

Developments In Business Simulation & Experiential Exercises, Volume 20, 1993

REFLECTING LEADER BEHAVIOR FROM THE LOOKING GLASS, INC. SIMULATION

Ralph M Roberts, The University of West Florida

Diana Page, The University of West Florida

Chester A. Schriesheim, The University of Miami

ABSTRACT

The purpose of this pilot study was to compare the view of leadership style, as self reported by the superior and as perceived by the subordinate, in a simulated environment for research and class pedagogy. Class pedagogy, reported in this paper, is based on J. Luft's and H. Ingham's (Luft, 1984) dynamic model of interpersonal communication. Using the model, students contrast the hypothesized differences in subordinate/superior views of leadership style and through guided discussion become acutely aware of the likelihood and consequences of those differences. Discussion of methods to mitigate those differences completes the learning module.

INTRODUCTION

The Johari Window, a perception model of how we see ourselves compared to how others see us (Luft, 1984), demonstrates the important role that feedback plays in individual development. It is a guide for individual learning about self, suggesting that feedback offers opportunities for individual growth, and that growth is limited without such feedback.

Thatcher (1990), concludes that feedback is critical for proper learning to take place after an experience. Gentry (1990), specifies that, "The student should not be allowed to conclude what was learned without receiving feedback: there is too much evidence that human beings do not do this properly" (p. 17).

The following guidelines have been suggested for effective feedback, descriptive versus evaluative, meets the needs of the receiver, asked versus imposed, timely and applicable (Sashkin and Morris 1984). Communication theory suggests the following three basic types of feedback (Kreitner and Kiniki 1989): informational feedback provides the learner nonevaluative information: corrective feedback provides the learner with challenging information which confronts an earlier message or belief: and reinforcing feedback which supports or augments the learners behaviors or statements.

Quality feedback in the area of leadership, therefore is an important element in learning about leadership. Typically mechanisms offering feedback to leaders have been comprised of written or verbal reports of particular behaviors (Jago and Vroom, 1975). Feldman (1986) argues strongly for increasing the amount and immediacy of feedback by attempting to provide experiences that can make even intuitive tasks more subject to analysis. We are aware that Schriesheim and Kerr (1974) report that self reports of leader behavior and others' often do not correlate.

Considering the above a simulation was used for leadership feedback. Simulations provide more effective learning experiences over time compared to conventional classroom instruction (Randel, Morris, Wetzel, & Whitehill, 1992).

Most leadership theorists recognize behavior as a critical dimension of effective leadership. The Ohio State Leadership Studies (Stogdill & Coons, 1957) isolated two kinds of behaviors, which are important in attaining organizational goals: initialing structure and consideration. Three versions of the Ohio State scales, the Supervisory Behavior Description Questionnaire (SBDQ), early Leader Behavior Description Questionnaire (LBDQ) and revised form XII of the LBDQ (LBDQ-XII), all have been used to measure leader behavior (Schriesheim et al, 1976 Schriesheim & Kerr, 1974; Schriesheim & Stogdill, 1975).

Using The Looking Glass, Inc. (McCall & Lombardo, 1982 and Lombardo & McCall, 1982) simulation as the laboratory, this study piloted a modified version of instrumental and supportive behavior descriptors to provide behavioral feedback. Instrumental leader behaviors are those actions "directed at clarifying (subordinate role) expectations" and supportive leader behaviors are those action considered "friendly and approachable, and considerate of the of the needs of subordinates" (House and Dessler, 1974, pp. 39-40).

METHOD

Sample

Participants were from management fundamentals classes. N= 117, including 66 females. The students met on Saturday to participate in The Looking Glass, Inc. A local utility company provided a realistic setting of large and small rooms. Data concerning leadership behaviors were collected at the conclusion of the simulation.

