subsequently rate others. The organizational members'
ratings-of-others could be significantly affected by the
feedback they have received. To demonstrate the potential
importance of such a bias, consider the following
hypothetical, somewhat exaggerated situation. If the effect
shown in this study was present in an organization, the
performance appraisals in an entire organization could
eventually show either a positive or negative leniency
bias. Furthermore, the entire organization may not exhibit
the same bias, but each chain of feedback under different
top managers may display different rating patterns. Thus,
it would be difficult to compare the ratings of employees
in different divisions of the company. This could cause top
management to make poor decisions regarding compensation,
promotion, and training.

The results may have particular implications for organizations implementing 360 degree feedback systems. The participants in this study rated others on the same task that they performed themselves. In work settings, this situation is most likely when members of the same department or team are asked to rate their peers in a 360 degree system. People may use their own feedback on the task as an anchor by which they judge others' performance on the same task.

To prevent such problems, organizations could allow all supervisors to complete performance appraisals on their subordinates before receiving feedback from their superiors. In this way, raters would complete ratings before being affected by received feedback. This would help eliminate one of the several biases that can affect performance appraisals, thereby increasing their accuracy. All employees who complete performance ratings should be trained to be accurate raters, and the possible effects of feedback received on ratings-of-others should be included in rater training programs. Because there is a multitude of factors which can affect the accuracy of performance appraisals, they should generally be used for developmental versus promotion or compensation purposes.

Considering the multitude of limitations to the generalizability of this study's results, the implications

should be considered with caution. Considerable future
research should be conducted in order to better understand
the feedback received--ratings-of-others relationship as
well as its implications for research and organizations.

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Appendix A

Advertising Task Feedback Form

Response Possibilities:

1	2	3	4	5	6	7	8	9	10
Poor				Average				Excellent	

Rating

_____1. Getting Attention- The extent to which the ad gets

the attention of others.

_____2. Holding Interest- The extent to which the ad holds

the interest of others.

_____3. Arousing Desire- The extent to which the ad arouses

the desires and meets the needs of others.

_____4. Relevance of Title- The extent to which the title

represents the company.

_____5. Relevance of Slogan- The extent to which the slogan

is relevant to the company.

_____6. Overall Rating

Appendix B

Please use the response possibilities shown below to rate the advertising board shown to you. Mark your rating (using whole numbers please) in the blanks provided.

<u>Performance Rating Form</u>

Response Possibilities:

1	2	3	4	5	6	7	8	9	10
Poor				Average				Excellent	

<u>Rating</u>

_____ 1. <u>Getting Attention</u>- The extent to which the ads get the attention of others.

_____ 2. <u>Holding Interest</u>- The extent to which the ads hold the interest of others.

_____ 3. <u>Arousing Desire</u>- The extent to which the ads arouse the desires and meet the needs of others.

_____ 4. <u>Relevance of Title</u>- The extent to which the titles represents the companies.

_____ 5. <u>Relevance of Slogan</u>- The extent to which the slogans are relevant to the companies.

_____ 6. <u>Overall Rating</u>

Appendix C

Instructions

Shown below are statements concerning the performance rating you received as a result of your work on the advertising task. Consider the statements with respect to that rating. Mark the alternative on the sheet that best indicates the degree to which you agree or disagree with the statements. Use the following response possibilities.

(1)   (2)   (3)   (4)
Strongly   Slightly   Slightly   Strongly
Disagree   Disagree   Agree   Agree

_____1. The feedback was an accurate evaluation of my performance on the task.

_____2. I do not feel the feedback reflected my actual performance.

_____3. I believe the feedback was correct.

_____4. The feedback was consistent with how I felt I performed on the task.

_____5. The raters accurately judged my performance on the task.

_____6. The raters incorrectly appraised my work.

_____7. The raters' evaluation of my work matched my own evaluation.

_____8. The raters' evaluation of my work reflected my true performance.

_____9. The feedback did not truly depict my performance on the task.

Appendix D

This form is to find out your opinion on how good your board was. Please use the response possibilities shown below to rate your own performance in creating an advertising display. Mark your rating (using whole numbers please) in the blanks provided.

