

# Developments In Business Simulation & Experiential Exercises, Volume 22, 1995

## THROUGH THE LOOKING GLASS INC.: SUPERIOR-SUBORDINATE PERSONALITY TYPE AND THE LENIENCY EFFECT

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### ABSTRACT

Participants in *The Looking Glass Inc.* simulation provided perceived frequency of self and supervisory leadership behaviors after the simulation. They also completed the Myers Briggs Personality Type Indicator. A comparison was made between supervisory and subordinate type and the leniency effect (difference in self-subordinate behavior ratings). Two personality type differences were significantly associated with the leniency effect. Implications are discussed.

### INTRODUCTION

The Bank of America, Wells Fargo, Exxon, Tenneco, The World Bank, British Petroleum, Continental Bank, Johnson and Johnson, and GTE have recently initiated upward feedback (Bernardin, Dahmus & Redmon, 1993) in an attempt to improve supervisory performance. Upward feedback refers to the process of subordinates anonymously evaluating their superior's performance (London & Wohlers, 1991). This differs from the past where the only feedback available was a performance appraisal conducted by a supervisor. Collapsing organizational structures and emphasis on teams have encouraged feedback from additional sources, which can include peers, subordinates, and customers. Feedback may allow a more accurate self-view for the supervisor and thus enable better supervisory performance.

Hazucha, Hezlett, and Schneider (1993) demonstrated the value of multiple perspective feedback through a two-year longitudinal field study. Using the Management Skills Profile manager behaviors were rated by the supervisor, peers, and subordinates. Their ratings were compared to the individuals self-rating in a feedback process. Two years later an evaluation indicated that enhanced skills resulted from the feedback process. This outcome is consistent with other evidence, which supports a relationship between self-rating accuracy and performance.

Bass and Yammarino (1991) reported that accurate self-perceivers tended to make more effective decisions than those who either over- or under-rated their own leader behaviors. Further, they reported that more successful Naval

officers were less likely to offer inflated self-ratings in relation to their subordinates. Reviewing previous literature, Yammarino and Atwater (1993) generally conclude that accurate self-perceivers are more successful, regardless of how success is defined.

A problem arises because generally self-ratings tend to be higher than others' ratings (Ashford, 1993; Atwater & Yammarino, 1992; Harris & Schaubroeck, 1988; Landy & Farr, 1980; Mabe & West, 1982). This is the so-called leniency effect. A meta-analysis describing the use of multiple sources for performance ratings (Harris & Schaubroeck, 1988) indicated high correlation between peer and supervisor ratings, but only a moderate correlation between self-supervisor and self-peer ratings. They examined the effect of rating format (dimensional vs. global), rating scale (trait vs. behavioral), and job type (managerial/professional vs. blue collar) on self-peer and self-supervisor ratings. The correlation of self-peer and self-supervisor ratings for managerial/professional employees was lower than that for blue-collar employees. An explanation offered for the lower correlation was that egocentric bias may be greater in ambiguous contexts (managerial/professional tasks) than in well-defined tasks (blue collar). The authors indicate the need for further research to identify other reasons for these self and other differences.

Farh and Dobbins (1989) also suggest more research is needed about the mechanisms that underlie disagreements in self and supervisor evaluations. Their study, using an experimental design with a control group, found significantly stronger correlations between self and supervisor ratings in an experimental group where self-raters had reviewed their peers' work before they made an evaluation. The correlations between self-ratings and objective performance indicators also were stronger when subordinates were presented with peer comparison information.

London and Wohlers (1991) studied differences between supervisor and subordinate perceptions using self-awareness indices. Biographical data and organizational variables (managerial level, line/staff

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and number of subordinates in the work group) were examined as possible correlates of interrater agreement in a Fortune 100 firm. They found that demographic variables did not predict agreement, but some significance was found for organizational variables, such as the strength of supervisor/subordinate relationships.

