

THE EFFECT OF PERCEIVED ATTITUDE
SIMILARITY ON PERFORMANCE
RATINGS

by
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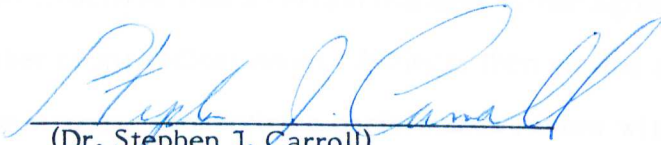
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ABSTRACT

Title of Dissertation: The Effect of Perceived Attitude Similarity
on Performance Ratings

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Dissertation directed by: Dr. Stephen J Carroll
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This research consists of a laboratory study designed to test the notion that variance in performance ratings can be accounted for by the perception of the rater that the person s/he is evaluating is attitudinally similar or dissimilar to himself or herself.

Student subjects were led to believe that a certain manager either agreed or disagreed with them on a number of attitudinal issues. Subjects then viewed a videotaped performance of the manager conducting a performance review with one of his problem subordinates. Subjects were asked to rate his performance using two different rating instruments -- a trait rating scale and a Behavior Observation Scale -- and to indicate personal liking for the manager.

Extent of attitude similarity was manipulated on two levels with a control group. That is, some subjects were led to believe that the ratee was attitudinally similar to self, others that the ratee was dissimilar to self, and a third group received no information about the ratee's attitudes.

The ratee's performance was manipulated on three levels. Some subjects viewed only a high performing manager, others viewed a moderate performer, and a third group viewed a low performing manager. Three different vignettes were prepared to represent the three levels of performance.

Finally, a hard-performance-data condition was included to test the robustness of the attitude similarity effect. Some subjects received hard performance data, in the form of bar graphs, that was consistent with the level of performance

portrayed in their videotaped vignette (i.e., those viewing the low performer received hard data indicative of low performance).

It was hypothesized that perceived attitude similarity would have its greatest effect when performance was moderate, and when subjects did not receive hard performance data. The results did not support these predictions. The effect of perceived attitude similarity on performance ratings was not significant under any of the experimental conditions. Perceived similarity had a small, but significant effect on attraction; however, level of performance accounted for a far greater proportion of variance in attraction measures than perceived similarity. It was concluded that the rating task in this experiment failed to create the conditions under which perceived similarity would be most likely to exert an influence on ratings. Specifically, the rating task was not sufficiently ambiguous for student raters.

To a patient and lovely man,
Dr. Abraham A. Katz, and our
little boys, David and Michael

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INTRODUCTION

The validity of performance ratings is a primary issue to organizations who use ratings in personnel decision-making, individuals who participate in the rating process, and individuals who expend a great deal of research effort attempting to improve rating accuracy.

Much of the research has focused on improving psychometric properties of rating scales. Other research has dealt with rater training programs, and biases associated with rater and/or ratee characteristics. In a comprehensive review of the rating literature, Landy and Farr (1980) suggest that research in these areas has reached an upper limit in accounting for variance in performance ratings. New, hopefully, more fruitful directions for research are recommended. One is the development of descriptive models of cognitive processes involved in rating tasks. Describing the cognitive processes whereby raters select, encode, organize, evaluate information and produce ratings may suggest constructive interventions to improve rating effectiveness.

Recently, researchers have begun to conceptualize performance appraisal as an exemplification of human information-processing within a social context (Carroll and Schneier, 1982; Ilgen and Feldman, 1983; Banks, 1982). These models borrow from Newell and Simon's work, in which the individual is conceptualized as an information-processor, and the field of person perception, which addresses the nature of the information processed (i.e., information about people) (Newell and Simon, 1972; Schneider, Hastorf and Ellsworth, 1979).

Performance appraisal may be viewed as an instance of interpersonal evaluation. Rater and ratee are continually reacting to and evaluating one another on the basis of information known about the other. That is, performance evaluation takes place within the context of an on-going interpersonal relation-

ship. However, information known about the ratee at any given point in time, may not be relevant to the task of evaluating his or her performance, and, in fact, may create cognitive or motivational biases for the rater that impact the accuracy of his ratings. For example, the desire to perceive a liked other as also being competent at his or her job may induce the rater to evaluate the ratee as being more competent than s/he actually is.

One category of bias-inducing information is knowledge of "attitude similarity" -- that is, the extent to which the rater views the ratee as attitudinally similar to himself or herself. A substantial literature examining the effects of attitude similarity on interpersonal evaluation (expressed mainly via trait ratings) suggests that attitude similarity is a persistent and fairly robust source of bias in ratings. It has been studied in relation to performance appraisal in only a few studies. However, the research to be reviewed shortly seems to indicate (1) a relationship between actual similarity in attitudes of the superior and subordinate and performance ratings, and (2) an effect of knowledge of similarity on decisions to hire and salary recommendations in laboratory settings. The study of attitude similarity in relation to performance ratings holds promise of identifying a source of bias -- a rater variable that can be accounted for and controlled for, to make ratings a purer reflection of performance per se.

The purpose of this dissertation is to present a laboratory research project investigating the impact of attitude similarity information on performance ratings. Before describing the methodology and experimental design used, we will review relevant research in the areas of attitude similarity and person perception. Chapter 1 contains a brief chronology of relevant developments in attitude similarity research, a summary of the empirical literature and a comment on its relevance for the study of performance appraisal. Chapter 2 draws theoretical and empirical work from the area of person perception that may help

us to understand how attitude similarity information enters cognitive operations of raters to influence the rating process. We present a model that attempts to describe how the appraiser integrates knowledge of similarity with performance-related information such that bias occurs in ratings. This model provides a conceptual framework for the research presented here. Chapter 3 describes how constructs were operationalized in this dissertation research. Chapter 4 is a formal statement of the hypotheses, and Chapter 5 presents the experimental design and methodology used. Chapters 6 and 7 present the results, an interpretation of the findings and implications for future research.

CHAPTER I

ATTITUDE SIMILARITY, INTERPERSONAL EVALUATION AND PERFORMANCE APPRAISAL

This dissertation research consists of a laboratory study designed to test the notion that variance in performance ratings can be accounted for by the rater's perception that the person s/he is evaluating is attitudinally similar or dissimilar to himself or herself. Since performance appraisal may be considered a type of interpersonal evaluation, this chapter focuses on that portion of the attitude similarity literature that addresses how the perception of similarity may influence interpersonal evaluation in general, and performance appraisal in particular.

The construct of attitude similarity has been operationalized two ways in the literature. One operationalization focuses on attitude similarity from a single dyad member's perspective. The unit of analysis is dyad member A's perception of agreement with dyad member B on any particular issue X or group of issues. Perceived attitude similarity (hereafter referred to as PAS) is usually studied in relation to A's evaluation of and/or attraction to B, and occasionally, the extent to which A perceives that the attraction is reciprocated by B (i.e., inferred reciprocal liking). Studies manipulating PAS as an independent variable are almost exclusively laboratory studies.

A second way of operationalizing attitude similarity is by making a direct comparison of person A's and person B's attitudes on an issue X or group of issues. Studies that have focused on actual similarity in dyads have been mainly conducted in field settings. A major subset of these have used performance evaluation as a dependent variable.

Only one study to date has incorporated PAS as an independent variable and performance appraisal as a dependent variable within the same study. This study,

by Pulakos and Wexley (1983), found a positive relationship of perceived similarity to performance ratings in a field setting. This dissertation research attempts to develop an explanation for the impact of PAS on performance ratings and attempts to test the plausibility of that explanation in a laboratory setting.

Following a brief chronology of theoretical and empirical developments in the area of attitude similarity, studies relevant to the relationship of PAS to interpersonal evaluation and performance appraisal will be reviewed.

Chronology of Theoretical and Empirical Developments

Fritz Heider (1946, 1958) is credited with the earliest theoretical statement of the relationship between attitude similarity and interpersonal evaluation. He argued that people strive to maintain balanced psychological states. Hence, if from A's perspective, A and B share common beliefs or feelings about object/issue X, A will tend to evaluate B positively; conversely, A will tend to dislike B to the extent that s/he perceives lack of commonality in beliefs or attitudes with B.^{*} A balanced state exists when one is in agreement with a liked other. It is subjectively experienced as pleasant, harmonious, and logically consistent. An imbalanced state comes into being when A perceives himself in disagreement with a liked person, or in agreement with a disliked person. The psychological tension thus created motivates A to restore harmony in the system, either cognitively or behaviorally. He may, for example, change his own attitudes toward X to conform to those of a liked B, induce B to change his or her attitudes, or simply perceive B's attitudes as more similar than they actually are.

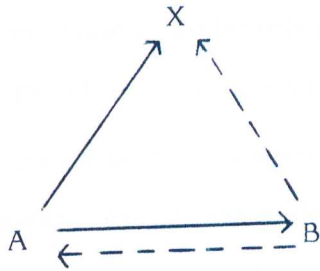
^{*}Although Heider used a P-O-X notation, we will maintain Newcomb's A-B-X notation for the sake of consistency throughout the text.

Newcomb (1968) proposed a third category of relations--the non-balanced state. This state exists when A dislikes B, regardless of whether they agree or disagree. Newcomb argued that non-balanced states are intermediate in inducing psychological tension because (1) A would be relatively indifferent to the attitudes of a disliked B; hence, agreement with a disliked individual would not be experienced as being quite as pleasant as agreement with a liked B, yet (2) A's dislike for B implies that the feelings are mutual, and the fact of being disliked produces psychological tension beyond indifference.

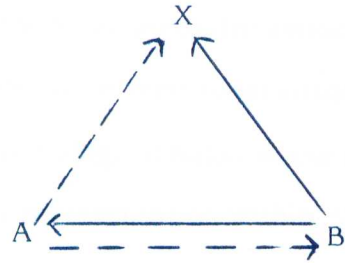
Subsequent research has substantiated Heider's balance effects and Newcomb's modification (i.e., Crano and Cooper, 1973; Cacioppo and Petty, 1981; Gutman and Knox, 1972; Insko, Songer, and McGarvey, 1974). One popular research strategy requires that subjects examine combinations of agreement and attraction in A-B-X triads, as in Figure 1, then either (1) rate them as to pleasantness, harmony, tension or logical consistency (i.e., Miller and Norman, 1976; Whitney, 1971), or (2) specify the third relation when two are given (i.e., Carroll, 1977; Garbing and Hunter, 1977). More creative approaches have incorporated real-life descriptions of A-B-X situations into the design, or have asked subjects to supply names of persons and issues to be used in constructing the triads (i.e., Gutman and Knox, 1972; Crockett, 1974).

Another experimental paradigm used in substantiating the agreement-attraction relationship was developed and popularized by Donn Byrne and his colleagues (see Byrne, 1971). Subjects were led to believe that a hypothetical "other" agreed or disagreed with them by perusing an attitude questionnaire supposedly filled out by the other. Actually, the experimenter had filled it out to agree/disagree with the subject's own views as expressed earlier on the same questionnaire. The subject then evaluated the other as to extent of liking and on several character traits. This research strategy has consistently supported

PAS (Perceived Attitude Similarity)

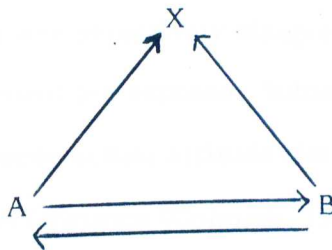


(a) From A's Perspective



(b) From B's Perspective

AAS (Actual Attitude Similarity)



(c) External Perspective

Figure I. Phenomenal and interpersonal A-B-X systems
(as explicated in Newcomb, 1953).

NOTE: Solid lines indicate an individual's own cognitions regarding another individual or object/issue X; dotted lines indicate perceptions of another's cognitions. Hence, in (a) above, $A \longrightarrow B$ represents A's evaluation of B, and $A \leftarrow \cdots B$ represents how A perceives that B evaluates A.

relationships, not only between attitude similarity and liking, but between attitude similarity and other trait attributions as well. Byrne, however, offers a stimulus-response explanation for his findings. He conceptualizes attitudes as reinforcing stimuli that elicit positive affect; the reinforcing property being the consensual validation of one's own beliefs (see Byrne, 1971, for a complete discussion).

In 1953 Newcomb extended balance principles to interpersonal situations. Balance theory principles were applied to both psychological balance and interpersonal balance. Imbalance is identified either as a representation within A's phenomenology, creating psychological tension for A, or as an objective state of affairs creating "strain toward symmetry" in the relationship between person A and person B. Neither attraction nor agreement is specified as the independent variable. Rather, the two occur in dynamic interaction. For example, mutually attracted individuals discover agreement and strive for agreement through communicative acts. Individuals who objectively disagree are less attracted to one another as areas of disagreement are exposed. Subsequent research has shown significant relationships between actual attitude similarity in dyads and superior's evaluations of subordinate performance (Golmieh, 1974; Miles, 1964; Senger, 1971; Wexley, Alexander, Greenawalt, and Couch, 1980), as well as interpersonal attraction (Griffitt and Veitch, 1973).

Studies that have manipulated the perception of similarity, for example, by using the Byrne experimental paradigm, are summarized in Table 1. Only one of these incorporated performance appraisal as a dependent variable. Studies that have examined actual similarity in dyads in relation to performance appraisal are summarized in Table 2.

TABLE 1

SUMMARY OF PERCEIVED ATTITUDE
SIMILARITY STUDIES

Study	Lab/ Field	Nature Of Dyad	Experimental Design	<u>X</u>	How Was Perception Of <u>X</u> Measured	PAS Manipulation	Significant PAS Relationships Shown	Non-Significant PAS Relationships Shown	Comments
Batchelor and Tesser (1971)	L	Student — Phantom	2x2x5 Factorial Sex of subject X attitude similarity X attitude base	A set of hetero- geneous issues	Attitude question- naire	Agreement/ disagreement on a single issue	Attraction($p < .01$) Similarity to self ($p < .001$) Inferred recip- rocal liking ($p < .001$) Evaluation of phantom's in- telligence ($p < .001$) Of phantom's knowledge of current events ($p < .001$) Morality ($p < .001$) Adjustment ($P < .001$)	None	
Bleda (1972)	L	Female students- Phantoms		Heterogeneous	Attitude question- naire	Unique stranger	Attraction ($p < .005$) Perceived height ($p < .02$)		

Byrne, et.al. (1971)		Students from five cultures --Phantoms	Task: Evaluate "other" on IJS	Heterogeneous	Attitude question- naire	Standard stranger	Attraction ($p < .0001$) Intelligence ($p < .0001$) Current events ($p < .0001$) Morality ($p < .0001$) Adjustment ($p < .05$)	None
Goldstein and Davis (1972)	L	Students-- Phantoms	2x2x2 Factorial (Phantom's race x Phantom's position on minimum income issue x Phantom's posi- tion on U.N. issue)	There should be a guaran- teed annual income for U.S. families. The U.S. should abide by any deci- sion made by the U.N.	Attitude question- naire	Agreement or disagreement on each issue	Sim. on income <u>issue related to:</u> Acquaintance acceptance- rejection Friend acceptance- rejection Social distance measure	Sim. on U.N. issue not <u>related to:</u> Acquaintance Friend Social distance
Good and Good (1977)	L	Students-- Hypothet- ical convicts		Heterogene- ous	Attitude question- naire	Unique stranger	Evaluations of emotional maturity ($p < .001$) Sense of personal responsibility ($p < .001$) Control of violent impulses ($p < .05$) Personal liking ($P < .001$) Willingness to parole ($p < .001$)	None

Hendrick, Bixenstein and Hawkins (1971)	L	Students-- Videotaped actors	2x2x2 Factorial (Subject's attitude X position of stimulus person x tape used) Task: Evaluate one of the discussants shown on videotape	U.S. involvement in Viet Nam	Opinionnaire	"Modified Standard Stranger"-- each stranger took either a "pro" or "con" position	(Actor's position X subject's position = similarity effect) Liking ($p < .0001$) Evaluation of presentation ($p < .05$) Bias in presentation ($p < .003$) Open-mindedness ($p = .0001$) Easy-going ($p = .0005$)	Intelligence ($p = .06$) Friendly ($p = .06$) Cynical Social distance scale items
Hendrick and Taylor (1971)	L	Male students-- Phantom	2x2 Factorial (Behavioral aggression exhibited by "other" X belief similarity) Task: Compete with Phantom in a reaction time experiment where "winner" sets shock level received by loser	Heterogeneous	Attitude questionnaire	Unique stranger	Liking ($p = .002$) Honest Intelligent	Shock settings of S for Phantom Neurotic Insensitive Cowardly Afraid Thoughtless Cruel Unfair Kindly

Kian, Rosen, and Tesser (1973)	L	Students-- Phantom	3x3x4 Factorial (Name of other X attitude similarity) <u>Task:</u> Presen- tation of a similar atti- tude statement and/or name of "liked" other as reinforce- ment on a dis- crimination task	Heterogeneous	Attitude question- naire	Agreement/dis- agreement of statements		Performance	
Krivosos, Byrne and Friedrich (1976)	L	Male stu- dents -- Phantom	3x3 Factorial (Similarity X task level) <u>Task:</u> evaluate a transcript of a perform- ance appraisal situation	Unspecified, Assume heter- ogeneous	Attitude question- naire	Unique stranger	Attraction ($p \leq .01$) Task perf. ($p \leq .05$) Positivity of affect felt by subject ($p \leq .01$)	None	
Layton and Insko (1974)	L	Male stu- dent -- Opposite sex Phantom	2x3 x2x2 (Attitude simi- larity X phy- sical attract- iveness of other X anticipated evaluation by other X antici-	Heterogeneous	Attitude question- naire	Unique stranger	Liking ($p \leq .01$) Inferred recipro- cal liking ($p \leq .01$) Desire to work with ($p \leq .01$) How rewarding it would be to interact socially ($p \leq .01$)	How interest- ing to talk with	Similarity X attractive- ness: Liking ($p \leq .05$) Dating ($p \leq .02$) Perceived sim- ilarity ($p \leq .005$) (Attitude sim-

			pated inter- action with other)				To what extent would consider dating ($p < .01$) Physical attrac- tiveness ($p < .01$) Intelligence ($p < .01$) Perception of similarity ($p < .01$)		ilarity had greater effect with an attractive partner) Similarity X anticipated interaction: Liking ($p < .001$) Working ($p = .029$) Social rewards ($p = .04$) (Similarity effect greater in <u>no anti-</u> <u>cipation</u> con- dition)
Russ, Gold, and Stone (1979)	L	Female stu- dents-- Phantoms	2x3 Factorial (Attitude similarity X cognitive uncertainty)	Unspecified, assume hetero- geneous	Attitude question- naire	Unique stranger	Attraction ($p < .05$)	None	
Silverman (1974)	F	Male stu- dents-- Phantoms	2x2x2x2 (Race X attitude simi- larity X con- sequences vs. no consequences X value similarity)	Heterogeneous	Attitude survey	All similar vs. all dissimilar	Preference as a roommate ($p < .01$)		Percentage of variance accounted for: Att. sim.= 36% Value sim.= 3% Race sim.= 3%

Smith, Meadow, Sisk (1970)	L	Male students--Phantoms	Evaluation of other from his questionnaire response Observation of other in a paired-associate learning experiment Re-evaluation of other	Heterogeneous	Attitude questionnaire	Unique stranger	Pre-observation attraction ($p < .001$) Post-observation attraction ($p < .001$) Evaluation of other's performance ($p < .02$)	Estimate of how intense the shocks received by other were	
Stroebe, Insko Thompson and Layton (1971)	L	Students--Phantoms	3x3x2 Factorial (Attitude similarity X physical attractiveness of other X sex of subject)	Unspecified, Assume heterogeneous	Attitude questionnaire	Unique stranger	Liking ($p < .01$) Preference as a co-worker ($p < .01$) Likelihood of considering as a date ($p < .01$) Likelihood of considering as a marriage partner ($p < .01$)	None	
Tashakkori and Insko (1979)	L	Students--Phantom	4x4 (Condition of $P \rightarrow X$ relationship X conditions of $O \rightarrow X$ relationship)	Heterogeneous	Attitude questionnaire	Subject fed back O's responses on cathode ray screen to match experimental condition	Sim. (" $P \rightarrow X$ " x " $O \rightarrow X$ " interaction): Liking ($p < .01$) Preference as a co-worker ($p < .01$) Inferred reciprocal liking ($p < .01$)		Agreement on extreme attitudes (Both +2 or Both -2) produced more liking than neutral attitude (Both zero)

