360-Degree Feedback to Leaders

DOES IT RELATE TO CHANGES IN EMPLOYEE ATTITUDES?

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This study examined the extent to which changes in leader behavior 1 year after a 360-degree feedback intervention related to changes in employee attitudes. Participants were 145 leaders and their subordinates, peers, and manager. The results indicated that improved subordinate ratings of the leader on consideration, performance orientation, and employee development related to increased subordinate engagement and satisfaction as well as reduced intentions to leave following 360-degree feedback to leaders. This study demonstrates that improved leader behavior following 360-degree feedback is related to improved employee attitudes.

Keywords: feedback; employee attitudes; multisource feedback; employee engagement

The popularity of 360-degree feedback—the process in which subordinates, peers, bosses, and/or customers provide anonymous feedback to recipients—has grown during the past decade (Waldman & Atwater, 1998). Organizations invest in 360-degree feedback programs with the expectation that not only will leaders make positive changes in behavior but also their developmental efforts will in turn influence other important organizational outcomes. Although 360-degree feedback is becoming a common human resources (HR) practice among many public and private organizations, little research has been conducted to assess whether 360-degree feedback influences outcomes such as employee attitudes.

Scant attention has been given to evaluating the effectiveness of 360-degree feedback programs. Seifert, Yukl, and McDonald (2003) found only 14 studies that evaluated the effects of 360-degree or multisource feedback programs, and most relied on changes in ratings of managers' behavior across

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time. To date, only two studies have attempted to address the outcomes of 360-degree feedback other than by simply looking at changes in participants' pre- and postfeedback ratings. One of these studies was presented at a conference in 1995 and showed no connection between 360-degree feedback and customer satisfaction or sales volume (Bernardin, Hagan, & Kane, 1995). However, in that study, they did not link the behaviors on which managers were measured with factors that may ultimately influence customer satisfaction, such as employee attitudes. The second study, a case study conducted in a regional bank by Smither and Walker (2001) and published in a chapter in the recent *Handbook of Multi-source Feedback*, showed a positive correlation between managers' 360-degree ratings of leadership skills and customer loyalty. In this same article, Smither and Walker point out that linkage research suggests that customer satisfaction and loyalty are affected by employee attitudes and behaviors, and employee attitudes and behaviors are influenced by the practices of their leaders. This line of reasoning would suggest that if leadership practices improve as a result of feedback, employee attitudes could be expected to improve as a result. However, research has not addressed the link between feedback provided to leaders and subsequent changes in employee attitudes. Given the investment organizations make in these programs, there is a need to examine the influence of 360-degree feedback on outcomes such as employee attitudes.

The literature rather clearly has established relationships between leadership behaviors and employee attitudes. A large body of research published during the past 40 years provides evidence that leadership behaviors (consideration or relationship-oriented leadership as well as initiating structure or task-oriented behaviors) are associated with employee attitudes, such as satisfaction and intent to leave (Fleishman & Harris, 1962; Fleishman, Harris, & Burtt, 1955; Griffin, 1980; Stogdill, 1974). These findings could lead us to speculate that if a leader's behavior improves, employee attitudes would also improve. More specifically, if a leader's skills and behaviors toward subordinates improve, subordinates could be expected to be more satisfied with their jobs and less likely to want to quit.

The primary purpose of this study is to assess the extent to which changes in leader behavior following 360-degree feedback are related to changes in employee attitudes. If leader behavior improves following feedback, do employee attitudes improve? We address this question using measures of employee satisfaction, intent to leave, and a new measure of employee attitudes—employee engagement—which Harter, Schmidt, and Hayes (2002) reported to be significantly related to outcomes such as turnover and customer satisfaction.

LEADER BEHAVIOR AND EMPLOYEE ATTITUDES

Numerous studies have demonstrated that 360-degree feedback can promote improvement in leadership skills as measured by pre- and postfeedback ratings, and in some cases, the improvements are dramatic (Atwater, Waldman, Atwater, & Cartier, 2000; Hazucha, Hezlett, & Schneider 1993; Smither et al., 1995). In a review of longitudinal studies that assessed performance improvement following multisource feedback, Smither, London, Flautt, Vargas, and Kucine (2002) reported that in 11 of the 13 studies, people improved after time. Although these studies have reported improvements in overall performance following 360-degree or upward feedback interventions, not all feedback recipients improve, and there are certainly degrees of improvement among those who do (Kluger & DeNisi, 1996). Nevertheless, we propose that leaders who improve their behaviors following feedback will have a positive impact on employee attitudes.

