Effects of Multisource Feedback and a Feedback Facilitator on the Influence Behavior of Managers Toward Subordinates

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The authors compared a feedback workshop with both a no-feedback control group and a comparison group of managers who received a feedback report but no feedback workshop. The multisource feedback was based on ratings of a manager’s influence behavior by subordinates, peers, and bosses. Managers in the feedback workshop increased their use of some core influence tactics with subordinates, whereas there was no change in behavior for the control group or for the comparison group. The feedback was perceived to be more useful by managers who received it in a workshop with a facilitator than by managers who received only a printed feedback report.

A widely used developmental method for managers and other professional employees is multisource feedback, which is often referred to as 360-degree feedback. In a multisource-feedback program, managers generally receive information about how they are perceived by various groups of people with whom they interact regularly (e.g., subordinates, peers, bosses, and clients). The feedback is usually provided in a report that contains descriptive information and graphical presentations of the data from the various sources, including self-ratings by the managers. In most programs the feedback consists of ratings on specific types of behavior or skill. Widespread interest in multisource feedback is affirmed by the number of recent books on the topic (Edwards & Ewen, 1996; Lepsinger & Lucia, 1997; Tornow, London, & CCL Associates, 1998; Waldman & Atwater, 1998). The popularity of multisource feedback reflects the assumption that it is an effective developmental method (Edwards & Ewen, 1996).

Potential Benefits of Multisource Feedback

The proponents of multisource feedback contend that it offers several potential benefits. First, managers can gain a more comprehensive perspective of their work performance when feedback is provided by people with a different perspective on it (Yammarino & Atwater, 1993). Consistent with this proposition, Bernardin, Dahmus, and Redmon (1993) found that feedback was viewed as more useful if it came from both bosses and subordinates rather than from subordinates alone. Second, developmental feedback is less likely to be ignored if the sources include peers and superiors, because these raters have more power and status than do subordinates. The knowledge that important people perceive a deficiency may increase efforts to demonstrate competence (London & Smither, 1995).

Consistent with control theory, one may be more motivated to change one’s behavior when ratings from others are lower than self-ratings (Carver & Scheier, 1981). However, negative feedback may be discounted if the rater is perceived as being biased or uninformed (Waldman & Atwater, 1998). When feedback from multiple sources is consistent, it is more likely to be perceived as accurate and useful for guiding behavior change (London & Smither, 1995; Meyer, 1980).

Potential Benefits of a Feedback Facilitator

The potential advantages of multisource feedback may depend in part on how it is presented to managers. There is usually a feedback report, but it can be delivered in different ways (Edwards & Ewen, 1996). Sometimes managers receive the report to interpret for themselves, and sometimes there is a feedback facilitator who meets with managers, either individually or collectively, to review the feedback report. The type of process may affect the perceived relevance and utility of the feedback. The complexity of feedback is usually greater when there are multiple sources, and the potential benefit of more information may be offset by the difficulties of interpreting it. A facilitator can help recipients interpret the feedback and understand why it is relevant (DeNisi & Kluger, 2000; Yukl & Lepsinger, 1995). Although most feedback reports include interpretive guides, a facilitator is able to provide more attention and assistance.

A feedback intervention is more likely to have a beneficial effect if recipients perceive that there is a need for improvement and are optimistic about learning how to make improvements (Hellervik, Hazucha, & Schneider, 1992; Kluger & DeNisi, 1996;
London & Smither, 1995). With the help of a supportive facilitator, recipients are more likely to set improvement goals and develop plans for improving their performance (Bracken, 1994; DeNisi & Kluger, 2000). A feedback workshop provides managers with uninterrupted time to analyze their feedback and develop improvement plans (Bracken, 1994). In the absence of a workshop, busy managers may spend little time thinking about the feedback or how to apply it.

Feedback about performance deficiencies is not likely to be beneficial if recipients are defensive about it. A facilitator can help to keep the recipient focused on opportunities for self-development rather than on coping with threats to self-esteem (DeNisi & Kluger, 2000). When feedback is distributed in a workshop with a facilitator, there are also opportunities for mutual support and encouragement among the participants (Edwards & Ewen, 1996). It is probably less threatening to have a feedback facilitator who is a consultant or human resource professional than to have a superior responsible for evaluating the manager’s performance (Antonioni, 1996). A neutral facilitator is less likely to elicit a defensive reaction and may be more capable of providing advice and coaching to help managers improve their performance. Moreover, when a feedback intervention is managed by a neutral facilitator, recipients may be more confident that the feedback will remain confidential.

