

## ABSTRACT

### A LONGITUDINAL INVESTIGATION INTO THE EFFECTS OF RATER FEEDBACK ON MANAGERIAL BEHAVIOR IN AN UPWARD FEEDBACK CONTEXT

By Brittany L. Schoessow

This study examined the relationship between upward feedback and subordinate perceptions of managerial supportiveness. It was proposed that (a) managers receiving feedback from their subordinates in time 1 will have higher feedback ratings in time 2, as compared to those who do not receive this feedback and (b) this upward feedback effect will persist after controlling for demographic and departmental differences. Archival data on upward feedback was acquired from a large consumer product based company located in the United States. Data from 2,928 raters assessing 453 participants, or managers, were included in the analyses. Both propositions did not receive support. Implications of these findings are discussed.

A LONGITUDINAL INVESTIGATION INTO THE EFFECTS  
OF RATER FEEDBACK ON MANAGERIAL BEHAVIOR  
IN AN UPWARD FEEDBACK CONTEXT

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To my family and friends who have given me tremendous support and encouragement along the way. Thank you for being my rock. To my mentor Suzanne Hawes who has given me the data to complete this thesis. Thank you for helping me in every way possible in completing my master's degree. I really appreciate all of the encouragement and help you have all given me, you have made me a stronger and better person.

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## CHAPTER I

### INTRODUCTION

There is evidence that supervisory support has a positive effect on employee outcomes (Kluger & DeNisi, 1996; Walker & Smither, 1999; Vandenberghe, Bentein, Michon, Chebat, Tremblay & Fils, 2007; Rhoades Shanock & Eisenberger, 2006). Just as employees form global beliefs regarding the extent to which they are valued by the organization, they develop general views concerning the degree to which supervisors value their contributions and care about their well-being (Kottke & Sharafinski, 1988). This can be defined as perceived supervisor support. Because supervisors act as agents of the organization who have responsibility for directing and evaluating subordinates' performance, employees often view their supervisor's favorable or unfavorable orientation toward them as indicative of the organization's support (Eisenberger, Huntington, Hutchison, & Sowa, 1986). This perceived support helps meet the socio-emotional needs of the subordinate and provides them the psychological resources necessary to be effective (Vandenberghe et al., 2007). Subordinates who perceive their supervisors as having high organizational status tend to more completely represent the organization's basic makeup, leading to a stronger relationship between perceived supervisor support and perceived organizational support (Eisenberger et al., 1986).

According to Organizational Support Theory, employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well being (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Subordinates reciprocate supervisor supportiveness by holding

favorable work attitudes and by engaging in job performance and various organizational citizenship behaviors, such as helping behaviors, being courteous, having civic virtue, being conscientious, and having a sense of sportsmanship. (Atwater & Yammarino, 1992; Bauer & Mulder, 2006; Hegarty, 1974; Podsakoff, Whiting, Podsakoff & Blume, 2009). Similarly, Social Exchange Theory suggests that both employees and employers view employment as a mutual exchange relationship in which equally beneficial, positive behaviors, promote the development of high quality exchange relationships, positive attitudes, organizational loyalty, and positive work behaviors (Kudisch, Fortunato, & Smith, 2006). Employees and managers create a feeling of responsibility or commitment to their work and each other when resources or information is exchanged between them and therefore they engage in more productive working behaviors.

Given its role in influencing employee attitudes and behaviors, it appears logical to develop ways to enhance perceived supervisor support. While there is a dearth of literature on the development of supervisor supportiveness, leadership-development literature demonstrates that various supervisory behaviors – including supportiveness - are malleable and can be learned on the job (Guthrie & King, 2004; McCauley & Douglas, 2004; Martineau, 2004). For instance, a combination of multi-source feedback and coaching has been shown to have a positive effect on supervisory behavior (Bracken & Timmreck, 2001) especially if supervisors also receive the opportunity to process or integrate the feedback received during the feedback session and set meaningful developmental goals (Ting & Hart, 2004; O'Connor & Quinn, 2004). Similarly, simulated or structured experiences (e.g., in the form of developmental assessment

centers) can foster the development of new ways of understanding the self and others by replicating aspects of the environment that challenge people in developmental transitions (Van Velsor & McCauley, 2004).

While there is an increasing recognition of the role of feedback from multiple sources in changing supervisory behavior (Atwater & Brett, 2006), such information is relatively difficult to obtain in organizational settings. This is primarily due to the twin motives of feedback providers to buffer individuals from difficult or painful feedback and prevent potential conflict arising from the provision of such feedback (Waung & Highhouse, 1997). Therefore, organizations often initiate systematic upward or multisource feedback programs that allow feedback providers such as subordinates and peers to remain anonymous, and the recipient (i.e., the supervisor) to receive a report containing a synthesis of feedback from multiple raters on key behavioral criteria. The most popular among such initiatives are multi-source feedback where feedback is provided by superiors, peers, and subordinates (Foster & Law, 2006), and upward feedback where subordinates anonymously evaluate their supervisors' job-relevant behaviors (Van Dierendock, Haynes, Borrill, & Stride, 2007). The latter is likely to be particularly relevant for behavior change because by the very nature of their working relationship, subordinates are often in closer contact with their supervisor than are the other potential raters, and therefore in a better position to directly observe and accurately rate supervisor behaviors (Bernardin, 1986; Hall, Leidecker, & DiMarco, 1996). Indeed, there is evidence suggesting that supervisory behavior can be modified



through upward feedback mechanisms (Bauer & Mulder, 2006; Kudisch, Fortunato & Smith, 2006; Van Dierendonck et al, 2005; Waldman & Atwater, 2001).

