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The influence of supervisor credibility, sex of supervisor, and sex of subject on feedback acceptance

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THE INFLUENCE OF SUPERVISOR CREDIBILITY, SEX OF SUPERVISOR,
AND SEX OF SUBJECT ON FEEDBACK ACCEPTANCE

A Thesis

Presented to the
Department of Psychology
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
University of Nebraska at Omaha

by

Tracy Innaurato

August 1984

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THESIS ACCEPTANCE

Accepted for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree Master of Arts, University of Nebraska at Omaha.

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ABSTRACT

Feedback has often been used as a means of improving employee performance. It is generally believed that feedback has a positive influence on performance, but little is known about the factors that influence acceptance of feedback (Ilgen, Fisher, & Taylor, 1979). The purpose of this study was to investigate the influence of supervisor credibility, sex of supervisor, and sex of subject on feedback acceptance. Subjects read a description of either a male or female supervisor, and the credibility of the supervisor was manipulated in these descriptions. Subjects listened to a taped feedback session, and then responded to a questionnaire developed to measure feedback acceptance. Results of a 2 x 2 x 2 (Supervisor Credibility x Sex of Supervisor x Sex of Subject) analysis of variance failed to provide support for the hypothesized main effects for supervisor credibility, sex of supervisor, and sex of subject. In addition, the results failed to support the hypothesized interaction between sex of supervisor and sex of subject or the interaction between sex of supervisor and supervisor credibility. There were, however, several methodological limitations inherent in this study that could have contributed to the nonsignificant findings.

Chapter I

INTRODUCTION

Performance appraisal and performance reviews have become an integral part of business and industry. Industrial psychologists have been attempting to measure performance in industrial settings for 50 years (Landy & Farr, 1980). Considerable research has been directed toward developing psychometrically sound appraisal instruments (Bernardin & Smith, 1981; Ivancevich, 1980; Latham & Wexley, 1978; Saal & Landy, 1977) and assessing their susceptibility to bias (Bernardin & Cardy, 1982; Holzbach, 1978; Hulin, 1982; King, Hunter, & Schmidt, 1980).

Reliably measuring performance, however, does not guarantee the effectiveness of an appraisal system. One of the most extensive investigations of the effectiveness of a traditional performance appraisal program is the now classic study by Meyer, Kay, and French (1965) which was conducted at the General Electric Company. Managers and subordinates were asked to complete questionnaires both before and after the appraisal sessions. On the basis of this study, it was concluded that the value of a comprehensive performance appraisal system is questionable. Their results indicated that employees seem more willing to accept suggestions from their managers when they are spread out over the year rather than in one comprehensive meeting. Results also indicated that greater performance improvement resulted when the manager and subordinate set specific goals to be met rather

than having the manager criticize the subordinate's current performance. Finally, it was concluded that salary considerations and suggestions for improving performance should be discussed in separate sessions. Although this was a thorough evaluation of the effectiveness of a performance appraisal system within an actual organization, it dealt with this issue on a macro level.

Clearly, organizations are interested in knowing whether their appraisal system as a whole is effective, but it is also important to have an understanding of the individual components of the appraisal process. The purpose of this study is to focus on one small piece of the complex performance appraisal puzzle--acceptance of performance feedback.

Supervisors are often required to provide performance feedback to their employees. Although it is generally believed that this feedback will have a positive influence on employee performance, little is known about the underlying processes involved or the factors that influence feedback acceptance (Ilgen, Fisher, & Taylor, 1979). In this regard, the purpose of the present study was to investigate the effects of supervisor credibility, sex of supervisor, and sex of subject on feedback acceptance.

Chapter II

LITERATURE REVIEW

Supervisor Credibility

Ilgen, Fisher, and Taylor (1979) suggest that the credibility of the source of feedback should influence feedback acceptance. They focused primarily on two dimensions of credibility; expertise and trustworthiness.

One purpose of giving feedback is to provide the employee with information concerning performance. It would appear, then, that information coming from a knowledgeable or expert source would be more readily accepted (Ilgen et al., 1979). Tuckman and Oliver (1968) found that teacher performance improved following feedback from students but decreased following supervisory feedback. They concluded that this was the result of teachers viewing the students' feedback as credible but not the supervisors' feedback. Klein, Kraut, and Wolfson (1971) found that employees tended to be satisfied with feedback when the source of the feedback was thought to be familiar with the job. Ilgen et al. (1979) concluded that satisfaction in this instance should be considered a reflection of feedback acceptance.

The influence of source trustworthiness on feedback acceptance has been implied from research concerning performance appraisal systems. Huse (1967) supports the use of Management by Objectives because this system establishes a climate of trust between the supervisor and subordinate. Performance feedback should be more

readily accepted when given by supervisors who are trusted than from those who are perceived as untrustworthy (Ilgen et al., 1979).

The research discussed above suggests that source credibility could influence feedback acceptance. Since this relationship has not been directly tested, attention was directed to related areas of research from which parallels could be drawn.