Research on Effects of Feedback to Managers

The general effects of feedback have been studied for decades, and there have been many laboratory experiments. After a meta-analysis of 131 feedback studies, Kluger and DeNisi (1996) concluded that there was only a small overall improvement in performance, and performance actually declined one third of the time. They proposed several reasons why feedback may not be effective, including characteristics of the feedback, the task, and the recipients. Their meta-analysis provides some important insights, but most of the studies were laboratory experiments on feedback about task performance or field studies on performance feedback from an authority figure or an expert (e.g., a teacher). The review did not examine the effects of upward or multisource feedback about managerial behavior.

Despite the widespread use of behavioral feedback as a technique for management development, there has been relatively little research to directly evaluate its effectiveness. We found only 14 studies that assessed the effects of upward or multisource feedback on managers and other formal leaders. The criterion in these studies was a change in ratings of managerial behavior or skill, not changes in objective measures of effectiveness. Table 1 describes the 14 studies and summarizes results based on ratings of managerial skill or managerial behavior made by others before and after the feedback intervention. The table does not show results based on anecdotal accounts of improvement, retrospective ratings of perceived change, or self-ratings by managers, all of which are likely to be biased indicators for evaluating feedback interventions.

Results from this research were generally weak and inconsistent. The research method used in most of the studies involved comparing premeasures and postmeasures of behavior or skill for a single group of managers. This type of study has no control group and cannot verify that positive outcomes are a direct result of the feedback intervention. There are several sources of contamination for single group pre–post designs, and they are more likely to occur in studies conducted over a long period of time.

One potential source of contamination (high manager mortality) occurs when many of the managers who are in the sample at the premeasure elect to drop out before the postmeasure. If the drop-outs consist mostly of managers who are unmotivated to improve or very competent managers with little potential to improve, then the apparent effects of the feedback intervention on the remaining managers may be inflated.

Rater instability is another source of contamination. The common practice of aggregating scores for the raters of a manager often obscures the fact that some of the raters were not the same for the premeasure and postmeasure. In studies in which raters are not held constant, the results may reflect differences in the raters rather than changes in manager behavior. The effect of the feedback can be inflated if many dropout raters give low premeasure ratings because they disliked the manager, and new raters who provide only a postmeasure rating are lenient because they do not know the manager very well.

Even when the same managers are rated each time by the same people, the results can be biased by changes in perceptions (London & Smither, 1995). After the initial experience with the rating process, the raters may gain a better understanding of the behaviors and begin to observe them more carefully. If raters know the managers are participating in developmental activities, then the postmeasure ratings may be inflated by expectations of improvement.

Many types of organizational changes can affect the behavior or performance of a manager (e.g., structural changes, job redesign, culture change, new incentives, and follow-up training or coaching). Without random assignment of managers to an experimental or control group, one cannot determine how much these other factors affected managerial behavior and performance. To illustrate the potential for contamination, in the study by Smither et al. (1995), there was a significant increase in behavior ratings, but managers who received a feedback report did not improve more than managers without such feedback.

Only four of the prior studies were field experiments with random assignment to experimental and control conditions. These experiments all involved upward feedback, and only one found clear evidence that the feedback was effective. We did not find any field experiments on the effects of multisource feedback on behavior or performance. The three nonexperimental studies on the effects of multisource feedback did not provide consistent results. In summary, there is little evidence that a multisource feedback intervention is effective for changing managerial behavior.

There has been little research on the benefits of a feedback facilitator. Antonioni (1995) compared the effects of giving managers only a feedback report with the effects of having managers meet with the boss to review the feedback report, but neither type of intervention had any significant effect on managerial behavior. The three other field experiments on upward feedback (Atwater, Waldman, Atwater, & Cartier, 2000; Hegarty, 1974; Nemeroff & Cosentino, 1979) had a neutral facilitator, but the results were inconsistent across studies. Managerial behavior improved in the study by Hegarty (1974), it did not improve in the study by Atwater et al. (2000), and it improved in the Nemeroff and Cosentino (1979) study only if the facilitator encouraged managers to set specific improvement goals. Most of the nonexperimental
studies on upward or multisource feedback did not clearly explain whether a feedback facilitator was used. In summary, the benefits of having a neutral facilitator for multisource feedback have yet to be determined.