Extant research on feedback in work-settings suggests that feedback influences the recipient's behavior through its discrepancy generation and reinforcement properties. According to the discrepancy generation explanation of feedback, individuals compare their actual behaviors with their desired behaviors and attempt to bridge the discrepancies between the two by either modifying their behaviors or lowering the standard of comparison (Kluger & DeNisi, 1996; Higgins, 1987). Consistent with this explanation, there is evidence that behavior change following upward feedback is greatest among managers who initially receive the most negative feedback or who initially overrate themselves (Walker & Smither, 1999). The reinforcing property of feedback, on the other hand, is likely to affect supervisory behaviors by helping supervisors in identifying and consequently repeating the specific behaviors that are favorably evaluated by subordinates, and signaling the favorable consequences that are likely to follow the display of these behaviors (Stajkovic & Luthans, 2003).

While very little research exists regarding the influence of upward feedback on the supportive behaviors of supervisors, the extant literature on feedback suggests the following hypothesis.

**Hypothesis 1:** Upward feedback from subordinates will positively influence supervisory supportiveness. Supervisors receiving formal upward feedback will receive significantly higher ratings on their

supportive behaviors than those not receiving this feedback from the previous year.

There are several other factors that are not accounted for that could lead to differences in supervisory supportiveness scores. These include departmental levels of supportiveness (e.g., different departments may emphasize different levels of supervisory supportiveness leading to between-department variability), and demographic differences (e.g., years of credited service, gender, and age). Research on performance appraisal ratings suggests that employees who see themselves as significantly different from their supervisors are less likely to trust their supervisors, believing that the supervisor may employ stereotypes or various prejudicial and unfair practices in their performance evaluations (Geddes & Konrad, 2003).

**Hypothesis 2:** The favorable effect of upward feedback on subordinate ratings of supervisory supportiveness will persist after controlling for departmental differences and demographic factors (age, gender, and years of credited service).

## CHAPTER II

### METHOD

#### Sample

Data was collected as part of an upward feedback program that was implemented in a global consumer product based company. The information gained through this process was provided to managers purely for developmental purposes, and was not linked to the organization's formal performance-appraisal or reward systems. Manager participation in the program was mandatory, while subordinates (raters) had the option to not participate. Each manager who received feedback from at least three subordinates received an overall summary report. The managers were then expected to share the feedback with their supervisor for coaching. If this was the participant's second (or more) time participating, copies automatically went to the organization's Human Resources (HR) function and to the participant's supervisor. The open-ended comments provided in the feedback report were reviewed by the HR function before reports were released to participants. This was done to ensure that the report did not include any inappropriate comments. See Appendix B and Appendix C for the two survey waves included in this study.

#### Participants

Participants in this feedback survey were adults who were representative of the United States workforce across key demographic characteristics such as gender, age, ethnicity and years of credited service.

Data from 2,897 raters assessing 372 participants, or managers, were included in the 2007 analyses. Of the rater data, 14.5% of the group code information was missing. The remaining raters came from the following groups: Business Process & Technology (N=165), North America Corporate Finance (N=51), Quality Assurance Safety and Environmental Affairs (N=40), Corporate Services and Facilities (N=19), Diverging Markets (N=8), Global Product Supply (N=49), Global Public Affairs & Communication (N=32), Canada (N=273), China (N=273), Taiwan (N=44), Finance (N=48), Legal (N=24), Marketing (N=70), Marketing Services (N=38), North America-Human Resources (N=77), Product Supply (N=810), Research Development & Engineering (N=278), and Sales (N=179). No rater demographic information was given for 2007.

The average years of credited service were 17.60 years with a standard deviation of 9.7 years for the participants (managers) in 2007. Fifty percent of the age information was missing from the participants. Of the remaining data 21% of the participants ranged from 20-40 years old, 48% ranged from 41-50 years old and the remaining 31% ranged from 51- 65 years of age. Fifty percent of the gender information was missing from the participants. Of the remaining information, 31% were female while 69% were male. Fifty percent of the ethnicity information was missing or coded as not applicable from the participant information. Ethnicity codes were given by the organization. Of the remaining ethnicity information 1,635 participants (85%) were Caucasian, 61 participants (3%) were Hispanic, 146 participants (8%) were African American, 75 (4%) participants were Asian/Pacific Islander, and 18 (1%) of participants indicated they were American Indian/Alaskan Native.