Self-rating Form

Response Possibilities:

1	2	3	4	5	6	7	8	9	10
Poor				Average				Excellent	

Rating

_____1. Getting Attention- The extent to which the ads get the attention of others.

_____2. Holding Interest- The extent to which the ads hold the interest of others.

_____3. Arousing Desire- The extent to which the ads arouse the desires and meet the needs of others.

_____4. Relevance of Titles- The extent to which the titles represent the companies.

_____5. Relevance of Slogans- The extent to which the slogans are relevant to the companies.

_____6. Overall Rating

Appendix E

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

_____ interested
_____ distressed
_____ excited
_____ upset
_____ strong
_____ guilty
_____ scared
_____ hostile
_____ enthusiastic
_____ proud

_____ irritable
_____ alert
_____ ashamed
_____ inspired
_____ nervous
_____ determined
_____ attentive
_____ jittery
_____ active
_____ afraid

Appendix F

DEMOGRAPHICS

1. What is your age? _____

2. What is your occupation? _____

(Please circle one answer in the following questions.)

3. What is your sex?

    Male   Female

4. What year are you in school?

Freshman Soph.   Junior   Senior   Post-Bac Grad

5. Have you had previous experience in marketing or
    advertisement?

    Yes   No

Appendix G

Purpose and Instruction Script

Part I

Hello, my name is Cybelle Lyon and I am a doctoral student in Industrial/Organizational Psychology. I am conducting this experiment as part of my Master's thesis. I am interested in the different aspects of attention getting and information communication. I want to find out how people attempt to get others' attention while conveying certain information at the same time. Specifically, I am interested in what people perceive as attaining these marketing goals. For this reason, I want to find out what you believe constitutes good attention getting and information conveyance.

For this experiment, you will be playing the role of manager of an advertising firm. In this job, you not only have to create advertising displays, you have to critique the work of those who work for you, too. Your first task as manager will be to create an advertising display board. A team of two marketing graduate students will evaluate your work, but we will ask you to leave the room so that all rating is done anonymously. Your second task will be to rate an example of someone else's ability to get attention and convey information; this person is no one in this room

or that you know. Feel free to ask me questions, and please be assured that all information you give will be kept confidential. The entire experiment will take approximately 1 hr. Before we start the experiment, I would like to give you the opportunity to change your mind about participation and have you fill out an informed consent form. Please understand that your participation is voluntary and you are free to withdraw from the experiment at any time. (Distribute informed consent forms.) Please sign both of these consent forms and put one away in your bag or your pocket. I will collect the other one. These consent forms will be kept separate from all other materials that you complete during this study, so your name will not be associated with any of your work.

I have placed a card with your participant number on it on your desk. This will be what identifies each person's work. Please write this number on every sheet of paper I hand you, besides the consent forms, throughout the rest of the experiment.

Now we are ready to begin the task. I am going to ask you to role play a middle-level manager in a mid-sized advertising company. By role play I mean act the part of, behave like you think that person would behave, and pretend that you are that person.

Your name is Lee Walters. You work at Hallston, Horowitz, and McDaniels, a mid-sized advertising agency in Portland as a middle manager. You usually oversee and evaluate the performance of your subordinate advertising agents, but to your surprise, your boss has asked you to try your hand at designing four preliminary advertisements, and developing a slogan and title for these ads.

Your task is to develop ads for the four companies shown on your desk. These ads will be used in the regional magazine, Your City's Delight. There are four squares available and I would like you to design one ad per square using thumbtacks and the pictures provided in the manila envelope. You do not have to use all of the pictures, but you can only use each picture once. Everyone has the same pictures to work with. Please write down the title and slogan that you develop for each ad on the slips of paper provided and place it where you would like it positioned on your ad.

Your ads will be evaluated by two advanced marketing graduate students who will decide together on your evaluation. The five dimensions your ad will be evaluated on are ability to get attention, ability to hold interest, ability to arouse desire, relevance of the title, and relevance of the slogan.