Research Objectives

The lack of strong, consistent results in the studies on upward and multisource feedback echoes the conclusions reached in the meta-analysis by Kluger and DeNisi (1996) and commentary by other scholars (e.g., Waldman, Atwater, & Antonioni, 1998). The widespread belief that behavioral feedback is a highly effective method for management development has little empirical support. Theory and research on this developmental method have lagged behind practice (Greguras & Robie, 1998; London & Smither, 1995; Waldman et al., 1998). One objective of our study was to find more definitive evidence about the effectiveness of a multisource feedback workshop for changing managerial behavior. A second objective was to explore the proposition that a skilled, neutral facilitator can enhance the effectiveness of multisource feedback.

Method

The field experiment included an experimental group and a control group in the same organization. There was also a quasi-experimental comparison group in another organization. Managers in the experimental condition received a feedback report in a workshop with a facilitator. Managers in the comparison group received the same type of feedback report, but there was no workshop. Managers in the control group received no feedback, but after the study was completed they also had an opportunity to participate in a feedback workshop. A premeasure survey was conducted in all three conditions to assess each focal manager’s behavior toward subordinates, peers, and bosses. The same respondents were surveyed again in a postmeasure survey conducted 3 months later. The

<table>
<thead>
<tr>
<th>Feedback study</th>
<th>Research design</th>
<th>Sample for analysis</th>
<th>Type of feedback</th>
<th>Time interval (months)</th>
<th>Other factors</th>
<th>Significant improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hegarty (1974)</td>
<td>2-group experiment</td>
<td>56 supervisors in a university</td>
<td>Upward</td>
<td>3</td>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>Nemeroff &amp; Cosentino (1979)</td>
<td>3-group experiment</td>
<td>30 insurance managers</td>
<td>Upward</td>
<td>3</td>
<td>F</td>
<td>Inconclusive (only if set specific goals)</td>
</tr>
<tr>
<td>Wilson et al. (1990)</td>
<td>1 group pre-post</td>
<td>41 hospital managers</td>
<td>Upward</td>
<td>12</td>
<td>A, C</td>
<td>Yes</td>
</tr>
<tr>
<td>Wilson et al. (1990)</td>
<td>1 group pre-post</td>
<td>29 bank managers</td>
<td>Upward</td>
<td>6</td>
<td>A, C</td>
<td>Yes</td>
</tr>
<tr>
<td>Hazucha et al. (1993)</td>
<td>1 group pre-post</td>
<td>48 utility managers</td>
<td>Upward</td>
<td>24</td>
<td>A, B, C</td>
<td>Inconclusive (p &lt; .10)</td>
</tr>
<tr>
<td>Atwater et al. (1995)</td>
<td>2 groups pre-post</td>
<td>978 navy cadet leaders</td>
<td>Upward</td>
<td>4</td>
<td>A, D, E</td>
<td>Yes</td>
</tr>
<tr>
<td>Antonioni (1995)</td>
<td>4-group experiment</td>
<td>96 managers</td>
<td>Upward</td>
<td>3</td>
<td>A</td>
<td>No</td>
</tr>
<tr>
<td>Hezlett &amp; Ronnkvist (1996)</td>
<td>1 group pre-post</td>
<td>110 managers in global firm</td>
<td>360</td>
<td>24</td>
<td>A, B</td>
<td>No</td>
</tr>
<tr>
<td>Smither et al. (1995)</td>
<td>1 group pre-post</td>
<td>238 managers</td>
<td>Upward</td>
<td>6</td>
<td>A, B, D</td>
<td>Inconclusive (only if had low initial rating)</td>
</tr>
<tr>
<td>Reilly et al. (1996)</td>
<td>1 group pre-post</td>
<td>92 managers</td>
<td>Upward</td>
<td>30</td>
<td>A, B, D</td>
<td>Inconclusive (only if had low initial rating)</td>
</tr>
<tr>
<td>Rosti &amp; Shipper (1998)</td>
<td>2 groups pre-post</td>
<td>53 job corps managers</td>
<td>360</td>
<td>3</td>
<td>A, C, E</td>
<td>Inconclusive (p &lt; .10 for a few skills)</td>
</tr>
<tr>
<td>Johnson &amp; Fersl (1999)</td>
<td>1 group pre-post</td>
<td>2,171 managers</td>
<td>Upward</td>
<td>12</td>
<td>A, B</td>
<td>No</td>
</tr>
<tr>
<td>Walker &amp; Smither (1999)</td>
<td>1 group pre-post</td>
<td>252 bank managers</td>
<td>Upward</td>
<td>48</td>
<td>A, C, D</td>
<td>Yes (more if low initial rating)</td>
</tr>
<tr>
<td>Atwater et al. (2000)</td>
<td>2-group experiment</td>
<td>96 police supervisors</td>
<td>Upward</td>
<td>10</td>
<td>A</td>
<td>No</td>
</tr>
</tbody>
</table>

Note. Time interval is between feedback and final postmeasure. A = Unmatched raters across time periods; B = High manager mortality; C = Follow-up training was available; D = Feedback process was repeated; E = Nonrandom assignment of managers to conditions; F = Feedback involved behavior in a special context.
feedback was based on the premeasure data from all sources. The effect of
the feedback interventions was evaluated in terms of a manager’s change
in behavior toward subordinates.