Fisher, Ilgen, and Hoyer (1979) examined the relationship between source credibility, information favorability and job offer acceptance. In the study, Senior business students were presented with job information and were asked to imagine that they had been presented with this information in a face-to-face meeting with one of four sources who differed in credibility. Subjects then responded to questions concerning source credibility and job acceptance. Results indicated that subjects were more likely to accept a job offer from a credible source. It would appear, then, that if source credibility influences job offer acceptance it could also influence feedback acceptance.

The influence of source credibility has also been of interest to those investigating acceptance of personality feedback. Halperin, Snyder, Shenkel, and Houston (1976) found lower acceptance of personality feedback from low-status diagnosticians than from middle- or high-status diagnosticians. In addition, they found an interaction between source status and message favorability, such that, status had little influence on acceptance if the message was positive, but became an important factor if the message was negative. Since a supervisor must often point out the negative aspects of an employee's performance,

the results of this study are relevant, the implication being that an employee should be more willing to accept negative performance feedback from a credible source.

Falcione (1974) examined the relationship between supervisor credibility and employee satisfaction with immediate supervision in a large industrial organization. The results revealed a strong correlation between supervisor credibility and subordinate satisfaction. It seems that if supervisor credibility influences an employee's general satisfaction with his supervisor, then it could also influence an employee's willingness to accept performance feedback from his supervisor.

Finally, support for the hypothesis that source credibility could influence feedback acceptance comes from attitude change and consumer research. Researchers in these areas have been investigating the influence of source credibility since the 1950s. Source expertise and trustworthiness are the characteristics that typically have been manipulated. Research has consistently shown that the expert source has greater success in changing our opinions than the non-expert source (Hovland, Janis, & Kelley, 1953; Maddux & Rogers, 1980; Mills & Harvey, 1972). While research has been less consistent concerning the influence of trustworthiness, the general trend is that a trusted source is more likely to induce attitude change (Cooper & Croyle, 1984; McGinnies & Ward, 1980).

The important contribution that the attitude change and consumer literature makes to the present study concerns the issue of message acceptance. While acceptance has not been directly tested in the

performance feedback literature, a parallel can be drawn from the attitude change and consumer literature.

Research has consistently shown that when the same message is presented by a credible and a non-credible source, acceptance of that message is greater when delivered by the credible source (Aronson & Golden, 1962; Hovland & Weiss, 1951; Kelman & Hovland, 1953).

When a supervisor provides feedback, it is an attempt, to some extent, to persuade subordinates to accept an evaluation and recommendations for improvement. Since source credibility influences acceptance of a persuasive communication and since performance feedback is in a sense a persuasive message, it seems likely that source credibility will also influence acceptance of performance feedback. The present study tested this hypothesis. In particular, it was hypothesized that acceptance of performance feedback would be greater when provided by a credible source.

Sex of Supervisor

One variable not previously investigated which could influence feedback acceptance is the sex of the supervisor. The proportion of women managers has increased from 15.9% in 1970 to 24.6% in 1979 (Employment and Training Report of the President, 1980). Although their numbers have increased, the question still remains: Has society's attitude toward women managers changed? Since passage of Title VII of the Civil Rights Act of 1964, considerable research has been conducted concerning perceptions and evaluations of male and female managers.

Management has traditionally been considered a masculine occupation. This is due in part to the stereotyped belief that men possess the traits necessary for managerial success (Terborg & Ilgen, 1975). Broverman, Vogel, Broverman, Clarkson, and Rosenkrantz (1972) asked college students to identify traits characteristic of men and women. Men were generally described as being aggressive, independent, objective, dominant, self-confident, and skilled in business; while women were described as being talkative, gentle, dependent, illogical, emotional, and passive.

Research also indicates that managers hold similar perceptions. Rosen and Jerdee (1978) surveyed 884 male managers and administrators. They found that men were perceived as having the leadership and decision-making skills necessary for management positions. Women, on the other hand, were perceived as having skills more in line with clerical positions. Schein (1975) found that female managers also associated male characteristics with managerial success.

In addition to differential perceptions, researchers have found evidence of differential evaluations in employment settings. Studies have shown that there is a tendency to evaluate female applicants for a managerial position less favorably than male applicants even though both are equally qualified (Dipboye, Fromkin, & Wiback, 1975; Rosen & Jerdee, 1974). Similarly, males receive more favorable evaluations than do females in traditionally masculine occupations (Landy & Farr, 1980; Schmitt & Hill, 1977).

Based on the above literature, the present study proposed that subordinates would be more accepting of feedback given by a male

supervisor simply because management is considered a masculine occupation.

Sex of Supervisor x Sex of Subject

This study also proposed that there would be a significant interaction between sex of supervisor and sex of subject. The research discussed earlier indicated that a male in a supervisory position is consistent with sex role stereotypes held by both males and females (Rosen & Jerdee, 1978; Schein, 1975; Terborg & Ilgen, 1975). Therefore, there should be no difference in male and female acceptance of feedback from a male supervisor. The situation in which the supervisor is female, however, is inconsistent with sex role stereotypes. This seems to be particularly true in the female supervisor, male subordinate situation. Males have not typically held a position subordinate to women. It appears, then, that males might be less willing than females to accept a female supervisor. This, in turn, could result in a general unwillingness to accept feedback provided by a female supervisor. It was hypothesized that male subjects would be less accepting of feedback provided by a female supervisor than would female subjects.