Data from 2,928 raters assessing 453 participants, or managers, were included in the 2008 analyses. Raters came from the following groups: Business Process & Technology (N=243), Canada (N=306), China (N=182), Corporate Services and Facilities (N=25), Developed Markets - Europe (N=43), Diverging Markets (N=124), Finance (N=107), Global Public Affairs & Communication (N=30), Global Product Supply (N=60), Human Resources (N=97), Legal (N=24), Marketing (N=62), Mexico (N=30), Marketing Services (N=41) Product Supply (N=971), Research Development & Engineering (N=305), Sales (N=209), and Taiwan (N=64).

Twenty-eight percent of the age information was missing from the raters. Of the remaining data, 31% of the raters ranged from 20-40 years old, 38% ranged from 41-50 years old and the remaining 31% ranged from 51- 69 years of age. Twenty-eight percent of the gender information was missing from the raters. Of the remaining information, 37% were female while 63% were male. Twenty-eight percent of the ethnicity information was missing or was coded as not applicable from the rater information. Ethnicity codes were given by the organization. Of the remaining ethnicity information 1,857 raters (81%) were Caucasian, 101 raters (4%) were Hispanic, 170 raters (7%) were African American, 106 (5%) raters were Asian/Pacific Islander, 35 (2%) of raters indicated they were American Indian/Alaskan Native, and 12 (1%) of the raters indicated they were Hawaiian Islander.

Participants came from the following groups: Business Process & Technology (N=52), Canada (N=44), China (N=46), Corporate Services and Facilities (N=5), Developed Markets - Europe (N=8), Diverging Markets (N=24), Finance (N=27), Global

Public Affairs & Communication (N=7), Global Product Supply (N=9), Human Resources (N=19), Legal (N=4), Marketing (N=20), Mexico (N=7), Marketing Services (N=11) Product Supply (N=73), Research Development & Engineering (N=39), Sales (N=45), and Taiwan (N=13).

The average years of credited service were 16.9 years with a standard deviation of 9.4 years for the participants (managers). Twenty percent of the age information was missing from the participants. Of the remaining data, 22% of the participants ranged from 20-40 years old, 47% ranged from 41-50 years old, and the remaining 32% ranged from 51- 67 years of age. Twenty percent of the gender information was missing from the participants. Of the remaining information, 28% were female while 72% were male. Twenty percent of the ethnicity information was missing or was coded as not applicable from the participant information. Of the remaining ethnicity information 2,038 participants (84%) were Caucasian, 85 participants (4%) were Hispanic, 195 participants (8%) were African American, 104 (4%) participants were Asian/Pacific Islander, and 19 (1%) of participants indicated they were American Indian/Alaskan Native.

## CHAPTER III

### RESULTS

#### Psychometric Properties of Scale

Internal consistency of the 10 item supervisory support scale used in this study was determined using the Cronbach Alpha coefficient. The scale demonstrated high levels of internal consistency during both administrations 2007 ( $\alpha = .95$ ) and 2008 ( $\alpha = .96$ ).

Convergent and discriminant validity of this scale were established by administering the 15 – 2008 survey items along with (a) 12 items adapted from the perceived organizational status (POS) measure developed by Eisenberger et al. (2002), and (b) 4 items from an organizational commitment measure to a sample of 138 undergraduate students from a Midwest University. The Eisenberger et al. (2002) POS measure was found to correlate more strongly with the 2008 survey items ( $r = .78$ ) than the organizational commitment measures ( $r = .43$ ). This was to be expected, and shows that our scale, indeed measures perceived supervisory support and thus providing further evidence for both convergent and discriminant validity.

Next, a Principle Components Exploratory Factor Analysis was conducted for the supervisory support scale, using Varimax rotation and an Eigen value  $> 1$ . Only one rotated factor was extracted. See Appendix D-2 and D-3 for the loadings of the one factor model. Nearly 70% of the variance was accounted for from this one factor in 2007. For 2008, 66% of the variance was accounted for from this single factor. There is a slight

difference from the 2007 data to the 2008 data due to the organization adding five additional questions. See Appendix B and C for each year's surveys.

### Hypothesis Testing

After establishing the psychometric properties of the scale, a Pearson's Product-Moment Correlation Coefficient was conducted to obtain the relationship between key demographics (age, gender, and years of credited service), the feedback/comparison group, a composite score for 2007 and a composite score for 2008. Subsequently, an Independent Samples t-test was conducted to look for differences in subordinate-perceived supervisor support between the feedback group (i.e., managers who received feedback in 2007) and the comparison group (i.e., managers who did not receive feedback in 2007). The first hypothesis stated that upward feedback from subordinates will positively influence supervisor supportiveness. Thus, supervisors receiving formal upward feedback would be expected to receive significantly higher ratings on their supportive behaviors than those not receiving this feedback. As shown in Appendix D-4, the feedback/comparison group correlated with the participant's age ( $r = .04, p < .05$ ), gender ( $r = -.11, p < .01$ ), and years of credited service ( $r = .10, p < .01$ ) but not the overall scores of either the 2007 or 2008 data set. There was a significant correlation between the 2007 index score on participant's age ( $r = -.07, p < .01$ ) and gender ( $r = -.08, p < .01$ ), but no relationship on years of credited service or the feedback/comparison group. There was no relationship with the feedback/comparison group and the 2007 data because the feedback group contained data in both years 2007 and 2008 while the comparison group had data only from 2008. Thus, individuals receiving feedback in 2007