Are there any questions? Well, use your imagination and good luck. You will have 20 minutes to complete the task and I will let you know when 20 minutes is up. That will give you approximately five minutes per ad.

You may begin. Okay, your time is up.

Part II

Now that you have finished, the marketing students will evaluate your performance according to the standards used in actual advertising firms. Please follow me to the other room so they will not see who completed which board. Please wait here while I go and tell them you are out of the room. You can talk to each other, but please do not discuss the experiment with each other. (Come back into the room and wait with the participants. After approximately 10 minutes and after feedback has been placed at their desks by the research assistant, the experimenter leads the participants back into the laboratory).

Part III

Please go back to the same place you were sitting before and turn over the rating form on your desk. Now I would like you to fill out some forms. (Hand out self-rating form, perceived feedback accuracy measure, and mood measure.) Now you will get to rate a display board that someone did before the experiment started. Please write your subject number on all of these sheets. Now there are

two more forms for you to fill out. (Pass out demographic
form and self-esteem assessment).

Part IV

Debriefing

Now the experiment is over and I would like to tell
you, in more detail, what my project is about. I am
actually interested in how receiving feedback on your own
performance affects the ratings that you give to others.
Your feedback sheets were filled out before any of you
arrived. Some contained all low scores, some all average
scores, and others contained all high scores. The research
assistants shuffled the different forms and placed them
face down at your stations without looking at them. So,
your boards were never actually evaluated by marketing
students and the rating you received had nothing to do with
your actual performance. So, I never saw who received which
ratings either. I was more interested in how receiving
either negative or positive feedback would affect your
ratings-of-others. For example, I wanted to see if
receiving a negative evaluation would cause you to give
others a negative evaluation as well. Does anyone have any
questions or comments? If anyone would like to contact me
about this experiment in the future, you can do so by
asking for me in the Psychology Department on the third
floor of Cramer Hall.

I would also like to ask you to please not discuss this experiment with anyone until the term is over. I'm sure that you can see that it is crucial to the success of my experiment that participants arrive with no prior knowledge of the experiment. If they hear about it ahead of time, my results will be meaningless.

Thank you for your participation.

Table 1

Means and Standard Deviations of Dependent Variables for

Entire Data Set by Favorability of Feedback

Dependent Variables

Feedback Condition	n		Mood	Self Rating	Ratings of Others
Positive	50	M	3.89	7.45	7.05
		SD	0.51	1.47	1.60
Average	36	M	3.75	5.76	6.06
		SD	0.41	1.34	1.27
Negative	57	M	3.49	4.73	5.37
		SD	0.42	1.63	1.45

Note. Mood, self-rating, and ratings-of-others were

measured on 5-point, 10-point, and 10-point scales,

respectively.

Table 2

Coefficient Alpha Reliabilities of Scales and

Intercorrelations of Dependent Variables

Subscale	1	2	3	4
1 Mood	**.85**	.37*	.14	.21*
2 Self-rating	--	**.95**	.62*	.01
3 Ratings-of-others	--	--	**.93**	.03
4 Acceptance	--	--	--	**.84**

Note. Coefficient alpha reliabilities are on the diagonal.

*p < .01.

n = 143

Table 3

Means and Standard Deviations of Dependent Variables for

the Not Accept Group by Favorability of Feedback

Dependent Variables

Feedback Condition	n		Mood	Self Rating	Ratings of Others
Positive	14	M	3.69	5.87	6.35
		SD	0.63	1.65	2.11
Average	10	M	3.71	6.58	6.73
		SD	0.52	1.87	1.49
Negative	28	M	3.47	5.80	5.84
		SD	0.45	1.41	1.61

Note. Mood, self-rating, and ratings-of-others were

measured on 5-point, 10-point, and 10-point scales,

respectively.

Table 4

Means and Standard Deviations of Dependent Variables for

the Accept Group by Favorability of Feedback

Dependent Variables

Feedback Condition	n		Mood	Self Rating	Ratings of Others
Positive	36	M	3.97	8.06	7.32
		SD	0.45	0.79	1.29
Average	26	M	3.76	5.44	5.80
		SD	0.36	0.94	1.10
Negative	29	M	3.51	3.70	4.92
		SD	0.39	1.07	1.12

Note. Mood, self-rating, and ratings-of-others were

measured on 5-point, 10-point, and 10-point scales,

respectively.