Sex of Supervisor x Credibility

This study also proposed a significant interaction between the sex of the supervisor and credibility. There is research that suggests bias may be affected by the qualifications of the target person. In general, it has been found that competent males are rated more favorably than competent females, and that incompetent females

are rated more favorably than incompetent males (Deaux & Taynor, 1973; Feather & Simon, 1975; Nieva & Gutek, 1980).

If bias is affected by the competence of an individual, it seems plausible to expect that bias will also be affected by credibility, since both reflect ability or expertise. Therefore, it was hypothesized that an interaction would exist between the sex of the supervisor and credibility. Subjects should be more accepting of feedback presented by a credible male supervisor than by a credible female supervisor, and they should be more accepting of feedback presented by a non-credible female supervisor than by a non-credible male supervisor.

Sex of Subject

One final variable that could influence acceptance of feedback is the sex of the subject. Women have traditionally been brought up to be passive and dependent (Tavris & Offir, 1977). As a result, accepting the opinions of others would be consistent with their role. There is also evidence suggesting that women are more susceptible than men to persuasive communications (Cohen, 1964). Men, on the other hand, are socialized to be dominant and independent (Broverman et al., 1972) and, therefore, might be more likely to question a supervisor's evaluation. It was hypothesized that there would be a significant difference between male and female subjects, with females showing a higher level of acceptance.

Hypotheses

In summary, this study hypothesized the following:

1. There would be a significant main effect for credibility such that acceptance of feedback should be greater when feedback is presented by a credible source.

2. There would be a significant main effect for sex of supervisor such that subjects would be more accepting of feedback provided by a male supervisor.

3. There would be a significant main effect for sex of subject such that female subjects would be more accepting of feedback.

4. There would be a significant interaction between sex of supervisor and sex of subject such that male subjects would be less accepting of feedback provided by a female supervisor than would female subjects.

5. There would be a significant interaction between sex of supervisor and credibility such that subjects would be more accepting of feedback presented by a credible male supervisor than by a credible female supervisor and would be more accepting of feedback presented by a non-credible female supervisor than by a non-credible male supervisor.

Chapter III

METHOD

Subjects

The subjects for this study were undergraduate students from the University of Nebraska at Omaha. A total of 80 subjects participated. The sample consisted of 40 males and 40 females. The mean age of the sample was 21.44 (range 18-44). A majority of the subjects were Freshmen (62.5%), 23.8% were Sophomores, 7% were Juniors, 3.8% were Seniors, and 1.3% were non-degree students. The subjects volunteered to participate in order to receive extra credit points in their courses.

Measures

Acceptance of Feedback Questionnaire. The dependent variable in this study was acceptance of feedback. A six-item questionnaire was developed to measure this variable (see Appendix A, items 7-12). Subjects used a five-point rating scale to indicate their degree of agreement with each of the items. A rating of 1 indicated strong disagreement and a rating of 5 indicated strong agreement. A total acceptance score was calculated by adding together the ratings for each of the individual items. A high score reflected greater acceptance.

Manipulation check. Because supervisor credibility was manipulated in this study, six questions were included in the Acceptance of Feedback Questionnaire (see Appendix A, items 1-6)

to assess the adequacy of the manipulation. The items reflect the subject's perceptions of the supervisor's credibility.

Employment-History Questionnaire. Because prior work experience could influence subjects' responses to the Acceptance of Feedback Questionnaire, a four-item questionnaire, concerning various aspects of the subjects' employment history, was developed (see Appendix B).

Sign of feedback. The sign of feedback was not manipulated in this study. Research indicates that positive feedback is accepted more than negative feedback (Ilgen, Fisher, & Taylor, 1979). Because this was an initial investigation of the factors that could influence feedback acceptance, the decision was made to use positive feedback. Question 13 of the Acceptance of Feedback Questionnaire (see Appendix A) was included to determine whether the subjects perceived the feedback as positive.

Procedure

Subjects were tested in groups of four (two males and two females). Two testing rooms were used and were set up so that males were in one room and females were in the other. Subjects were told that the experimenter was interested in reactions to different styles of providing feedback.

When subjects arrived, they were given a set of written instructions (see Appendix C) which informed the subjects that they were going to listen to a tape recording of an actual performance review session (audiotapes rather than videotapes were used to control for the possible influence of nonverbal cues and physical appearance). They were told to listen to the tape as if they were the person

receiving the feedback. After they read the instructions, the subjects were given a written description of the supervisor who would be providing the feedback. Supervisor credibility was manipulated in these written descriptions.