had an opportunity to increase their scores in 2008, while the participants in 2008 have had only one round in the feedback survey process and therefore serve as the comparison. There was a significant correlation between the 2008 index score and years of credited service ( $r = .08, p < .01$ ), and the 2007 index score ( $r = .26, p < .01$ ). By running an Independent Samples t-test, significant differences could be looked at comparing the 2008 survey questions and the feedback/comparison groups. There was only one significant question found: My manager knows me as an individual ( $t(2922) = -2.37, p < .05, d = .10$ ). The remaining 14 questions were deemed non-significant. To see if there was a significant effect, the effect size was measured using Cohen's  $d$ . No sizable effects were found. See Appendix D-5 for results. Therefore, Hypothesis 1 was not supported – supervisors receiving formal upward feedback did not receive significantly higher ratings on their supportive behaviors than those not receiving the feedback.

Hypothesis 2 stated that the favorable effects of upward feedback on subordinate ratings of supervisor supportiveness will persist after controlling for departmental differences and demographic factors (age, gender, and years of credited service). To test this, a Hierarchical Regression Analysis was conducted to see if there were relationships between demographic differences, the feedback/comparison groups and the 2008 supervisory support survey. The 2008 supervisory support survey was set as the outcome variable. The three demographic variables (age, gender, and years of credited service) were entered in the first step and the group variable was entered in the second step. The group variable did not significantly increase the variance accounted for in the supervisory support survey ( $\Delta R^2 = .00, ns$ ). Of the control variables, participants gender

was non-significant ( $\beta = -.04, ns$ ). However participant's age ( $\beta = -.08, p < .01$ ) and years of credited service ( $\beta = .13, p < .01$ ) were significant. See Table D-6. To see if there were any upward feedback result differences between departments, an Analysis of Variance (ANOVA) was conducted. There was a significant difference between departments ( $F(2,17) = 4.41, p < .001, \text{partial } \eta^2 = .03$ ). To see where the differences were, an LSD post-hoc analysis was conducted. For descriptive statistics see Appendix D-7. While there were departmental differences, there were no upward feedback score differences. See Appendix D-8 for varying differences between departments. Thus, Hypothesis 2 was not supported; controlling for departmental and demographic differences did not maintain or increase upward feedback scores.

#### Supplemental Analysis

To see if the participants used more of the scale in year two, coefficients of Variation (SD/Mean) were calculated for the 2007 and 2008 scale items, and subtracted from each other (Coeff.Var.08 – Coeff.Var.07; see Appendix D-1). The differences between these administrations were not practically significant, leading to the conclusion that the difference in instructions made no difference from 2007 to 2008.

## CHAPTER IV

### DISCUSSION

#### Implications for Practice

The purpose of this study was to examine whether upward feedback from subordinates would positively influence supervisory supportiveness, also suggesting that supervisors receiving formal upward feedback would receive significantly higher ratings on their supportive behaviors than those not receiving this feedback. The study in addition sought out if the favorable effects of upward feedback on subordinate ratings of supervisor supportiveness would persist after controlling for departmental differences and demographic factors (age, gender, and years of credited service).

There is evidence that upward feedback has a positive effect on supervisor supportiveness and employee outcomes (Kluger & DeNisi, 1996; Walker & Smither, 1999). A similar effect was expected but not found in the current study. This was probably because the intervention did not have sufficient strength to produce behavior change. The first reason for this might be the specificity of the feedback. There is evidence that feedback interventions are likely to be most effective when they are specific and behavior-based, as opposed to focused on individual traits and values (Kluger & DeNisi, 1996). An examination of the items used in the supervisory support scale indicate that these might be perceptions or evaluations of supervisory behavior, as opposed to accurate observations of these behaviors. A second reason for the non-significant results might be the solitary quality of the intervention. There is evidence that feedback is effective in fostering behavior change when it is accompanied by coaching (Walker &

Smither, 1999), systematic goal setting (Atwater & Brett, 2006; Waldman & Atwater, 2001), reinforcement (Bauer & Mulder, 2006; Kluger & DeNisi, 1996), and skill-training (Bracken & Timmreck, 2001; Walker & Smither, 1999) The combination of these interventions creates a synergistic effect that is stronger than individual intervention effects (Stajkovic & Luthans, 2003; Rhoades & Eisenberger, 2006). Finally, it is possible that upward feedback did not translate into behavior change because it was not perceived as an organizational priority. Research on transfer of training (Bracken & Timmreck, 2001) suggests that people are more likely to change their behavior following an intervention if they receive support from their supervisors and peers (Stajkovic & Luthans, 2003). Although it is possible that support mechanisms were available for individual participants in this study, it does not appear that a system-wide effort was made to foster and facilitate behavior change.