Table 5

Chi-Square, Degrees of Freedom, Goodness of Fit Index,

Adjusted Goodness of Fit Index, and Root Mean Square

Residual of the Three Models Tested by Path Analyses

Models

	1	2	3
Chi-square	10.57	.19	5.21
df	2	1	3
p	.005	.666	.157
GFI	.948	.999	.972
AGFI	.742	.990	.906
RMSR	.036	.006	.047

Figure 1. First model of the relationships between feedback received, mood, self-ratings, and ratings-of-others when feedback is accepted.
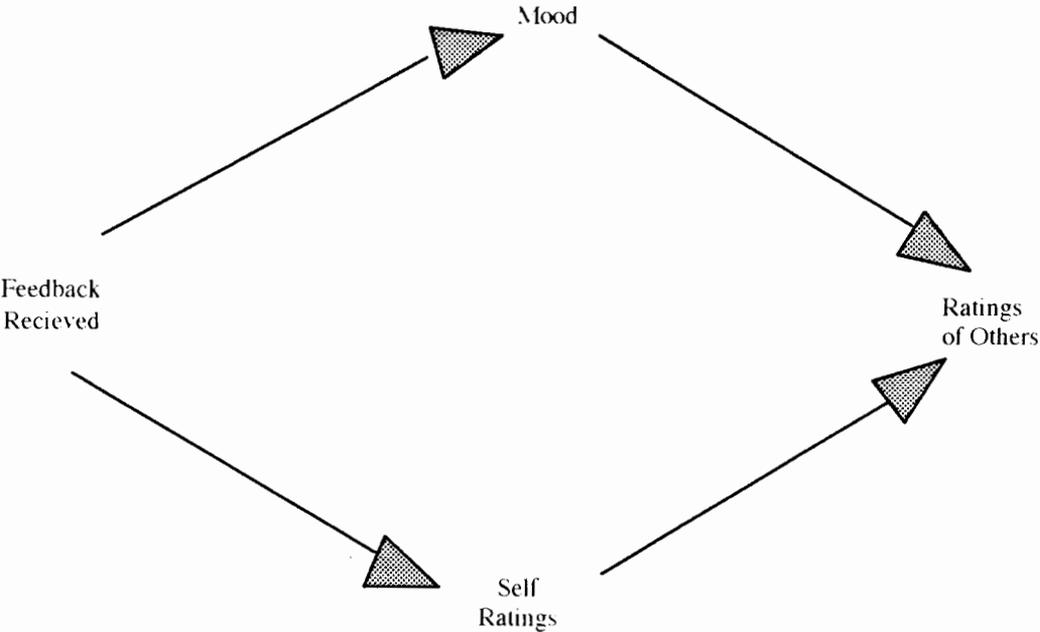
Figure 2. Flow chart of the steps taken in the experiment.
Steps: Rate Self, Rate Accuracy, and Rate Mood were
counterbalanced across sessions so that there were six
different orders of the measures given.

```
              ┌──────────┐
              │ perform  │
              │ task     │
              └──────────┘
                   │
                   ▼
               IV
              ┌──────────┐
              │ receive  │