Subjects read a description of either a credible male supervisor, a non-credible male supervisor, a credible female supervisor, or a non-credible female supervisor (see Appendix D). There was no difference in the descriptions of the male and female supervisors. After reading the descriptions, subjects listened to the taped feedback session. Each subject had their own tape recorder and listened to the tape through headphones. Sex of supervisor and sex of subordinate (the person receiving feedback) were manipulated on the tapes. The combination of the credibility and sex manipulations resulted in eight possible conditions: a credible male supervisor providing feedback to a male; a non-credible male supervisor providing feedback to a male; a credible female supervisor providing feedback to a male; a non-credible female supervisor providing feedback to a male; a credible male supervisor providing feedback to a female; a non-credible male supervisor providing feedback to a female; a credible female supervisor providing feedback to a female; and a non-credible female supervisor providing feedback to a female. Male subjects were randomly assigned to one of the four conditions in which a supervisor provided feedback to a male and female subjects were randomly assigned to one of the four conditions in which a supervisor provided feedback to a female. There were no differences in the eight conditions in terms of the feedback provided. The

confederates who were second-year Master's students in industrial psychology followed a standard script when they recorded the feedback sessions (see Appendix E). After listening to the taped feedback session, subjects filled out the Acceptance of Feedback Questionnaire. They were instructed to respond to the questions as if they themselves had just been given feedback.

Pilot Study

Before the actual experiment was conducted, the credibility manipulation was tested on 41 Psychology 101 students. Each subject read one of the four possible supervisor descriptions. Subjects then responded to the first six items of the Acceptance of Feedback Questionnaire. These items reflected subjects' perceptions of the credibility of the supervisor. One-tail t -tests were calculated for each of the four conditions. Male subjects perceived the credible male supervisor as significantly more credible than the non-credible male supervisor, $t(9) = 2.62$, $p < .01$. Female subjects perceived the credible male supervisor as significantly more credible than the non-credible male supervisor, $t(8) = 5.35$, $p < .01$. Male subjects perceived the credible female supervisor as significantly more credible than the non-credible female supervisor, $t(8) = 3.89$, $p < .01$. Female subjects perceived the credible female supervisor as significantly more credible than the non-credible female supervisor, $t(8) = 9.96$, $p < .01$. These results suggest that the credibility manipulation was successful.

Chapter IV

RESULTS

Reliability of Acceptance and Credibility Check Measures

The dependent variable in this study was acceptance of feedback as measured by items 7-12 of the Acceptance of Feedback Questionnaire. The reliability of this measure was assessed by calculating coefficient alpha. Coefficient alpha was .84 for the total sample, .79 for males, and .88 for females. The interitem correlations appear in Table 1. Examination of this table indicated that all of the items were significantly intercorrelated. The average interitem correlation was .49. These results support the use of a composite acceptance score.

The reliability (coefficient alpha) of the six items used as a check of the credibility manipulation was .73 for the total sample, .71 for males, and .75 for females. The interitem correlations are presented in Table 2. The results indicate that for the most part these items were significantly intercorrelated. There were three exceptions to this general trend. The correlations between questions 1 and 4, questions 3 and 5, and questions 5 and 6, were not significant. Since these items were only used as a check of the credibility manipulation, the decision was made to use a composite credibility score.

Table 1
 Interitem Correlations of the Acceptance of
 Feedback Questionnaire

Question	Question				
	8	9	10	11	12
7	.59**	.54**	.48**	.39**	.58**
8		.48**	.35**	.40**	.74**
9			.61**	.38**	.45**
10				.35**	.43**
11					.41**

** $p < .01$

Table 2
Interitem Correlations of the Credibility
Manipulation Check

Question	Question				
	2	3	4	5	6
1	.50**	.31**	.16	.24*	.41**
2		.32**	.24*	.37**	.37**
3			.37**	.14	.38**
4				.43**	.49**
5					.20

* $p < .05$

** $p < .01$

Means and Standard Deviations

Means and standard deviations of the dependent variable by sex and total sample appear in Table 3. Examination of Table 3 reveals that there were no sex differences for the dependent variable, $t(78) = .08, p > .20$.

Means and standard deviations of the four employment-history variables by sex and total sample appear in Table 4. There were no significant sex differences for prior supervisory experience, $t(78) = 1.36, p > .05$, having received performance feedback prior to participating in this study, $t(78) = .50, p > .20$, or for having given performance feedback, $t(78) = 1.09, p > .10$. Results of a chi-square analysis also indicated that there was no relationship between sex of subject and prior work experience, $\chi^2(2, N = 80) = 4.18, p > .10$. Examination of frequency data indicated that 39% of the sample had part-time work experience, 35% had full-time work experience, and only 6% had no work experience; 36% had supervisory experience, 58% had received performance feedback prior to participating in this study, and 35% had given performance feedback prior to participating in this study.

Question 13 of the Acceptance of Feedback Questionnaire was included to assess subjects' perceptions of the sign of feedback. The mean rating was 3.76 indicating that subjects perceived the feedback as slightly positive.