A further extension of this work (Wohlers, Hall, & London, 1993) investigated demographic variables and organizational type as possible correlates of agreement between subordinate ratings of supervisors and supervisors' self-ratings on motivation and performance items. Organization type, race, age, and participation in career planning by subordinates were related to supervisor and subordinate agreement. Atwater and Yammarino (1992) investigated correlates of leader characteristics and leader-other agreement. Characteristics included scholastic aptitudes, interests, conduct, leadership positions and leader behaviors. One group investigated was student leaders at the U.S. Naval Academy, and another group was Navy officers. The findings suggested that self-awareness (self-other agreement), particularly concerning leader behavior, is positively related to performance. The study indicates the value in obtaining multiple source ratings about leader behaviors and providing feedback to the leaders.

Researchers seeking relationships among personality types and managerial positions have investigated relationships with problem-solving and participative styles (Grove & Knowles, 1990; Hellriegel & Slocum, 1975, 1980; Schweiger & Jago, 1982), and cognitive style (McKenney & Keen, 1974). This present work continues the investigation of personality type and its influence on the leniency effect; the congruence of supervisor and subordinate evaluation of the supervisor.

Carl Jung classified patterns of human behavior into basic personality preferences. Myers and Briggs developed the Myers Briggs Type Indicator (MBTI) to reflect these basic preferences. The full personality type (Myers & McCaulley, 1985), which includes perceptive processes, judgement processes, orientation, and lifestyle, will be discussed in the hypothesis section. Research in performance appraisal and in teaching indicates that similarity on the MBTI influences the relationship of paired individuals. Basically, whatever the combination of preferences, people with similar preferences find it easier to understand each other (Myers, 1980; Lawrence, 1989). This understanding may or may not translate to closer self-subordinate evaluations.

Leadership research indicates that effective leaders use two kinds of leader behaviors, instrumental and supportive (Stogdill & Coons, 1957). Instrumental leader behaviors are those actions "directed at clarifying subordinate role expectations," and supportive leader behaviors are those actions considered "friendly and approachable, and considerate of the needs of subordinates" (House and Dessler, 1974, pp. 39-40).

This study investigates the effect of MBTI personality preferences on self-reported and subordinate reported instrumental behaviors in an experimental environment, which will be discussed in a later section. The focus of this paper is the relationship, or leniency effect, between supervisor and subordinate perceptions of supervisory instrumental behaviors and personality preferences as defined by the MBTI.

### HYPOTHESES

The Extraversion/Introversion preference describes personal orientation. Extraversion (E) occurs when attention and energy is directed outside to the world of actions, people and things--interacting with the environment. Introversion (I) occurs when attention and energy is directed to a person's inner world of ideas and feelings--focusing inward and exploring one's thoughts. Introverts prefer quiet, a time to consider things, and are less interested in others' views of themselves. An individual with extraversion preference is more likely to verbalize and present behaviors and also to recognize these behaviors. Es are also more likely to be interested in how others' view their behavior. An introversion preference on either side of the supervisory-subordinate relationship (or both) may lower the communication and thus allow a greater leniency effect.

Hi Supervisors with extraversion preference paired with subordinates with extraversion preference will evidence less leniency effect relative to the other three-paired groups.

The sensing (S) and intuition (N) preference describes two ways of perceiving. The S preference pays attention to immediate, real practical facts of life; experience as it is. The N preference pays attention to possibilities, relationships and meanings of facts. Sensing types, as supervisors, are likely to seek and report precise detail and thus provide a more accurate (less favorable) report of their behaviors. The intuitive types as subordinates, would be less attuned to actual facts, more to possibilities and so 'grade' supervisory behavior more favorably than it may be.

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Also sensing subordinates may be more realistic evaluators while intuitive superiors, using less factual detail, may evidence a greater self-leniency. Thus, the supervisor with S preference will evidence less leniency effect when paired with subordinates with N preferences.

H2 Supervisors with sensing preferences paired with subordinates with intuitive preferences will evidence less leniency effect relative to the other three-paired groups.

The thinking (T) and feeling (F) preference describes differences in judgement. The T preference uses logic and impersonal analysis to reach a decision. The F preference makes judgements based on personal values, human relationships, and warmth, empathy and compassion. It would seem that the combination of a superior with the thinking preference (impersonal analysis) and the subordinate with feeling preference (compassion) would evidence the lowest leniency effect than the other combinations. Feeling preference supervisors may evaluate themselves more positively (lenient) while thinking preference subordinates may evaluate their supervisors more negatively which would contribute to the leniency effect.