Tesser (1971)	L	Male students-- Phantom	2x2 Factorial (Evaluative similarity X structural similarity)	Heterogeneous	Attitude question- naire	Unique stranger <u>Evaluative Sim.</u> Proportion of similar items <u>Structural Sim.</u> Extent to which other sees same pairs of items as "going together"	<u>Evaluative Sim.</u> Attraction ($p < .01$) How well S thought he could predict other's responses to another set of items ($p < .01$) Whether other was viewed as taking into account the same aspects of items S would ($p < .01$) Other's intelligence ($p < .01$) Knowledge of current events ($p < .05$) Morality ($p < .05$) <u>Structural Sim.</u> Attraction ($p < .01$) Whether other's opinions were consistent ($p < .01$) Ability to predict other's responses ($p < .05$) Intelligent ($p < .05$)	<u>Evaluative Sim.</u> Whether other's opinions were consistent Self-confident Gregarious Extroverted <u>Structural Sim.</u> Adjustment Knowledge of current events Self-confident Gregarious Extroverted
Touhey (1974)	L	Students evaluating a hypo- thetical dyad	3x5 (3 levels of agreement in the hypothetical dyad X 5	Heterogeneous	Not assessed	Created by manipulation of propor- tion agree- ment in hypothetical	Estimates of B's attraction to A ($p < .01$ $p .005$)	

			levels of attraction of <u>B</u> to <u>A</u>) <u>Task:</u> <u>Ss</u> are given proportion agreement within the dyad and <u>B</u>'s attraction for <u>A</u>. <u>Ss</u> then (1) predict <u>B</u>'s attraction for <u>A</u>; (2) evaluate <u>B</u>'s personality given his attraction for <u>A</u>; (3) give own attraction to <u>B</u>.		dyad			
Veitch and Piccione (1978)	L	Students—Phantoms	Separate 2x2x4 Anova's for each dependent variable (Sex of subject X attitude similarity X shocking pattern) <u>Task:</u> to evaluate the hypothetical subject from an	Heterogeneous	Attitude questionnaire	Unique stranger	Attraction ($p < .001$) Intelligence ($p < .05$) Knowledge of current events ($p < .001$) Better intentioned ($p < .001$) Behavior more justified ($p < .001$)	

		earlier exper- iment adminis- tering shocks to another for wrong answers							
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PERSONNEL DECISIONS

Baskett (1973)	L	Student -- Phantom	3x2 Factorial Phantom's competence X attitude similarity Task: Evaluate Phantom as applicant for a position	Statements on interpersonal trust and faith in the environmental protection process	Attitude questionnaire	Unique stranger	Recommended salary ($p < .05$)	Recommendation to hire	
Griffit and Jackson (1970)	L	Students--Phantom applicants	2x3 (similarity X ability of applicant)	Heterogeneous	Attitude survey	Proportion of similar items	Hiring recommended ($p < .001$)	Salary recommended (but influenced trait ratings on an IJS)	Ability: hiring recommendation ($p < .01$) Significant interaction with ability on hiring recommendation (Lowest rating in mod. ability, low similarity condition). Both hiring recommendation and salary recommendation positively correlated

Latham, Wexley and Pursell (1975)	F	Managers--video applicants	"After only" 4 measures	General	Assumed similarity: culturally disadvantaged applicant vs. typical middle class as expressed by background and attitude information on video		Recommendation to hire (in control group only--untrained regarding error) "similar-to-me"	Recommendation to hire (for two groups trained to avoid the "similar-to-me" error)	with attractiveness. (p<.01 ea.)
Peters and Terborg (1975)	L	Student--Phantom Applicant	2x2 (Similarity X favorable vs. unfavorable info. about applicant presented first)	Heterogeneous issues	Attitude survey	Similarity to stranger .00 → 1.00	Attraction (≤.01) Anticipated more pos. relations (p<.01) More likely to hire (≤.01) Salary recommendation (≤.01)	Capability of learning job Getting along with co-workers	Fav. info first more likely to hire
Pulakos and Wexley (1983)	F	Vertical Dyads	2x2x2x2 Factorial (Manager's perceived similarity X subordinate	No <u>X</u>	Not assessed	Perception of similarity to other assessed by a Likert-type question embedded in a biographical	Manager's perceived similarity: Subordinate's evaluation of superior's perf. (p<.00001)		

		perceived similarity X manager's sex X subordinate sex)		and attitu- dinal information form	Superior's eval- uation of sub's. perf. (p <.00001) Subordinate's per- ceived similarity: Subordinate's evaluation of superior's perf. (p <.00001) Manager's per- ceived similarity X sub's perceived similarity: Sub.'s evaluation of sup.'s perf. (p <.00001)	
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TABLE 2
SUMMARY OF ACTUAL ATTITUDE SIMILARITY STUDIES USING
PERFORMANCE EVALUATION AS A DEPENDENT VARIABLE

STUDY	FIELD	Dyad	<u>X</u>	How Was Perception of <u>X</u> Measured?	Index of Comparisons	Significant Relationships Reported (To Similarity)	Non-Signifi- cant Relationships Reported
Golmieh (1974)	F	Vertical Dyads - Social workers and supervisors	Content of sub- subordinate's job	Fine's Functional Job Analysis Self-Report	Correlation coefficients	Superior's rating of: (1) subordinate's adjustment to work situation (2) Quality of output (3) Overall job performance Overall performance	None
			Job content plus social/psycho- logical require- ments of job	Porter and Henry's Inner - Other Directed Questionnaire	Correlation coefficients		
Miles (1964)	F	Vertical Dyads	Management Theory Concepts (Motivation, organization, administration, role of govern- ment, unions)	45-item attitude scale	D Scores	Superior's overall judgment of sub- ordinate's performance	None

Nieva
(1976)

F

Vertical Dyads

Value of extrinsic job factors	Responses to two Likert-type questions (i.e., how desirable to you is it that your job security is good?)	D scores on means of scales	None	
Value of intrinsic job factors	Responses to seven Likert-type questions (i.e., how desirable is it to you that you have the chance to develop your own special abilities at work?)	D scores on means of scales	Level of subordinate's intrinsic rewards ($p < .01$) ($r = -.15$)	Performance ratings Trait ratings Pay Financial reward
Value of interpersonal job factors	Responses to 4 questions (i.e., that your supervisor treats you with respect)	D scores on means of scales		Performance ratings Trait ratings Pay Financial reward Intrinsic reward
Job satisfaction	Responses to four questions (i.e., overall, how satisfied would you say you are with your job?)	D scores on means of scales	Performance ratings ($p < .05$) ($r = -.11$) Intrinsic rewards ($p < .05$) ($r = -.08$)	Trait ratings Pay Financial reward
Job involvement	two questions	D scores on	Performance	None

				(i.e., how involved do you feel in your job?)	means of scales	ratings ($p < .01$) ($r = -.25$) Trait ratings ($p < .01$) ($r = -.36$) Pay ($p < .01$) ($r = -.25$) Financial rewards ($p < .01$) ($r = .20$) Intrinsic rewards ($p < .01$) ($r = -.32$)	
Senger (1971)	F	Vertical Dyads	Value words	Responses to 40 value words (i.e., worship, truth, people) on bi-polar adjective scales	D Scores	Superior's ranking of subordinates on all-around competence	None
Wexley, Alexander, Greenawalt, and Couch (1980)	F	Vertical Dyads	Responsibility Loyalty Goals and Planning Social Values Personality Belief in Authority Belief in Work	4 bi-polar adjective scale rating for each concept	D Scores: Superior's ratings of self vs. subordinate's rating of self	None	Performance evaluation Job satisfaction of subordinate
					Manager's rating of subordinate vs. subordinate's self-rating	Performance evaluation ($p < .01$) ($r = .27$)	None
					Subordinate's rating of manager vs. manager's self-ratings	Subordinate's job satisfaction ($p < .01$) ($r = .36$)	None

Criteria for Inclusion of Studies

Labels such as "value similarity," "belief congruence," "perceptual congruence" and "attitude similarity" have been used interchangeably in the literature. Therefore, studies that treat similarity in beliefs, values, perceptions, cognitions, or attitudes are considered within the scope of the review. Studies that compare dyad members on the basis of background factors, race, sex, age, interests, and personality will be excluded (i.e., Rand and Wexley, 1975). These factors may be viewed as possible antecedents to attitude similarity to the extent that persons from the same age group, for example, are more likely to "see things the same way" than persons from different age groups. Similarity in role perspectives probably also contribute to attitude similarity. Since the variable of interest here is perceived similarity, studies assessing actual similarity are excluded unless performance appraisal is a dependent variable.

In addition, studies concerned with accuracy in reporting another's perceptions are not within the scope of this review. This includes "role accuracy" studies directed at determining how accurately subordinates assess their superior's expectations (i.e., Greene, 1972), and comparisons of "metaperspectives" following the Laing, et. al. model (1966).

The study of perceptual accuracy has more to do with "understanding" another individual's perspective on issue X than agreeing with it (although the ratee may use the information to feign agreement, thus creating PAS for the rater). For example, Smircich and Chesser (1981) asked subordinates to estimate how their superiors would fill out their performance appraisal forms. Since they were not asked to indicate the extent to which they agreed with the ratings, however, the study was excluded from the review.

We now turn to a more detailed review of the studies contained in Tables 1 and 2.

Perceived Attitude Similarity (PAS)

As shown in Table 1, 22 of the 25 studies manipulating PAS as an independent variable are laboratory studies, and nearly all of these employed Byrne's basic methodology to create the illusion of attitude similarity (see Byrne, 1961; also described in Byrne, 1971). This paradigm has been referred to as Byrne's "unique stranger" technique.

Subjects are first asked to fill out an attitude survey covering a wide range of topics (i.e., western movies, belief in God, smoking). A phony questionnaire, purportedly representing the views of another person, is then prepared for each subject to create the impression of congruence, or lack of congruence, with the subject's own views. This is done by manipulating the proportion of items upon which they appear to agree. For example, in the similar condition, the other's responses to 90% of the items appear on the same side of the neutral point as the subject's own responses, while in the dissimilar condition, only 10% appear on the same side of the neutral point. At a later time the subject is exposed to the other's questionnaire responses and asked to indicate his liking for the other, as well as to evaluate the other on a number of character traits using an Interpersonal Judgement Scale. Sixteen studies employed this basic paradigm.

Byrne's "standard stranger" technique is an alternative way of categorizing subjects on the perceived similarity dimension (see Byrne and Clore, 1966; also described in Byrne, 1971). Subjects fill out an attitude survey, then are immediately exposed to the responses of a same-sex stranger on the identical survey. The stranger within each condition is represented by a standard pattern of questionnaire responses, thus all subjects in the condition are reacting to the same stranger. Each subject is then classified on a scale of .00 to 1.00 as to extent of similarity between himself and the stranger to whom he was exposed. Byrne, et. al. (1971) and Peters and Terborg (1975) utilized this technique.

In the remaining studies shown in Table 2, the stranger was characterized by agreement or disagreement with the subject on one or two controversial issues.

It should be noted that the specific content about which attitudes, beliefs and values are expressed has not been treated as a crucial factor. Most investigators have assessed reactions to a set of heterogeneous issues, following Byrne, or have arbitrarily chosen controversial societal issues. The relative importance of issues, however, has been addressed. The combination of similarity on important topics and dissimilarity on unimportant topics has been associated with greater attraction than similarity on unimportant topics and dissimilarity on important ones (see Byrne, 1971, p. 62-68).

Byrne and his colleagues have also found that extent of agreement or disagreement accounts for variance in attraction ratings. Extent of agreement/disagreement is indicated by the discrepancy between the subject's response to an item and the phantom's response to the same item. Hence, the subject tends to be more attracted to the phantom if the phantom not only agrees with the subject on important issues, but feels as strongly as the subject himself feels. Byrne indicates that the relationship of attraction to similarity-dissimilarity and discrepancy is additive; that is, attraction is a positive function of similarity-dissimilarity and a negative function of discrepancy (Byrne, 1971, p. 79).

Outcome Variables

Attraction

Research has repeatedly confirmed a highly significant relationship between attitude similarity and interpersonal attraction (i.e., Batchelor and Tesser, 1971; Good and Good, 1977; Veitch and Piccone, 1978; Russ, et. al. 1979). All of these, with one exception, have utilized Byrne's operationalization of the attraction

measure or a variation of it. Subjects are asked to indicate the extent to which they would like or dislike the stranger and the extent to which they would enjoy working with the stranger on two Likert-type rating scales. Their responses are then scored and summed to yield the measure of attraction.

Interpersonal Evaluation

Byrne originally embedded the attraction items in a six-point Interpersonal Judgement Scale to disguise the major purpose of his experiments (Byrne, 1971, p. 53). However, in subsequent research the other items have continued to show highly significant relationships to attitudinal similarity. Specifically, a more similar "other" has been viewed as more intelligent (i.e., Batchelor and Tesser, 1971; Byrne, et. al., 1971; Hendrick and Taylor, 1971), as having a greater knowledge of current events (i.e., Byrne, et. al., 1971; Veitch and Piccone, 1978; Tesser, 1971), as more moral (Batchelor and Tesser, 1972; Byrne, et. al., 1971; Tesser, 1971), and better adjusted (Batchelor and Tesser, 1972; Byrne, et. al., 1971; Veitch and Piccone, 1978).

Attributions of other traits and intentions have been investigated as well. For example, in a study by Good and Good (1977) subjects evaluated an attitudinally similar convict as more emotionally mature and as having better control over violent impulses. Subjects in Hendrick et. al. (1971) rated similar others as more open-minded, easygoing, sincere, informed, less opinionated, less arrogant, and less aggressive. Directional support was found for ratings of intelligence and friendliness, but not for ratings on the adjective "cynical." Similar "others" have also been evaluated as physically taller (Bleda, 1972), physically more attractive (Layton and Insko, 1974), more similar to the subject in personality (Batchelor and Tesser, 1971; Layton and Insko, 1974), and as probably liking the subject more than would a dissimilar other (Batchelor and Tesser, 1971; Johnson and Johnson, 1972).

There have been relatively few non-significant relationships reported from the use of Likert-type rating scales. However, a study by Hendrick and Taylor (1971) suggests that knowledge of belief similarity may affect attributions on some traits but not others. Subjects competing in a reaction time experiment with a phantom "other" were led to believe that the slower individual would receive a shock, and, further, that the "winner" would choose the level of shock to be administered. Subjects received feedback as to the "other's" choice of shock setting on the trials they lost. Hence, other's aggressiveness was manipulated as well as belief similarity. It was found that ratings on some adjectives were sensitive to either one of the manipulations but not both. There were significant main effects of belief similarity on ratings of honesty and intelligence, but not on ratings of thoughtlessness, cruelty, unfairness or kindness. These were the main effects of opponent's aggressiveness. Similarity to the phantom did not significantly effect the level of shock selected by "winner" subjects for "loser" phantoms.

Expectations and Goal Facilitation

Johnson and Johnson (1972) is the only study in Table 1 to examine the effects of attitude similarity upon expectations. The phantom person was varied as to racial similarity, attitude similarity, and whether he facilitated or blocked the subject's goal for point accumulation in the Prisoner's Dilemma Game. Attitude similarity was shown to have significant main effects on pre-game measures of liking, inferred reciprocal liking and expected cooperativeness in the game, as well as significant interactions with race on liking and inferred reciprocal liking. However, neither racial nor attitudinal similarity related significantly to a post-game measure of liking. The goal facilitation condition produced the only significant main effect. In addition, the pre-game measures of expected cooperation

and liking were found to be significantly related when attitude similarity was held constant. Based on these findings, the authors argue that attraction in a goal interdependent situation is a function of cooperation, and that expected cooperation mediates the similarity-attraction relationship.

Behavior and Behavioral Intentions

Subjects have shown a greater willingness to parole an attitudinally similar convict (Good and Good, 1977), to consider a similar opposite-sex other as a dating partner and a marriage partner (Stroebe and Insko, 1971), and to select a similar same-sex other as a roommate (Silverman, 1974).

The findings on the relationship of PAS to personnel-related decisions have been less consistent. In three lab studies, student subjects were asked to make decisions regarding phantom job applicants. Griffit and Jackson (1970) found a significant relationship between subjects' perceived similarity to phantom job applicants and the strength of their recommendations to hire, but no relationship of PAS to the recommendations for starting salary. Conversely, Baskett (1973), found a significant relationship of PAS to recommended salary, but not to recommendation to hire. Finally, Peters and Terborg (1975) found a significant correlation of PAS to both likelihood to hire and salary recommendation. In a field study by Latham, Wexley and Pursell (1975), using managers in a training situation and videotaped applicants, a significant relationship between PAS and recommendation to hire emerged only for those not trained to avoid the "similar-to-me" error.

Performance Evaluation

None of the laboratory studies in Table 1 look at work-related performance evaluations, although two studies address performance evaluation in non-work

contexts. Hendrick et. al. (1971) showed that students evaluated participants in a Viet Nam discussion as having made better, less biased presentations if they agreed with the discussant on the Viet Nam issue. In a study by Smith et. al (1970) students observing another's performance on a paired-associates task rated the performance of an attitudinally-similar other higher than that of a dissimilar other.

The only field study to examine PAS in relation to performance appraisal was by Pulakos and Wexley (1983), who examined perceived similarity in manager-subordinate dyads in manufacturing, retailing, government and service organizations. It should be noted that the question used as a measure of perceived similarity did not specify for the respondent whether s/he was to assess attitudinal, or possibly biographical similarity to the other (see footnote). The results indicated a significant interaction of manager's perceived similarity and subordinate's perceived similarity on subordinate ratings of managerial performance. Thus, the perception of similarity by both parties was correlated with subordinates' evaluations of their superiors. In addition, there was a significant main effect of manager's perceived similarity on superior's ratings of subordinate's performance.

It appears from these studies that a similar person may be evaluated more highly, associated with more positive characteristics, and treated more favorably

*The question was embedded in a biographical and attitudinal information form:

My superior (subordinate) and I are similar
kinds of people: (check one).

- ☐ Strongly Agree
- ☐ Agree
- ☐ Undecided
- ☐ Disagree
- ☐ Strongly disagree

than a dissimilar person. The Pulakos and Wexley study suggests that PAS bears a relationship to performance appraisal in work settings.

Possible Moderators

Variables that may moderate the relationship of PAS to interpersonal attraction, as well as to other outcome variables, have not been extensively studied, but present interesting possibilities for future investigation.

Perceived Attitude Base Batchelor and Tesser (1971) examined the effect of attitudinal base (why an individual holds the attitude s/he does) on the similarity-attraction relationship. Their results confirmed that the effect of attitude similarity on attraction is stronger toward persons who hold attitudes as an expression of personal values than toward persons who hold attitudes for ego-defensive reasons.

Polarity of Similar Attitudes A study by Tashakkori and Insko (1979) suggests that polarity of similar attitudes may moderate the similarity-attraction relationship. Subjects who agreed with a similar other where both held extreme views on the issue (strongly favored or strongly opposed) indicated greater interpersonal attraction to the other than subjects who agreed with a similar other where both held neutral views.