Correlational Analysis

The correlations between acceptance of feedback and four employment-history variables are presented in Table 5. Examination

Table 3
Means and Standard Deviations of Feedback Acceptance
by Sex and Total Sample

	Mean	SD	Range
Total Sample	23.44	3.74	13-30
Males	23.47	3.49	16-30
Females	23.40	4.02	13-30

Note. N = 80 for total sample

N = 40 for males

N = 40 for females

Table 4
Means and Standard Deviations of Employment-History
Variables by Sex and Total Sample

Item	Total (N = 80)		Males (N = 40)		Females (N = 40)	
	Mean	SD	Mean	SD	Mean	SD
Prior work experience	1.36	.62	1.35	.70	1.38	.54
Prior supervisory experience	.45	.50	.53	.51	.38	.49
Have you received performance feedback prior to participating in this study	.73	.45	.70	.46	.75	.44
Have you ever given performance feedback	.44	.50	.38	.49	.50	.51

Table 5
Correlations between Acceptance of Feedback and
Employment-History Variables (N = 80)

Item	Acceptance of Feedback
Prior work experience	.01
Prior supervisory experience	.03
Have you received performance feedback prior to participating in this study	.05
Have you given performance feedback prior to participating in this study	.10

of this table indicated that there were no significant correlations between any of the employment-history variables and acceptance of feedback.

The correlation between acceptance of feedback and perceived credibility was .73 ($p < .001$) for the total sample, .64 ($p < .001$) for males, and .82 ($p < .001$) for females. These results indicated that there was a significant relationship between acceptance of feedback and perceived credibility.

Manipulation Check

To ensure that subjects perceived significant differences between the credible and non-credible supervisors, a $2 \times 2 \times 2$ (Sex of Subject \times Sex of Supervisor \times Credibility) analysis of variance was performed on the credibility scale composite. The results of this analysis are presented in Table 6. The main effect for credibility reached significance, $F(1, 72) = 10.99$, $p < .001$, which indicates that the credibility manipulation was successful. However, one-tail t -tests performed for each of the four conditions indicated that while male subjects perceived a significant difference in credibility when the supervisor was male, $t(18) = 2.07$, $p < .05$, they did not perceive a significant difference when the supervisor was female, $t(18) = .87$, $p > .10$. Female subjects perceived a significant difference in credibility when the supervisor was male, $t(18) = 2.39$, $p < .01$, and when the supervisor was female, $t(18) = 1.70$, $p < .05$. Cell means are presented in Table 7. Although there appears to be a contradiction between significant t -tests and non-significant interactions in the

Table 6
 Analysis of Variance Table for Effects of Supervisor
 Credibility, Sex of Supervisor, and Sex of Subject
 on Perceived Credibility

Source of Variance	Sum of Squares	df	Mean Square	F
Sex of Subject (Sex)	4.51	1	4.51	.42
Sex of Supervisor (SSex)	6.61	1	6.61	.62
Credibility	117.61	1	117.61	10.99***
Sex x SSex	9.11	1	9.11	.85
Sex x Credibility	2.11	1	2.11	.197
SSex x Credibility	2.11	1	2.11	.197
Sex x SSex x Credibility	1.51	1	1.51	.141
Residual	770.300	72	11.568	

***p < .001

Table 7
Cell Means for Credibility Composite Scores

Sex of Subject	Sex of Supervisor							
	Male				Female			
	Credible		Non-Credible		Credible		Non-Credible	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Male	23.40	2.17	20.70	3.50	22.90	3.35	21.40	4.30
Female	24.60	2.80	21.80	2.44	23.30	2.95	20.60	4.06

analysis of variance, it should be noted that the t-tests were one-tailed and, therefore, more powerful.

Tests of Hypotheses Concerning Acceptance of Feedback

A 2 x 2 x 2 (Supervisor Credibility x Sex of Supervisor x Sex of Subject) analysis of variance was performed to test the hypotheses of this study. The results of this analysis appear in Table 8. Cell means are presented in Table 9. The results did not support the hypothesized main effects for credibility, sex of supervisor, or sex of subject. In addition, there was no support for the hypothesized interaction between sex of supervisor and sex of subject or for the interaction between sex of supervisor and supervisor credibility. The only significant effect was for a non-hypothesized interaction between sex of subject and credibility, $F(1, 54) = 5.03, p < .05$. Further analysis indicated that the credibility manipulation only affected acceptance of feedback by female subjects.

Table 8
 Analysis of Variance Table for Effects of Supervisor
 Credibility, Sex of Supervisor, and Sex of
 Subject on Acceptance of Feedback

Source of Variance	Sum of Squares	df	Mean Square	F
Sex of Subject (Sex)	.11	1	.11	.01
Sex of Supervisor (SSex)	32.51	1	32.51	2.45
Credibility	32.51	1	32.51	2.45
Sex x SSex	1.01	1	1.01	.08
Sex x Credibility	66.61	1	66.61	5.03*
SSex x Credibility	6.61	1	6.61	.49
Sex x SSex x Credibility	12.01	1	12.01	.91
Residual	954.30	72	13.99	

* $p < .05$

Table 9
Cell Means for Acceptance of Feedback

Sex of Subject	Sex of Supervisor							
	Male				Female			
	Credible		Non-Credible		Credible		Non-Credible	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Male	24.40	2.50	23.60	3.24	22.00	3.74	23.90	4.28
Female	25.60	3.37	22.70	3.16	24.30	3.60	21.00	4.76

Chapter V

DISCUSSION

The purpose of this study was to investigate the influence of supervisor credibility, sex of supervisor, and sex of subject on acceptance of performance feedback. The results did not support the hypothesized main effects for credibility, sex of supervisor, or sex of subject nor did they support the hypothesized interaction between sex of supervisor and sex of subject or the interaction between sex of supervisor and supervisor credibility. There was, however, a significant correlation between acceptance of feedback and perceived credibility. In addition, there was a significant interaction between sex of subject and supervisor credibility. These findings prompted post hoc analyses in hopes of understanding why the hypotheses were not supported.