Research suggests that HR management practices can affect employee performance through their influence on employees' skills and motivation (Huselid, 1995). Three hundred sixty degree feedback is one such HR practice that should affect organizational performance because it is designed to give leaders information about leadership behaviors that need development and is expected to motivate leaders to make improvements. In a study of leaders in an airline services organization, 360-degree ratings of leaders were related to employee turnover and indicators of service quality (Church, 1995). That is, better leaders (those receiving higher 360-degree ratings) had lower turnover and produced higher service quality. This study did not assess, however, the subsequent influence that 360-degree feedback may have on improving leadership behavior nor how those improvements might affect employee attitudes and behaviors. If, as suggested above, leadership behavior is related to employee attitudes, we can speculate that positive changes in the leaders' behaviors will result in positive changes in employee attitudes. Specifically, if leader behavior improves, we could expect employee attitudes to improve.

LEADER BEHAVIOR AND EMPLOYEE JOB SATISFACTION

Schriesheim and Schriesheim (1980) found that considerate leadership explained 63% of the variance in subordinate satisfaction after initiating structure was partialed out. The influence of structuring or task-oriented leadership on employee attitudes is inconsistent and generally is not very strong

unless the job is very unstructured (Bass, 1990). Thus, we would expect that if leaders improved their relationship-oriented behaviors, employees would show improvements in their job satisfaction.

Hypothesis 1: Positive changes in relationship-oriented leadership behavior will relate to positive changes in employee job satisfaction.

LEADER BEHAVIOR AND EMPLOYEE INTENT TO LEAVE

Buckingham and Coffman (1999) reported that individuals do not leave organizations; they leave managers. In a meta-analysis, Gerstner and Day (1997) found significant negative correlations between leader consideration behaviors and turnover intentions. They concluded that having a high-quality relationship with one's leader influences affective outcomes and performance. Singh and Billingsley (1996) found that school principal support influenced job satisfaction and intent to leave. This is consistent with the results of a test of a casual model predicting turnover intentions (Iverson & Roy, 1994). These authors found that leader support predicted turnover intentions through job satisfaction. Sales managers' consideration behaviors directly and indirectly influenced job satisfaction, which in turn influenced salespersons' propensity to leave the organization and actual turnover (Jones, Kantak, Futrell, & Johnston, 1996). We could conjecture that managers with better leadership skills who are more involved and in touch with their employees will have greater success in handling an employee's intent to leave and will be better able to minimize actual turnover. For example, Lee, Mitchell, Holtom, McDaniel, and Hill (1999) suggested that leaders may influence employees' reactions to workplace "shocks" by anticipating them before they happen (e.g., discussing reasons why the employee is not getting a promotion or knowing which employees may face family work challenges and providing alternative work schedules, counseling, etc., to alleviate a potential crisis). We expect that leaders who show improvements in their relationship-oriented behaviors will have employees who express a decreased intention to leave the organization.

Hypothesis 2: Positive changes in relationship-oriented leadership behavior will relate to positive changes in employee intent to leave.

LEADER BEHAVIOR AND EMPLOYEE ENGAGEMENT

The importance of leadership behaviors on employee attitudes has been strengthened by recent research on employee engagement (Buckingham & Coffman, 1999; Harter et al., 2002; Luthans & Peterson, 2002). Similar to

Kahn's (1990) personal engagement theory, employee engagement is a multidimensional construct that includes emotional or cognitive involvement during daily task performance. Somewhat different from the more general construct of job satisfaction, employee engagement captures employees' enthusiasm for work, their emotional connection to others at work, and their cognitive involvement in their role at work. Harter et al. (2002) reported the results of a large meta-analysis conducted across 7,939 business units and 36 companies using the engagement measure. Their results revealed strong ties between employee engagement and satisfaction and outcomes such as customer satisfaction, employee turnover, profitability, and safety outcomes.

Employee engagement includes facets of work on which leaders can take action. Extensive research conducted by the Gallup organization (Buckingham & Coffman, 1999) found that items on job satisfaction and employee opinion surveys that measured aspects of the environment that the manager could directly influence explained most of the variance in these lengthier surveys. On the basis of these findings, Gallup developed a measure of employee engagement called the Gallup Workplace Audit (The Gallup Organization, 1992-1999). This measure asks employees questions such as whether they have received recognition within the past 7 days and whether they have the materials and equipment to do their jobs. Because engagement has both task and relationship components to it, we expect changes in leaders' task and relationship behaviors to influence changes in their employees' levels of engagement.

Hypothesis 3: Positive changes in relationship-oriented leadership behavior will relate to positive changes in employee engagement.

Hypothesis 4: Positive changes in task-oriented leadership behavior will relate to positive changes in employee engagement.

METHOD

SAMPLE

A multisource feedback process was conducted in two organizations, an elementary school district and a retail chain at two time periods, approximately 1 year apart. The first administration will be referred to as Time 1, the second as Time 2. Participants at the retail organization included district and regional managers and support managers at a variety of locations in the western United States. In the school district, leader participants included principals, assistant principals, staff directors, and first-line supervisors in support areas, such as transportation and food services. We believed that

combining participants from different organizations in a variety of jobs would enhance the generalizability of our findings.