The feedback involved a manager’s use of proactive influence tactics
with subordinates, peers, and bosses. The effectiveness of managers de-
dpends on their influence over other people in the same organization, and for
many types of influence attempts one must use proactive influence tactics
(Yukl, 2002). Several studies have been conducted to identify specific
types of influence tactics (e.g., Kipnis, Schmidt, & Wilkinson, 1980;
Schriesheim & Hinkin, 1990; Yukl & Tracey, 1992). Building on the
earlier work, Yukl and Seifert (2002) developed an extended taxonomy
of 11 influence tactics that are relevant for managers. The four core tactics
most likely to result in commitment by the target person include rational
 appeals (appealing to the person’s values, ideals and emotions),
 consultation (involving the person in planning how to accomplish a task or
 objective), and collaboration (offering to make it easier to carry out a
 request). Other tactics (e.g., exchange, pressure, or coalition) are more
 likely to result in compliance or resistance (Yukl, 2002).

Sample

The sample for the experimental part of the study included most of the
midlevel managers from a regional savings bank in the northeastern United
States. The 14 middle managers included 6 men and 8 women. The
managers were randomly assigned to the experimental and control groups,
with an equal number in each group. The sample for the comparison group
included 7 middle managers (5 women and 2 men) in another regional
 savings bank who volunteered to participate in the study.

In each condition we randomly selected five peers and five subordinates
of each manager to serve as raters. If a manager had fewer than five
subordinates or peers, all of them were included. In most cases the
managers had only one boss to provide feedback. In the bank used for the
experimental and control conditions, the response rate on the premeasure
survey was 80% for subordinates, 85% for peers, and 100% for bosses. The
response rate for the comparison group in the other bank was 96% for
subordinates, 91% for peers, and 100% for bosses.

Although managers in the experimental and comparison groups received
feedback from multiple sources, we were able to evaluate only the effect of
the feedback on manager behavior toward subordinates. In a small
organization, insulating the peer and boss raters from possible contamination is
difficult. There were very few bosses, each boss had to rate several focal
managers, and the bosses knew which managers were in each condition.
Most of the peer raters were also focal managers. In the first bank, one half
of the peer raters participated in the feedback workshop, where they
learned how to identify the behaviors better and received feedback about
their own behavior. In the second bank, most of the peer raters were also
in the comparison group that received feedback reports. Like the bosses, all
peer raters filled out the premeasure questionnaire multiple times, and this
process may have changed their perception and awareness of the influence
tactics. In contrast, none of the subordinate raters in either bank received
feedback, and each subordinate had to rate only a single focal manager.
Therefore, we used only subordinates to evaluate the feedback interven-
tions. The number of subordinates who provided usable data from both the
premeasure and postmeasure surveys was 21 for the feedback work-
shop, 18 for the control group, and 20 for the comparison group.

Procedure

The first author presented a brief overview of the project at a regularly
scheduled meeting of the executive group for the first bank, and the bank
president indicated strong support for it. A letter from the bank president
explaining the project was sent to all participating managers and raters,
along with consent forms to be returned directly to the researchers. The
managers were assured that they would all have an opportunity to attend
either the initial feedback workshop or a second one to be held after the
postmeasure survey. Once the signed consent forms were received, the
premeasure questionnaire was mailed directly to the participants. A similar
procedure was followed in the second bank to obtain volunteers for the
feedback-only condition.

The multisource raters used the target version of the questionnaire to
describe the influence behavior of the focal managers. The name of the
manager to be rated was written on the questionnaire to make it possible to
combine responses from different raters of the same manager. Raters were
also asked to write a four-digit number on both the premeasure and
postmeasure questionnaires so that the two could be matched for the
analysis of behavior change. The focal managers in all conditions received
a self-report questionnaire designed to measure their use of different
influence tactics with subordinates, peers, and bosses.