Hypothesis 2 was not supported. After controlling for differences, upward feedback scores did not maintain or increase. However, there is evidence that supervisory support correlated with participant's (manager's) age and years of credited service on the 2008 scale. Participant age and years of credited service had a small but significant effect on subordinate ratings on supervisory supportiveness, while the effect of years of credited service was in the expected direction; age which was positively correlated with years of credited service was found to have a negative relationship with these ratings. Examining the effect sizes for the two, it is clear that close to 1 percent of the variance in supervisory support was explained by years of credited service. However, only slightly less than half of a percent was explained by age. Thus, the significance in

both cases - but particularly for age - could be explained by the large sample size. It can also be conjectured that the relationship between age and supervisory support is not entirely an artifact of the sample size. In some ways this is opposite of a suppression effect. The positive outcome of years of credited service would be expected because the longer an individual works at the organization, the more managerial experience they build and therefore become a better manager of people.

Significant departmental differences were found for supervisory support. Much of these differences may be due to the variable sample sizes of each group. The groups ranged from 25 to 970 individuals indicating that there is a lot of variability within groups. The group with the most significant differences was Corporate Services and Facilities – being statistically different from all other groups but Legal. These differences might suggest that some department managers may receive more lenient or strict ratings than other managers within departments. It may also suggest that managerial climate is different between departments.

#### Limitations, Strengths & Future Research

A key strength of this study is the large sample size and data from multiple time-periods. However, a key limitation was the post-hoc nature of the study. Because the data in both waves had already been collected, I was not able to influence the design of the instrument, the intervention itself, or the research design. It could be argued that a comprehensive intervention including goal-setting, reinforcement, training, and support might have been more effective in creating behavior change, and an instrument focusing on specific behaviors (e.g., using a behaviorally anchored rating scale) might have

created a larger effect size. Finally, a field experiment with random assignment of participants across conditions with pre- and post-tests might have allowed for a better understanding of causality, i.e., whether extraneous variables might have had an effect in influencing behavior change.

It is recommended that future studies be conducted using synergistic packages of interventions comprised of feedback, goal-setting, coaching, and reinforcement, with adequate attention paid to the transfer climate. Also, future attempts at upward feedback interventions might require a stronger focus on behavior-focused rating scales and rater-training raters to ensure the provision of objective and specific behavioral feedback.

To extend future research on demographic differences in an upward feedback context one could look at cross-cultural differences and perspectives. Research has shown that there are different definitions and perspectives when it comes to cultural differences and leadership development (Hoppe, 2004).

In summary, this study extends research in the areas of upward feedback and perceived supervisor support by exploring past research as well as demographic and departmental differences. While there has been extensive research done in the field of feedback, more research can be conducted using upward feedback. Many opportunities of upward feedback await discovery, and much of this will better help organizations with performance, and other working behaviors and goals.

APPENDIX A

IRB Approval



November 6, 2008

Ms. Brittany Schoessow  
1790 Robin Ave. Apt R307  
Oshkosh, WI 54902

Dear Ms. Schoessow:

On behalf of the UW Oshkosh Institutional Review Board for Protection of Human Participants (IRB), I am pleased to inform you that your application has been approved for the following research: A Longitudinal Investigation into the Effects of Rater Feedback on Managerial Behavior in an Upward Feedback Context.

Your research protocol has been classified as EXEMPT. This means you will not be required to obtain signed consent. However, unless your research involves **only** the collection or study of existing data, documents, or records, you must provide each participant with a summary of your research that contains all of the elements of an Informed Consent document, as described in the IRB application material. Permitting the participant, or parent/legal representative, to make a fully informed decision to participate in a research activity avoids potentially inequitable or coercive conditions of human participation and assures the voluntary nature of participant involvement.

Please note that it is the principal investigator's responsibility to promptly report to the IRB Committee any changes in the research project, whether these changes occur prior to undertaking, or during the research. In addition, if harm or discomfort to anyone becomes apparent during the research, the principal investigator must contact the IRB Committee Chairperson. Harm or discomfort includes, but is not limited to, adverse reactions to psychology experiments, biologics, radioisotopes, labeled drugs, or to medical or other devices used. Please contact me if you have any questions (PH# 920/424-7172 or e-mail: rauscher@uwosh.edu).

Sincerely,

Dr. Frances Rauscher  
IRB Chair

cc: Mahesh Subramony  
1467

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March 2, 2009

Brittany Schoessow  
1790 Robin Ave. Apt R307  
Oshkosh, WI 54902

Dear Ms. Schoessow:

Based on the additional materials that you provided, your request for a modification has been approved for the study "A Longitudinal Investigation into the Effects of Rater Feedback on Managerial Behavior in an Upward Feedback Context."

Sincerely,

A handwritten signature in cursive script that reads "Dr. Frances Rauscher".

Dr. Frances Rauscher  
IRB Chair

Cc: Mahesh Subramony

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APPENDIX B

2007 Survey

## 2007 Performance Management Feedback Survey

1. My manager sets clear expectations for me.
2. My manager provides recognition for a job well done.
3. My manager treats me fairly.
4. My manager knows me as an individual.
5. My manager provides appropriate coaching to help me do my job.
6. My manager's actions match his/her words.
7. My manager provides me with useful feedback about my job performance.
8. My manager fosters an inclusive work environment.
9. My manager supports the usage of worklife programs.
10. Overall, my manager is an effective manager of people.
  - What are your manager's greatest strengths in people management?
  - What are your manager's developmental opportunities in people management?