In each organization, all leaders with three or more direct reports were asked to participate in the 360-degree process. HR personnel in each organization prepared a master list of leaders, their manager, peers (ranging from six to nine peers) and direct reports (ranging from 3 to 60 individuals). The school superintendent or HR director prepared a letter that explained the 360-degree process and invited the leaders and their raters to participate in the developmental process. This letter was included with the survey packet. In total, 174 leaders participated in the study, 98 from the retail organization and 76 from the school district. Twenty-nine leaders did not have data at both Times 1 and 2; thus, our final sample was 145. Approximately 70% of the leaders were male.

ADMINISTRATION OF SURVEYS

The researchers prepared the survey packages for each leader and his or her raters. HR personnel at each organization mailed the individually addressed packets to all raters via internal mail. Participants mailed the surveys directly to the researchers in prestamped and addressed envelopes. All subordinate and peer surveys were anonymous. Return rates at Time 1 were self = 100%, managers = 98%, peers = 83%, and subordinates = 68%. Return rates at Time 2 were self = 92%, managers = 95%, peers = 75%, and subordinates = 58%.

FEEDBACK FORMAT

This study was part of a larger study that compared reactions to feedback on two types of feedback format. Feedback reports were prepared for each leader wherein he or she saw averaged results from subordinates and peers on 47 survey items, his or her self-score, and the rating provided by his or her manager. The feedback was presented in numeric or text format. Each feedback report included the same information, that is, data from each rating source presented in either numbers or words. High and low ratings in each format were highlighted in varying colors indicating very high strengths (dark green), high strengths (light green), neither strength nor development need (black), development need (red), or serious development need (purple). Leaders were selected randomly to receive either text or numeric feedback. As the comparison of feedback format was not the purpose of this study, data from leaders in both conditions were combined. However, where appropriate in our analyses, we tested to see that format did not interact with other variables to influence our results or their interpretation.

FEEDBACK DELIVERY

Researchers delivered the feedback reports to leaders in groups ranging in size from 6 to 15. All leaders were guaranteed confidentiality of the data in their feedback reports. During the feedback meetings, the data in their reports were explained, and leaders were encouraged to meet with their rater groups to acquire additional feedback. Leaders were encouraged to take the feedback seriously and to use it to make improvements. Leaders were aware that the 360-degree process would be repeated in 9 to 12 months.

MEASURES

Leadership behavior. A survey assessing task and relationship leadership dimensions used in earlier 360-degree feedback research (Atwater et al., 2000) was modified for use in this study. Because this was a survey used for development purposes, the managers in each organization felt strongly that the survey needed to capture the leadership behaviors most relevant to their organizations. As such, some modifications were made to item wording, and a few new items were added to the survey. Forty-seven items capturing task and relationship dimensions of leadership were ultimately approved by both organizations as relevant to the leadership positions included in the study. Items were rated on a 9-point frequency scale ranging from 9 = *almost always* to 1 = *not at all*. Factor analyses of the Time 1 data performed on each rating source separately indicated two factors that were similar to those from the Atwater et al. (2000) study and a third factor that represented employee development. Items that loaded highly (> .45) on a factor without substantial cross-loadings are presented in the appendix. Nine items were excluded because they did not load clearly on one factor. We used three scales of leadership behavior. Two represented relationship-oriented aspects of leadership (i.e., consideration and employee development), and the third assessed task-oriented aspects of leadership (performance orientation). The alpha coefficients computed on subordinate data at Time 1 were consideration = .90 (15 items), employee development = .91 (6 items), and performance orientation = .89 (17 items); alphas at Time 2 were .98, .97, and .97 for each scale, respectively. (Alphas for peers and managers on each of the scales all exceeded .7)

Scales were created for each of the three leadership behavior dimensions by averaging responses to the questions that composed each scale. We conducted within- versus between-variance comparisons to assess rater agreement for both peers and subordinates on each of the three constructs (employee development, performance orientation, and consideration). In all six analyses, the degree of variance between leaders was significantly greater than the degree of variance within leaders. When we calculated interrater

agreement as 1 – (*MS* within/*MS* between), five of the six coefficients were above .65 (the coefficient for peers ratings of performance was .5). Data for a leader's subordinates and peers were aggregated to create one score for each dimension at each time for each rating source. That is, a leader had employee development, consideration, and performance-orientation scores at Times 1 and 2 from each source. Because peer and subordinate surveys were anonymous, we were unable to know exactly who completed surveys at Times 1 and 2, though we did know the rating source (e.g., peer or subordinate). Nevertheless, we believed that the data collected were representative of the way the leader's behavior was perceived by his or her peers or subordinates at each time.

Employee attitudes. Subordinates completed three measures of employee attitudes: employee engagement, employee satisfaction, and intent to leave. These items were included on the last page of the 360-degree feedback survey administered to the leader's subordinates at Time 1 and Time 2.