The respondents mailed their completed questionnaires directly to the
researchers in postage-paid envelopes provided to preserve confidentiality.
Subordinate and peer responses remained anonymous, and managers who
received feedback saw only composite scale scores for each type of rater.
The feedback from bosses was not anonymous if the manager had only one
boss, which was usually the case.

Measure of Influence Behavior

The measure for assessing influence behavior was an updated version of
the Influence Behavior Questionnaire (Yukl & Tracey, 1992). Yukl and
Seifert (2002) have provided validation evidence for the 11 influence
tactics in the updated target version of the questionnaire, including a
confirmatory factor analysis. Each item had five anchored response choices
indicating how frequently the focal manager used the tactic in influence
attempts with the target person. The responses in the target version ranged
from 1 (I can’t remember him/her ever using this tactic with me) to 5
(He/she uses this tactic very often with me).

The agent self-report version of the questionnaire had parallel items and
a similar rating format, with only minor differences in wording. For each
item in the agent version, the focal managers rated their use of the tactic in
influencing a specified target group (e.g., subordinates, peers, or bosses).
To make the agent version easier to complete, we created three columns
next to each question (one column for each target group).

Feedback was based on the 11 tactic scales. Evaluation of the feedback
interventions was based primarily on a composite score for the core tactics
(the mean of the 12 items on these tactics), but supplementary analyses of
feedback effects were made for the tactic scales.

Feedback Reports

Before the study began, we pilot tested the feedback report to check on its
readability and relevance. The final report included a detailed descrip-
tion of the influence tactics and their relative effectiveness. Next, there was
an explanation of how to interpret the feedback. The actual feedback was
presented as a mean rating for each tactic by target source (i.e., subordi-
nates, peers, or boss). The mean scores for each tactic were shown both in
numerical form and as a bar graph. The manager’s self-ratings for each
target source were included in the feedback report to facilitate comparison
of self-ratings to ratings by the targets. The feedback report also showed
norms for each tactic based on all premeasure data for each type of target
rater. Managers were encouraged to pay special attention to any large
discrepancies between self- and target ratings or between target ratings and
the norms for that source. Finally, there was a section to assist the focal
managers in planning how to improve their use of any core tactics that
seemed to be underutilized.

The feedback report was similar to ones used in many feedback pro-
grams, but it incorporated one uncommon element: Self-ratings were made
separately for agent influence behavior toward each type of target (i.e.,
...
subordinates, peers, or bosses). The usual procedure is to have agents make self-ratings for their general use of a behavior for all targets. The new procedure made it possible to compare self-ratings and target ratings separately by type of target.

**Feedback Workshop**

The feedback workshop was conducted over a 7-hr period at the bank’s training facility, and the researchers were the facilitators for the workshop. The first part of the workshop explained the various influence tactics and how they are related to the success of an influence attempt. The facilitators showed a video to participants with examples of the core tactics, and we stopped it several times to identify the tactics and discuss their relevance to the situation. In the second part of the workshop, participants were shown their feedback reports. The facilitators explained each section of the report, answered questions, and provided advice on how to interpret the feedback. In the third part of the workshop, a scenario exercise provided the participants an opportunity to consider how the influence tactics can be used in specific situations that bank managers are likely to encounter. Three scenarios were used, one involving downward influence, one involving lateral influence, and one involving upward influence. The managers worked in small groups to develop an influence strategy for each scenario, and then the groups presented their recommendations and gave examples of what they would say or do in each situation. In the final part of the workshop, the facilitators helped individuals develop action plans for using the feedback to improve their influence behavior. The facilitator emphasized opportunities to make better use of any core tactics that were relevant to their situation.

**Evaluation of the Feedback and the Workshop**

We administered a short questionnaire at the end of the workshop to evaluate the content of the workshop and the facilitator effectiveness. Each scale had three items of the type commonly used to evaluate training workshops (Noe, 1999). A 5 point anchored rating scale was used with response categories ranging from poor to outstanding. Ratings were obtained not only from managers who attended the workshop for the experimental group but also from managers who attended the workshop held for the control group a few weeks after the postmeasure survey was completed. The two workshops are referred to as Workshop 1 and Workshop 2.

We used another short questionnaire to assess perceptions regarding accuracy of the feedback, utility of the feedback, and capacity to improve performance. Each scale had three items. A 5 point anchored Likert scale was used with response categories ranging from 1 (strongly disagree) to 5 (strongly agree). This questionnaire was filled out by managers in the two workshops and managers in the second bank who received only written feedback reports. For the comparison group, the questionnaire was mailed to the managers along with the feedback report, and they were asked to return it directly to the researchers.