Although there was a significant main effect for credibility on the manipulation check measure, t-tests indicated that the credibility manipulation was effective for female subjects in both the male and female supervisor conditions but was only effective for male subjects in the male supervisor conditions. Analysis of acceptance of feedback data indicated that male subjects did not respond differently to credibility regardless of the sex of the supervisor. In fact, male subjects were slightly more accepting of feedback from a non-credible female supervisor than from a credible female supervisor. Although this difference was not significant, it should be noted that this

result was in a direction opposite to what was predicted. In addition, male subjects were not as accepting of feedback from a credible female supervisor as were the female subjects, and the difference approached significance, $t(18) = 1.39$, $p < .20$. On the other hand, males were more accepting of feedback than females when the supervisor was a non-credible female. This difference also approached significance, $t(18) = 1.42$, $p < .20$. Therefore, in the analysis of the acceptance of feedback data, it is not surprising that the main effect for credibility and the interaction between sex of supervisor and credibility were not significant.

There are several other potential explanations for why the acceptance of feedback measure did not show a significant main effect for supervisor credibility. First, the descriptions of supervisor credibility might not have been adequate. This explanation is not entirely satisfactory, however, because the manipulation was successful for female subjects and had been successful for both males and females in the pilot study. A second explanation might be that the nonsignificant findings were the result of a systematic error in responding by some of the male subjects. For example, some male subjects may have coded their answers incorrectly. This could explain why male subjects showed a greater degree of acceptance when feedback was provided by a non-credible rather than a credible female supervisor. On the other hand, there is no reason to believe that such an error would be more likely among male than female subjects. Third, it is possible that male subjects responded primarily to the sex of the supervisor and not to the credibility manipulation.

Replication of this study is recommended to determine whether these results were simply a function of the male subjects in this study or if there is, in fact, a tendency for males and females to respond differentially to supervisor credibility.

The results of this study did not support a main effect for sex of supervisor. It is tempting to conclude that this is an indication of changing attitudes toward women managers. This conclusion is not warranted, however, because one can never prove the null hypotheses. In addition, one cannot generalize to a general population from a student population which may be sensitized to issues of sex-role stereotyping.

It is difficult to draw any firm conclusions from this study concerning the influence of supervisor credibility, sex of supervisor, and sex of subject on acceptance of performance feedback. The sex of subject x credibility interaction does, however, indicate the need for further research.

Future research should be designed to eliminate methodological limitations inherent in this study. It is possible that using a taped feedback session did not adequately reflect a true feedback session. Subjects were asked to listen to a taped feedback session as if they themselves were receiving feedback. It is possible that subjects could not assume this role. Even if they could assume the subordinate's role, there are distinct differences between the experimental condition and a true feedback session. First, unlike actual subordinates, subjects did not perform the tasks that were being evaluated. As a result, they could not compare the supervisor's

evaluation with personal beliefs concerning the quality of their performance. It seems likely that supervisor credibility would become more of an issue in acceptance of actual performance feedback, especially when the supervisor's evaluation did not match the subordinate's evaluation. Halperin et al. (1976) found that acceptance of discrepant and negative personality interpretations was greater from a high status source. Second, because it was not the subject's own performance that was evaluated, one would have to question how ego involving the experiment was for them. It may have been difficult for subjects to take criticism or praise personally in this study. In an actual feedback session, where ego involvement is greater, a subordinate may be more willing to accept both criticism and praise from a credible supervisor. Clearly, the best solution for overcoming these limitations would be to conduct this study in an actual organization. Since it is difficult to conduct field research, it is suggested as a compromise that a study be conducted in which subjects actually perform an ego involving task and then receive feedback concerning their performance from more and less credible sources.

In addition to overcoming the methodological limitations of this study, future research should investigate the influence of the sign of feedback on feedback acceptance. Subjects in this study perceived the feedback as slightly positive. Research indicates that positive feedback is accepted more than negative feedback (Ilgen et al., 1979). It is possible that supervisor credibility could become more of an issue in feedback acceptance when the feedback is negative.

Finally, further development of the acceptance of feedback and credibility check measures is necessary. Although the reliability of both measures was reasonably high, in the 80's and 70's respectively, the interitem correlations were disappointingly low and should be improved.

REFERENCES

Aronson, E., & Golden, B. W. (1962). The effect of relevant and irrelevant aspects of communicator credibility on opinion change. Journal of Personality, 30, 135-146.

Bernardin, J. H., & Cardy, R. L. (1982). Appraisal accuracy: The ability and motivation to remember the past. Public Personnel Management, 11, 352-357.

Bernardin, H. J., & Smith, P. C. (1981). A clarification of some issues regarding the development and use of behavioral anchored rating scales (BARS). Journal of Applied Psychology, 66, 458-463.