APPENDIX C

2008 Survey

## 2008 Performance Management Feedback Survey

1. My manager sets clear expectations for me.
2. My manager provides recognition for a job well done.
3. My manager treats me fairly.
4. My manager knows me as an individual.
- 5. My manager asks for my input when making decisions that will impact me.\***
6. My manager provides appropriate coaching to help me do my job.
7. My manager's actions match his/her words.
- 8. I feel comfortable talking to my manager about things that concern me.\***
9. My manager provides me with useful feedback about my job performance.
- 10. My manager handles performance issues constructively.\***
11. My manager fosters an inclusive work environment.
12. My manager supports the usage of work life programs.
- 13. My manager is open and honest with me.\***
14. Overall, my manager is an effective manager of people.
- 15. Compared to other managers I have known, this manager is among the best.\***
  - What are your manager's greatest strengths in people management?
  - What are your manager's developmental opportunities in people management?

APPENDIX D

Tables

Table D-1.  
*Descriptive Statistics for 2007 and 2008 Upward Feedback Questions*

	2007			2008			<i>d</i>
	<i>M</i>	<i>SD</i>	<i>CV</i>	<i>M</i>	<i>SD</i>	<i>CV</i>	
1. My manager sets clear expectations for me.	4.06	.96	.24	3.92	.82	.21	-.03
2. My manager provides recognition for a job well done.	3.98	1.08	.27	3.92	.96	.24	-.03
3. My manager treats me fairly.	4.19	1.03	.25	4.10	.90	.22	-.03
4. My manager knows me as an individual.	3.96	1.06	.27	3.86	.98	.25	-.02
5. My manager asks for my input when making decision that will impact me.	--	--	--	3.88	.98	.25	--
6. My manager provides appropriate coaching to help me do my job.	3.80	1.07	.28	3.71	.95	.26	-.02
7. My manager's actions match his/her words.	3.99	1.07	.27	3.91	.96	.25	-.02
8. I feel comfortable talking to my manager about things that concern me.	--	--	--	4.02	1.03	.26	--
9. My manager provides me with useful feedback about my job performance.	3.87	1.03	.27	3.80	.91	.24	-.03
10. My manager handles performance issues constructively.	--	--	--	3.74	.93	.25	--
11. My manager fosters an inclusive work environment.	3.96	1.06	.27	3.87	.96	.25	-.02
12. My manager supports the usage of work life programs.	4.13	.97	.23	4.02	.92	.23	.00
13. My manager is open and honest with me.	--	--	--	4.05	.93	.23	--
14. Overall, my manager is an effective manager of people.	4.04	1.06	.26	3.94	.98	.25	-.01
15. Compared to other managers I have known, this manager is among the best.	--	--	--	3.73	1.14	.31	--

Note. CV = Coefficient of Variation; *N* = 2,897 (2007); *N* = 2,928 (2008)

Table D-2.  
*Principle Components Factor Analysis 2007 Upward Feedback Data*

	Factor 1
14. Overall, my manager is an effective manager of people.	.919
3. My manager treats me fairly.	.879
6. My manager provides appropriate coaching to help me do my job.	.860
7. My manager's actions match his/her words.	.851
9. My manager provides me with useful feedback about my job performance.	.850
11. My manager fosters an inclusive work environment.	.848
1. My manager sets clear expectations for me.	.808
2. My manager provides recognition for a job well done.	.805
4. My manager knows me as an individual.	.777
12. My manager supports the usage of work life programs.	.741

Note. One factor was extracted using varimax rotation obtaining 69.78% of the variance.



Table D-3.

*Principle Components Factor Analysis for 2008 Upward Feedback Data*

	Factor 1
14. Overall, my manager is an effective manager of people.	.909
15. Compared to other managers I have known, this manager is among the best.	.871
3. My manager treats me fairly.	.853
13. My manager is open and honest with me.	.851
7. My manager's actions match his/her words.	.842
8. I feel comfortable talking to my manager about things that concern me.	.838
11. My manager fosters an inclusive work environment.	.822
6. My manager provides appropriate coaching to help me do my job.	.821
10. My manager handles performance issues constructively.	.819
9. My manager provides me with useful feedback about my job performance.	.803
5. My manager asks for my input when making decisions that will impact me.	.788
2. My manager provides recognition for a job well done.	.770
4. My manager knows me as an individual.	.759
1. My manager sets clear expectations for me.	.755
12. My manager supports the usage of work life programs.	.683

Note. One factor was extracted using varimax rotation obtaining 66.27% of the variance.

Table D-4.

*Correlation of 2008 demographic variables, Feedback/comparison group, and 2007/2008 index scores*

	1	2	3	4	5	6
1. Feedback/Comparison	--					
2. Participant Age	.041 <sup>*</sup>	--				
3. Participant Gender	-.114 <sup>**</sup>	.164 <sup>**</sup>	--			
4. Participant Years of Credited Service	.100 <sup>**</sup>	.545 <sup>**</sup>	.127 <sup>**</sup>	--		
5. 2007 Index	--	-.074 <sup>**</sup>	-.078 <sup>**</sup>	.004	--	
6. 2008 Index	.014	-.026	-.033	.082 <sup>**</sup>	.255 <sup>**</sup>	--

Note. \* Correlation is significant at the .05 level; \*\* Correlation is significant at the .01 level

Table D-5.