Race and Sex Studies examining race as a moderator have yielded mixed results. A study by Goldstein and Davis (1972) suggests that the effect of PAS on the acceptance or rejection of another may depend on the subject's initial level of racial prejudice, as well as the intimacy required in the stimulus social situation. Studies investigating sex of subject as a moderator have shown few effects and no discernible pattern of results.

Figure 2 summarizes the major relationships among variables suggested in the perceived attitude similarity literature. Actual similarity is represented as a major contributor to PAS, although situations may exist where the two are not totally congruent; for example, a greater degree of agreement may be perceived than actually exists due to a lack of interaction between individuals or discussion of only the few topics upon which they agree rather than the many upon which they do not agree.

The relationship of PAS to attraction is well established in the empirical literature, and balance theory offers a theoretical explanation for the relationship. However, the consistent relationships of PAS and attraction to trait attributions have not been adequately explained. As mentioned earlier, Byrne used trait ratings merely to disguise the purpose of his experiments, which was to assess the attraction variable. A major limitation of the current literature is the failure to address the cognitive processes by which PAS appears to affect interpersonal judgments other than attraction. (An exception is the Johnson and Johnson study (1972) which suggests that PAS may set up the expectation of goal facilitation.)

There is some evidence to suggest that polarity of attitudes and inferred attitude base may moderate the relationship of PAS to interpersonal evaluation. If both rater and ratee are avid Reaganites, we might reasonably expect greater enthusiasm for one another than if both were politically neutral. In addition, the ratee's expressed attitudes must be perceived as genuine expressions of personal values.

This dissertation is concerned with one type of interpersonal judgment, namely, performance evaluation. In the next section, we will review studies that have assessed performance appraisal as a dependent variable in relation to actual attitude similarity.

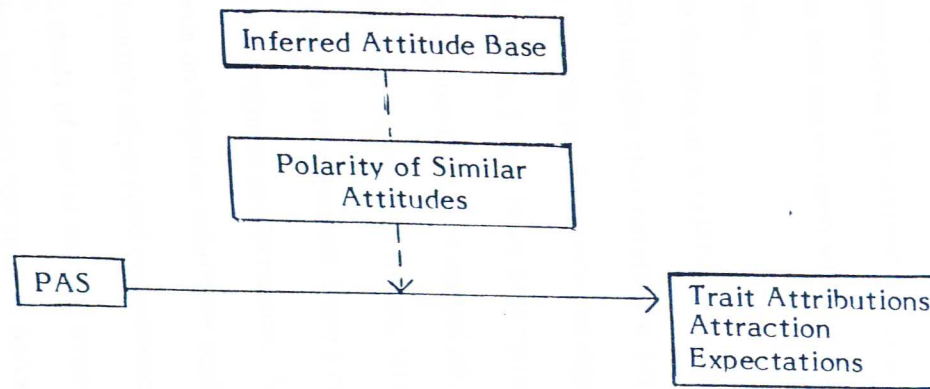


Figure 2. Summary model of the attitude similarity literature.

Attitude Similarity and Performance Appraisal

Other than the Pulakos and Wexley study discussed above, studies assessing the relationship of attitude similarity to performance appraisal have used actual similarity, rather than perceived similarity as the independent variable. Although similarity in the dyad is the objective basis for the perception of similarity, other factors may influence the accuracy of this perception. For example, an individual may misperceive the extent of his similarity to another because they tend to talk about the few issues upon which they disagree, rather than the many upon which they agree.

The finding of a relationship between actual similarity and performance evaluation implies that raters are perceiving and reacting to actual similarity in a way that affects performance ratings. This section reviews and critiques the five studies in Table 2 that have attempted to establish a connection between attitude similarity and performance appraisal.

In a study of vertical dyads, Miles (1964) found that congruency of attitudes with respect to management theory concepts related to superiors' overall judgments of subordinate performance. Senger (1971) found that similar responses to value words on bi-polar adjective scales related significantly to superior's rankings of subordinate's all-around competence.

In a study of social worker dyads, Golmieh (1964) claimed a significant relationship between "congruent perceptions" and superior's ratings of subordinate's performance. The X's were (1) subordinate's job content, and (2) the social and psychological requirements of the subordinate's job. An examination of Golmieh's dissertation reveals that subordinates were instructed to indicate the job behaviors that they actually performed on their jobs, while their superiors were asked to indicate the behaviors they expected of subordinates. The correla-

tion found between the two is probably best interpreted as an indicator of how well subordinate behavior conformed to role expectations, rather than as an indicator of agreement.

Both the Wexley, et al. (1980) and Nieva (1976) studies operationalized attitude similarity by asking each dyad member to evaluate himself or herself on a number of dimensions (i.e., job satisfaction, loyalty). Similarity in self-evaluations was the index of attitude similarity.

Wexley et. al (1980) assessed the difference between superiors' and subordinates' self-descriptions on such dimensions as personality, loyalty and responsibility. This measure did not correlate significantly with performance ratings or measures of subordinate satisfaction. Wexley et. al. (1980) used two additional measures of attitude similarity labelled "subordinate's perceptual congruence" and "manager's perceptual congruence." The former was defined as the difference between the subordinate's self-description of the manager and the manager's self-description. This was found to be related to overall subordinate satisfaction ($r=.36$). Conversely, manager's perceptual congruence, defined as the difference between the manager's description of the subordinate and the subordinate's self-description, was significantly correlated with superior's evaluation of subordinate performance ($r=.17$).

Carroll and Schneier (1982, p. 163) present data indicating that very few individuals rate themselves as below average on character traits similar to the ones used in the Wexley study. If most people tend to rate themselves positively on these types of items, then subordinate ratings of managers would be expected to converge with managers' self-ratings if they are high. In the Wexley study, then, it is not surprising that subordinates liked the supervisors that they rated highly on character traits. Conversely, high ratings of subordinates by managers

would be expected to converge with subordinates' self-ratings. One could predict from this that managers who gave high trait ratings would also give high performance ratings. It is, thus, not clear from this study that attitude similarity accounted for variance in performance ratings.

Of the several comparisons made by Nieva (1976), including extent of own job involvement, extent of own job satisfaction, value of interpersonal job factors, and value of extrinsic and intrinsic job rewards, only one (job involvement) showed a significant relationship to performance ratings and trait ratings.

The evidence of a relationship between attitude similarity and performance appraisal in field settings is scant. However, the findings from the Miles and Senger studies are suggestive. The Pulakos and Wexley study is probably the most convincing. Other field studies (Golmieh; Wexley, et. al.; and Nieva) suffer from problems in operationalizing attitude similarity.

In summary, a bulk of laboratory research has established that people tend to react to similar and dissimilar others in predictable ways, at least under controlled conditions where the subject's similarity to another is made salient. In addition, there is some evidence of a relationship between attitude similarity and performance appraisal in field settings. A theoretical explanation for the observed relationships of PAS to trait attributions, expectations and performance evaluations is noticeably absent.

Recently, the performance appraisal literature has focused on cognitive processes underlying performance judgments. The next chapter integrates the two literatures of attitude similarity and cognitive processes in performance evaluation. An attempt is then made to explain how PAS may impact interpersonal judgments, specifically, performance judgments. From this integration, a model will be developed which will serve as the basis for this dissertation research.

CHAPTER 2

INFORMATION-PROCESSING IN PERFORMANCE EVALUATION

Recently there have been attempts to describe the cognitive processes of performance evaluators, from the point at which ratee's behavior is observed until an evaluation of performance is recorded. The following discussion draws mainly from two of these -- Ilgen and Feldman (1983) and DeNisi, Cafferty, and Meglino (unpublished). Both sets of authors incorporate prototype theory (implicit personality theory) into their models.

Prototype theory addresses the categorization schemes by which people classify others in their social environment. A prototype is a mental representation of a "category" of person. A matrix of traits and behaviors associated with the prototype characterize all individuals assigned to that category. Attention to particular characteristics about an individual allegedly triggers the assignment of that person to a category such that other traits and behaviors associated with the prototype are attributed to him. Some research indicates that the recall of an individual's behavior and other characteristics may be more consistent with the prototype category to which he has been assigned than with his actual behaviors and characteristics (Cantor and Mischel, 1979; Phillips and Lord, 1983). That is, the features of the prototype category come to characterize the person assigned to it.

Landy and Farr (1980) describe performance ratings as "instances" of implicit personality theory. This implies that ratings, or any form of evaluation, will be consistent with prevailing prototypes that raters associate with ratees. The prototype may be performance or non-performance-based. Nathan and Lord (1983) suggest that halo error in ratings may be a result of generalizing from a performance-based prototype. Hence, ratings along distinct performance

dimensions become consistent with one another. Ilgen and Feldman suggest that non-performance based prototypes may influence what traits and behaviors are associated with a ratee. These associations could introduce cognitive biases in performance evaluation, either "in favor of" or "in opposition to" the ratee, such that the rater likes (dislikes) him, expects good (bad) things from him, and attributes positive (negative) traits to him. In short, the rater may be using irrelevant information as a basis for ratings, perhaps unintentionally.

Prototype theory, or implicit personality theory, offers a plausible explanation for the consistent covariance among PAS, interpersonal attraction and trait attributions in attitude similarity research. Within the framework of prototype theory, PAS may be viewed as a salient personal characteristic that triggers assignment of a person to a prototype category -- a category of positive traits and characteristics in the case of an attitudinally similar person and of negative traits and characteristics in the case of a dissimilar person.

In this chapter we attempt to explain how PAS may bias performance ratings via a process of forming or accessing a prototype of the ratee. The extent of this effect is speculated to depend on three factors -- (1) the salience of performance-based cues, (2) the salience of non-performance based cues, and (3) situational ambiguity for the rater. In the discussion that follows, we will introduce only those portions of the information-processing models that assist in explaining the role of PAS in performance evaluation. Additional supporting research will be cited where appropriate.

Cognitive Models of the Performance Appraisal Process

Both the Ilgen and Feldman and DeNisi et. al. models borrow concepts from Wyer and Scrull's information-processing model (1981). The rater observes be-

havior, encodes and processes information in a "workspace" in short-term memory, then either discards it or organizes it in "storage bins" in long-term memory for future reference. Ilgen and Feldman imply that storage bins may bear prototype labels, and even may be cross-indexed. That is, a bin exists for the individual in which his prototype memberships are entries (since each of us can be categorized in multiple ways -- age, race, and so on). Bins also exist for each prototype in which individuals are entries. All individuals entered there are thought to share the traits and expected behaviors associated with the prototype. The contents of the workspace at any point in time include information from the task environment (in this case, the rating situation), as well as information retrieved from long-term memory.

The concept of cue salience is used to explain what information in the task environment is likely to receive attention, what information is likely to be retrieved or "reconstructed" from memory, and how contradictory information may be weighted to form a prototype composite of the ratee. The concept of situational ambiguity is used to specify the conditions under which a rater is likely to associate non-performance based traits with a ratee as a result of generalizing from a non-performance based prototype.

Cue Salience

Saliency of information is a key aspect of both attentional and reconstructive processes. The salience of a particular cue depends upon the distinctiveness of the cue itself, as well as its surround (i.e., a black in a sea of whites). However, the perceiver's attention may be drawn to particular cues, not because the cues are distinctive in any way, but because a prototype category is particularly accessible in the rater's long-term memory system. Factors that are likely to

impact category accessibility at a point in time include (1) recency of use, (2) preconceived notions about the individual, (3) baseline prototypes, (4) the rater's expertise, or job knowledge, and (5) the affect associated with particular prototypes.

In the DeNisi et. al. model, a "preencoder" filters relevant information from what the rater has observed. The relevancy of information is partly determined by preconceived notions that the rater has about the ratee, including prior assignment of the individual to a prototype category. The prototype has an impact on the types of information that become salient to the rater as s/he observes and what additional information the rater may seek about the ratee. The authors cite research indicating that raters will seek information that tends to confirm their initial expectations (Snyder, 1981).

A prototype category may also be accessible because it was used recently, thus drawing the perceiver's attention to prototype-consistent behavior as s/he observes and inducing recall of prototype-confirming behavior from past observation (Ilgen and Feldman, 1983). Some research indicates that there are individual differences in "baseline" prototypes -- that is, some people seem to start out viewing almost everyone in negative terms, while others tend to view most people positively (Kaplan, 1973).

Ilgen and Feldman cite research suggesting that experience in an area will lead to more well developed prototypes (Rosch, et. al., 1976). By implication, the rater with job-knowledge would be expected to notice aspects of performance that others might miss. Hence, his or her ratings might be considerably more accurate than the ratings of a less competent evaluator. They cite other research to suggest that a category that produces more intense affect for the rater is likely to become salient (Tajfel, 1969; also in Wyer and Carlston, 1979). If the category is

not performance-related, the rater may be focusing on emotionally-loaded, non-job-related cues that may affect the validity of his or her ratings.

In the Ilgen and Feldman model, the role of prototypes in encoding observed behavior may flow from on an automatic categorization process. A hypothetical comparison mechanism matches incoming information with prototype categories accessible in long-term memory (see Figure 3). If the features of a target person readily match an existing prototype, automatic attentional and categorization processes operate. One trait implies another, a behavior implies other behaviors, traits and emotional states imply one another, and so on. Rater attends to ratee's salient features and a rapid, perhaps subconscious, category assignment is made.

A flow-diagram of how cue salience and category accessibility impact representation of information in the workspace, as per our discussion, is shown in Figure 4.

Bias in Combining Contradictory Information

According to Ilgen and Feldman, categorization sometimes requires a more conscious effort. It may necessitate a search through long-term memory and/or in the task environment for further information about the problematic individual. This is likely to occur when (1) no salient category exists for the ratee, (2) incoming information is inconsistent with an existing prototype, or (3) a single stimulus contains inconsistent or negatively correlated information. If an individual cannot be assimilated into an existing category, a new category may be created for which s/he is the prototype (i.e., a category of poor performers with commendable attitudes). Alternatively, the rater may weight each piece of information separately in deriving a composite judgment of the ratee upon which to base his or her final judgements. Another possibility is that the rater would ask "why" questions

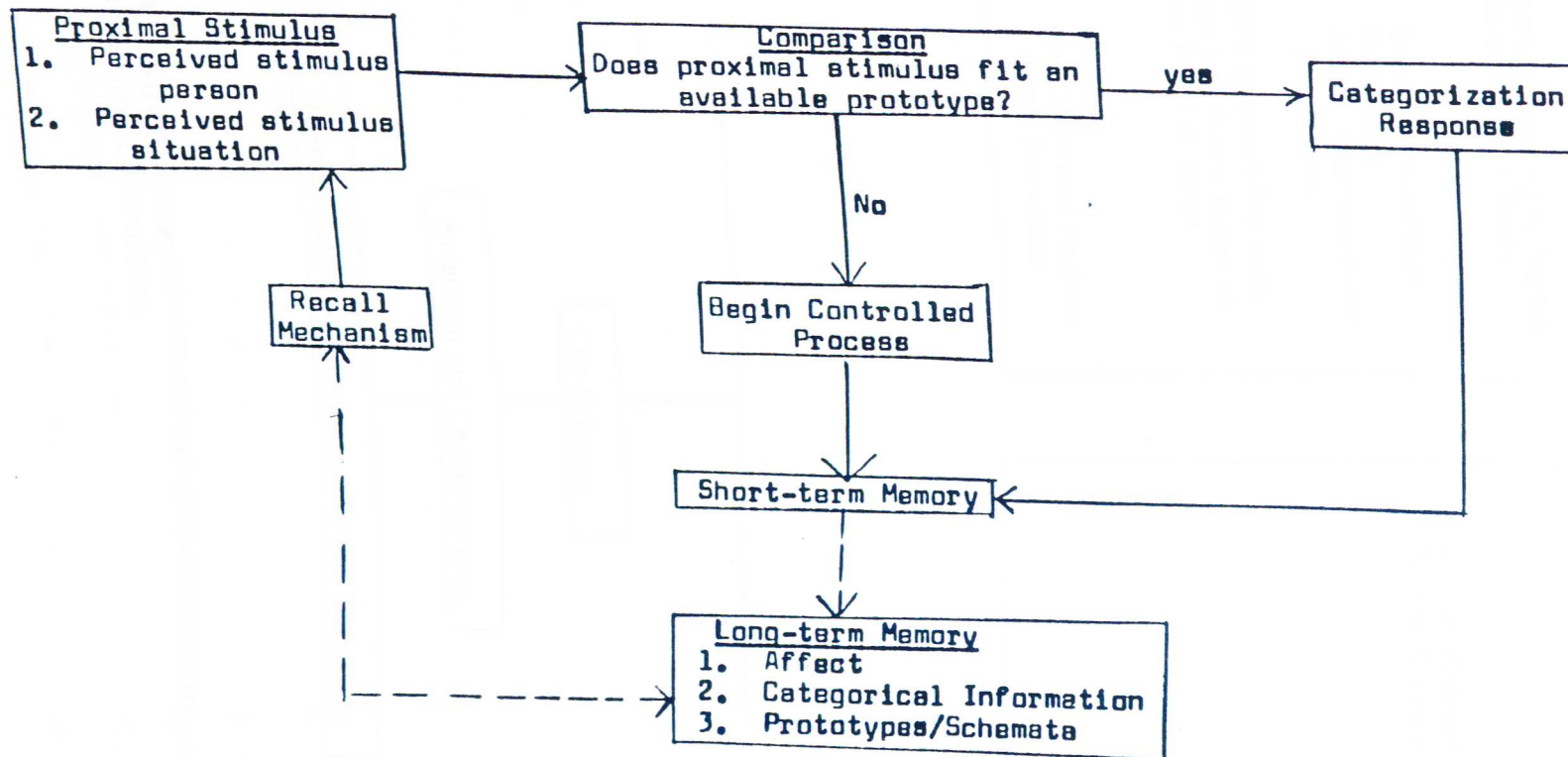


Figure 3. Prototype matching mechanism from Ilgen and Feldman (1983).