Simulation

The simulation is a complex in-basket organization exercise, which creates a day in the lives of the top twenty managers of a mid-sized manufacturing corporation. The organizational levels include Presidents, Vice Presidents, Directors, and Plant Managers. Participants in this simulation are free to call meetings, write memos and make or defer decisions. The simulation includes a diversity of problems in finance, personnel, legal, production, sales, research, and safety. For further information about the simulation see Lombardo, McCall, and Devries (1983). Six Looking Glass Organizations were established to accommodate the 117 participants. Students had self-selected groups of five or six the first day of the semester for other experiential exercises, These groups generally remained together during this simulation.

Instrumentation

Two congruent questionnaires were developed based on Houses and Desslers (1974) Instrumental and Supportive Leadership scale, one for superiors and one for subordinates. Eight questions from the instrumental domain and nine questions from the supportive domain were included in each questionnaire. The questionnaire asked each participant, in the role of subordinate, to report how frequently their boss actually behaved in a specific way towards them. A seven-item Likert scale enabled participants to report a range of superior behaviors.

A similar seventeen questions comprised the self perception questionnaire. It asked participants, in the role of superior, to report how frequently they actually behaved in a specific way toward each individual subordinate. (Instruments obtainable from authors.)

Hypotheses

Hypotheses were established defining the concepts of pedagogical intersect. This allowed scientific experimentation to be the basis for feedback:

- H1: There would be a positive correlation between the superiors' self-reported scores and their subordinates scores.
- H2: There would be no difference in the superiors self-evaluation of overall leadership style and the subordinates evaluation of superiors leadership style.

Developments In Business Simulation & Experiential Exercises, Volume 20, 1993

- H3: There would be no difference in the self and subordinate's evaluation on the supportive (S) dimension of the Leadership scale.
- H4: There would be no difference in the self and subordinates' evaluation non-the instrumental (I) dimension of the leadership scale.

Experimental Design

Superiors reported their self-perceived leadership style for each subordinate, the "self" report. This is an important design element: it provides a more accurate representation of leadership style than reporting one average style perception for all subordinates. Subordinates reported their observation of the leadership style of their superior, the "superior" report.

The four organizational levels with three levels of paired self-subordinate observations provided 109 accurately paired self-reported and subordinate reported data points.

Initially all paired data were merged for correlations, then all data were divided into the two leadership categories supportive (S) and instrumental (I). Then Pearson correlation coefficients were computed for each of the three experimental levels, president to vice presidents, vice presidents to midlevel, and midlevel to lowest level. Each level was examined in total and each level was examined for S and I leadership categories.

Further, the data were examined aggregated by organizational division under each vice president. Pearson correlations were undertaken for the total data in each of the divisional data sets. Next, the data were divided again into instrumental and supportive categories for each division.

The second statistical analysis was an ANOVA with repeated measures to compare the average self reported style with the style reported by the subordinates. These comparisons were made with the total data, and the I and S categories. Further, the data were evaluated similarly by level and by division.

RESULTS

The correlation between self and subordinate data for the total sample was significant with a coefficient of .104 and .28. There was no significant correlation for the supportive data (S), but $P=.078$, with correlation of .170. for the instrumental data (I). There were no correlations within levels for total, supportive, or instrumental leadership style. Further, there were no correlations within divisions for total, supportive or instrumental leadership style with one exception. In one division the correlation coefficient was -.336 with $P=.060$ for the supportive data.

The second analysis tested the hypothesis that the means of the self and subordinates ratings were the same. The analysis was performed with all the data using total, I and S leadership dimensions.

Self vs Subordinate Mean Scores

	Total Score	S Dimension	I Dimension
Self/ Superior Mean	4.77	5.55	3.93
Subordinate Mean	4.14	4.71	3.57
Self > Sub. Mean	.63	.84	.36
F (1,108) =	19.63	57.38	3.59
P	<.0001	<.0001	=.06

It appears that the supportive dimension was dominating the overall result. Performing a similar analyses by level and division indicated no significant effects on means associated with level or division.

DISCUSSION

The correlation analysis indicated no relationship between superior and subordinate perception of leadership style so H_1 can be rejected.