**Results**

**Reliability of Measures**

Internal consistency reliability was determined separately for the premeasures and postmeasures of influence behavior, and it was adequate for all scales (α > .70). For the composite measure of core tactics, the alpha value for subordinate raters was .91 for the premeasure and .93 for the postmeasure. For subordinate raters on the premeasure and postmeasure respectively, the alpha values were as follows: .78 and .82 for rational persuasion, .80 and .70 for inspirational appeals, .79 and .84 for consultation, and .71 and .88 for collaboration.

Reliability was also determined for the scales used to measure manager reactions to the feedback and the workshop. The alpha values were .94 for feedback accuracy, .86 for feedback utility, .94 for capacity to improve, .89 for quality of workshop content, and .87 for facilitator effectiveness.

**Evaluation of Feedback Workshop**

To serve as an adequate basis for assessing the effects of multisource feedback, the workshop must be relevant, and the feedback report must be accurate and useful. The ratings of the workshop were computed separately for the managers in the experimental group and the managers in the control group (who attended the workshop after the postmeasure survey). The mean scale score for the quality of workshop content was 4.3 for the first workshop and 4.6 for the second workshop. The mean scale score for facilitator effectiveness was 4.4 for the first workshop and 4.7 for the second workshop. These mean ratings (on a scale ranging from 1.0 to 5.0) indicate a favorable assessment of the feedback workshop. The similarity of the ratings for the two workshops (the means were not significantly different) provides additional evidence that they are reliable.

The mean ratings of feedback accuracy, relevance, and utility by managers in the two feedback workshops and by managers in the comparison group are shown in Table 2. There was no significant difference for perceived accuracy of the feedback, which is consistent with the fact that the feedback report was similar for each group of managers. However, the managers in the workshops gave significantly higher ratings of feedback utility (η² = .37) and capacity to improve performance (η² = .38) than did the managers in the feedback-only comparison group. The results suggest that feedback was more useful and easier to apply when there was a facilitator.

**Table 2**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Workshop 1 M</th>
<th>Workshop 1 SD</th>
<th>Workshop 2 M</th>
<th>Workshop 2 SD</th>
<th>Feedback only M</th>
<th>Feedback only SD</th>
<th>F(2,18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback accuracy</td>
<td>4.05</td>
<td>0.30</td>
<td>3.73</td>
<td>1.08</td>
<td>3.36</td>
<td>0.49</td>
<td>1.56</td>
</tr>
<tr>
<td>Feedback utility</td>
<td>4.38</td>
<td>0.62</td>
<td>4.43</td>
<td>0.42</td>
<td>3.62</td>
<td>0.52</td>
<td>5.18*</td>
</tr>
<tr>
<td>Capacity to improve</td>
<td>4.67*</td>
<td>0.58</td>
<td>4.72</td>
<td>0.41</td>
<td>3.67</td>
<td>0.92</td>
<td>5.45*</td>
</tr>
<tr>
<td>Number of managers</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Means that do not share subscripts have a significant pairwise difference, using Duncan’s (1995) Multiple Range Test (*p* < .05). *p* < .05.


Effects of the Feedback Workshop on Behavior

As in most of the prior studies, the effects of the feedback intervention were assessed in terms of changes in behavior from the premeasure to the postmeasure. The primary analysis was carried out at the individual level, because the questionnaire measures dyadic influence behavior toward the individual respondent, and managers varied their use of the tactics when influencing different subordinates. The means and standard deviations for the composite core tactic scores are shown in Table 3. An initial analysis of premeasure scores did not reveal any significant differences between the experimental group and the control group for any of the core tactics or for the composite score, which verified that random assignment created equivalent groups for the study.

A two-way repeated measures analysis of variance (ANOVA) was used to assess the effect of the feedback workshop on managerial behavior. Condition (feedback workshop vs. control group) and time (premeasure vs. postmeasure) were the independent variables, and use of core tactics with subordinates was the dependent variable. The premeasure and postmeasure ratings by subordinates were used as the within-subjects variables, and condition was used as the between-subjects variable. When used with matched premeasure and postmeasure data, the repeated measures ANOVA allows for a control of premeasure scores when evaluating the effects of an intervention on postmeasure scores. The results of the ANOVA (see Table 4), indicate a significant two-way interaction effects of an intervention on postmeasure scores. The results of the ANOVA were assessed in terms of changes in behavior from the premeasure to the postmeasure. The primary analysis was carried out at the individual level, because the questionnaire measures dyadic influence behavior toward the individual respondent, and managers varied their use of the tactics when influencing different subordinates. The means and standard deviations for the composite core tactic scores are shown in Table 3. An initial analysis of premeasure scores did not reveal any significant differences between the experimental group and the control group for any of the core tactics. Thus, even though managers were not randomly assigned to the comparison group, it was equivalent to the experimental group on the premeasures. Manager self-ratings of the core tactics on the premeasures were also compared, and once again there were no significant differences between the two conditions. Because a key aspect of the feedback is comparison of self-ratings to ratings by others, the lack of significant differences in either component indicates that the content of the feedback reports was equivalent for the experimental group and the comparison group. That is, one group of managers did not receive feedback that was more negative than the feedback for the other group.