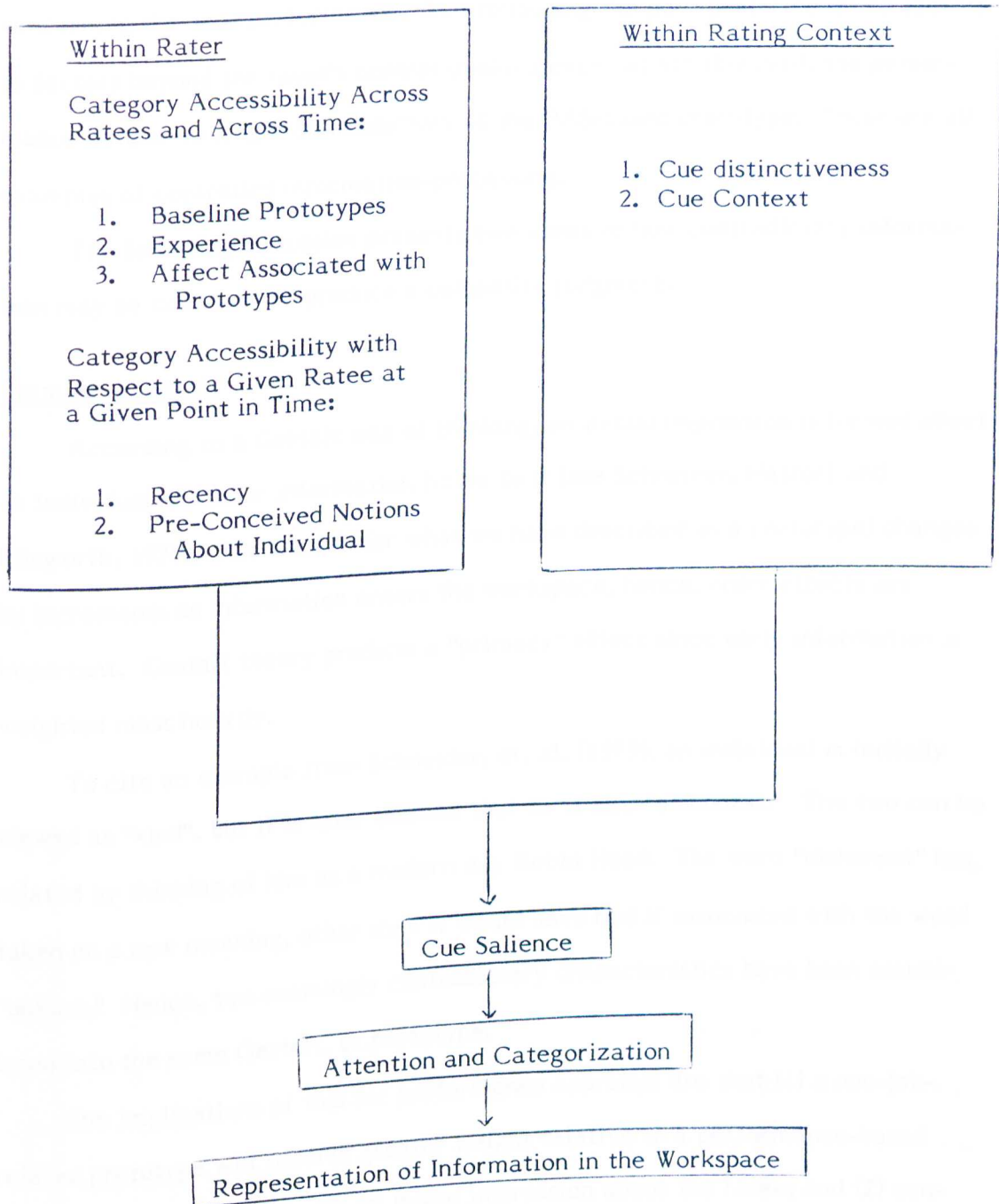


Figure 4: Effects of cue salience and category accessibility on cognitive representation of information.

concerning the poor performance. By attributing the poor performance to factors to factors beyond the ratee's control (making external attributions), the performance data is no longer contradictory of the PAS-based prototype. These are all examples of controlled information-processing.

The following discussion presents two views of how contradictory information may be combined to produce a composite judgment.

Forming a Gestalt

According to a Gestalt way of thinking, an initial impression is formed about an individual and later information fitted to it (see Schneider, Hastorf and Ellsworth, 1979). The Gestalt (or what we have described as a prototype) changes by increments as information enters the workspace; hence, order effects are important. Gestalt theory predicts a "primacy" effect since early information is weighted most heavily.

To cite an example from Schneider, et. al. (1979), an individual is initially viewed as "kind", but it is later learned that he is also "dishonest." The two can be related by thinking of him as a modern day Robin Hood. The word "dishonest" has taken on a new meaning, other than it would have had if associated with the word "unkind." Hence, two seemingly contradictory characteristics have been assimilated into the same Gestalt, or prototype.

The implications of this for performance appraisal are that (1) a non-job-related prototype will receive greater weight relative to a performance-based prototype if it is the basis for an initial impression about the ratee; and (2) contradictory information may be maintained in the construction of a new prototype. However, traits associated with the new prototype may be qualitatively different from those associated with either of the contributing prototypes. For example, traits associated with a "poor performer with commendable attitudes" may be different than those associated with a "poor performer with poor atti-

tudes." Hence, trait and behavioral ratings may be influenced by the addition of a bias-producing prototype to performance information, particularly if the former is the basis for an initial impression of ratee.

An alternative to the "primacy effect" explanation is the "recency effect" explanation--that the most recent information is most accessible in memory and will, therefore, be weighted most heavily.

Weighted Averaging If weighted averaging is used, the contradictory traits or behaviors do not change in meaning. Rather, the traits are combined by averaging the value of these traits along with other traits. In Anderson's model (1974), for example, the initial impression that the perceiver has of the individual is weighted along with other information. The full equation is:

$$E = \frac{w_o S_o + \sum wS}{w_o + \sum w}$$

where "w"'s are the trait weights and S_o is the initial impression.

Traits are identified by scale values as well as weights. These indicate how positively the trait is valued and remain relatively fixed across situations. However, the weight that each item of information receives depends upon the evaluation context. Since the relative weights must sum to one, the weight that one cue receives limits the weight assigned to other cues in evaluating the individual.

Research aimed at discovering how people weight various types of information in performance evaluation have revealed the following:

(1) Performance accounts for most of the variance in performance ratings. This is generally agreed to be the case given that the rater's objective is evaluating performance (Ilgen and Feldman, 1983). Actual performance had the largest effect on performance ratings in two studies that manipulated performance level, ratee's sex and race (Bigonness, 1976; Hamner, et. al., 1974).

(2) Raters may weight information that is not performance-related, such as sex and race (see above studies and Landy and Farr, 1980).

(3) Some studies suggest that unfavorable information is weighted more heavily than favorable information in selection interviews (London and Poplawski, 1976; Hollman, 1972). Greater weight has been assigned to negative and extreme information in studies of interpersonal evaluation (Anderson, 1974; Hamilton and Huffman, 1971; Hodges, 1974; Wyer, 1974).

Fiske (1980) argues that most behaviors and human attributes are perceived as moderately positive. These "modal" attributes do not distinguish among persons well in evaluation contexts, and are, therefore, not particularly informative. She uses the employment interview to illustrate. If nearly everyone applying for the job has a BA degree, this information is relatively uninformative, even though it is a moderately positive attribute. However, extremely positive information, such as the possession of an MBA, and any negative information, such as having no degree at all, would be informative by virtue of its uniqueness. Fiske's research substantiated her prediction that greater weight would be given to extreme information, with greatest weight to both negative and extreme information in an interpersonal evaluation task (Fiske, 1980).

The relative weight received by an informational cue may be viewed as an aspect of cue salience. In the DeNisi et. al. model, for example, the "preencoder" filters incoming information according to its relevancy in the rating situation. Since the rater's goal is performance appraisal, performance itself would be considered relevant and, therefore, weighted. In addition, recall that "preconceived notions" might be considered relevant, and, therefore, receive weight, even though such notions are not necessarily inferred from the ratee's performance.

Situational Ambiguity

Ilgen and Feldman point out that non-performance-related factors are more likely to receive weight in performance decisions when the rating situation is ambiguous for the rater. This might occur, for example, when the rater lacks job knowledge and has not, therefore, developed job-relevant category systems such that ratees can be matched to appropriate performance categories. It may also occur when the rater has not had adequate opportunity to observe performance or gather job-related information, or when the job does not offer easily detectable cues of good and bad performance. Under these circumstances, the rater is likely to fall back on "default" values specified by a non-performance-related prototype categorization of the ratee.

A recent study by Phillips and Lord (1983) suggests that recall of behavior may be colored by the prototype category to which an individual is assigned. In this study the behaviors subjects recalled about a leader they had observed on videotape were more consistent with a prototype associated with the leader (i.e., successful versus unsuccessful) than with the behavior actually exhibited on the videotape. In another study, Nathan and Lord (1983) observed a similar tendency among students evaluating a videotaped lecturer to erroneously recall incidents consistent with their general impression. This research suggests that prototypes can play a role in what is recalled about an individual in an evaluation context.

Influence of Bias-Producing Prototypes On Performance Appraisal

Having reviewed the relevant information-processing literature, we now state some general conclusions about the possible impacts of bias-producing prototypes on performance evaluation. We will then re-examine the impact of a

particular bias-producing prototype, designated earlier as the PAS-based-prototype, which is the variable of interest in this dissertation.

We have noted that non-performance-based prototypes may affect what cues are salient as the rater observes performance, what instances of previous performance are retrieved from memory, and what additional information is sought about the ratee with greater attention given to prototype-confirming information.

In some cases more conscious weighting and combining of information is assumed to occur. If a Gestalt process is assumed, the relative impact of a bias-producing prototype on performance evaluation depends upon (1) whether it induces the formation of a new prototype (Gestalt), (2) what traits are associated with the new prototype, and (3) whether the biasing factor precedes or follows performance (given the primacy effect). The order of information is also important if a recency effect is expected.

Alternatively, information may be combined in weighted-average fashion to form a composite impression, with performance receiving the greatest weight, and negative and extreme information receiving greater weight relative to moderate information. This suggests that the relative weight of a non-performance-based factor depends upon the negativity and/or extremity of the factor itself, as well as the negativity and/or extremity of the performance. One would expect extremely good or poor performance to carry even more weight relative to the bias factor, with greater weight to the bias factor if it is negative and/or extreme and performance is moderate. Hence, negativity and extremity of a cue may increase its salience relative to other cues.

The bias factor of specific interest in this dissertation research is the PAS-based prototype--that is, one that consists of all the traits and behaviors expected of an individual who is attitudinally similar to oneself.

We now attempt to describe the cognitive processes by which a PAS-based prototype, in particular, may be perceived and weighted relative to performance in a performance evaluation context. Figure 5 is a schematic representation of this process. It is intended to be an integrating device, rather than a formal model, since, as Ilgen and Feldman have already pointed out, much of the underlying theory is speculative in nature.

Integration of PAS-Based and Performance-Based Information in a Performance Appraisal Context

The question of interest in this dissertation research is -- to what extent and under what conditions is PAS most likely to affect performance evaluations?

The model in Figure 5 attempts to describe the cognitive processes by which rater's attitude similarity to ratee is perceived and weighted relative to observed performance. It describes a process of combining, or integrating, two types of information that directly impact performance evaluation, trait attributions and attraction via the process of forming or accessing a prototype. As shown in the model, actual performance evaluation, which includes the physical act of rating, is based upon a prototype-composite of the ratee. Attraction and trait attributions are responses to the same prototype composite.

Actual performance, actual attitude similarity, and other characteristics, are observed and perceived by the rater. To the extent that they are mutually confirming -- that is, one implies the other, ratee is automatically assigned to the implied category. If the items of information contradict one another, however, other processes may ensue. These might include the search for a Gestalt, a weighting scheme, and/or an attribution of causes for the unexpected behavior, attitudes, or characteristics.

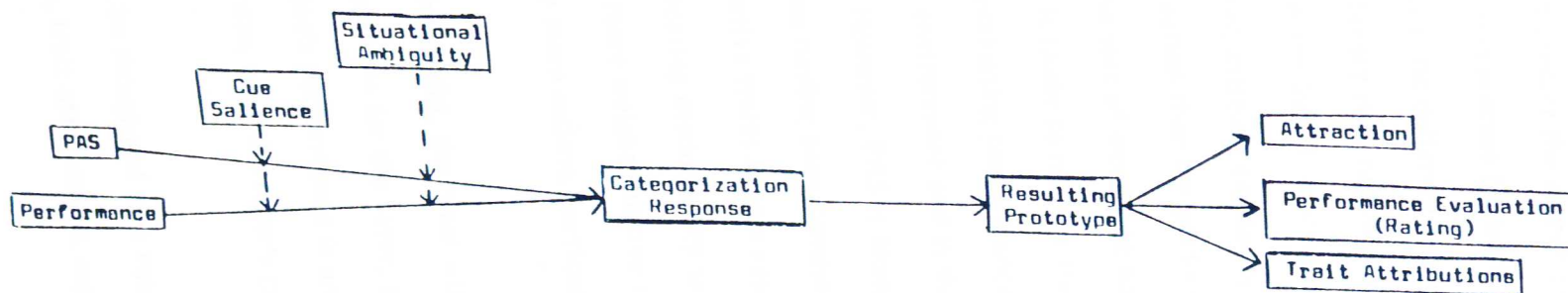


Figure 5. Integration of PAS and Performance Information in Performance Evaluation

If PAS information contradicts perceived performance level, or visa versa, Gestalt theory would predict the search for a new Gestalt. It is difficult to predict the outcome of this process for performance ratings. The traits associated with a new Gestalt may be different from the traits associated with contributing prototypes, but the theory does not address the implications of this for performance ratings. Since the initial impression is hypothesized to be most powerful, the theory implies that attitude similarity information may carry greater weight in performance evaluation than the performance itself, which is unlikely.

The use of some sort of weighting scheme permits more concrete predictions. Performance is likely to receive the greatest weight. Given that the rater's objective is evaluating performance, performance is likely to be salient both within the task environment and in the rater's attempts to reconstruct from long-term memory. However, PAS is likely to receive some weight. It is an affectively-loaded cue having been consistently associated with interpersonal attraction and evaluative traits in past research. If PAS information is negative or extreme (i.e., indicating dissimilarity to rater or extreme similarity), it may be expected to receive more weight relative to performance cues since it may be considered relatively more salient, particularly if the performance itself is moderate.

According to the model, the rater will rely more heavily on PAS cues if situational ambiguity exists for the rater, for example, if the rater has little job knowledge, if the ratee's performance is ambiguous and/or inconsistent, if the job itself is difficult to rate, or if the rater's contacts with the ratee are not relevant to performance.

Attraction can be thought of as a value appraisal of the prototype. Hence, attraction to a ratee, trait attributions, expectations and perceived similarity to

the ratee covary according to the prototype category to which the rater has assigned the ratee. Since performance evaluations are based on the same prototype category as attraction and trait attributions, the model predicts that these will tend to be consistent with one another. That is, the liked person is more likely to be perceived as similar and to receive higher trait and performance ratings than the disliked person.

The dissertation research described here is a laboratory study designed to test a portion of the model. The next chapter explains how concepts were operationalized to test the model. A formal statement of the hypotheses tested will follow.

CHAPTER 3

OPERATIONALIZATIONS OF CONSTRUCTS

According to the model in Figure 5, PAS is an important nonperformance factor that impacts performance evaluation. The relationship is moderated by both cue salience and situational ambiguity for the rater.

In this experiment, the effect of PAS on performance ratings was tested in a laboratory setting where only two types of information were known about the ratee -- performance and similarity to the rater on general attitudinal issues. Student raters assessed a ratee's performance to determine, first, if there would be an effect of PAS on performance ratings, and second, whether it would be moderated by the salience of the performance cue and situational ambiguity for the rater.

Independent Variables

PAS

PAS was manipulated using Byrne's unique stranger manipulation. That is, subjects were led to believe that a manager either strongly agreed or strongly disagreed with them on a number of issues. In an effort to make the PAS cue salient, two steps were taken -- (1) the extent of agreement or disagreement between the manager's views and the subject's own views was made extreme (i.e., 90%); and (2) the issues selected for this study were ones that an earlier sample of undergraduates seemed to feel strongly about. This study manipulated two levels of PAS (i.e., agreement and disagreement) and included a control group.

Performance

Following exposure to the manager's attitudes, subjects viewed a videotape

of the manager conducting a performance review with his subordinate. Subjects were asked to rate how well he conducted the review and to indicate the extent of their attraction to the manager. Three different vignettes were used to vary the manager's level of performance. Some subjects viewed a high-performing manager; others viewed a moderate-level or low-level performer.

The levels of performance manipulated here were designed to represent degrees of salience of the performance cue. If negative or extreme information is more salient than moderate information and therefore likely to be weighted more heavily, as suggested earlier, then the high and low performances in this study represent a greater degree of cue salience than the moderate-level of performance. In an effort to make the high and low conditions salient, vignettes were constructed to represent the extremes of performance on all performance dimensions. The moderate vignette was constructed to be clearly moderate on all dimensions.

Situational Ambiguity

Situational ambiguity was manipulated on two levels. These consisted of a hard performance data condition and a no-hard-data condition. Subjects in the hard data condition received hard data with respect to the manager's performance in addition to viewing his performance on videotape. Subjects viewing the low performer thus received additional data to support the judgment that the ratee was a low performer; subjects viewing the moderate performer received hard data to support the idea that the ratee was a moderate-level performer, and so on.

Other subjects did not receive hard performance data. This rating task was expected to be ambiguous for student raters since it was assumed that (1) most were not familiar with the performance review process they were evaluating or

what constituted good/poor performance in conducting a performance review, and (2) each student would see only one level of performance and would not, therefore, have other examples of performance to use as a basis for comparison. The absence of hard data was expected, therefore, to create a relatively ambiguous rating situation for student raters.

Dependent Variables

Performance Ratings

The performance evaluation construct was operationalized in two ways. Students were asked to rate the manager first on a trait rating scale, then again on a Behavioral Observation Scale. The two scales contained exactly the same performance dimensions on which the ratee was to be evaluated. The two types of rating instruments were used to determine if trait ratings and behavioral ratings would be differentially robust with respect to PAS-induced biases.

The accuracy (or bias) in ratings was assessed using deviations from "true scores." A true score on a dimension is the mean, or average, of expert ratings on that dimension. The experts were individuals who were familiar with the job they were evaluating and the principles of performance evaluation. This procedure will be described more fully in Chapter 5.

It was felt that because students lacked knowledge relevant to the manager's job and the performance evaluation process, it would be difficult to conclude that one student group's rating were necessarily less accurate than another group's ratings because they were higher (or lower). It was therefore decided to assess deviation of subject ratings from expert ratings, in addition to testing between-group differences for evidence of bias in ratings.

Attraction

The attraction variable was operationalized in a manner consistent with Byrne's earlier research. The measure employed two Likert-type rating scales which are described in greater detail in Chapter 5.

We have so far set forth a model describing the impact of PAS on attraction, trait attributions and performance evaluation, and in this chapter have outlined the way constructs from the model were operationalized for the purpose of this study. The next chapter is a formal statement of the hypotheses that were tested.

CHAPTER 4

FORMAL STATEMENT OF HYPOTHESES

Consistent with the previous chapter, the following hypotheses are presented. Hypotheses are presented separately for each manipulation.

1. Performance Level

1.1 Behavioral ratings will be higher, the higher the level of performance exhibited by the ratee.

1.2 Trait ratings will be higher, the higher the level of performance exhibited by the ratee.

1.3 Extent of liking will be greater the higher the level of performance exhibited by the ratee.

1.4 Accuracy in behavioral ratings will be greater in the high and low performance conditions than in the moderate performance condition.

PAS is expected to receive more weight in rating decisions when performance is moderate than when performance is either negative or extreme.

2. Perceived Attitude Similarity

2.1 Relative to the condition in which raters have no information about the ratee's attitudes, behavioral ratings will be higher in the similar attitude condition and lower in the dissimilar attitude condition, respectively.

2.2 Relative to the condition in which raters have no information about the ratee's attitudes, trait ratings will be higher in the similar attitude condition and lower in the dissimilar attitude condition, respectively.

2.3 Accuracy in behavioral ratings will be greater when raters have no attitude information than when the ratee is presented to the rater as either attitudinally similar or dissimilar.

2.4 Relative to the condition where raters have no attitude information, extent of

liking will be higher in the similar attitudes condition and lower in the dissimilar attitudes condition.

2.5 The relationship between attitude similarity and behavioral ratings will be moderated by performance level. Specifically, a greater degree of relationship between attitude similarity and performance ratings is expected in the moderate performance condition.

2.6 The relationship between attitude similarity and trait ratings will be moderated by performance level. Specifically, a greater degree of relationship between attitude similarity and performance ratings is expected in the moderate performance condition.

3. Hard Performance Data

3.1 Accuracy will be greater when hard performance data is present than when no hard data is present.

3.2 Behavioral ratings are expected to exhibit a two-way interaction effect between attitude similarity and hard vs. no-hard-data. Specifically, it is expected that attitude similarity will have a greater effect on ratings when no hard data is available.

3.3 Trait ratings are expected to exhibit a two-way interaction effect between attitude similarity and hard vs. no-hard-data. Specifically, it is expected that attitude similarity will have a greater effect on ratings when no hard data is available.

CHAPTER 5
METHODOLOGY
Experimental Design

The study employed a factorial design consisting of three crossed factors -- attitude similarity (similarity/dissimilarity/no attitude information); level of ratee performance (high/moderate/low), and a hard performance data condition (hard data/no hard data). The design is presented in graphic form in Figure 6. As mentioned earlier subjects assigned to the hard data conditions received the level of hard performance data consistent with the level of ratee performance to which they were assigned.