*T-test for differences at the individual level on the 2008 survey questions and feedback/comparison group*

	Comparison Group			Feedback Group			<i>t</i>	<i>d</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>		
1. My manager sets clear expectations for me.	910	3.92	.81	2014	3.92	.83	-.12	.00
2. My manager provides recognition for a job well done.	910	3.92	.95	2013	3.93	.97	-.20	.01
3. My manager treats me fairly.	910	4.08	.86	2014	4.10	.92	-.48	.02
4. My manager knows me as an individual.	910	3.79	.96	2014	3.89	.98	-2.4*	.10
5. My manager asks for my input when making decisions that will impact me.	910	3.89	.94	2013	3.88	1.00	.24	-.01
6. My manager provides appropriate coaching to help me do my job.	909	3.66	.93	2015	3.73	.96	-1.6	.07
7. My manager's actions match his/her words.	910	3.94	.92	2014	3.89	.98	1.2	-.05
8. I feel comfortable talking to my manager about things that concern me.	909	4.03	.99	2014	4.01	1.05	.36	-.02
9. My manager provides me with useful feedback about my job performance.	909	3.77	.89	2015	3.81	.92	-1.0	.04
10. My manager handles performance issues constructively.	907	3.74	.89	2010	3.74	.95	.06	.00
11. My manager fosters an inclusive work environment.	907	3.88	.93	2012	3.87	.92	.22	-.01
12. My manager supports the usage of work life programs.	910	3.98	.89	2012	4.04	.93	-1.6	.07
13. My manager is open and honest with me.	910	4.06	.89	2013	4.04	.95	.63	-.02
14. Overall, my manager is an effective manager of people.	910	3.93	.93	2011	3.94	1.0	-.21	.01
15. Compared to other managers I have known, this manager is among the best.	910	3.72	1.12	2013	3.74	1.14	-.58	.02

Note. \* Significant at .01.

Table D-6.  
*Hierarchical Regression on the 2008 Index and key demographic variables as the dependant variable*

Step		$\beta$	$t$	$d$	$R^2$	$\Delta R^2$
1	Participant Age	-.01	-.68*	-.02		
	Participant Gender	-.01	-.32	-.02	.01	.01*
	Participant Years of Credited Service	-.04	-1.7*	-.08		
2	Participant Age	-.08	-3.3	-.16		
	Participant Gender	-.04	-1.8	-.08		
	Participant Years of Credited Service	.13	5.3	.02	.01	.00
	Feedback/Comparison Groups	-.01	-.49	-.02		

Note. \* Significant at .01,  $N = 2433$ , Caution significance may be due to large sample size.

Table D-7.  
*Descriptive statistics for 2008 index score on departments.*

	<i>M</i>	<i>SD</i>	<i>N</i>
Finance	3.94	.61	107
Product Supply	3.94	.80	970
Business Process and Technology	3.99	.62	242
Corporate Service Facility	3.32	1.17	25
Developed Markets - Europe	3.93	.47	43
Diverging Markets	3.85	.71	129
Global Public Affairs & Communication	4.01	.81	30
Global Product Supply	3.98	.69	60
Human Resources	4.03	.70	97
Legal	3.73	.96	24
Marketing	3.94	.70	62
Marketing Services	3.85	.83	41
Research Development & Engineering	3.74	.83	305
Sales	4.09	.62	209
Canada	3.75	.74	305
China	3.98	.73	182
Mexico	3.93	.78	30
Taiwan	3.69	.62	64

Table D-8.

*Departmental differences as perceived from an upward feedback context*

Target Department	N	Department with higher scores than target departments
1. Business Process & Technology	242	Canada, RDE, Taiwan
2. Canada	305	BP&T, China, Finance, GPS, HR, PS, Sales
3. China	182	Canada, RD&E, Taiwan
4. Corporate Service Facility	25	All departments except Legal
5. Developed Markets-Europe	43	
6. Diverging Markets	129	Sales
7. Finance	107	Canada, RD&E, Taiwan
8. Global Product Supply	60	Canada, RD&E, Taiwan
9. Global Public Affairs & Communication	30	
10. Human Resources	97	Canada, RD&E, Taiwan
11. Legal	24	Sales
12. Marketing	62	
13. Marketing Services	41	Sales
14. Mexico	30	
15. Product Supply	970	Canada, RD&E, Sales, Taiwan
16. Research Development & Engineering	305	BP&T, China, Finance, GPS, HR, PS, Sales
17. Sales	209	Canada, DivMks, Legal, PS, RD&E, Taiwan
18. Taiwan	64	BP&T, China, Finance, GPS, HR, PS, Sales