The second analysis with ANOVA indicated a highly significant difference of +63 in the superior's self-rating and the rating actually provided by that paired subordinate. Thus H_2 must be rejected and the conclusion is that superiors have a higher or rose colored view of their leadership style than that perceived by subordinates. This is an important finding because the superiors are more positive about their leadership style as it "plays out" in practice.

The average difference for the supportive element is .84 with the instrumental element having a marginally significant mean difference of .36 between superior and subordinate reported ratings.

The supportive or consideration dimension thus indicates the greatest difference between self perception and subordinates' perceptions. The rose colored difference here is likely to be detrimental to long term productivity in organizations that require participative leadership styles.

For this pilot study the statistical information was not available soon enough for actual class discussion. Other content and process issues developed in the simulation were discussed in the debrief, but they are beyond the scope of this paper. They are well discussed in other Looking Glass literature. A debrief with the statistical information would have included small group discussion comparing actual results to the hypotheses. Large group discussion would then provide feedback about self and others leadership perceptions, which would lead to learning about leader behaviors. Further discussions would include the consequences of the blind area, managers believing they are using one style, while subordinates believe they are using another.

These results of similar statistical studies will be extremely compelling to students in the future if the instructor's previous experience with experiential education is any guide. Future classes may be expected to develop similar hypotheses and then learn from the feedback about actual results. Future studies, with a planned one-week turnaround, can be fed back as live data for class analysis. Further class discussion would include statistical analyses of each of the seventeen questions individually for further inferences and conclusions. Feedback will be corrective or reinforcing, as previously discussed, depending upon the congruence, or lack, in the superior versus subordinate information. These results also would be a powerful example of the blind area described in the Johari Window.

A disadvantage of using The Looking Glass, Inc. was discussed in an earlier article (Roberts, R. and Page, D. 1992). The simulation is expensive in dollars, instructor time, and class time. Procuring adequate space, maximizing benefits to students by ensuring they play a role commensurate with their abilities, ensuring that participants receive packets in a timely manner, and preparing name tags, signs and organization charts place a heavy time demand on instructors.

This expense suggests that the current data be used in the future. While an aha! from direct participation in the experiential exercise may be lacking, a powerful learning experience could be managed by using these data and results for class discussion as follows: 1) The Looking Glass, Inc would be described, with the rather sophisticated annual report being given to class members; 2) the topics of leadership style, feedback, and the Johari Window (all taught earlier) would be woven together and the class would hypothesize about the likely congruence of superior/subordinate perceptions; 3) the real data from this class would be presented. These data from an immediate past and close group of peers would be much more meaningful than an "old" and "distant" textbook presentation or data gathered from other sources.

In other words the students would be given the scenario, asked to develop hypotheses, and then given the previously derived statistical results for small group analyses, reflection and conclusions. This would allow the results of a very demanding simulation to be used by many classes, not just the lucky (or unlucky) few who participated directly.

Developments In Business Simulation & Experiential Exercises, Volume 20, 1993

CONCLUSION

The experiential nature of this exercise allows superiors to exhibit actual behaviors which subordinates evaluate. Thus subordinates are giving feedback on concrete behaviors. This feedback carefully facilitated, provides the mechanism for learning about perceptive differences by the entire class.

A total model or process for this leadership feedback learning experience includes the following:

1. Assist students in developing hypothesis relative to leaders' and subordinates perceptions of leadership behaviors.
2. Explain Looking Glass, Inc. simulation to students.
3. Run the simulation.
4. Administer leadership survey instrument.
5. Develop the data into statistics about leaders and subordinates' perceptions of leadership behaviors and provide to students.
6. Debrief
 - a. Facilitate discussion, first asking general questions such as: How did you feel about the simulation? (or similar questions to allow students to openly express themselves). Then pose more specific questions, such as what is your leadership style? Which behaviors... instrumental? supportive? were you more comfortable with? Which behaviors... instrumental... supportive? did you use more often?
 - b. Provide the statistical information to students in small groups so they can compare class hypotheses with actual results
 - c. Discuss differences in boss and subordinate perceptions in the large group.
 - d. Conclude with discussions about the Johari Window, the likely problems arising from differing perceptions of leadership behaviors, and mechanisms to mitigate those commonly found differences.