Employee engagement. Twelve items assessed employee engagement based on the Gallup Workplace Audit (The Gallup Organization, 1992-1999; Harter, et al., 2002). Harter and colleagues conducted a factor analysis and found "the ratio of the first factor to second factor eigenvalues to be 5.9 times the ratio of the second to third eigenvalues" and thus sufficient evidence for unidimensionality (Harter et al., 2002, p. 270). Thus, the 12 items were averaged into one scale with an alpha of .86 at Time 1 and .87 at Time 2. Sample items included "I know what is expected of me at work," "In the last seven days I have received recognition or praise for doing good work," "I have the materials and equipment to do my job right," and "At work, my opinion seems to count."

Employee satisfaction. Two items assessed the employee's overall satisfaction with his or her job. These items included "All in all I am satisfied with my job" and "In general I like working here." Alphas for the satisfaction scale were .69 at Time 1 and .78 at Time 2.

Intent to leave. Intent to leave was measured by five items. Sample items included "I often think about quitting this job" and "I will actively look for a new job in the next year." The alpha for intent at Time 1 was .83. The alpha at Time 2 was .84.

Means, standard deviations, and zero-order correlations for all variables at Times 1 and 2 are presented in Table 1. We recognized that same-source bias may have influenced our results and have tried to address this issue.

Podsakoff, MacKenzie, Lee, and Podsakoff (2003) point out that the problem of method biases have a long history in behavioral science research. They suggest a number of possible approaches to deal with same-source bias, though none of the approaches offers a perfect solution. One possible approach is to conduct a single-factor test and to examine the unrotated factor solution to see whether a single factor emerges or one general factor accounts for the majority of the covariance. We performed a factor analysis on the subordinate unaggregated data at both Time 1 and Time 2 separately. All 38 leadership behavior items that were included in the scales as well as the attitude items measuring intent to leave, satisfaction, and engagement were included. Both analyses revealed six factors with eigenvalues greater than 1. Although this test does not allow one to control for the same-source bias that may be present, the fact that six factors emerged would suggest that common-source bias is not a major concern. In addition, the fact that both manager and peer ratings of leadership were correlated with subordinate attitudes is further evidence that the relationships between leadership behavior and attitudes are not primarily because of same-source effects. It should also be noted that given the anonymity of the subordinate and peer ratings at Times 1 and 2, we cannot know which subordinates or peers completed the surveys at both time periods. We can assume that it is unlikely that the subordinates and peers who rated a leader at Times 1 and 2 were identical for many (if any) leaders. Given the above, we believe that same-source bias did not contribute in a significant way to our results.

RESULTS

The correlations among the study variables at Times 1 and 2 are presented in Table 1. As can be seen, the leader behavior variables as rated by subordinates were significantly correlated with each of the employee attitude variables at both Time 1 and Time 2. Manager and peer ratings of leadership behavior were correlated with subordinate ratings of engagement and intent to leave at Time 1 and Time 2 but not with employee job satisfaction.

To assess change across time, we regressed the Time 2 leader ratings on the Time 1 leader ratings (Cohen & Cohen, 1983; Judd & Kenny, 1981). Thus, only variance in residual change in the attitude variables remained to be explained by residual change in leader behaviors. Brown and Ryan (2003) used this method for testing relationships between two change scores. The hypotheses were tested using the residual scores for these predictor and outcome variables. Table 2 displays the correlations among these residualized variables after controlling for format and organization.