* Broverman, I. K., Vogel, S. R., Broverman, D. M., Clarkson, F. E., & Rosenkrantz, P. S. (1972). Sex-role stereotypes: A current appraisal. Journal of Social Issues, 28, 59-78.

Cohen, A. R. (1964). Attitude change and social influence. New York: Basic Books, Inc.

Cooper, J., & Croyle, R. T. (1984). Attitudes and attitude change. Annual Review of Psychology, 35, 395-426.

Deaux, K., & Taynor, J. (1973). Evaluation of male and female ability: Bias works two ways. Psychological Reports, 32, 261-262.

* Dipboye, R. L., Fromkin, H. L., & Wiback, K. (1975). Relative importance of applicant sex, attractiveness, and scholastic standing in evaluation of job applicant resumes. Journal of Applied Psychology, 60, 39-43.

Employment and Training Report of the President (1980). Washington: Superintendent of Documents, U.S. Government Printing Office.

Falcione, R. L. (1974). Credibility: Qualifier of subordinate participation. The Journal of Business Communication, 11, 43-54.

* Feather, N. T., & Simon, J. G. (1975). Reactions to male and female success and failure in sex-linked occupations: Impressions of personality, causal attributions, and perceived likelihood of different consequences. Journal of Personality and Social Psychology, 31, 20-31.

Fisher, C. D., Ilgen, D. R., & Hoyer, W. D. (1979). Source credibility, information favorability, and job offer acceptance. Academy of Management Journal, 22, 94-103.

Halperin, K., Snyder, C. R., Shenkel, R. J., & Houston, B. K. (1976). Effects of source status and message favorability on acceptance of personality feedback. Journal of Applied Psychology, 61, 85-88.

Holzbach, R. (1978). Rater bias in performance ratings: Superior, self, and peer ratings. Journal of Applied Psychology, 63, 577-588.

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). Communication and persuasion. New Haven: Yale University Press.

Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. Public Opinion Quarterly, 15, 635-650.

Hulin, C. L. (1982). Some reflections on general performance dimensions and halo rating error. Journal of Applied Psychology, 67, 165-170.

- Huse, E. F. (1967). Performance appraisal--a new look. Personnel Administration, 3, 16-18.
- Ilgen, D. R., Fisher, C. D., & Taylor, M. S. (1979). Consequences of individual feedback on behavior in organizations. Journal of Applied Psychology, 64, 349-371.
- Ivancevich, J. M. (1980). A longitudinal study of behavioral expectations scales: Attitudes and performance. Journal of Applied Psychology, 65, 139-146.
- Kelman, H. C., & Hovland, C. I. (1953). "Reinstatement" of the communicator in delayed measurement of opinion change. Journal of Abnormal Social Psychology, 48, 327-335.
- King, L. M., Hunter, J. M., & Schmidt, F. L. (1980). Halo in a multidimensional forced choice performance evaluation scale. Journal of Applied Psychology, 65, 507-516.
- Klein, S. M., Kraut, A. I., & Wolfson, A. (1971). Employee reactions to attitude survey feedback: A study of the impact of structure and process. Administrative Science Quarterly, 16, 497-514.
- Landy, F. M., & Farr, J. L. (1980). Performance rating. Psychological Bulletin, 87, 72-107.
- Latham, G. P., & Wexley, K. N. (1978). Behavioral observation scales for performance appraisal purposes. Personnel Psychology, 30, 255-268.
- Maddux, J. E., & Rogers, R. W. (1980). Effects of source expertness, physical attractiveness, and supporting arguments on persuasion: A case of brains over beauty. Journal of Personality and Social Psychology, 39, 235-244.

McGinnies, E., & Ward, C. D. (1980). Better liked than right: Trustworthiness and expertise as factors in credibility. Personality and Social Psychology Bulletin, 6, 467-472.

Meyer, H. H., Kay, E., & French, J. R. P. (1965). Split roles in performance appraisal. Harvard Business Review, 43, 123-129.

Mills, J., & Harvey, J. (1972). Opinion change as a function of when information about the communicator is received and whether he is attractive or expert. Journal of Personality and Social Psychology, 21, 52-55.

Nieva, V. F., & Gutek, B. A. (1980). Sex effects on evaluation. Academy of Management Review, 5, 267-276.

Rosen, B., & Jerdee, T. H. (1974). Effects of applicants' sex and difficulty of job on evaluations of candidates for managerial positions. Journal of Applied Psychology, 59, 511-512.

* Rosen, B., & Jerdee, T. H. (1978). Perceived sex differences in managerially relevant characteristics. Sex Roles, 4, 837-843.

Saal, F. E., & Landy, F. J. (1977). The mixed standard rating scale: An evaluation. Organizational Behavior and Human Performance, 18, 19-35.

* Schein, V. E. (1975). Relationships between sex-role stereotypes and requisite management characteristics among female managers. Journal of Applied Psychology, 60, 340-344.

* Schmitt, N., & Hill, J. E. (1977). Sex and race composition of assessment center groups as a determinant of peer and assessor ratings. Journal of Applied Psychology, 62, 261-264.

Tavris, C., & Offir, C. (1977). The longest war--sex differences in perspective. New York: Harcourt Brace Jovanovich, Inc.