If the simulation is not run "live" skip steps 3 & 4.

In summary, The Looking Glass, Inc., focused on leadership behaviors and with carefully organized debriefing, can provide a powerful experiential learning experience for students.

REFERENCES

- Feldman, J. (1986) On the Difficulty of Learning from Experience in H. P. Sims, Jr. & D. A. Giora (eds.) The Thinking Organization San Francisco; Jossey-Bass
- Gentry, J. W., (1990). "What is Experiential Learning?" In Guide to Business Gaming and Experiential Learning. James W. Gentry (Ed) East Brunswick: Nichols/GP Publishing.
- House, R. J. and Dessler, G. (1974) "The Path Goal Theory of Leadership: Some Post Hoc and A Priori Tests' In J. G. Hunt and L. L. Larson (Eds.), Contingency Approaches to Leadership Carbon-dale, Ill.: Southern Illinois University Press.
- Jago, A. G., and Vroom V. H. (1975) "Perceptions of Leadership Style: Superior and Subordinate Descriptions of Decision-Making Behavior) in Hunt, J and Larson, L (Eds) Leadership Frontiers Carbondale, Ill.: Comparative Administration Research Institute. Graduate School of Business Administration, Kent State University.
- Kreitner, R. and Kiniki, A. (1989) Organizational Behavior Homewood, Ill. Irwin

Lombardo, M. M. & McCall, M. W. Jr (1982) Leaders on Line Observations from a Simulation of Managerial Work in J. G. Hunt, Uma Sekaran & Chester A. Schriesheim (Eds) Leadership Beyond Establishment Views. Carbondale, Ill: Southern Illinois University Press.

Lombardo, M., McCall, M. W., Jr., & DeVries, K. L. (1983) The Looking Glass, Inc. Administrator's Guide. Greensboro, NC: Center for Creative Leadership.

Luft, J. (1984) An Introduction to Group Processes An Introduction to Group Dynamics. 3rd Edition, Mountain View, California: Mayfield Publishing Company.

McCall, M. W., Jr. and Lombardo, M. M. (1982) Using Simulation for Leadership and Management Research: Through The Looking Glass. Management Science, 28, 533-549

Randel, J. M, Morris, B. A, Wetzel, C. D., Whitehill, B. V. (1992) The Effectiveness of Games for Educational Purposes: A Review of Recent Research. Simulation & Gaming 23, No. 3, pp. 261-276

Roberts, R. M. and Page, D. (1992) Executive Evaluation of College Student Learning via The Looking Glass, Inc. Simulation. Simulation and Gaming Vol. 23, No. 4 December 1992 Pp 499-506

Sashkin, M. & Morris, W. C. (1984) Organizational Behaviors, Concepts and Experiences Reston, Va: Reston Publishing Company, Inc.

Schriesheim, C. A., R. J. House, and S. Kerr (1976) "Leader Initiating Structure: A Reconciliation of Discrepant Research Results and Some Empirical Tests," Organizational Behavior and Human Performance, 15, 297-321.

Schriesheim, C. A. and Kerr, S. (1974). Psychometric properties of the Ohio State Leadership scales. Psychological Bulletin, 81, 756-765

Schriesheim, C. A. and Stogdill, R. M. (1975) Differences in factor structure across three versions of the Ohio State Leadership scales. Personnel Psychology, 28, 189-206

Stogdill, R. M. and Coons, A. E. (1957) Leader Behavior: Its Description and Measurement. Columbus: Ohio State University, Bureau of Business Research.

Thatcher, D. C. (1990) Promoting Learning Through Games and Simulations. Simulation & Gaming 21, (3), pp. 262-273