TABLE 1
Means, Standard Deviations, and Correlations for Study Variables

Variable	M	SD	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. T1 sub. employee development	6.64	1.25										
2. T1 sub. consideration	6.90	1.21	.88**									
3. T1 sub. performance orientation	7.53	.86	.79**	.81**								
4. T1 supv. employee development	7.57	1.10	.24**	.18*	.12							
5. T1 supv. consideration	7.52	.92	.26**	.32**	.16*	.82**						
6. T1 supv. performance orientation	7.73	1.09	.20**	.17*	.16*	.83**	.79**					
7. T1 peer employee development	7.38	1.07	.41**	.40**	.26**	.53**	.48**	.38**				
8. T1 peer consideration	7.27	1.16	.43**	.45**	.25**	.50**	.57**	.39**	.86**			
9. T1 peer performance orientation	7.77	.75	.30**	.25**	.24**	.51**	.42**	.50**	.82**	.76**		
10. T2 sub. employee development	6.73	1.22	.66**	.59**	.52**	.29**	.28**	.25**	.35**	.35**	.18*	
11. T2 sub. consideration	6.94	1.22	.63**	.67**	.59**	.20*	.28**	.19*	.28**	.31**	.10	.89**
12. T2 sub. performance orientation	7.58	.87	.56**	.54**	.66**	.19*	.17*	.23**	.26**	.22**	.18*	.83**
13. T2 supv. employee development	7.94	.94	.20*	.19*	.15	.38**	.39**	.44**	.55**	.56**	.54**	.27**
14. T2 supv. consideration	7.84	.87	.19*	.27**	.16	.30**	.51**	.39**	.45**	.57**	.39**	.28**
15. T2 supv. performance orientation	8.05	.98	.04	.07	.08	.28**	.33**	.52**	.31**	.39**	.43**	.16*
16. T2 peer employee development	7.53	1.15	.33**	.27**	.15	.49**	.47**	.49**	.74**	.71**	.67**	.43**
17. T2 peer consideration	7.40	1.23	.39**	.35**	.16	.44**	.48**	.43**	.73**	.79**	.66**	.43**
18. T2 peer performance orientation	7.79	.90	.26**	.20*	.14	.46**	.40**	.52**	.65**	.64**	.72**	.37**
19. T1 employee engagement	3.79	.40	.73**	.62**	.56**	.22**	.18*	.23**	.38**	.39**	.34**	.52**
20. T1 satisfaction	4.11	.36	.42**	.42**	.41**	.08	.09	.12	.17*	.17*	.16*	.30**
21. T1 intent to leave	2.33	.44	−.38**	−.39**	−.31**	−.15	−.22**	−.23**	−.19*	−.20**	−.19*	−.25**
22. T2 employee engagement	3.76	.40	.39**	.32**	.31**	.29**	.18*	.25**	.36**	.31**	.31**	.52**
23. T2 satisfaction	4.10	.42	.18*	.18*	.21*	−.01	−.02	−.00	.10	.06	.04	.15*
24. T2 intent to leave	2.24	.49	−.25**	−.27**	−.24**	−.08	−.09	−.06	−.20*	−.16	−.11	−.27**

(continued)

TABLE 1 (continued)

Variable	M	SD	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. T1 sub. employee development												
2. T1 sub. consideration												
3. T1 sub. performance orientation												
4. T1 supv. employee development												
5. T1 supv. consideration												
6. T1 supv. performance orientation												
7. T1 peer employee development												
8. T1 peer consideration												
9. T1 peer performance orientation												
10. T2 sub. employee development												
11. T2 sub. consideration												
12. T2 sub. performance orientation	.87**											
13. T2 supv. employee development	.26**	.22**										
14. T2 supv. consideration	.33**	.24**	.85**									
15. T2 supv. performance orientation	.17*	.19*	.78**	.72**								
16. T2 peer employee development	.37**	.28**	.53**	.46**	.40**							
17. T2 peer consideration	.39**	.27**	.54**	.55**	.43**	.90**						
18. T2 peer performance orientation	.32**	.27**	.49**	.40**	.50**	.88**	.84**					
19. T1 employee engagement	.51**	.43**	.31**	.24**	.13	.44**	.48**	.39**				
20. T1 satisfaction	.37**	.36**	.11	.16	.07	.20*	.19*	.21*	.63**			
21. T1 intent to leave	−.35**	−.26**	−.25**	−.29**	−.16	−.28**	−.28**	−.27**	−.55**	−.74**		
22. T2 employee engagement	.47**	.51**	.35**	.26**	.28**	.39**	.40**	.36**	.57**	.45**	−.36**	
23. T2 satisfaction	.22**	.23**	.07	.11	.09	.16*	.12	.12	.27**	.43**	−.39**	.51**
24. T2 intent to leave	−.35**	−.30**	−.12	−.18*	−.11	−.27**	−.24**	−.19*	−.40**	−.55**	.42**	−.58**	−.71**

NOTE: T1 = Time 1; T2 = Time 2; sub. = ratings by subordinate; supv. = ratings by supervisor; peer = ratings by peer.
*$p < .05$. **$p < .01$.

As can be seen from Table 2, Hypotheses 1 through 3 were supported. Changes in both consideration and employee development were related to changes in each of the employee attitude measures. When the leader's consideration and employee development behaviors improved, it was related to positive changes in employee engagement and satisfaction. Positive changes in the leader's behavior in these areas were also associated with reduced intentions to leave among employees. Hypothesis 4 also was supported in that positive changes in performance orientation were positively related to changes in employee engagement. Although the strongest correlations were obtained for relationships between leader behaviors and employee engagement, it should be noted that changes in employee performance orientation were also related to improved satisfaction and reduced intent to leave. (It should be noted that these analyses were also run as regression analyses controlling for format and for organization.) Each of the relationships between residualized scores remained significant. It is difficult to adequately analyze the relationships between changes in two variables. To further explore the relationships we found, we performed analyses of covariance using changes in attitudes as the dependent variables and changes in leader behaviors as rated by subordinates as the independent variables. The difference scores between subordinates' ratings of their leaders on each dimension at Time 2 and Time 1 were divided into quintiles. For example, for subordinate ratings of employee development, the Time 2 – Time 1 difference scores were divided into quintiles as follows: difference less than –.65, level = 1; difference between –.18 and –.65, level = 2; difference between .33 and –.18, level = 3; difference between .33 and .89, level = 4; difference greater than .89, level = 5. These quintiles suggest that for those at Levels 1 and 2, change from Time 1 to Time 2 was negative, that is, the leader received lower scores at Time 2. For those at Levels 4 and 5, change was positive, that is, the leader received higher scores at Time 2.