* Terborg, J. R., & Ilgen, D. R. (1975). A theoretical approach to sex discrimination in traditionally masculine occupations. Organizational Behavior and Human Performance, 13, 352-376.

Tuckman, B. W., & Oliver, W. F. (1968). Effectiveness of feedback to teachers as a function of source. Journal of Educational Psychology, 59, 297-301.

Appendix A

Acceptance of Feedback Questionnaire

Instructions: You have just listened to a feedback session. Please answer the following questions as if you were the person who had been given the feedback. Please make sure that you fill in the circle that corresponds to the answer you choose.

Rating Scale

a = strongly disagree
b = disagree
c = uncertain
d = agree
e = strongly agree

1. I feel the supervisor is trustworthy.
2. I trust the advice the supervisor gave.
3. I feel the supervisor has not given an honest appraisal of my performance.
4. The supervisor knows a lot about what I do on the job.
5. I consider the supervisor to be an expert.
6. The supervisor does not know what he is talking about.
7. The meeting with the supervisor was not helpful.
8. I feel that the supervisor gave good advice.
9. I would not try the suggestions the supervisor gave.
10. I accept the advice the supervisor gave.
11. I do not agree with the supervisor's evaluation of my performance.
12. I feel that the suggestions given by the supervisor would be helpful.
13. Overall, I feel that the feedback provided was positive.

Appendix B

Employment-History Questionnaire

1. Have you ever had any paid work experience?

No = 0

Part-time = 1

Full-time = 2

2. Have you had any supervisory experience?

No = 0

Yes = 1

3. Have you ever received performance feedback?

No = 1

Yes = 1

4. Have you ever given performance feedback?

No = 0

Yes = 1

Appendix C

Instructions: In a few minutes you are going to listen to a recording of an actual performance feedback session that was taped a few weeks ago at a local air freight company. After listening to the tape, you will be asked to answer a few questions concerning the supervisor and the feedback. Please read and follow the numbered instructions below.

1. Please read the description of the supervisor provided below.

This information describes the supervisor who will be providing feedback on the tape.

DESCRIPTION APPEARS HERE

2. If you are ready, you can now listen to the tape. As you listen, imagine that you are the subordinate (Paul on the tape) who is receiving feedback from your supervisor. Push the button marked PLAY to start the tape. When the tape is finished, push the button marked STOP.
3. After you have listened to the tape, please answer the questions on the attached questionnaire. Please read the instructions carefully before answering the questions. There are a total of 13 questions. Please answer all questions. When you have finished, return all forms to the experimenter.

Appendix D

Supervisor Descriptions

Credible Supervisor

John (Joan) has been a supervisor with the company for 15 years. He (She) received a Bachelors degree in Business Administration from the University of Nebraska. He (She) participated in an extensive training program to learn all aspects of his (her) subordinate's job. He (She) has been described by his (her) subordinates as fair and honest.

Non-Credible Supervisor

John (Joan) has just been hired as a supervisor. He (She) has had no supervisory experience. He (She) is the son (daughter) of the Vice President of the company. Prior to this job, John (Joan) worked as a waiter (waitress) at a local restaurant.

Appendix E

Feedback Script

Supervisor: Good morning (Paul or Mary), how are you?

Subordinate: I'm fine.

Supervisor: The weather has really been crazy lately, hasn't it?

Subordinate: It sure has.

Supervisor: It's time for your annual review, so I've called you in this morning to discuss your performance over the past year.

I would like to go over this evaluation sheet with you.

Overall, your performance has been pretty good. You seem to be getting along well with your co-workers.

You're very careful with customer packages. There haven't been any reports of damage to packages that you have handled.

Subordinate: I always try to be careful.

Supervisor: There are a couple of areas that need improvement.

You are often using the wrong size shipping cartons. So, I would suggest that you review your procedure manual. There is a chart in the manual that indicates what size carton to use based on the size of the package you are handling. You should copy this chart and keep it in your work area.

Subordinate: I don't understand why it's so important to use exactly the right size carton. Like you said, I haven't damaged any packages.

Supervisor: Well, first of all it increases company costs. It also increases the likelihood of package damage.

Subordinate: I see.

Supervisor: The next point I would like to discuss is your production rate. I have noticed that your production rate is high in the morning, but then you tend to slack off in the afternoon. I suggest that you try to pace yourself. If you slow down in the morning, you should be able to maintain an acceptable rate in the afternoon.

The last point I'd like to discuss is your attendance record. In general, I am pleased. You have only missed one day in the past year. However, you've been late for work several times in the past few weeks.

Subordinate: Yes, I know. I've been having car trouble.

Supervisor: Everybody has that problem at one point in time. It would probably be a good idea to make arrangements to get a ride to work with one of your co-workers until your car is fixed.

Well, that about covers everything I wanted to discuss with you. Do you have any questions or problems you would like to discuss?

Subordinate: No.

Supervisor: If you ever want to discuss anything, please come and see me.

Subordinate: OK. I'll keep that in mind.

Stage Direction: Open Door

Supervisor: Oh (Paul or Mary), when you get back to work, could you ask Peter to come see me?

Subordinate: Sure.