Subjects

The subjects were junior and senior students enrolled in an undergraduate organizational behavior course at the University of Maryland. Subjects received one percentage point toward their final course grades for each hour of participation in research.

It was not possible to randomly assign subjects to all conditions for the following reasons:

(1) Subjects signed up to participate in sessions on a bulletin board outside the lecture hall. All subjects in a single session were required to view the same videotape; hence, level of ratee performance was randomly assigned to sessions.

(2) Subjects in the no-attitude-information condition could not be intermingled with subjects in the similar or dissimilar attitude conditions since differences in the quantity of stimulus materials held by each subject would be noticed. However, subjects in the similar and dissimilar attitude conditions

	<u>Levels of Ratee Performance</u>		
	Low Performance	Moderate Performance	High Performance
Attitude Similarity	Hard Data No Hard Data	Hard Data No Hard Data	Hard Data No Hard Data
Attitude Dissimilarity	Hard Data No Hard Data	Hard Data No Hard Data	Hard Data No Hard Data
No Attitude Information	Hard Data No Hard Data	Hard Data No Hard Data	Hard Data No Hard Data

Figure 6. Experimental Design.

could be intermingled since the quantity of materials held by each subject were the same. Sessions, therefore, were assigned to either the no-attitude-information condition or a combined similar/dissimilar attitude condition.

Subjects were randomly assigned to the similar and dissimilar treatments within the combined attitude condition, and to the hard and no-hard-data treatments in all conditions. A total of 210 subjects participated in the experiment.

Procedure

In order to manipulate the subject's perception of attitude similarity to another using Byrne's technique, it was necessary to determine what the subject's attitudes actually were. The first procedure described here had that objective.

Attitude Assessment

The experimenter entered the undergraduate class with the permission of the instructor. Students were told that the experimenter was running two separate experiments. Because neither experiment would require an hour of participation from the students, a full percentage point toward their final grade could only be earned by participating in both experiments. One was an Attitude Survey study that could be completed in class. Those that wished to participate in the second experiment could sign up on the bulletin board outside the lecture hall after class.

The experimenter then passed out the survey that appears in appendix 1. Students were led to believe that the purpose of the study was to examine the relationship between attitudes and certain individual and group characteristics, such as age, college major, whether or not one's mother worked, and so on. The

experimenter also explained that the survey had been administered to a group of managers and that she was interested in comparing students' responses to the survey with managers' responses to the same survey.

The experimenter then distributed to the class a ten-item attitude survey and a series of questions related to individual and group characteristics, as shown in appendix 1. She reassured students that their responses would be kept entirely confidential, but that to ensure that they received proper credit for having completed the survey, they would have to put their social security numbers on the cover sheet where indicated.

Experimental Sessions

Subjects in all conditions were given the following instructions:

This experiment is concerned with the way individuals perceive one another and form impressions of one another based on limited kinds of information. I will be asking you to read some information about an individual, to view him on videotape, and then to evaluate him on a number of instruments. Does anyone have any questions about what we'll be doing here today? (Students were then asked to fill out a "Consent Form" that indicated they were participating of their own free will and could withdraw at any time.)

It is very easy for your perceptions of an individual to be influenced by what someone else may think of him. For that reason, I will ask that none of you talks or asks questions for the remainder of the experiment, since you may inadvertently reveal your own judgments by what you say. Since I am interested in individual perceptions, uninfluenced by others, I hope everyone will refrain from talking or asking questions from this point on.

For the same reason, it might be a good idea to spread ourselves out in the room, just to make sure that you don't accidentally see what someone else has written about him. (Students were encouraged to sit at spaced distances from one another.)

At this point each subject received a brown envelope with his or her name written on it, and were asked not to look at the contents until instructed to do

so. Packets contained the following stimulus materials, which are displayed in appendix 1.

1. A general description of the organization and the manager's department. The manager was described as a Director of Engineering Projects.
2. A sheet containing two bar graphs reporting objective performance data for all Directors of Engineering Projects. The first bar graph compared revenue generated from "follow-on" business for each Director. The second compared contract proposals accepted for each Director. Four different forms were used. In the no-hard-data condition, Directors were designated by number only. This sheet was designed to appear as more information about the organization as a whole. In the hard data conditions, however, the bar representing the target manager's performance was cross-hatched and labelled with his name. Low hard performance data was indicated by cross-hatching on the lowest bars of each bar graph; high performance by cross-hatching on the highest bars, and moderate performance by cross-hatching on intermediate-level bars.
3. The attitude survey and individual and group characteristics questions purportedly filled-out by the manager himself, for subjects in the similar and dissimilar attitude conditions only. Subjects in the no-attitude-information condition received only the individual and group characteristics filled out by the manager, not his attitude survey.
4. A question sheet requiring the student to answer questions about the manager. The questions forced the student to look through the stimulus materials for answers. This was designed to increase the probability that students would look at all the information. Further, subjects in the similar and dissimilar attitude conditions were asked to indicate the extent to which they perceived the manager as attitudinally similar to themselves on a five-point Likert scale. This served as

a manipulation check and did not appear on the question sheet in the no-attitude-information condition.

The experimenter then proceeded with the following instructions:

Now let's look at the material in our packets.

You should have a description of the individual and his organization. (The experimenter casually held this up since it was the same in all packets.) Next, you will see that this individual was one of the managers who filled out the same attitude survey that you filled out in class several weeks ago. These are his responses to the survey and his individual and group characteristics (in the similar and dissimilar attitude conditions). These are his individual and group characteristics (in the no-attitude-information conditions). You should also have a "Report for Directors of Engineering Projects" and a question sheet.

If you don't use all the information available to you in evaluating another person, your perception is likely to be different than it would otherwise be. The question sheet is included just to make sure you have looked all the information over thoroughly. So, please look everything over carefully and try to answer the questions as accurately as you can. When you are done, look up at me as a signal that you are ready to go on.

When everyone had completed the question sheet, a videotape of the manager interacting with one of his subordinates was shown. The experimenter then passed out a six-dimension trait-format performance rating scale with brief instructions to respond using their best judgment of where the manager belonged on each trait dimension (see appendix 2). They were asked to put the instrument in their envelopes when completed.

The Behavior Observation Scales and the attraction questions were then handed out (shown in appendix 2). The following instructions were given:

Some people find it easier to fill out rating scales when the degrees of "goodness" or "badness" are more explicitly defined for them. Now I'd like for you to complete another instrument, called a Behavior Observation Scale, that gives more explicit information to guide you in the rating process. (The experimenter then went over the instructions written on the instrument and the "Things to Guard Against.") If you find yourself responding in ways that disagree with what you put on the trait rating scale, that is O.K. Answer what you think is

most appropriate on this scale. Don't go back to the trait scale at this point.

When you are through, please respond to the questions on the question sheet. (The experimenter read aloud the instructions for the attraction questions as they appear on the question sheet.)

When you are done, put everything in your packet, raise your hand, and I will pick it up. (Students were dismissed after packets were collected.)

Attitude Similarity Manipulation

For subjects in the similar and dissimilar attitude conditions, the manager's attitude survey was uniquely constructed for each subject in the following manner.

For subjects in the similar attitude condition, ninety percent of the manager's responses were located on the same side of the neutral point as the subject's own responses to those items. Byrne's "constant discrepancy" method was used to simulate item responses for the manager. (See Table 3 for a description of the simulation pattern.) In the similar condition, the manager's responses showed a one-point discrepancy from the student's own responses, as shown in Table 3. Hence, if the subject checked "strongly agree," the manager checked "agree." If the subject checked "agree," the manager checked either "strongly agree" or "probably agree."

For subjects in the dissimilar attitude condition, ninety percent of the manager's responses were located on the opposite side of the hypothetical neutral point from the subject's own responses to the items. The manager's response showed a three-point discrepancy from the subject's response. Therefore, if the subject checked "strongly agree," the manager checked "probably disagree."

Items included in the survey were suggested by a class of undergraduate business students at Loyola College in Baltimore as topics that college students considered controversial.

TABLE 3
CONSTANT DISCREPANCY PATTERN FOR
SIMULATING MANAGER'S RESPONSES
TO ATTITUDE ITEMS^a

<u>Subject's Response</u>	<u>Manager's Responses</u>	
	<u>Similar</u>	<u>Dissimilar</u>
1	2	4
2	1 or 3	5
3	2	6
4	5	1
5	4 or 6	2
6	5	3

^aAfter Byrne, 1971, p. 76

Construction of Scripts and Behavior Observation Scales

In order to operationalize the performance variable, an effort was made to obtain vignettes of managerial performance that would accurately reflect the three distinct levels of performance to be used in the study. The videotape medium was preferred over the use of written vignettes in terms of realism (since non-verbal, as well as verbal aspects of performance can be conveyed), and subject involvement in the rating task.

Eight scripts were obtained from Walter C. Borman for possible use in the study. The scripts depicted a manager giving performance feedback to a problem subordinate. Borman additionally provided the Behaviorally Anchored Rating Scales used by his subjects in evaluating the performances depicted in the scripts (Borman, 1978; see Figure 7 for a sample dimension from Borman's instrument). The BARS include six performance dimensions -- structuring and controlling the interview, establishing and maintaining rapport, reacting to stress, resolving conflict, developing Whipker (the subordinate), and motivating Whipker. Each dimension is rated on a seven-point scale anchored by specific examples of behavior. In addition, more general descriptions of behavior are provided for the high, average, and low areas of each scale.

The scripts were originally videotaped by Borman with a different actor portraying the manager for each script. The scripts were constructed to reflect different mean performance levels across performance dimensions and realistic covariation among dimensions within a single performance.

Pre-Testing

For purposes of this dissertation research, the eight Borman scripts were pre-tested on a sample of 64 undergraduate students at the University of

C. REACTING TO STRESS

Remaining calm and cool, even during Whipker's outbursts; apologizing when appropriate but not backing down or retreating unnecessarily; maintaining composure and perspective under fire versus reacting inappropriately to stress; becoming unreasonable, irate, or defensive in reaction to complaints; backing down inappropriately when confronted.

High Level Performance

- . Remains calm during Whipker's outbursts and responds in a rational, problem solving manner.
- . Is firm but nondefensive in response to Whipker's verbal assaults; admits fault when appropriate but maintains an effective, problem solving orientation when interacting with Whipker.

What a high level performer might do:

7. Even though Whipker is at his assaultive best several times during the interview, this Baxter would still maintain his cool, his earnest voice, and his good eye-to-eye contact with Whipker.
6. If Whipker said that he wanted Baxter's job, this Baxter could be expected to be very calm and cool and to say, "Do you have any ideas as to why you didn't get it?"

Average Performance

- . Maintains composure during most of the interview but may appear unsettled, self-conscious, or defensive in reaction to some of Whipker's outbursts.
- . May become rattled when confronted but recovers quickly.

What an average performer might do:

5. If Whipker pressed him to explain why he didn't get Baxter's job, this Baxter would present his arguments in a low-key, logical manner.
4. Would expect this Baxter to become a bit rattled when Whipker blows off about the Valva incident, but to recover quickly and request more information about the run-in.
3. When Whipker complains about not receiving the memo regarding Tech Services, can expect this Baxter to say he had no idea what happened to the memo.

Low Level Performance

- . Becomes aggressively authoritative with Whipker or becomes helplessly silent during Whipker's outbursts.
- . Escalates conflict by reacting defensively to Whipker's outbursts or accusing Whipker of causing problems.

What a low level performer might do:

2. Can be expected to swallow hard and grab the sides of his chair when Whipker blows up about how he should have had Thompson's job.
1. Would expect this Baxter to respond to Whipker's belligerence by becoming belligerent himself and to state, "You got the memo as fast as anyone else--if you didn't receive the memo, it's your fault."

Figure 7. Sample dimension from Borman's performance rating instrument.

Maryland. Students were asked to read the scripts and evaluate the manager's performance on the Borman rating instrument. Eight students were assigned to each script. The instructions written on the instrument and the "Things to Guard Against" were read aloud.

The goal of pre-testing was to locate three scripts that had the following psychometric properties:

1. Significant differences among means in the appropriate directions, and;
2. Small enough standard errors to enable detection of between-cell differences, yet large enough within-cell variability to enable individual differences in attitude similarity to have an effect.

Script Modifications

Three scripts were selected on the basis of pre-testing that came closest to meeting the above criteria. Additional pre-testing led to substantial modification of the scripts and the rating instruments. These included the following:

1. Script material was re-written to differentiate performances on the specific dimensions which failed to differentiate between scripts in pre-testing.
2. Behavioral anchors were removed from the BARS. Some anchors mirrored behaviors exactly as they occurred in the scripts such that rating was reduced to a coding task. Other anchors required subjects to infer beyond the material presented. Upon de-briefing, subjects felt that anchors often conflicted with the more general statements defining the high, average, and low areas of the scale. The experimenter agreed.
3. The general statements were re-written to incorporate some of the information originally presented as behavioral anchors that the experimenter felt would more adequately define the constructs of high, average, and low

performance. In addition, the names of the characters (Baxter and Whipker) were dropped from the rating instrument. Statements were re-written so that it would appear to be a realistic rating instrument for evaluating managerial performance in conducting performance reviews.

4. The seven-point scale was extended to a nine-point scale to allow for greater variance in ratings, and hence, greater distances between script means.

The final scripts and rating instrument prepared for this study appear in appendices 3 and 2, respectively. The means, standard deviations, and standard errors from the final pre-test are presented in Table 4.

It should be noted that the variance across dimensions within performance level for each of Borman's performances was substantially reduced in order to achieve a clear differentiation among performance levels. For purposes of this research, an effort was made to create a high performer who would be perceived as clearly high on all dimensions, a moderate performer who was consistently and clearly moderate, and so on.

Videotape Production

A professional actor was selected to play the manager's role in the videotaped performances, while a student actor assumed the subordinate's role. The same actors played these roles in each vignette. They were directed to conform to the intended levels of performance for each vignette in verbal and non-verbal behavior during the videotaping session. Each performance was five to seven minutes long.

TABLE 4

FINAL PRE-TEST MEANS, STANDARD DEVIATIONS, AND STANDARD
 ERRORS ON PERFORMANCE DIMENSIONS
 FOR EACH LEVEL OF PERFORMANCE

		Mean	Standard Deviation	Standard Error
High Performer	Overall (across dimensions)	<u>7.9074</u>	<u>.508</u>	<u>.169</u>
	Dimension 1	7.8889	1.537	.512
	Dimension 2	7.4444	1.236	.412
	Dimension 3	8.7778	.667	.222
	Dimension 4	7.4444	1.014	.338
	Dimension 5	8.5556	.882	.294
	Dimension 6	7.3333	1.118	.373
Moderate Performer	Overall	<u>5.5185</u>	<u>.922</u>	<u>.307</u>
	Dimension 1	4.5556	2.068	.689
	Dimension 2	6.3333	2.449	.816
	Dimension 3	6.2222	2.108	.703
	Dimension 4	4.6667	2.291	.764
	Dimension 5	5.6667	2.062	.687
	Dimension 6	5.6667	2.398	.799
Low Performer	Overall	<u>2.9259</u>	<u>1.077</u>	<u>.359</u>
	Dimension 1	4.1111	2.088	.696
	Dimension 2	2.6667	1.871	.624
	Dimension 3	3.5556	2.351	.784
	Dimension 4	2.3333	1.414	.471
	Dimension 5	2.7778	1.986	.662
	Dimension 6	2.1111	1.269	.423

Construction of Remaining Dependent Measures

Trait Rating Scales

The trait rating scales contained the same six performance dimensions that appeared in the Behavior Observation Scales, only here they were defined as skills or abilities. Ratings were made on a nine-point graphic rating scale for each dimension.

Attraction Measure

The attraction measure consisted of two seven-point Likert scales which asked the subject the extent to which he would prefer the manager as a co-worker, and the extent to which he would like the manager as a person. These questions duplicate the questions used to assess attraction on Byrne's Interpersonal Judgment Scale.

Obtaining Expert Scores

Five faculty members of the College of Business and Management at the University of Maryland were asked to participate in the study. All five had considerable knowledge of rating scale development and expertise in the area of management, and were, therefore, well-qualified raters of managerial performance.

Before the rating session, scripts of the three performances and the Behavior Observation Scales were distributed to the experts. Raters were encouraged to study the scripts and rating instrument before the actual rating session.

In the rating session, the experimenter read through the instructions with raters and reminded raters of contrast, halo, and leniency errors. Raters then viewed the videotaped vignettes one by one and recorded their ratings following each performance.

The same methods used by Borman (1978) were used in this study to assess the precision of the ratings. These included the computation of an intraclass correlation coefficient as an index of interrater reliability for each performance dimension and for each rater, and the use of an Analysis of Variance procedure to assess convergent and discriminant validity of ratings.

The next chapter presents the results of this experiment.

CHAPTER 6

RESULTS

The alpha coefficients for the BOS, Trait scale, and attraction measure were .95, .97, and .86, respectively.

Results of the manipulation check for PAS confirmed that the manipulation was effective. Recall that subjects were asked to indicate on a five-point Likert scale the extent to which they perceived the manager to be similar to themselves (one = very dissimilar, five = very similar). Eighty-six percent of subjects in the similar attitude condition and 91% of subjects in the dissimilar attitude condition responded on the appropriate side of the neutral point. The mean ratings of perceived similarity were 3.97 for the similar attitude group and 1.89 for the dissimilar attitude group. Since this study deals explicitly with perceived similarity, subjects who checked the neutral alternative (neither similar nor dissimilar) or alternatives incongruent with their assigned conditions (i.e., subject in the similar condition indicates perception of dissimilarity) were excluded from the analyses that follow. A total of 191 students were included in the analysis, 96 males and 95 females. Nineteen were excluded. Intercorrelations among the BOS items, the traits and the attraction questions are presented in Table 5.

Tests for Homogeneity of Variance

Multivariate analysis of variance and planned comparisons were used to analyze these data. An important assumption underlying the use of these procedures is homogeneity of variance. While violation of the assumption does not dramatically affect outcomes when cell sizes are equal, it may affect outcomes when cell sizes are not equal. Box's M (Winer, 1962, p. 595) a test for homoge-

TABLE 5
INTERCORRELATIONS AMONG DEPENDENT MEASURES

Variable	1	2	3	4	5	6
1. Structuring						
2. Maintaining rapport	.69					
3. Reacting to stress	.74	.76				
4. Resolving conflict	.70	.78	.71			
5. Developing subordinate	.77	.81	.76	.83		
6. Motivating subordinate	.72	.79	.77	.82	.86	
1. Organization						
2. Communication skill	.88					
3. Composure	.81	.87				
4. Conflict resolution skill	.85	.91	.86			
5. Employee development skill	.83	.90	.84	.93		
6. Leadership ability	.84	.88	.80	.90	.92	
1. Preference as a co-worker						
2. Liking	.78					

ity of variance appropriate for multivariate data, was computed on behavioral, trait, and attraction ratings. All tests were significant beyond the .0001 level indicating a lack of homogeneity of variance in these data ($F=1.34$, $df=357/13,559$; $F=1.45$, $df=357/13,559$; $F=1.80$, $df=51/30,907$ for behavioral, trait, and attraction ratings, respectively).

Cell means and variances, as well as marginal means and variances, are displayed for each dependent measure in Tables 6 through 22. Note that cell variances in the high performance condition are consistently smaller than variances in the other performance conditions. A factor mentioned by students in debriefing sessions may account for the unexpectedly large variances in the low condition. Some students felt that the low performer's authoritarian behavior was justified and effective given the subordinate's obnoxious behavior in the interview. Therefore, some students in the low condition rated the manager as a "high."