Three dependent variables were assessed. These included employee engagement at Time 2, employee satisfaction at Time 2, and employee intent to leave at Time 2. For each analysis, the comparable Time 1 variable (e.g., engagement Time 1) was included as the covariate. The estimated marginal means (Time 2 means adjusted for the Time 1 means) are presented in Tables 3 to 5.[1] As can be seen from these tables, the predicted trends in means on satisfaction and engagement at Time 2 go up as the degree of change in leader behavior goes from negative to positive. Similarly, the predicted trend in intent to leave goes down as the change in leader behavior goes from negative to positive. It should be noted that not all leaders were perceived to have made positive changes following feedback. In fact, the average ratings leaders received from subordinates at

TABLE 2
Correlations Among Residualized Change Scores for Leader Behavior and Employee Attitude Variables

	Leader Behavior								
	Subordinate			*Peer*			*Supervisor*		
Employee Attitude	*Performance*	*Consideration*	*Employee Development*	*Performance*	*Consideration*	*Employee Development*	*Performance*	*Consideration*	*Employee Development*
Engagement	.46**	.45**	.53**	.05	.08	.06	.14	−.01	.04
Intent to leave	−.22**	−.23**	−.29**	−.01	−.01	−.01	−.01	.02	.06
Satisfaction	.22**	.27**	.23*	.05	.02	.01	.06	.01	.03

*$p < .05$. **$p < .01$.

TABLE 3
Estimated Marginal Means on Satisfaction Time 2 by Leader Behavior Change

Leader Behavior Change (Time 2 – Time 1 as Rated by Subordinates)	*Subordinate Satisfaction*		
	Employee Development	*Performance Orientation*	*Consideration*
Group 1 (most negative change)	4.02	3.96	3.97
Group 2	3.97	4.11	4.11
Group 3	4.16	4.15	4.04
Group 4	4.22	4.13	4.10
Group 5 (most positive change)	4.13	4.13	4.27
ANCOVA effect for leader behavior change	*ns*	*ns*	$p < .05$

TABLE 4
Estimated Marginal Means on Intent to Leave Time 2 by Leader Behavior Change

Leader Behavior Change (Time 2 – Time 1 as Rated by Subordinates)	*Subordinate Intent to Leave*		
	Employee Development	*Performance Orientation*	*Consideration*
Group 1 (most negative change)	2.35	2.41	2.37
Group 2	2.39	2.26	2.26
Group 3	2.24	2.20	2.29
Group 4	2.07	2.18	2.18
Group 5 (most positive change)	2.16	2.18	2.11
ANCOVA effect for leader behavior change	$p < .05$	*ns*	*ns*

Times 1 and 2 did not differ significantly. However, more than half the leaders did receive higher ratings at Time 2 on each of the three leadership behavior measures. Despite the absence of improvement on average across all leaders, those who improved did see improvement in employee attitudes.

It is also interesting to note that the ANCOVA results also suggest that changes in specific leadership behaviors are strongly related to changes in specific attitude measures. As can be seen from Table 3, in support of our hypotheses, changes in each of the leader behavior dimensions

TABLE 5
Estimated Marginal Means on Engagement Time 2 by Leader Behavior Change

Leader Behavior Change (Time 2 – Time 1 as Rated by Subordinates)	*Subordinate Intent to Leave*		
	Employee Development	*Performance Orientation*	*Consideration*
Group 1 (most negative change)	3.59	3.54	3.54
Group 2	3.62	3.73	3.73
Group 3	3.80	3.74	3.75
Group 4	3.88	3.87	3.78
Group 5 (most positive change)	3.92	3.92	3.99
ANCOVA effect for leader behavior change	$p < .000$	$p < .000$	$p < .000$

(i.e., consideration, employee development, and performance orientation) were related to changes in employee engagement. However, Tables 4 and 5 reveal that changes in consideration were related to changes in employee satisfaction whereas changes in employee development were related to changes in intent to leave. These findings are consistent with our hypotheses in that we anticipated that both aspects of relationship-oriented leadership would be related to satisfaction and intent; however, these results suggest that the types of relationship are related to attitudes somewhat differentially.

DISCUSSION

This study extended research on multisource feedback by examining the relationship between changes in ratings of leaders' behaviors and changes in three measures of employee attitudes following a 360-degree feedback intervention. The results show that multisource feedback on leaders' behaviors from subordinates, managers, and peers relates to subordinate attitudes. The levels of leader behavior change related to changes on subordinate engagement, satisfaction, and intent to leave the organization. It should be noted, however, that not all leaders made improvements in behavior, but for those who did, changes in employee attitudes were more positive.