              │ feedback │
              └──────────┘
                   │
                   ▼
              ┌──────────┐
              │ rate     │
              │ self     │
              └──────────┘
                   │
                   ▼
              ┌──────────┐
              │ rate     │
              │ accuracy │
              └──────────┘
                   │
                   ▼
              ┌──────────┐
              │ rate     │
              │ mood     │
              └──────────┘
                   │
                   ▼
               DV
              ┌──────────┐
              │ rate     │
              │ others   │
              └──────────┘
```
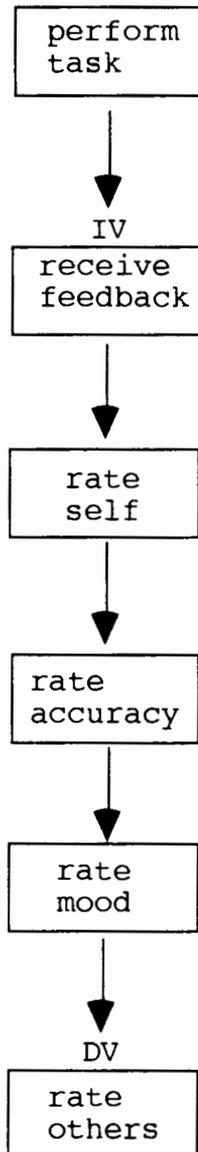
Figure 3. Path analysis test of the first model of the relationships between feedback received, mood, self-ratings, and ratings-of-others when feedback is accepted.
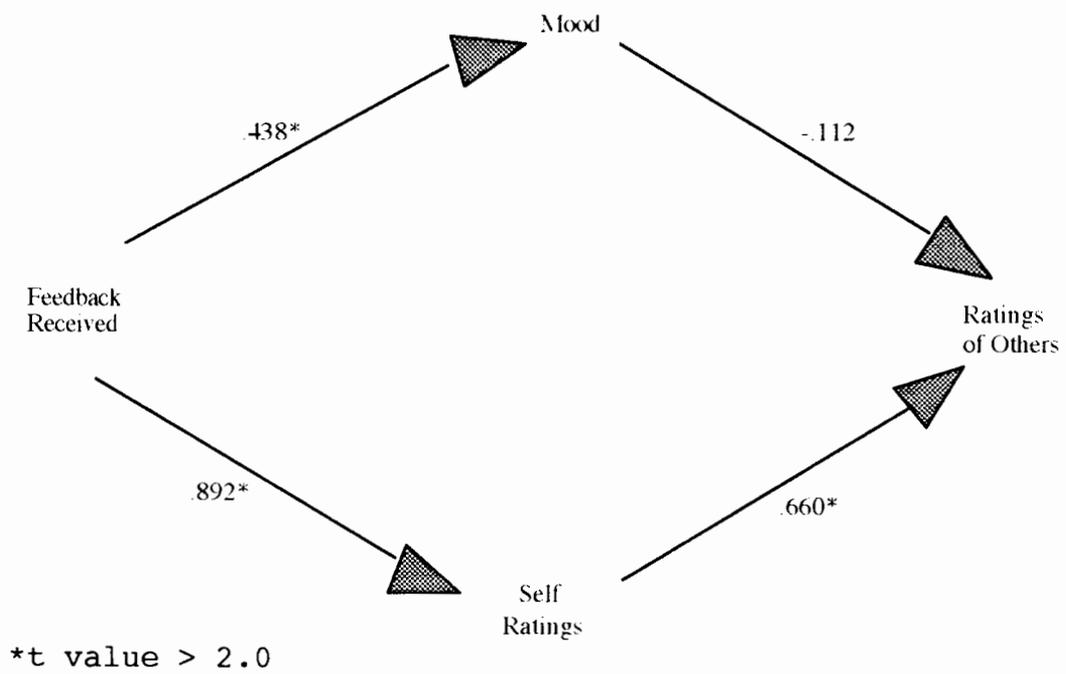