The enhancing effects of a feedback facilitator for changing managerial behavior were evaluated with a two-way repeated measures ANOVA. The results are shown in Tables 3 and 4. The Condition × Time interaction was significant, both for the individual level of analysis (η² = .21) and for the group level of analysis (η² = .53). The follow-up t tests indicated that there was a significant increase in use of the core tactics for the feedback workshop but no significant change in the comparison group.

### Table 3

<table>
<thead>
<tr>
<th>Condition</th>
<th>Premeasure</th>
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<th>Postmeasure</th>
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<td></td>
<td>t</td>
<td>df</td>
<td>M</td>
<td>SD</td>
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<tr>
<td>Feedback workshop</td>
<td>3.53**</td>
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<td>0.68</td>
<td>3.00</td>
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<td>19</td>
<td>2.92</td>
<td>1.14</td>
<td>2.68</td>
<td>1.01</td>
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<tr>
<td>Group level of analysis</td>
<td></td>
<td></td>
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<tr>
<td>Feedback workshop</td>
<td>4.16**</td>
<td>6</td>
<td>2.80</td>
<td>0.83</td>
<td>3.20</td>
<td>0.77</td>
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<tr>
<td>Control group</td>
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<td>6</td>
<td>3.15</td>
<td>0.52</td>
<td>3.12</td>
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<td>Feedback only</td>
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<td>6</td>
<td>3.02</td>
<td>1.02</td>
<td>2.80</td>
<td>0.97</td>
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** p < .01.

### Table 4

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<th>Time</th>
<th>Interaction</th>
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<tr>
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<td>2.42</td>
<td>5.08**</td>
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<td>2.33</td>
<td>0.34</td>
<td>10.58**</td>
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</table>

Group level of analysis

<table>
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<th>Conditions compared</th>
<th>df</th>
<th>Condition</th>
<th>Time</th>
<th>Interaction</th>
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<tbody>
<tr>
<td>Workshop vs. control group</td>
<td>1, 12</td>
<td>0.13</td>
<td>9.31*</td>
<td>12.25**</td>
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<tr>
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<td>1, 12</td>
<td>0.04</td>
<td>1.07</td>
<td>13.30**</td>
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*p < .05.  **p < .01.
Discussion

The results from our field experiment on multisource feedback provide evidence for the potential effectiveness of this popular developmental technique. The managers in the feedback workshop significantly increased their use of two core tactics to influence subordinates, whereas managers in the control group did not change their use of any core tactics. Our study was also the first to evaluate the effects of a feedback facilitator who was not the manager’s boss. The results show that having a competent, supportive facilitator increases the perceived utility of the feedback and results in more behavior change for the managers. Effect sizes ranged from moderate to large for all analyses (Cohen, 1988).

Limitations

Like all studies, ours had some limitations. We were able to assess the effect of the feedback workshop on influence behavior toward subordinates, but we could not adequately assess the effects on influence behavior toward peers and bosses. This research question deserves more attention, but the research would require a much larger organization in which it would be possible to insulate peer and boss raters from confounding factors.

Like the 14 prior studies on the effects of feedback to managers, our study used behavior change as the criterion. Without a measure of managerial effectiveness, it is not possible to determine if changes in influence behavior also increase the effectiveness of the managers. However, because the core tactics have been found to be related to independent criteria of managerial effectiveness in other studies (e.g., Yukl & Tracey, 1992), it is reasonable for one to infer that managerial effectiveness would be increased by greater use of the core tactics. The implications of multisource feedback for managerial effectiveness need to be directly examined in future research.

Unlike the main part of the study, the comparison of the feedback workshop to the feedback-only group was a quasi-experimental design. Possible differences between the two banks may account for the findings. The results should be verified in a follow-up study conducted in an organization large enough to permit random assignment to all conditions.