## REFERENCES

- Atwater, L.E., & Brett, J.F. (2006). 360-degree feedback to leaders: Does it relate to changes in employee attitudes. *Group & Organization Management, 31* (5), 578-600.
- Atwater, L.E., & Yammarino, F.J. (1992). Does self-other agreement on leadership perceptions moderate the validity of leadership and performance predictions? *Personnel Psychology, 45*, 141-164.
- Bauer, J., & Mulder, R.H. (2006). Upward feedback and its contribution to employees' feeling of self-determination. *Journal of Workplace Learning, 18* (7/8), 508-521.
- Bernardin, H.J. (1986). Subordinate appraisal: A valuable source of information about managers. *Human Resource Management, 25*, 421-439.
- Bracken, D.W., & Timmreck, C.W. (2001). Success and sustainability: A systems view of multisource feedback. In Bracken, David W.; Timmreck, Carol W.; Church, Allan H. *The handbook of multisource feedback: The comprehensive resource for designing and implementing MSF processes*. (pp. 478-494). San Francisco, CA, US: Jossey-Bass.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D., (1986). Perceived organizational support. *Journal of Applied Psychology, 71* (3), 500-507.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I.L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology, 87* (3), 565-573.

- Foster, C.A., & Law, M.R.F. (2006). How many perspectives provide a compass? Differentiating 360 – degree and multi-source feedback. *International Journal of Selection and Assessment*, 14 (3), 288-291.
- Geddes, D., & Konrad, A.M. (2003). Demographic differences and reactions to performance feedback. *Human Relations*, 56, (12), 1485-1514.
- Guthrie, V.A., & King, S.N. (2004). Feedback-intensive programs. In MCCauley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 25-57). San Francisco, CA: Jossey-Bass.
- Hall, J.L., Leidecker, J.K., & DiMarco, C. (1996). What we know about upward feedback appraisals of management: Facilitating the future use of UPAs. *Human Resource Development Quarterly*, 7 (3), 209-226.
- Hegarty, H.W. (1974). Using subordinate ratings to elicit behavioral change in supervisors. *Journal of Applied Psychology*, 59 (6), 764-766.
- Higgins, T.E. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94 (3), 319-340.
- Hoppe, M.H. (2004). Cross-cultural issues in the development of leaders. In MCCauley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 331-360). San Francisco, CA: Jossey-Bass.
- Kluger, A.N., & DeNisi, A. (1996). The effects of feedback interventions on performance: A historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin*, 119 (2), 254-284.



- Kottke, J.L., & Sharafinski, C.E. (1988). Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement, 48*, 1075-1079.
- Kudisch, J.D., Fortunato, V.J., & Smith, A.F.R. (2006). Contextual and individual difference factors predicting individual's desire to provide upward feedback. *Group & Organization Management, 31* (4), 503-529.
- Livers, A.B., & Cavers, K.A. (2004). Leader development across race. In McCauley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 304-330). San Francisco, CA: Jossey-Bass.
- Martineau, J.W. (2004). Evaluating the impact of leader development. In McCauley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 234-266). San Francisco, CA: Jossey-Bass.
- McCauley, C.D., & Douglas, C.A. (2004). Developmental relationships. In McCauley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 85-115). San Francisco, CA: Jossey-Bass.
- O'Connor, P.M.G., & Quinn, L. (2004). Organizational capacity for leadership. In McCauley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 417-437). San Francisco, CA: Jossey-Bass.
- Podsakoff, N.P., Whiting, S.W., Podsakoff, P.M., Blume, B.D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology, 94* (1), 122-141.

- Rhoades Shanock, L., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support and performance. *Journal of Applied Psychology, 91* (3), 689-695.
- Rowson, A.M. (1998). Using 360 degree feedback instruments up, down and around the world: Implications for global implementation and use of multi-rater feedback. *International Journal of Selection and Assessment, 6* (1), 45-48.
- Stajkovic, A.D., & Luthans, F. (2003). Behavioral management and task performance in organizations: Conceptual background, meta-analysis, and test of alternative models. *Personnel Psychology, 56* (1), 155-194.
- Ting, S.E., & Hart, W. (2004). Formal coaching. In MCCAuley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 116-150). San Francisco, CA: Jossey-Bass.
- Vandenberghe, C., Bentein, K., Tremblay, M., & Fils, J.F. (2007). An examination of the role of perceived support and employee commitment in employee-customer encounters. *Journal of Applied Psychology, 92* (4), 1177-1187.
- Van Dierendock, D., Haynes, C., Borrill, C., & Stride, C. (2007). Effects of upward feedback on leadership behavior toward subordinates. *Journal of Management Development, 26* (3), 228-238.
- Van Velsor, E., & MCCAuley, C.D. (2004). Our view of leadership development. In MCCAuley, C.D., & Van Velsor, E. (2<sup>nd</sup> ed.), *Handbook of leadership development*. (pp. 1-22). San Francisco, CA: Jossey-Bass.

- Waldman, D.A., & Atwater, L.E. (2001). Attitudinal and behavioral outcomes of an upward feedback process. *Group & Organizational Management, 26* (2), 189-205.
- Walker, A.G., & Smither, J.W. (1999). A five-year study of upward feedback: What managers do with their results matters. *Personnel Psychology, 52*, 393-423.
- Waung, M., & Highhouse, S. (1997). Fear of conflict and empathic buffering: Two explanations for the inflation of performance feedback. *Organizational Behavior and Human Decision Processes, 71* (1), 37-54.