H3 Supervisors with thinking preference paired with subordinates with feeling preference will evidence less leniency effect relative to the other three-paired groups.

The judgement (J) and perception (P) preference describes the management of one's outer life. A person, who prefers judgement has a drive toward decisions, plans, organization and control. The perception preference is spontaneous, adaptable, open ended and looking to new perceptions and data. The experimental exercise for this study was very fast paced, ill defined and open-ended. In this environment the judgement preference subordinates would be uncomfortable, unable to affect closure, and thus likely rate supervisory instrumental behaviors as inadequate and low. The perception preference supervisors, on the other hand, would be comfortable in the environment, provide less direction, and would have a tendency to over report their instrumental behaviors. Thus this combination would develop the greatest leniency effect.

H4 Supervisors with perception preference paired with subordinates with judging preference will evidence more leniency effect relative to the other three-paired groups.

### METHOD

#### Sample

The subjects for the study were undergraduate management students in a mid-sized Southern university. The study included 77 participants, of whom 66 (56%) were females. Three undergraduate introductory management classes were combined for the simulation experience.

#### Simulation

The Looking Glass, Inc. simulation is a complex in-basket organizational exercise, which creates a day in the lives of twenty managers in a mid-sized manufacturing corporation. It is a fast-paced, fact filled and ill-defined environment; and there is insufficient time to attend to the many situations in the simulation. The Looking Glass, Inc. operates with four hierarchical levels: a President, three Vice Presidents, nine Directors, and seven Plant Managers. Participants in the simulation are free to call meetings, write memos, and make or defer decisions. For further information about the simulation, see Lombardo, McCall, and Devries (1983). For this study, six Looking Glass organizations were established to accommodate the 77 participants.

#### Procedure

Students were assigned to one of the six Looking Glass organizations and to a role within their organization prior to the simulation. They were given supporting materials to read in advance, and the simulation was operated for four hours on one Saturday. The exercise was processed for about two hours after completion. Students had full autonomy in how they conducted business. All students acted in the role of manager at some level, and thus all were in their future role aspirations. They took their roles in this simulation very seriously and performed their functions in a professional manner.

#### Measures

Leader behavior was measured using the House and Dessler (1974) Instrumental and Supportive Leadership Scale, modified slightly to fit the investigation. Instrumental behaviors were the focus of this research because the investigators believed that the time allowed for the simulation and its fast paced nature would preclude accurate development of supportive behaviors. There were seventeen items included, and two congruent questionnaires which

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measured supervisor self-report and behaviors and a subordinate report and behaviors. The subordinate version of the scale asked respondents how frequently their boss actually behaved in a particular way towards them. Scale anchors were numerical from 1 (“almost always”) to 7 (“almost never”). A mirrored version of the scale was administered to the supervisors. Supervisors indicated for each subordinate how frequently they engaged in particular behaviors. Thus, supervisors were required to fill out as many questionnaires as they had subordinates. The Myers Briggs Type Indicator (Form G; MBTI) was used to obtain polar cognitive style data for each participant in the exercise. The four dimensions have been discussed in the hypothesis section.

### Analysis

A difference score was computed for each superior-subordinate dyad for the instrumental supervisory behaviors. The difference was computed as the subordinate’s rating minus the supervisor’s self-rating. Thus, negative scores indicated that supervisors believed they provided more of the leader behavior than did the subordinate. A positive score indicated the reverse.

For each dimension of the MBTI, four groups were created to include the possible combinations of each polar preference for each supervisor-subordinate dyad. Separate one-way ANOVA’s were run on the difference scores of the four groups. Any significant main effects were followed up with post-hoc least significant difference (LSD) tests. The sample size was reduced from 117 to 85 due to missing MBTI scores and incomplete supervisor-subordinate data.