Effects of Feedback on Different Tactics

Because this study was the first to assess the utility of a feedback workshop for improving influence behavior, there was little basis for determining in advance if some tactics would be easier to change than others. We had hoped that the feedback workshop would increase the use of all four core tactics, and it is not clear why rational persuasion did not increase. One explanation why rational persuasion did not increase is that there was already considerable use of this tactic at the time of the pretest ($M = 3.8$). There is some evidence that managers tend to focus more on changing behaviors that seem to be deficient (Hezlett & Ronnkvist, 1996). In addition, our workshop did not attempt to teach participants the necessary skills to use complex forms of rational persuasion (e.g., how to present facts and evidence in a convincing way).

The lack of an increase in the use of inspirational appeals may reflect the nature of the work in a savings bank. Comments by some of the managers during the workshop indicated that they did not feel comfortable using ideological appeals in their influence attempts with other members of the bank. Another explanation is that our workshop did not teach the skills necessary to use inspir-
rational appeals effectively (e.g., how to identify the values and ideals of the target person, how to compose relevant ideological and emotional appeals). It is likely that more skill is required for use of inspirational appeals than for consultation or collaboration.

Facilitating Conditions

The effectiveness of multisource feedback may depend in part on facilitating conditions during the feedback process and afterward. Examples include relevant skill training, incentives for behavior change, and a supportive climate (Antonioni, 1996; Kluger & DeNisi, 1996; London & Smither, 1995). As yet, it is still not clear how much these conditions can enhance the effects of feedback or the extent to which one condition may substitute for another. A better understanding of facilitating conditions would be valuable in designing effective feedback interventions. The relevance of each facilitating condition for our study will be considered briefly.

Providing training or follow-up coaching can enhance the effectiveness of behavioral feedback. The potential benefits include a better understanding of the behaviors, more skill in the effective use of the behaviors, and increased self-confidence about using the behaviors. Skill training can be included in a feedback workshop or as a follow-up activity. In the latter case, the feedback can be used to help managers decide what type of training or coaching is most relevant. Evidence that feedback is more effective when followed by relevant training was found in studies by Hazucha, Hezlett, & Schneider (1993) and Wilson, O’Hare, & Shipper (1990) but not in the study by Rosti and Shipper (1998). Our feedback workshop included some activities to increase understanding of the influence tactics, but there was little opportunity for developing skill in actually using the tactics. The 3 hrs of training we provided was much less than the 24 hrs of training (over a 3 month period) in the study by Rosti and Shipper, or the 3 weeks of residential training in the bank study by Wilson et al. Further increasing the influencing skills of managers would require much more training than we provided. At the minimum, each participant should have an opportunity to practice using each core tactic (e.g., in a role play) and receive specific feedback (e.g., by viewing a videotape of the role play). This type of training would involve extending the workshop by at least another day or adding follow-up training.

Another facilitating condition is a supportive climate for behavior change (Facteau, Facteau, Russell, & Poteet, 1998; Hazucha et al., 1993). The climate appeared supportive at the beginning of our study, but it deteriorated rapidly. After the premeasure survey was completed, there was a hostile takeover attempt of our primary bank by two other regional banks. The focal managers in the study were heavily involved in dealing with the external threats. Many of the managers reacted negatively, because a takeover would result in elimination of some jobs at their level and would require difficult adjustments for anyone who remained. In the absence of a takeover crisis to distract attention from applying what was learned, the behavior change may have been greater. The second bank was also involved in the takeover, which may be one reason why the feedback-only intervention had no beneficial effect on behavior.

The appraisal process and reward system can also affect motivation to use behavioral feedback. The absence of stronger effects in most feedback studies may reflect a lack of participant concern for correcting any weaknesses revealed by the feedback. In our study, as in most of the prior studies, the feedback intervention was entirely developmental. Some scholars (e.g., London, Smither, & Adsit, 1997) have proposed that multisource feedback would be more effective if recipients were accountable for using it to improve their performance. Even when the primary objective is development rather than appraisal, the improvement goals and action plans can provide a basis for subsequent evaluation of the manager. Another way to increase motivation to use developmental feedback would be to ensure that it includes behaviors and skills used to appraise manager performance and make promotion decisions.

In summary, we found that a multisource feedback workshop can improve managerial behavior even when there is little skill training, a nonsupportive climate, and no extrinsic inducements. Increasing the effectiveness of the feedback beyond the level achieved in our study would probably require more of the facilitating conditions. Learning how to create these conditions should be a primary objective of future research on behavioral feedback programs.

References


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