This study is the first to our knowledge that relates multisource feedback to employees' attitudes. Although we expected subordinates' ratings of leadership behaviors to relate to subordinates' engagement, job satisfaction, and intent to leave, managers' and peers' ratings of the leaders also significantly

related to the subordinates' levels of engagement and intent to leave at Time 1 and Time 2. Ratings of the leader from all three sources and on all three leadership dimensions related to subordinate engagement (zero-order correlations ranged from .18 to .40). Managers' and peers' ratings of consideration and performance orientation related to subordinate intent to leave with significant correlations ranging from −.18 to −.27. A leader's consideration and performance orientation behaviors are probably more visible to a manager and peers than are the leaders' employee development activities. However, even these correlations were somewhat surprising because during the feedback sessions in both organizations, many leaders complained that the peer ratings were not very meaningful because their peers were housed in different locations or they interacted only at monthly or quarterly meetings. This suggests that it may not take a great deal of interaction for peers to make meaningful assessments of an individual's leadership capabilities as they relate to subordinate attitudes.

The level of leader behavior change related to changes in employee attitudes, though to varying degrees. Changes in employee engagement were more strongly related to changes in leader behavior (correlations ranging from .45 to .53) than were changes in intent to leave or satisfaction (correlations ranging from .22 to .29). Additionally, the ANCOVA results indicated that all leader behaviors related to engagement, though only consideration related to satisfaction and only employee development related to intent to leave. This tentatively suggests that if leader behavior improves on any dimension, it has a fairly high likelihood of affecting employee engagement, though satisfaction and intent may be more affected by consideration and employee development, respectively.

Employee engagement is considered to be a measure that includes items that can be directly affected by leaders, whereas job satisfaction and intent to leave can be affected to a greater extent by the job and other factors in the work environment. Thus, it is not surprising that changes in consideration, performance orientation, and employee development were more strongly related to changes in employee engagement than to satisfaction and intent.

The relationship between changes in leader behavior and changes in employee satisfaction is consistent with the body of evidence that demonstrates that consideration relates to employee satisfaction (Bass, 1990). However, these results extend the current literature by demonstrating that improvement in consideration following 360-degree feedback is related to employee improvement in job satisfaction.

The relationship between changes in leader behavior and changes in employee intent to leave based on ANCOVA results suggests that when employees perceive that their leader is concerned with their development,

they may be less likely to seek job opportunities elsewhere. Although we cannot directly attribute the changes in leader behavior to the 360-degree feedback intervention, we did ask employees to indicate on the Time 2 survey the extent to which they believed their leader used his or her feedback to make improvements (5 = *to a very great extent*, 1 = *not at all*). This item correlated with improvements on the leader behavior scales (differences between Time 1 and Time 2 scores). These correlations were .49 for performance orientation, .45 for consideration, and .38 for employee development. This suggests that the employees who saw improvements in behavior rated their leaders higher at Time 2 than they did at Time 1. Additionally, 65% of the subordinates reported at least some improvement in their leader's behavior as a result of the feedback. In sum, the results from this study extend the current literature on 360-degree feedback by indicating that changes in leader's behaviors following multisource feedback are related to changes in important employee attitudes.

PRACTICAL IMPLICATIONS

This study has important practical implications for managers and organizations. Our study provides initial evidence that the impact of multisource feedback programs may extend beyond improvements in the leaders' behaviors and may relate to important changes in employee attitudes. Given the growing body of literature that supports the relationship between employee attitudes (e.g., employee satisfaction, service orientation, and pride in service) and customer satisfaction and profitability (Harter et al., 2002; Johnson, 1996; Rucci, Kirn, & Quinn, 1998; Schmidt & Allscheid, 1995; Schneider, White, & Paul, 1998; Ugboro & Obeng, 2000), leadership development programs that can influence employee attitudes may be well worth their costs. For example, as part of their meta-analysis, Harter et al. (2002) conducted a utility analysis and found that those business units in the top quartile of employee engagement reported from $80,000 to $120,000 higher monthly revenues on average than those in the bottom quartile. Our results suggest that money spent on multisource feedback programs may help leaders influence bottom-line outcomes, such as turnover and revenue.

This study suggests that leaders who take their feedback seriously and change their behavior may expect to see changes in important employee attitudes. On average, we found minimal change in subordinate ratings of leaders from Time 1 to Time 2. However, for leaders who improved, their subordinates reported improvement in employee attitudes whereas leaders who declined saw related lowering of subordinate attitudes. Leaders may be more willing to make behavior changes if they believe it will actually make a difference to their employees.

Our results suggest that when leaders are not committed to make positive changes based on the feedback they receive from a 360-degree feedback program, they and the organization may suffer negative consequences in terms of lower subordinate satisfaction and engagement and higher levels of intentions to leave. Thus, it behooves HR managers to adequately involve and actively engage leaders in the process at the start of such programs.