Although lack of homogeneity of variance is a serious violation, its practical effect is to inflate the denominator of the F-ratio, thereby providing a more conservative test of the hypotheses. Due to the high intercorrelations among items on the BOS and among items on the trait scale, planned comparisons were carried out only on scale totals. A procedure that takes heterogeneity of cell variances into account was used in testing planned comparisons. The results of this procedure are presented in the next section.

Planned Comparisons

Hypotheses 1.1, 1.2, and 1.3 predicted that behavioral, trait and attraction ratings would be responsive to the intended levels of performance; that is, that ratings in the high performance condition would be higher than ratings in the moderate condition, and that these, in turn, would be higher than ratings in the

TABLE 6
CELL AND MARGINAL MEANS AND VARIANCES
FOR BOS SCALE TOTAL**

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data 15 37 (83.17) 12.22 (6.54) No Hard Data 9 Mean for combined cells: 13.80	35.12 (51.27) 36.43 37.75 (103.02) n=8 n=12	47.00 (9.61) 47.60 48.20 (9.06) n=11 n=10	32.61(235.11) Similar Attitudes (Row mean and row variance)
	Dissimilar	11.70 (7.56) 13.66 15.62 (75.69) 10 8	34.82 (30.58) 32.87 30.92 (48.44) 11 12	47.60 (16.24) 46.80 46.00 (34.22) 10 9	31.11(210.22) Dissimilar Attitudes
	No Info	13.83 (16.48) 15.04 16.25 (86.49) 12 12	33.18 (81.54) 34.05 34.92 (44.25) 11 15	46.67 (17.72) 46.64 46.62 (11.29) 12 13	31.91(211.54) No Attitude Information

14.17 (43.83) 34.45 (60.37) 47.01 (14.97)
 Low Moderate High
 (Column means and variances)

*Marginal means are unweighted.
 **Summation of ratings on dimensions one through six.

TABLE 7
CELL AND MARGINAL MEANS AND VARIANCES FOR
DIMENSION 1 OF THE BOS: STRUCTURING
AND CONTROLLING THE INTERVIEW

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data Cell mean → 2.62 Cell variance → (2.82) Mean for combined cells → 2.92 3.22 (1.93) No Hard Data 9 n= 8	5.25 (2.79) 4.92 4.58 (4.28) n= 8 n= 12	7.81 (.76) 8.01 8.20 (1.06) n= 11 n= 10	5.28(6.56) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 2.70 Cell variance → (1.35) Mean for combined cells → 2.91 3.12 (3.57) 10 8	5.09 (2.89) 4.84 4.58 (3.53) 11 12	7.40 (.93) 7.48 7.56 (.53) 10 9	5.08(5.36) Dissimilar Attitudes
	No info.	Cell mean → 2.58 Cell variance → (1.72) Mean for combined cells → 2.87 3.17 (4.88) 12 12	4.91 (3.50) 4.61 4.31 (3.06) 11 13	7.67 (.97) 7.72 7.77 (1.02) 12 13	5.07(6.50) No Attitude Information

2.90 (2.58) 4.79 (3.22) 7.73 (.88)
 Low Moderate High
 (Column means and variances)

*Marginal means are unweighted.

TABLE 8
CELL AND MARGINAL MEANS AND VARIANCES FOR
DIMENSION 2 OF THE BOS: ESTABLISHING
AND MAINTAINING RAPPORT

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Cell mean → 3.50 Cell variance → (2.86) Mean for combined cells → 2.92 n=8 No Hard Data	6.62 (2.56) 4.92 n=12 6.92 (2.43)	7.36 (1.66) 8.01 n=11 7.50 (.72)	5.60(6.39)
	Dissimilar	Cell mean → 1.90 Cell variance → (.74) Mean for combined cells → 2.91 n=10 2.12 (1.85)	6.18 (1.72) 4.83 n=11 6.17 (1.61)	7.90 (1.45) 7.48 n=9 7.67 (1.49)	5.32 (7.23)
	No info.	Cell mean → 2.75 Cell variance → (2.56) Mean for combined cells → 2.87 n=12 2.67 (1.51)	6.36 (2.86) 4.61 n=13 6.69 (4.08)	7.75 (2.37) 7.72 n=13 7.35 (1.10)	5.63(6.73)
		2.43(1.84) Low	6.49(2.65) Moderate	7.62(1.49) High	

(Column means and variances)

*Marginal means are unweighted.

TABLE 9
CELL AND MARGINAL MEANS AND VARIANCES FOR
DIMENSION 3 OF THE BOS: REACTING
TO STRESS

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data Cell mean → 2.62 Cell variance → (1.12) Mean for combined cells → 2.81 3.00 (4.49) No Hard Data 9	5.87 (6.40) 6.27 6.67 (4.24) n=8 n=12	8.45 (1.46) 8.28 8.10 (1.88) n=11 n=10	5.79(7.98)
	Dissimilar	Cell mean → 2.20 Cell variance → (.62) Mean for combined cells → 2.47 2.75 (2.79) 8	6.18 (2.16) 5.92 5.67 (4.24) 10 12	8.20 (1.06) 8.16 8.11 (1.10) 10 9	5.52(7.13)
	No info.	Cell mean → 2.58 Cell variance → (1.54) Mean for combined cells → 3.25 3.92 (4.28) 12	6.18 (4.58) 6.13 6.08 (1.42) 11 13	8.08 (1.54) 8.00 7.92 (1.42) 12 13	5.79(6.26)
					No Attitude Information

2.85(2.62) 6.11 (3.47) 8.15 (1.34)
 Low Moderate High
 (Column means and variances)

*Marginal means are unweighted.

TABLE 10
CELL AND MARGINAL MEANS AND VARIANCES FOR
DIMENSION 4 OF THE SOS:
RESOLVING CONFLICT

		Performance			
		Low	Moderate	High	
Cell mean Cell variance Mean for combined cells	Similar	Hard Data 2.62 (3.42) 2.09 1.55 (1.02) No Hard Data	6.12 (.70) 6.10 6.08 (8.07) n=8 n=12	7.45 (.48) 7.57 7.70 (2.02) n=11 n=10	5.26(7.94) Similar Attitudes (Row mean and row variance)
	Dissimilar	1.50 (.50) 2.19 2.87 (6.97) 10 8	5.54 (2.46) 5.36 5.16 (3.42) 11 12	8.00 (1.56) 7.83 7.67 (1.99) 10 9	5.13(7.80) Dissimilar Attitudes
	No info.	2.00 (2.72) 2.21 2.42 (2.99) 12 12	5.09 (5.48) 5.58 6.08 (3.72) 11 13	7.75 (2.19) 7.60 7.46 (2.28) 12 13	5.13(8.12) No Attitude Information

2.16(2.81) 5.68(4.07) 7.67 (1.66)
 Low Moderate High

(Column means and variances)

*Marginal means are unweighted.

TABLE 11
CELL AND MARGINAL MEANS AND VARIANCES FOR
DIMENSION 5 OF THE BOS: DEVELOPING
THE SUBORDINATE

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Cell mean → 2.12 Cell variance → (4.41) Mean for combined cells → 1.73 1.33 (.25) n=8 No Hard Data	6.37 (2.55) 6.81 n=8 7.25 (1.66) n=8	8.36 (.45) 8.58 n=11 8.80 (.18) n=	5.71(9.67) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 1.70 Cell variance → (.46) Mean for combined cells → 1.97 2.25 (4.20) 8 10	5.82 (1.56) 5.24 11 4.67 (3.35) 12	8.20 (.40) 8.04 10 7.89 (1.81) 9	5.09(7.74) Dissimilar Attitudes
	No info.	Cell mean → 2.09 Cell variance → (.99) Mean for combined cells → 1.96 1.83 (3.96) 12 12	4.91 (3.50) 5.26 11 5.62 (1.25) 13	8.08 (1.55) 8.38 12 8.69 (.40) 13	5.20(8.89) No Attitude Information

1.89(2.18) 5.77(2.90) 8.34(.79)
 Low Moderate High
 (Column means and variances)

*Marginal means are unweighted.

TABLE 12
CELL AND MARGINAL MEANS AND VARIANCES FOR
DIMENSION 6 OF THE BDS: MOTIVATING
THE SUBORDINATE

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Cell mean → 1.66 Cell variance → 1.44 Mean for combined cells → 1.44 (2.8) No Hard Data	Cell mean → 5.56 Cell variance → 6.25 (6.92) n=8 n=12	Cell mean → 7.72 Cell variance → 7.90 (.99) n=11 n=10	4.98 (8.96) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 2.10 Cell variance → 2.50 (2.56) Mean for combined cells → 2.50 (2.56) No Hard Data	Cell mean → 5.33 Cell variance → 4.67 (4.41) n=11 n=12	Cell mean → 7.51 Cell variance → 7.11 (3.35) n=10 n=9	4.98 (7.35) Dissimilar Attitudes
	No info.	Cell mean → 2.04 Cell variance → 2.25 (5.29) Mean for combined cells → 2.25 (5.29)	Cell mean → 5.96 Cell variance → 6.15 (4.80) n=11 n=13	Cell mean → 7.28 Cell variance → 7.23 (1.19) n=12 n=13	5.09 (7.86) No Attitude Information
		1.93 (2.17) Low	5.61 (4.71) Moderate	7.50 (1.41) High	

(Column means and variances)

*Marginal means are unweighted.

TABLE 13
CELL AND MARGINAL MEANS AND VARIANCES
FOR TRAIT SCALE TOTAL**

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data Cell mean → 17.50 Cell variance → (10.06) Mean for combined cells → 17.03 n=8 16.56 (23.52) No Hard Data 9	44.37 (17.14) Cell mean → 42.02 Cell variance → 39.67 (73.62) n=8 n=18	48.45 (8.47) Cell mean → 49.08 Cell variance → 49.70 (4.00) n=11 n=10	36.04 (216.77) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 16.20 Cell variance → (13.03) Combined cell means → 19.10 22.00 (59.44) 8 10	40.45 (39.06) Cell mean → 38.10 Cell variance → 35.75 (93.51) 11 12	49.60 (8.07) Cell mean → 48.41 Cell variance → 47.22 (23.91) 10 9	35.20 (184.66) Dissimilar Attitudes
	No Info.	Cell mean → 17.17 Cell variance → (35.05) Mean for combined cells → 16.04 14.92 (34.69) 12 12	39.91 (55.50) Cell mean → 38.84 Cell variance → 37.77 (47.06) 11 13	46.08 (24.60) Cell mean → 45.93 Cell variance → 45.77 (17.22) 12 13	33.60 (197.92) No Attitude Information
		17.39 (42.85) Low	39.65 (58.74) Moderate	47.80 (16.03) High	

(Column means and variances)

*Marginal means are unweighted.

TABLE 14
CELL AND MARGINAL MEANS AND VARIANCES FOR
TRAIT 1 OF THE TRAIT SCALE:
ORGANIZATION

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data Cell mean → 3.87 Cell variance → (4.71) Mean for combined cells → 3.77 3.67 (n=8) No Hard Data 9	6.87 (1.85) 6.23 (n=8) 5.58 (2.82) n=12	7.91 (.49) 8.20 (n=11) 8.50 (.28) n=10	6.07(4.95) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 3.40 Cell variance → (.93) Mean for combined cells → 3.70 4.00 (1.14) 10 8	6.09 (1.69) 5.96 (n=11) 5.83 (3.61) 12	8.30 (.46) 8.15 (n=10) 8.00 (.50) 9	5.94(4.58) Dissimilar Attitudes
	No info.	Cell mean → 3.25 Cell variance → (1.12) Mean for combined cells → 3.29 3.33 (2.59) 12	6.73 (.82) 6.40 (n=11) 6.08 (.75) 13	7.50 (.64) 7.40 (n=12) 7.31 (1.23) 13	5.70(4.24) No Attitude Information
		3.59(1.70) Low	6.20(1.98) Moderate	7.92(.77) High	(Column means and variances)

3.59(1.70) 6.20(1.98) 7.92(.77)
Low Moderate High

(Column means and variances)

*Marginal means are unweighted.

TABLE 15
CELL AND MARGINAL MEANS AND VARIANCES FOR
TRAIT 2 OF THE TRAIT SCALE:
COMMUNICATION SKILL

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Cell mean → 2.87 Cell variance → (3.55) Mean for combined cells → 2.68 2.33 (1.50) n=8 No Hard Data 9	7.50 (.29) 7.04 6.58 (3.36) n=8 n=12	8.18 (.56) 8.24 8.30 (.46) n=11 n=10	5.96 (7.21) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 2.70 Cell variance → (.90) Mean for combined cells → 3.22 3.75 (5.93) 10 8	7.19 (1.56) 6.55 5.19 (2.96) 11 12	8.50 (.50) 8.25 8.00 (1.25) 10 9	6.01 (6.37) Dissimilar Attitudes
	No info.	Cell mean → 3.00 Cell variance → (1.45) Mean for combined cells → 2.67 2.33 (1.14) 12 12	7.18 (1.76) 7.05 6.92 (1.58) 11 13	8.08 (.45) 7.96 7.85 (1.30) 12 13	5.89 (6.63) No Attitude Information
		2.83 (2.20) Low	6.88 (2.14) Moderate	8.15 (.75) High	

(Column means and variances)

*Marginal means are unweighted.

TABLE 16
CELL AND MARGINAL MEANS AND VARIANCES FOR
TRAIT 3 OF THE TRAIT SCALE:
COMPOSURE
Performance

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Herd Data Cell mean → 2.87 Cell variance → (.213) Mean for combined cells → 3.27 3.67 (1.75) n=8	7.62 (.84) 7.35 7.08 (1.90) n=8 n=12	8.64 (.25) 8.57 8.50 (.28) n=11 n=10	6.40 (6.00) Similar Attitudes (Row mean and row variance)
	Dissimilar	No Herd Data Cell mean → 3.60 Cell variance → (1.14) Mean for combined cells → 3.99 4.37 (3.42) 10 8	7.36 (.45) 6.68 6.00 (4.00) 11 12	8.40 (.49) 8.16 7.89 (.61) 10 9	6.27 (4.67) Dissimilar Attitudes
	No info	Cell mean → 3.00 Cell variance → (.91) Mean for combined cells → 3.12 3.25 (2.76) 12 12	7.18 (2.56) 6.86 6.54 (3.10) 11 13	8.33 (.42) 8.16 8.00 (.83) 12 13	6.05 (6.29) No Attitude Information
		3.46 (2.01) Low	6.97 (2.39) Moderate	8.29 (.52) High	

(Column means and variances)

*Marginal means are unweighted.

TABLE 17
CELL AND MARGINAL MEANS AND VARIANCES FOR
TRAIT 4 OF THE TRAIT SCALE:
CONFLICT RESOLUTION SKILL

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Cell mean → 2.49 Cell variance → 2.22 (.94) Mean for combined cells → 2.75 n=11	Cell mean → 7.44 Cell variance → 6.75 (2.92) Mean for combined cells → 7.18 (1.17) n=12	Cell mean → 8.15 Cell variance → 8.30 (.46) Mean for combined cells → 8.00 (.80) n=10	6.02 (7.38) Similar Attitudes (Row mean and row variance)
	Dissimilar	Cell mean → 2.75 Cell variance → 3.50 (2.28) Mean for combined cells → 2.50 (1.90) n=10	Cell mean → 6.63 Cell variance → 6.08 (4.08) Mean for combined cells → 6.73 (3.80) n=11	Cell mean → 7.98 Cell variance → 7.56 (.78) Mean for combined cells → 7.58 (1.54) n=9	5.79 (5.73) Dissimilar Attitudes
	No info.	Cell mean → 2.17 Cell variance → 1.83 (1.42) Mean for combined cells → 2.50 (1.90) n=12	Cell mean → 6.75 Cell variance → 6.77 (3.84) Mean for combined cells → 6.94 (3.03) n=13	Cell mean → 7.64 Cell variance → 7.69 (.90) Mean for combined cells → 7.92 (.90) n=13	5.52 (7.92) No Attitude Information

2.47 (1.73) 6.94 (3.03) 7.92 (.90)
 Low Moderate High

(Column means and variances)

*Marginal means are unweighted.

TABLE 18
CELL AND MARGINAL MEANS AND VARIANCES FOR
TRAIT 5 OF THE TRAIT SCALE:
EMPLOYEE DEVELOPMENT SKILL

		Performance				
		Low	Moderate	High		
Attitude Similarity	Similar	Hard Data Cell mean → 2.25 Cell variance → (4.20) Mean for combined cells → 2.18 n=8	7.50 (.86) 7.21 n=8 6.92 (3.53) n=12	8.27 (.42) 8.24 n=11 8.20 (.62) n=10	5.87 (8.33)	Similar Attitudes (Row mean and row variance)
	Dissimilar	No Hard Data Cell mean → 2.10 Cell variance → (1.21) Mean for combined cells → 2.42 n=9	6.36 (1.66) 6.18 n=11 6.00 (4.54) n=12	8.20 (.18) 8.16 n=10 8.11 (1.61) n=9	5.88 (7.14)	Dissimilar Attitudes
	No info.	Cell mean → 2.58 Cell variance → (1.72) Mean for combined cells → 2.17 n=12 1.75 (.57) n=12	6.55 (4.28) 6.35 n=11 6.15 (2.82) n=13	7.50 (1.37) 7.71 n=12 7.92 (.55) n=13	5.41 (7.44)	No Attitude Information
		2.26 (1.56) Low	6.58 (3.07) Moderate	8.03 (.80) High		

(Column means and variances)

*Marginal means are unweighted.

TABLE 19
CELL AND MARGINAL MEANS AND VARIANCES FOR
TRAIT 6 OF THE TRAIT SCALE:
LEADERSHIP ABILITY

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data Cell mean → 2.87 Cell variance → (4.12) Mean for combined cells → 2.71 2.56 (1.02) No Hard Data 9 n=8	6.75 (1.06) 6.75 (1.85) n=8 n=12	7.45 (.86) 7.68 7.90 (.32) n=11 n=10	5.71 (5.31)
	Dissimilar	Cell mean → 2.40 Cell variance → (.70) Mean for combined cells → 3.01 3.62 (2.86) 10 8	6.27 (1.61) 6.09 11 12	7.80 (.40) 7.73 10 9	5.61 (6.53)
	No info.	Cell mean → 2.83 Cell variance → (1.06) Mean for combined cells → 2.62 2.42 (.81) 12 12	5.55 (3.46) 5.43 11 13	7.08 (2.07) 7.04 12 13	5.03 (4.91)
					No Attitude Information

$\frac{2.78(1.57)}{\text{Low}}$
 $\frac{6.09(2.71)}{\text{Moderate}}$
 $\frac{7.48(.97)}{\text{High}}$

(Column means and variances)

*Marginal means are unweighted.

TABLE 20
CELL AND MARGINAL MEANS AND VARIANCES FOR THE
SUMMATED ATTRACTION MEASURE

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Herd Data Cell mean → 5.75 Cell variance → (8.53) Mean for combined cells → 5.76 5.78 (7.45) n=8	11.75 (.78) 11.25 10.75 (3.84) n=8	12.18 (1.56) 12.14 12.10 (4.08) n=11	9.72(1.14) Similar Attitudes (Row mean and row variance)
	No Herd Data	4.90 Cell mean → 4.90 Cell variance → (2.76) Mean for combined cells → 5.89 6.87 (10.43) n=8	8.90 (8.47) 8.99 9.08 (5.15) n=11	11.80 (3.06) 11.56 11.33 (6.00) n=10	
	Dissimilar	5.75 Cell mean → 5.75 Cell variance → (6.00) Mean for combined cells → 5.50 5.25 (5.11) n=12	10.00 (8.62) 10.35 10.69 (1.39) n=11	11.92 (3.17) 12.19 12.46 (1.10) n=12	
No info.					8.62(10.94) Dissimilar Attitudes
					9.34(1.20) No Attitude Information

5.72 (6.19) 10.20 (5.36) 11.97 (2.67)
 Low Moderate High
 (Column means and variances)

*Marginal means are unweighted.