*t value > 2.0

Figure 4. Path analysis test of the second model, a model
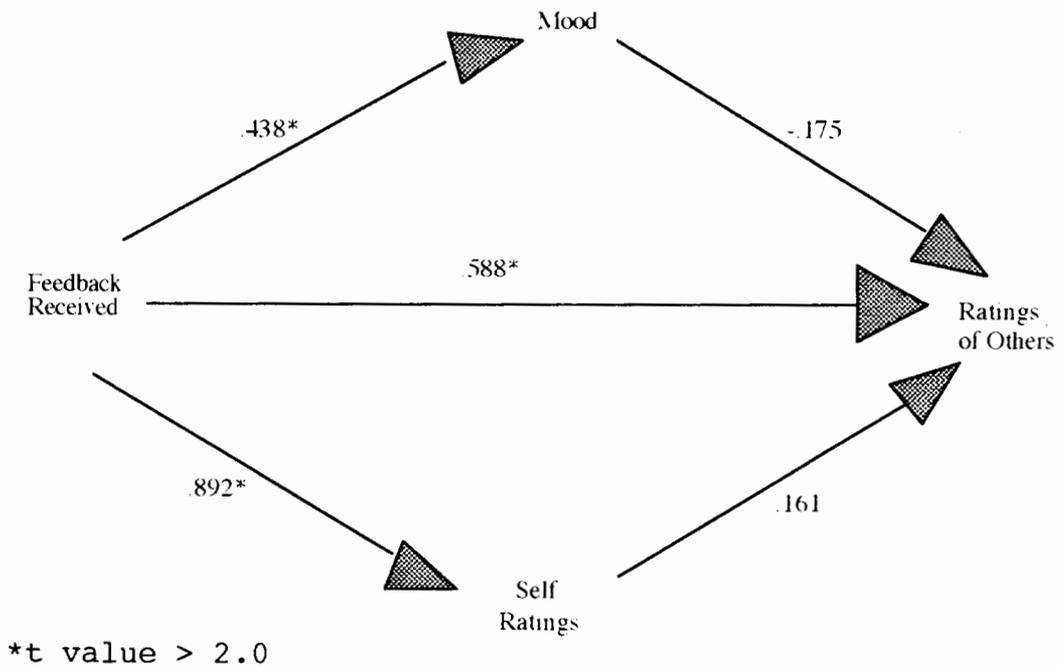with a path directly from feedback received to ratings-of-
others included.

*t value > 2.0
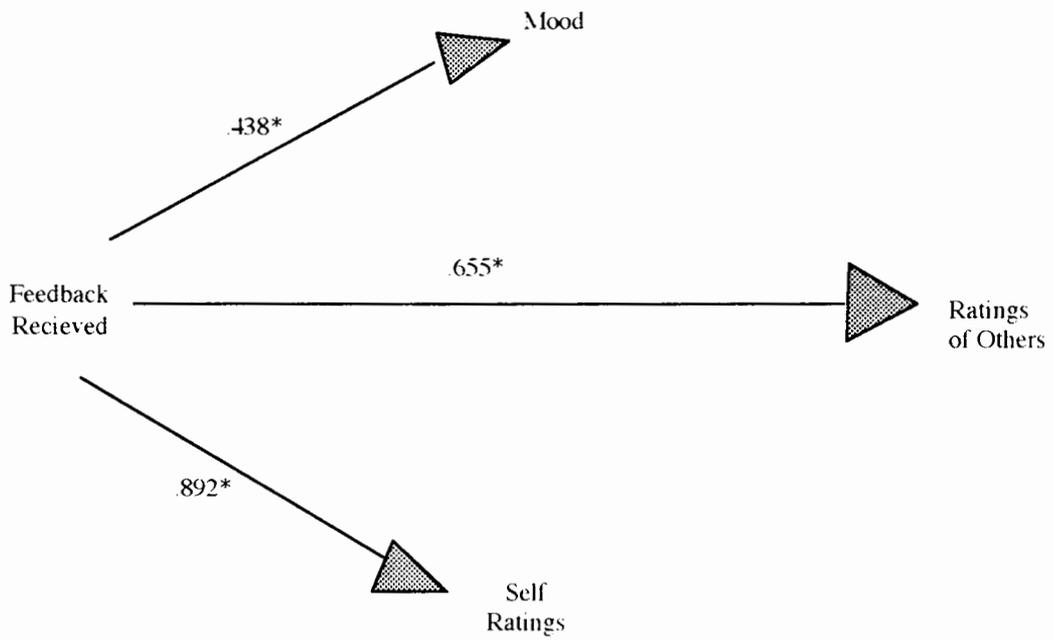
Figure 5. Path analysis test of the third model, a model with two paths dropped.

Mood

.438*

.655*

Feedback
Recieved

Ratings
of Others

.892*

Self
Ratings

*t value > 2.0

Figure 6. New model proposed for future research in which an internal standard acts as a mediator in the relationship between feedback received and ratings-of-others.