LIMITATIONS

This study shares some of the limitations of other multisource field studies as discussed in Seifert et al. (2003). The study design is based on pre- and postfeedback measures of leaders' behaviors and does not have a control group. Thus, we cannot definitively conclude that leader behavior caused employee attitude change. It is possible, though less likely, that employee attitudes changed because of some factor other than the leader's behavior and this resulted in employees providing higher or lower ratings of the leader. The fact that manager and peer ratings of the leader also were related to employee attitudes measured at Times 1 and 2 suggest this was not likely the causal direction. However, we do have data at two time periods from a variety of rating sources at two organizations in a variety of jobs, which improves the generalizability of our findings.

One might expect same-source bias could account for the relationship between employees' ratings of their leader and their ratings of engagement, satisfaction, and intent to leave. However, the significant correlations between leadership ratings by managers and peers and the employees' attitudes as well as the six factors that emerged from the factor analysis indicate otherwise. In addition, we were looking not merely at data collected at one time period but at changes across time.

DIRECTIONS FOR FUTURE RESEARCH

Harter et al. (2002) concluded from their study of the relationship between employee engagement and business-unit outcomes that "changes in management practices that increase employee satisfaction may increase business-unit outcomes" (p. 268). Our results lend support to this speculation by suggesting that changes in management practices may influence satisfaction. Improved attitudes, in turn, may influence outcomes. Further research should examine the relationship between changes in leadership behavior and changes in employee attitudes and how these affect organizational outcomes, such as customer satisfaction and turnover. In this study, we only assessed intent to leave. As Tett and Meyer (1993) concluded,

> In keeping with previous meta-analyses (e.g. Steel & Ovalle, 1984), turnover intention is the strongest predictor of turnover; but the modest strength of the relation (i.e. rho = around .65), suggests limits in intent to quit as a surrogate of turnover. (p. 286)

Whether changes in leader behavior following multisource feedback translate into a reduction in employee turnover remains a question for future research.

Casual models and longitudinal data examining the generalized path from leaders' behavior to organizational outcomes are needed. The reason organizations invest thousands of dollars in multisource feedback programs is not just to change leaders' behavior but because they expect leader improvement to influence important organizational outcomes. Research is needed that will show how these improvements translate into organizational outcomes affecting the bottom line.

Overall, this study makes several key contributions. First, this is the first study to link changes in behavior following multisource feedback to changes in employees' attitudes. The results confirm the value of multisource feedback as a leadership development tool by showing that changes in levels of leader ratings relate to changes in employee attitudes. This study also added empirical support for the unique contribution of a measure of employee engagement. Although this measure significantly correlates with employee satisfaction, it may capture a more objective assessment of a leader's actions. Unlike employee satisfaction, managers' and peers' ratings of the leader were significantly correlated with subordinate engagement. The results also suggest that negative outcomes, such as decreases in employee satisfaction or engagement, can result if leaders' behaviors deteriorate following a multisource feedback intervention. Much more needs to be learned about how to implement 360-degree feedback to capitalize on positive and minimize negative outcomes.

APPENDIX
ITEMS INCLUDED IN LEADER BEHAVIOR SCALES

CONSIDERATION

I treat others consistently, using the same standards for each.
I accept feedback without becoming defensive (e.g., making excuses, denial, getting angry).

I make it easy for people to tell me what they think.
I relate to all kinds of individuals tactfully at all levels.
I involve people in decision-making.
In implementing a change, I patiently listen to concerns.
I value others' opinions.
I clearly believe that the best way to accomplish a leader's job is to work through others.
I promote a spirit of cooperation between team members.
I help resolve conflicts when they occur in the work group.
I create an environment where all employees feel valued.
I work well with peers.
I act in ways that builds others' respect for me.
I am tactful and sensitive to the feelings of others.
I really listen to people.

EMPLOYEE DEVELOPMENT

I give my staff members recognition or praise for doing good work.
I provide public recognition for a job well done.
I make my staff feel good about their contributions.
I talk to my staff members about their progress.
I give my staff members opportunities to learn and grow.
I encourage my staff members' development.

PERFORMANCE ORIENTATION

I help people understand how meeting customer needs is critical to our mission and goals.
I lead by example in providing exemplary internal and external customer service.
I emphasize in words and actions that customer service is a top priority.
I meet emergency situations effectively and competently.
I am willing to do whatever it takes to meet objectives and deadlines.
I make maximum use of staff/team and other resources to meet goals.
I set goals that challenge others.
I hold staff accountable.
I tell staff exactly what is expected of them.
I follow up on items delegated to others.
I make tough decisions in a timely manner.
I communicate information in a timely way.
I put tough issues on the table even if it makes people uncomfortable.
I talk enthusiastically about what needs to be accomplished.
I take the initiative in communicating new ideas, issues, and concerns to my supervisors.
I have good working relationships with higher management.
I voice my views to my supervisors on controversial issues.

NOTE

1. The nine ANCOVA tables were not included in the article because of space limitations. These are available from the first author.

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