TABLE 21
CELL AND MARGINAL MEANS AND VARIANCES FOR ATTRACTION
QUESTION 1: PREFERENCE AS A CO-WORKER

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Hard Data Cell mean → 2.25 Cell variance → (1.93) Mean for combined cells → 2.07 n=8	5.87 (.13) 5.56 5.25 (1.85) n=8	6.18 (.76) 6.14 6.10 (2.31) n=11	4.59 (4.45) Similar Attitudes (Row mean and row variance) 4.26 (4.03) Dissimilar Attitudes 4.47 (4.17) No Attitude Information
	No Hard Data	1.89 (1.51) 1.90 (.77) 2.32 2.75 (2.79) n=9	4.36 (2.66) 4.35 4.33 (2.43) n=12	6.30 (.46) 6.09 5.89 (1.61) n=10	
	Dissimilar	2.42 (1.35) 2.12 1.83 (1.06) n=12	4.73 (3.20) 4.86 5.00 (.67) n=11	6.33 (.42) 6.32 6.31 (.40) n=12	
No info.					

2.17 (1.48) 4.92 (1.99) 6.19 (.88)
 Low Moderate High
 (Column means and variances)

*Marginal means are unweighted.

TABLE 22
CELL AND MARGINAL MEANS AND VARIANCES FOR ATTRACTION
QUESTION 2: LIKING AS A PERSON

		Performance			
		Low	Moderate	High	
Attitude Similarity	Similar	Cell mean → 3.50 Cell variance → (2.56) Mean for combined cells → 3.69 n=8	Cell mean → 5.87 Cell variance → (.41) Mean for combined cells → 5.69 n=8	Cell mean → 6.00 Cell variance → (.60) Mean for combined cells → 6.00 n=11	5.12 (2.06)
	Dissimilar	Cell mean → 3.89 Cell variance → (2.62) Mean for combined cells → 3.56 n=10	Cell mean → 4.55 Cell variance → (2.07) Mean for combined cells → 4.65 n=11	Cell mean → 5.50 Cell variance → (1.82) Mean for combined cells → 5.47 n=10	4.56 (2.28)
	No info.	Cell mean → 4.12 Cell variance → (2.69) Mean for combined cells → 3.37 n=12	Cell mean → 5.27 Cell variance → (1.61) Mean for combined cells → 5.48 n=11	Cell mean → 5.44 Cell variance → (1.77) Mean for combined cells → 5.87 n=12	4.91 (2.59)
		3.54 (2.22)	5.27 (1.22)	5.78 (1.04)	
		Low	Moderate	High	

(Column means and variances)

*Marginal means are unweighted.

low condition. Hypotheses 2.1, 2.2., and 2.4 predicted that behavioral, trait, and attraction ratings in the similar condition would tend to be inflated and, therefore, higher than ratings in the no-attitude-information condition; and conversely, that ratings in the dissimilar attitude condition would tend to be deflated, and therefore, lower.

Since no procedure is available for non-orthogonal planned comparisons involving unequal cell variances, two separate procedures were employed -- Dunn's multiple comparison procedure, which is appropriate for non-orthogonal comparisons (see Kirk, 1968, p. 79), and a t-test recommended by Cochran and Cox (1957, p. 100) that accommodates unequal cell variances. The results for performance and attitude similarity hypotheses are presented in Tables 23 and 24, respectively. In line with Byrne's measure of attraction, responses to question 1 (preference as a co-worker) and question 2 (liking) were summed. The summation was treated as a separate dependent variable here and in subsequent analyses. The use of a summated measure permits the results of this study to be compared to the results of Byrne's earlier studies on the relationship of PAS to attraction.

Results from the two types of significance tests generally confirm one another. The performance comparisons yielded data consistent with the experimental hypotheses. There were highly significant differences between ratings in the high versus the moderate conditions, and between ratings in the moderate versus the low conditions for all three scales. However, in comparisons of the similar attitude and no-attitude-information conditions, the summated attraction measure was the only significant result at the .05 level of significance. In comparisons of the dissimilar and no-attitude-information conditions, none were significant.

TABLE 23
 PLANNED COMPARISONS OF PERFORMANCE GROUPS
 USING DUNN'S MULTIPLE COMPARISON PROCEDURE ^t
 AND COCHRAN AND COX'S T-TEST

Variable	HIGH VS. MODERATE			MODERATE VS. LOW		
	Dunn's Procedure		C and C	Dunn's Procedure		C and C
	$X_1 - X_2$	d	t	$X_1 - X_2$	d	t
1. BOS Scale Total	12.57**	3.08	11.86***	20.26**	3.18	15.83***
2. Trait Scale Total	8.35**	3.00	7.88***	22.18**	3.09	17.46***
3. Attraction Scale Total	1.77**	1.06	5.03***	4.48**	1.10	10.42***

^t According to Dunn's procedure, the difference between means must exceed d critical to achieve significance. The highest d critical for which the comparison is significant is given. Dunn's procedure does not permit testing beyond the .01 level (see Kirk, 1968).

* p < .05
 ** p < .01
 *** p < .001

TABLE 24
 PLANNED COMPARISONS OF ATTITUDE SIMILARITY GROUPS
 USING DUNN'S MULTIPLE COMPARISON PROCEDURE^t
 AND COCHRAN AND COX'S T-TEST

Variable	SIMILAR VS. NO INFO.			NO. INFO. VS. DISSIMILAR		
	Dunn's Procedure		C and C	Dunn's Procedure		C and C
	$X_1 - X_2$	d	t	$X_1 - X_2$	d	t
1. BOS Scale Total	1.76	2.50	.67	.71	2.43	.28
2. Trait Scale Total	3.33	2.43	1.31	-1.81	2.50	-.75
3. Attraction Scale Total	.38	.86	2.00*	.52	.86	.52

^t According to Dunn's procedure, the difference between means must exceed d critical to achieve significance. The highest d critical for which the comparison is significant is given. Dunn's procedure does not permit testing beyond the .01 level (see Kirk, 1968).

* $p < .05$

** $p < .01$

*** $p < .001$

These results fail to support the notion that perceived similarity substantially impacts performance, or even attraction ratings, at least under this set of experimental conditions. The failure of attraction to achieve greater significance is at variance with earlier research that has consistently supported the similarity-attraction relationship, although no-information control groups have not been employed to the author's knowledge. Comparisons have typically been restricted to similar versus dissimilar groups only.

Since the attitude similarity hypotheses imply that ratings in the similar attitude condition should exceed those in the dissimilar condition, differences between these groups were also treated as planned comparisons. These results are presented in Table 25. Although performance ratings once again did not achieve significance, the attraction measure was significant at the .05 level on both tests. This comparison lends some support for the effect of PAS on attraction.

An examination of the marginal means for the PAS conditions, displayed in Tables 6 through 22 for all dependent measures, lends directional support for the positive influence of perceived similarity on ratings. Ratings for nearly every dependent measure are somewhat higher in the similar attitude condition than in the no-attitude-information condition (exceptions are dimensions 2, 3, and 6 of the BOS). However, the expected deflationary effect of perceived dissimilarity is supported for only the attraction questions, the summated attraction measure and for some dimensions (dimensions 2, 3, 5, and 6) of the BOS. The effect is more apparent in the moderate performance condition with the dissimilar group's mean ratings lower than the no-information group's mean ratings on 13 of the 17 dependent measures. In addition, there is strong support for the predicted directional differences between the similar and dissimilar groups.

TABLE 25
 PLANNED COMPARISONS OF SIMILAR VS.
 DISSIMILAR ATTITUDE GROUPS USING
 DUNN'S MULTIPLE COMPARISON
 PROCEDURE^t AND COCHRAN
 AND COX'S T-TEST

Variable	Similar vs. Dissimilar		
	Dunn's Procedure		C and C
	$X_1 - X_2$	d	t
1. BOS Scale Total	2.47	2.61	.90
2. Trait Scale Total	1.52	2.54	.58
3. Attraction Scale Total	.90*	.90	2.00*

^tAccording to Dunn's procedure, the difference between means must exceed d critical to achieve significance. The highest d critical for which the comparison is significant is given. Dunn's procedure does not permit testing beyond the .01 level (see Kirk, 1968).

* $p < .05$

** $p < .01$

*** $p < .001$

It appears from the preceding analyses that PAS did not affect performance or attraction ratings to the extent predicted; however, the effect on attraction in comparing the similar and dissimilar groups does substantiate the similarity-attraction effect found in earlier studies.

The examination of means seemed to indicate a slight inflationary effect of perceived similarity on all measures, including performance ratings, as well as a slight deflationary effect of perceived dissimilarity in the moderate performance condition. The next section presents findings from the multivariate analysis of variance procedure.

Multivariate Analysis of Variance

Multivariate analysis of variance (MANOVA) with a $3 \times 3 \times 2$ factorial design was employed to measure the effects of level of ratee performance (PERF), perceived attitude similarity (PAS), and presence of hard performance data (HDATA) on the BOS and Trait Scales. The attraction measures were treated separately in univariate analysis of variance procedures. The summated measure was treated separately so that the results of this analysis could be compared to Byrne's findings, as stated earlier.

Recall that subjects in the hard data conditions received objective performance information consistent with the performance level enacted on the videotape. Hence, subjects in the low performance condition received only low performance hard data, and so on. Since the variable of interest was the presence or absence of hard data, the level of hard data was designed to support the videotaped presentation.

MANOVA results are displayed in Table 26. Results for both the BOS AND Trait ratings show a significant main effect for PERF (multivariate $F=85.82$,

TABLE 26

RESULTS OF MANOVA'S AND SUBSEQUENT UNIVARIATE
ANALYSES ON ALL DEPENDENT MEASURES

Source	Univariate df's	DIM1		DIM2		DIM3		DIM4		DIM5		DIM6		Multivariate
		MS	F	MS	F	MS	F	MS	F	MS	F	MS	F	F
Perf.(A)	2	372.60	159.65 ^C	453.09	224.26 ^C	432.43	170.34 ^C	481.09	163.61 ^C	652.67	371.67 ^C	492.32	174.12 ^C	85.82 ^C
PAS (B)	2	.85	.37	1.78	.88	1.85	.73	.42	.14	8.01	4.57 ^a	.38	.13	1.30
Hdata (C)	1	.04	.02	.58	.29	1.71	.67	.71	.24	.43	.24	.15	.05	.91
AxB	4	.53	.23	1.88	.93	1.51	.59	1.59	.54	6.34	3.61 ^b	2.13	.75	.34
BxC	2	.05	.02	.78	.38	.73	.29	1.47	.50	2.40	1.37	4.02	1.42	.72
AxC	2	5.29	2.27	1.89	.93	4.37	1.72	.70	.24	.79	.45	.85	.30	1.40
AxBxC	4	.08	.04	2.54	1.26	1.54	.61	4.32	1.47	3.92	2.23	4.69	1.66	.84
Source	Univariate df's	TRAIT 1		TRAIT 2		TRAIT 3		TRAIT 4		TRAIT 5		TRAIT 6		Multivariate
		MS	F	MS	F	MS	F	MS	F	MS	F	MS	F	F
Perf.(A)	2	292.97	203.60 ^C	474.65	289.12 ^C	385.53	246.47 ^C	521.91	289.11 ^C	550.60	299.51 ^C	356.82	209.65 ^C	72.03 ^C
PAS (B)	2	1.92	1.33	.08	.05	2.18	1.39	3.46	1.92	3.58	1.95	9.09	5.34 ^b	1.80 ^a
Hdata (C)	1	1.82	1.27	7.13	4.34 ^a	2.76	1.76	4.15	2.30	1.35	.74	.00	.00	1.33
AxB	4	2.50	1.73	2.01	1.23	2.49	1.59	1.11	.61	2.14	1.17	2.28	1.34	1.35
BxC	2	.32	.22	.03	.02	.78	.49	.49	.27	.42	.23	.83	.49	.56
AxC	2	3.53	2.45	2.28	1.38	7.97	5.09 ^b	2.90	1.61	1.32	.72	.55	.32	1.30
AxBxC	4	1.47	1.03	3.13	1.91	.54	.35	5.72	3.17 ^a	1.44	.78	1.90	1.12	
Source		Ques. 1		Ques. 2		Q 1 + Q 2								
		MS	F	MS	F	MS	F	MS	F	MS	F	MS	F	
Perf.(A)	2	261.32	181.66 ^C	87.63	61.02 ^C	650.16	138.87 ^C							
PAS(B)	2	1.99	1.38	5.62	3.92 ^a	14.30	3.05 ^a							
Hdata(C)	1	.53	.37	3.16	2.20	1.10	.24							
AxB	4	2.84	1.97	1.46	1.01	7.20	.19							
BxC	2	.77	.53	.75	.52	2.88	.54							
AxC	2	.01	.01	.57	.40	.70	.15							
AxBxC	4	1.70	1.18	1.12	.78	5.36	1.14							

a = p < .05

b = p < .01

c = p < .001

df=12/334, $p = .0001$; and multivariate $F = 1.80$, df=12/334, $p < .05$, respectively). This indicates that there were significant differences in both sets of ratings due to level of ratee performance. In addition, trait ratings showed a main effect for PAS (multivariate $F=1.80$, df=12/334, $p < .05$) suggesting that there were significant differences in trait ratings attributable to perceived similarity, contrary to the results of planned comparisons. However, in subsequent univariate analyses, only dimension 5 of the BOS and trait 6 of the trait scale showed a significant main effect of PAS.

It is possible to obtain a statistically significant multivariate F yet fail to obtain statistically significant univariate F 's when the dependent measures are analyzed separately. Kerlinger and Pedhazur demonstrate how a pattern of results may emerge in n dimensional space that is not apparent when the relationships involving the independent and each dependent variable are viewed separately in two-dimensional space (1973, p. 359). This in fact proved to be the case here with respect to trait ratings.

All effects due to PERF were significant beyond the .0001 level. An inspection of the marginal mean ratings suggests that the effects of PAS were small in comparison to the influence of PERF for both dimension 5 and trait 6. A comparison of the proportion of variance accounted for (omega square; see Hayes, 1973) by each of these variables confirms this impression. In both cases PAS accounts for only 1% of the variance in ratings while PERF accounts for 78% and 66%, respectively. These results are presented in Table 27.

Univariate analysis of the summated attraction measure found significant main effects for PERF ($F=3.05$, df= 2/173, $p < .0001$) and PAS ($F=3.05$, df=2/173, $p < .05$). Both main effects were also found to be significant for question 2 (liking; $F = 61.02$, df=2/173, $p < .0001$, and $F = 3.92$, df = 2/173, $p < .05$, respectively).

TABLE 27
OMEGA SQUARES FOR SIGNIFICANT EFFECTS
FROM THE ANALYSIS OF VARIANCE
ON BOS AND TRAIT SCALES

Effect	ω^2	Effect	ω^2
Dimension 1 Perf	.63	Trait 3 Perf Perf x Hdata	.71 .01
Dimension 2 Perf	.70	Trait 4 Perf	.74
Dimension 3 Perf	.64	Trait 5 Perf	.76
Dimension 4 Perf	.64	Trait 6 Perf PAS	.66 .01
Dimension 5 Perf PAS Perf x PAS	.78 .01 .01	Question 1 (Preference as a co-worker) Perf	.65
Dimension 6 Perf	.65	Question 2 (Liking) Perf PAS	.38 .02
Trait 1 Perf	.67	Summated Attraction Measure Perf PAS	.59 .01
Trait 2 Perf Hdata	.75 <.01		

Question 1 (preference as a co-worker) showed a main effect of only performance ($F=181.67$, $df=2/173$, $p<.0001$). Again, omega squares suggest that PAS accounts for a very small proportion of variance.

Hypotheses 2.5 and 2.6 predicted that similarity should be differentially effective across performance levels in influencing both behavioral and trait ratings. Specifically, it was predicted that attitude similarity would have the greatest effect on performance ratings when performance was moderate. The relevant source of variance for testing the significance of this finding is the PAS X PERF interaction. As shown in Table 26, only dimension 5 displayed a significant PAS X PERF interaction. In an analysis of simple effects, the only significant differences between levels of PAS were in the moderate performance condition, as predicted. Mean ratings in the similar group were significantly higher than in the dissimilar or no-attitude information groups. The results of tests for simple effects are shown in Table 28.

Hypotheses 3.2 and 3.3 predicted a two-way interaction effect between PAS and HDATA for behavioral and trait ratings. Specifically, PAS was expected to have a greater effect in the absence of hard data. The MANOVA results did not support these predictions, since the PAS X HDATA interaction was not significant for any dependent measure.

Finally, two unexpected effects involving the HDATA manipulation were obtained. Trait 2 showed a main effect for HDATA ($F=4.34$, $df=1/173$, $p<.05$). Specifically, ratings for trait 2 were higher in the hard data condition than in the no-hard-data condition. In addition, dimension 3 showed a significant PERF X HDATA interaction ($F=5.09$, $df=2/173$, $p<.01$). In tests of simple effects the only significant difference was in the low performance condition where ratings in the no-hard-data condition were higher ($F=4.26$, $df=1/185$, $p<.05$). These findings

TABLE 28
TESTS OF SIMPLE EFFECTS FOR SIGNIFICANT TWO-WAY
INTERACTIONS

INTERACTION	F	df	p
PERF X PAS (Dimension 5)			
<u>Similar vs. Dissimilar</u>			
	.29	1/182	.60*
Within low group	16.90	1/182	.00
Within moderate group	1.50	1/182	.22
Within high group			
<u>Similar vs. No Info</u>			
	.35	1/182	.55
Within low group	15.74	1/182	.00
Within moderate group	.19	1/182	.67
Within high group			
<u>Dissimilar vs. No Info</u>			
	.00	1/182	.97
Within low group	.04	1/182	.85
Within moderate group	.73	1/182	.39
Within high group			
PERF X HDATA (Dimension 3)			
<u>Hard vs. No Hard Data</u>			
	4.26	1/185	.04
Within low group	.01	1/185	.93
Within moderate group	.29	1/185	.59
Within high group			

*Probabilities are rounded to the nearest hundredth.

offer no clear interpretation of the nature of the HDATA effect, however, the magnitude of HDATA effect was quite small as indicated by the omega square in Table 26.

The three-way interaction effect shown for dimension 4 is essentially uninterpretable.

The MANOVA findings generally support a small but significant effect of attitude similarity on ratings of attraction. There was clearly no effect on behavioral ratings; however, there was a significant multivariate effect on trait ratings. This finding is difficult to interpret in light of the non-significant results of univariate analyses.

Assessing Accuracy

The methods used by Borman (1978) to assess the precision of expert ratings were used here. An intraclass correlation coefficient was computed for each dimension of the BOS as an index of interrater reliability. These coefficients are displayed in Table 29. Reliability was very high, as in the Borman study.

Also, as in Borman, an analysis of variance was performed to assess the effects of Rater (differential validity), Ratee (convergent validity), Ratee X Dimension (discriminant validity) and Rater X Ratee (rater agreement collapsed across dimensions). The procedure, described in Kavenaugh, et. al., 1971, involves constructing an ANOVA table from data in the multitrait-multimethod matrix. The resulting ANOVA table for these data appears in Table 30.