### RESULTS

There was no significant result for the first hypothesis. Less leniency effect was not apparent for supervisors and subordinates who each had extraversion preferences. A significant main effect occurred for the second hypothesis, regarding the sensing vs. intuitive dimension [ $F(1,81) = 3.43, p < .05$ ]. Post hoc analyses indicated that for sensing supervisors and intuitive subordinates, the leniency effect was positive. That is, the subordinates reported more instrumental behavior than did the supervisors. In the other three groups, the supervisor reported more instrumental behavior than did the subordinates (see Table 1).

There were no significant results for the third hypothesis. Thinking and feeling preferences did not relate to the leniency effect in this study. The second significant main effect occurred for the fourth hypothesis about the

judgement vs. perception dimension [ $F(3,81) = 3.78, p < .05$ ]. Post hoc analyses of this effect indicated that perceptive supervisors and judging subordinates were associated with a greater (more negative) leniency effect (see Table 2 for cell means).

**TABLE 1**  
Cell Means and Standard Deviations  
for Sensing Vs. Intuitive Types

		Supervisor Type	
		Sensing	Intuitive
Subordinate Type	Sensing	-.550 (2.307) n = 33	-.883 (1.466) n = 19
	Intuitive	.819 (2.028) n = 19	-1.405 (1.879) n = 11

Instrumental Behavior

**TABLE 2**  
Cell Means and Standard Deviations for  
Judgment Vs. Perception Types

		Supervisor Type	
		Perception	Judgment
Subordinate Type	Perception	.180 (1.897) n = 18	.021 (1.772) n = 18
	Judgment	-1.633 (2.376) n = 16	-.178 (2.082) n = 33

Instrumental Behavior

Summarizing, there was support for hypotheses two and four. In the first case the subordinates reported more instrumental behavior than the supervisors thought they were providing, and in the second case the subordinates reported less instrumental behavior than the supervisors thought they were providing. These differences were predicted based on consideration of the MBTI dimensions and they have implications for enhancing supervisory behaviors.

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### DISCUSSION

This research indicates that certain combinations of personality preferences seem to be related to the difference in the supervisor and subordinate view of the supervisor's behaviors. Perception supervisors, who do not move toward closure, over rate their instrumental actions in relation to their judgement subordinate. In this case the subordinate is seeking more certainty, planning and direction and the unaware supervisor is not providing it. Previous research has found that the leniency effect is related to supervisory performance, measured in several ways; so this result indicates a problem to be resolved.

A very interesting result is evident in Table 1. Contrary to most literature about the leniency effect, sensing supervisors underrate their instrumental behaviors to intuitive subordinates. This negative leniency effect requires some consideration. Perhaps the supervisor responds to immediate facts with input to subordinates but does not, on reflection, consider this as instrumental behavior. However, the subordinate, as an intuitive more comfortable with possibilities and relationships, may over respond and over report these inputs as directive behaviors. The point here is that this supervisory underrating, a negative leniency effect, is likely detrimental to the supervisory-subordinate relationship and to supervisory performance.

This research suggests an additional factor, which affects a supervisor's lack of accurate self-perception. If supervisors were aware of their personality types and the types of their subordinates, and the potentials for inaccurate self-awareness, then they may be able to overcome this detrimental effect. They may deliberately change their leadership behaviors to match subordinate needs in the specific work environment.

Feedback and training sessions could be designed to include both the supervisor and his/her subordinates. Training around supervisor-subordinate personality typing would explore the potential differences in viewpoints about supervisory behavior, and develop understanding and actions to mitigate problems arising from specific personality combinations.

A few caveats about this study are apparent. The study must be considered preliminary. One group of approximately 100 individuals was used to generate the data. Many more investigations need to be undertaken before general conclusions are appropriate. Also student subjects were used for the

study. Results will be more convincing as they are developed from ongoing work environments. Work environments also would provide sufficient time for supervisors and subordinates to fully view the supervisor's behaviors. This would address the problem of the short-term nature of the Looking Glass simulation and also allow investigation of the supportive dimension of leadership behavior.

This work, an early look at personality type differences and their relationship to the leniency effect, found some relationships between the two variables. However, much work remains to be done for definitive conclusions about these relationships.

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