In addition, variance components were computed to estimate the magnitude of the effects using formulas from Kavenaugh. As shown in Table 30 only the Ratee effect is significant and, in fact, accounts for 97% of the variance in expert ratings. Thus, convergent validity is high. The non-significant Ratee X Dimension

TABLE 29
INTRACLAS CORRELATION COEFFICIENTS
FOR EACH DIMENSION

VARIABLE		Intraclass corr. coef.
		.99**
1.	Structuring	.98
2.	Maintaining rapport	.99
3.	Reacting to stress	.99
4.	Resolving conflict	1.00
5.	Developing subordinate	.98
6.	Motivating subordinate	

**Rounded to the nearest hundredth

TABLE 30
ANALYSIS OF VARIANCE OF CORRELATIONS
FROM THE MULTITRAIT-MULTIMETHOD
MATRIX

Source	df	MS	F	Variance Component
Ratee (R)	2	43.825	1417.909**	.97
R X Dimension	10	.045	1.468	.01
R X Rater	8	.082	2.668	.01
Error	40	.031		.01

**p<.01

interaction suggests a lack of discriminant validity. This finding confirms that the actors accurately communicated the intended levels of performance since each performance was constructed to be equally good (moderate or poor) on all dimensions. Given the non-significant Rater X Ratee effect, there is no evidence of rater bias.

Operationalizing Accuracy

Hypotheses, 1.4, 2.3, 3.1, predicted that subjects' ratings would be more accurate (1) in the low and high performance groups than in the moderate group, (2) in the no-attitude-information group than in the similar or dissimilar attitude groups, and (3) in the hard data group than in the no-hard-data group.

The data point used to represent the accuracy of a subject's rating was the algebraic difference between the subject's rating and the "true score" for the ratee on that dimension. The "true score" for each ratee on each dimension was represented by the mean of the expert ratings rounded to the nearest whole number. True scores and other measures of central tendency are displayed in Table 31.

Planned comparisons using difference scores were conducted to test the accuracy hypotheses. Because of unequal cell sizes, the Bartlett-Box test for homogeneity of variance was performed for each appropriate partitioning of the data. Variances among levels of PERF lacked homogeneity for all dimensions ($F=13.07$, $p=.0001$; $F=2.77$, $p=.06$; $F=7.08$, $p=.001$; $F=6.23$, $p=.01$; $F=12.78$, $p=.0001$; $F=12.22$, $p=.0001$ for dimensions 1 through 6, respectively). However, variances among levels of PAS were not found to be significantly different ($F=1.39$, $p=.87$;

TABLE 31
TRUE SCORES AND MEASURES OF CENTRAL TENDENCY FOR EACH
RATEE ON EACH DIMENSION

	Dim 1	Dim 2	Dim 3	Dim 4	Dim 5	Dim 6
Ratee 1						
True Score	8	8	9	8	9	8
Mean	8.0	8.2	8.8	8.2	8.8	7.8
Mdn	8	8	9	9	9 9	
Mode	8	8/9	9	9	9 9	
Ratee 2						
True Score	4	5	5	4	5	5
Mean	3.8	5.4	4.8	4.0	4.6	4.6
Mdn	4	5	5	4	5 5	
Mode	4	5	4/5	4	5 5	
Ratee 3						
True Score	1	1	1	1	1	1
Mean	1.2	1.2	1.2	1.0	1.0	1.2
Mdn	1	1	1	1	1 1	
Mode	1	1	1	1	1 1	

$F=1.81, p=.16$; $F=1.48, p=.23$; $F=.50, p=.61$; $F=.08, p=.92$; $F=.30, p=.74$ for dimensions 1 through 6, respectively). In partitioning the data according to levels of HDATA, dimensions 1, 2, and 5 displayed homogeneity of variance ($F=2.36, p=.125$; $F=.80, p=.37$; $F=.47, p=.49$) while dimensions 3, 4, and 6 did not ($F=3.90, p<.05$; $F=5.07, p<.05$; $F=6.80, p<.01$). The Cochran and Cox t-test was used in conjunction with Dunn's procedure for non-orthogonal comparisons where homogeneity of variance was found lacking. Otherwise, Dunn's test or a standard t-test was performed as appropriate. The results are presented in Table 32.

Again, results of the Cochran and Cox procedure and Dunn's procedure are in agreement. With respect to Hypothesis 1.4, student ratings of the high performer were consistently more accurate than ratings of the moderate performer on every dimension. Comparisons between the moderate and low groups however, did not support the prediction of greater accuracy in the low group than in the moderate group. In fact, in the only two significant contrasts (dimensions 1 and 3) the mean difference score was lower for the moderate group indicating greater accuracy.

In testing Hypothesis 2.3, comparisons of the similar attitude group with the no-attitude-information group and of the dissimilar group with the no-attitude-information group yielded no significant results. Also, in comparisons of the hard data and no-hard-data groups, none of the findings were significant (Hypothesis 3.1).

These findings present additional evidence that PAS did not have the predicted biasing effect on ratings. The only contrasts that confirmed predictions were those indicating greater accuracy in the high than in the moderate performance condition. There is nothing to suggest, however, that the greater deviations from true score in the moderate condition are attributable to the PAS manipulation.

TABLE 32

PLANNED COMPARISONS OF DIFFERENCE SCORES FOR LEVELS
OF PERFORMANCE, LEVELS OF ATTITUDE SIMILARITY,
AND LEVELS OF HARD PERFORMANCE DATA

VARIABLE	⁺ Dunn's Procedure	d	<u>C and C</u>	<u>Dunn's Procedure</u>	d	<u>C and C</u>
	X mod - X High		t	X mod - X low		t
1. Structuring	1.01**	.75	4.06***	-1.14**	.76	3.77***
2. Maintaining rapport	1.87**	.69	7.45***	.05	.57	.19
3. Reacting to stress	1.98**	.77	7.33***	-.76*	.63	2.45**
4. Resolving conflict	2.01**	.83	6.86***	.53	.68	1.61
5. Developing subordinate	1.40**	.69	5.96***	-.13	.56	.46
6. Motivating subordinate	1.17**	.82	3.86***	-.27	.85	.83

	<u>X sim - X no</u>	d	<u>Xdiss - X no</u>	d
1. Structuring	.15	.68	.00	.68
2. Maintaining rapport	-.08	.66	.26	.66
3. Reacting to stress	-.03	.77	.25	.77
4. Resolving conflict	.08	.75	.01	.75
5. Developing subordinate	.50	.61	.14	.61
6. Motivating subordinate	-.08	.71	.13	.71

^t According to Dunn's procedure, the difference between means must exceed d critical to achieve significance. The highest d critical for which the comparison is significant is given. Dunn's procedure does not permit testing beyond the .01 level (see Kirk, 1968).

* $p < .05$

** $p < .01$

*** $p < .001$

TABLE 32 (continued)

VARIABLE	X - X no hard hard	<u>C and C</u>	
		t	t
1. Structuring	.03		.13
2. Maintaining rapport	-.04		.18
3. Reacting to stress	.24	.86	
4. Resolving conflict	.20	.73	
5. Developing subordinate	.15		.67
6. Motivating subordinate	.09	.35	

* $p < .05$ ** $p < .01$ *** $p < .001$

POST-HOC ANALYSES

Two post-hoc analyses were conducted. As a manipulation check for PAS, subjects were asked to indicate the extent to which they perceived the manager's attitudes as similar to their own. Alternatives ranged from "very similar" to "very dissimilar" on a five-point Likert-type scale. Thus, it was possible to operationalize PAS as a continuous variable. This measure was used as a predictor in separate bivariate regression analyses on each dependent measure. The results, appearing in Table 33, basically duplicate the omega squares calculated earlier.

In addition, correlations were calculated among the means of the trait and BOS scales and the summated attraction measures. These correlations, which appear in Table 34, indicate high correlations among the dependent variables. This is consistent with the idea that performance and attraction ratings may be based upon the prototype category to which the ratee has been assigned and, therefore, tend to be consistent with another.

TABLE 33
RESULTS OF POST-HOC ANALYSES USING A CONTINUOUS MEASURE
OF PAS AS A PREDICTOR IN SEPARATE
BIVARIATE REGRESSION ANALYSES
ON EACH DEPENDENT MEASURE

VARIABLE	R ² (PAS)
<u>Dimensions</u>	
1. Structuring	.00
2. Maintaining rapport	.01
3. Reacting to stress	.01
4. Resolving conflict	.01
5. Developing subordinate	.02
6. Motivating subordinate	.00
<u>Traits</u>	
1. Organization	.00
2. Communication skill	.00
3. Composure	.01
4. Conflict resolution skill	.00
5. Employee development skill	.00
6. Leadership ability	.00
<u>Attraction</u>	
1. Preference as a co-worker	.01
2. Liking as a person	.04**
3. Summated measure	.02

*p < .05

**p < .01

***p < .001

TABLE 34
CORRELATIONS AMONG MEAN BOS RATINGS,
MEAN TRAIT RATINGS AND
SUMMATED ATTRACTION
RATINGS

	BOS	TRAITS	ATTRACTION
BOS			
TRAITS	.92		
ATTRACTION	.82	.86	

CHAPTER 7

DISCUSSION AND CONCLUSION

Relationship of PAS to Performance Ratings

In this experiment performance clearly accounted for most of the variance in both behavioral and trait performance ratings, as predicted. Contrary to prediction, however, the effect of PAS on performance ratings was not supported. Planned comparisons failed to reveal the expected inflationary effect of perceived similarity on ratings, or conversely, the expected deflationary effect associated with perceived dissimilarity. Although a significant multivariate main effect of PAS on trait ratings was found, the effect was not supported by subsequent univariate analyses on traits taken separately. In addition, planned comparisons using accuracy scores (i.e., students' deviations from true scores) indicated that student raters were no less accurate in the similar and dissimilar groups than in the no-attitude-information control groups.

PAS was not predicted to have an equivalent impact on performance ratings across at all levels of performance. It was argued earlier that informational cues that were neither negative nor extreme would be weighted less heavily in prototype formation. PAS, therefore, was expected to have a greater influence on ratings when the performance itself was neither negative nor extreme; that is, in the moderate performance condition.

Both the MANOVA results and planned comparisons using accuracy scores failed to support this idea. While planned comparisons revealed significantly less accuracy in the moderate relative to the high performance condition (as indicated by greater departures from true scores), there was no significant difference between accuracy in the moderate and low performance conditions. From the results of the MANOVA, only one dimension demonstrated the expected PAS X PERF interaction.

A second factor that was expected to increase the relative influence of PAS on performance ratings was situational ambiguity. It was assumed here that student raters who did not have hard performance data as an anchor point for prototype formation would be in a relatively ambiguous rating situation. Undergraduate students were not expected to be familiar with performance standards regarding what would constitute a good or poor performance in the performance review vignettes. The data, however, did not bear out this expectation. Planned comparisons using accuracy scores indicated that there was no less accuracy in the no-hard-data condition than in the hard-data condition. This finding was further substantiated by the lack of a significant PAS X HDATA interaction in the MANOVA procedure. The high level of agreement among experts and students on each dimension and for each ratee suggests that the levels of performance were very clear, such that performance level captured a large proportion of variance in ratings. Thus it appears that the rating situation was not as ambiguous to subjects as intended. Rather than lack of hard data creating ambiguity for student raters, the introduction of hard data may have been a redundancy.

It should be mentioned that the directional trend in mean ratings indicated higher ratings in the similar group than in the control group across all performance conditions. In addition, lower ratings were assigned in the dissimilar group than in the control group in the moderate performance condition. These trends may warrant further exploration in future research.

Relationship of PAS to Attraction

The absence of a finding of a PAS effect was unanticipated in light of previous research on what Byrne has referred to as "the ubiquitous" similarity-attraction relationship (Byrne, et. al., 1971). The earlier research of Byrne and others has typically not employed no-attitude-information control groups or

assessed the magnitude of the PAS effect on attraction. Rather, only similar and dissimilar groups have been compared.

The difference in attraction for the similar versus dissimilar groups was substantiated in this experiment at the .05 level of significance, thereby confirming the effectiveness of the manipulation. (Note that this is not as high a level of significance as has been achieved in earlier studies, as shown in Tables 1 and 2.) The use of a control group further permitted us to consider the issue of whether being perceived as similar (dissimilar) is a significant advantage (disadvantage) for the ratee over having no attitudinal information available to the rater at all. According to these findings, the perception of similarity may make the ratee more attractive to the rater, although perceived dissimilarity does not appear to have made the ratee significantly less attractive. Overall, the magnitude of the PAS effect was quite small. Performance had by far the greater impact on measures of attraction.

Interpretation and Implications

The results of this study were somewhat surprising given that past field studies have shown a correlation of actual attitude similarity to performance evaluation, and a tradition of laboratory studies has consistently confirmed the similarity-attraction paradigm proposed by Byrne (1971). This study proposed an explanation to bridge these two lines of research; that is, that perceived similarity would influence performance ratings and attraction via a prototype formation process, and further, that the relative contribution of perceived similarity to prototype formation would depend on (1) the salience of PAS cues, (2) the salience of performance cues, and (3) situational ambiguity.

An obvious limitation of this study was that one of the conditions under which PAS was expected to influence ratings did not exist here. Specifically, the

rating task was situationally unambiguous. Subjects were rating under conditions of clear performance that probably rarely exist in realistic performance appraisal settings. Interestingly, this aspect of the experiment may have created precisely the conditions that attenuated the relationship of similarity to attraction. The results of this study suggest that performance may be the more powerful determinant of attraction, at least in a performance rating context. Other studies have supported the idea that perceived competence is a correlate of attraction (i.e., Staw, 1975).

A further limitation of the study was the use of small cell sizes which led to loss of power in testing between-group differences. This may have prevented finding a significant PAS relationship in the moderate condition where a clear directional trend exists.

Future laboratory research should concentrate on more effectively manipulating situational ambiguity, for example, by creating inconsistencies in the performance itself, or by creating an impoverished information condition such as would exist if the rater were not adequately familiar with the job or lacked the opportunity to observe performance.

If situational ambiguity is operationalized in these ways, the idea of performance cue salience becomes redundant since a more salient performance cue automatically reduces ambiguity for the rater. A refinement of the information-processing model in Figure 5, then, might be to eliminate salience of the performance cue as a moderator, thereby eliminating the redundancy in the model. A revised model is shown in Figure 8.

This experiment failed to replicate earlier field correlational studies finding a relationship of attitude similarity to performance ratings (i.e., Miles, 1964; Senger, 1971; Pulakos and Wexley, 1983). As noted earlier, no previous research to the author's knowledge examines this relationship in the laboratory. The pre-

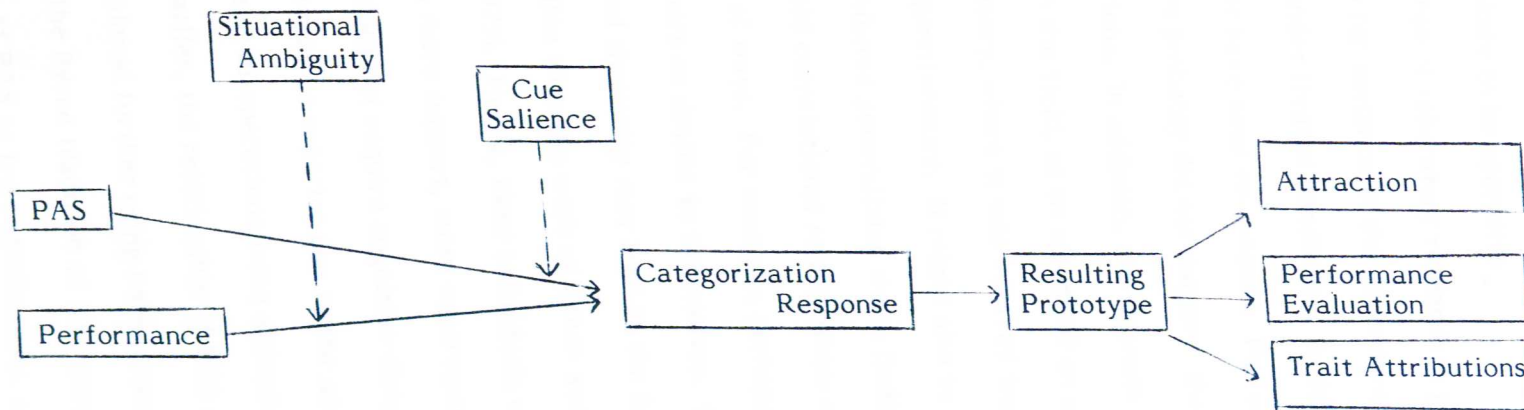


Figure 8. Revised model of the integration of PAS and performance information in performance evaluation.

sent study extends previous work because it attempts to identify a causal relationship between PAS and performance ratings and to define the conditions under which it is likely to be operative.

As is true of laboratory research in general, the need to eliminate competing explanations for variance in the dependent variables required testing the PAS hypotheses under limited conditions. In doing so, key aspects of real rating situations may not have been re-created. For example, we have noted that this laboratory situation probably did not capture the ambiguity that typically exists in field rating situations. In addition, the strength of the attitude similarity variable may be greater in the field, as an aspect of an on-going interpersonal relationship, than in the laboratory, where it was inferred from an unknown individual's responses to an attitude questionnaire. It might also be argued that the use of students as subjects prohibited generalizing these findings to managers in real work settings.

The field correlational relationships reported, however, might be explained in a number of ways. For example, perhaps raters tend to perceive more competent performers as similar to themselves. Pulakos and Wexley (1983) suggested that perceived similarity may lead to the formation of stronger vertical dyadic linkages, in line with the work of Graen and his colleagues (Dansereau, Graen and Haga, 1975). Hence, liked individuals may be given more challenging assignments, more support, more opportunities for development, and so on. This explanation does not require cognitive distortion since the favored subordinates' performance may be superior due to the advantages they have received. Because of the problems of operationalizing attitude similarity in the field studies mentioned earlier, the relationship of PAS to performance ratings in the field should be explored further using better measures.

Given the Byrne tradition of laboratory research that has consistently found relationships of PAS to trait attributions, as well as attraction, it would appear

worthwhile to further develop and explore the influence of PAS on performance evaluation from an information-processing standpoint. This experiment has defined conditions under which PAS is not likely to influence performance ratings and that perhaps minimize the influence of PAS on attraction; that is, under conditions of clear performance. To the extent that raters do clarify performance for themselves by taking the opportunity to observe behavior, finding out exactly what the requirements of the job are, and so on, the influence of non-performance cues, such as this one may be inhibited.

Future research is now needed to test the conditions under which PAS is likely to influence performance ratings and attraction with particular attention to effectively creating conditions of situational ambiguity for the rater.

APPENDIX I STIMULUS MATERIALS

ATTITUDE STUDY

This survey is designed to tap attitudes on a number of issues of general importance to people today. We are interested in the relationship of individual and group characteristics to general attitudes.

The following questionnaire contains ten items. The response choices under each item permit six possible responses. Read each response statement carefully, consider which response most accurately represents your attitude on the issue, and place a checkmark by the appropriate statement. Following the questionnaire items are additional items that will be used to identify individual and group characteristics of interest in this study. Please respond to all items.

It is important to the purpose of this research that your responses accurately reflect your true beliefs and feelings. The information you provide will remain completely confidential. No one will see this information except you.* Please take the time to give us valid information.

In order to insure that you receive proper credit for having participated in the experiment, it is necessary that you give your social security number. Once it is determined that you have been a serious participant, your social security number will appear on a list given to your professor so that students may receive credit for the experiment.

Write your social security number here _____

*(and Dena Feren, the investigator, of course)

1. U.S. build-up of nuclear weapons.

- _____ I strongly support U.S. build-up of nuclear weapons.
- _____ I support U.S. build-up of nuclear weapons.
- _____ To a slight degree, I support U.S. build-up of nuclear weapons.
- _____ To a slight degree, I oppose U.S. build-up of nuclear weapons.
- _____ I oppose U.S. build-up of nuclear weapons.
- _____ I strongly oppose U.S. build-up of nuclear weapons.

2. Legalized abortion (for reasons other than, or in addition to, life-threatening circumstances).

- _____ I strongly support legalized abortion (as clarified above).
- _____ I support legalized abortion (as clarified above).
- _____ I mildly support legalized abortion (as clarified above).
- _____ I mildly oppose legalized abortion (as clarified above).
- _____ I oppose legalized abortion (as clarified above).
- _____ I strongly oppose legalized abortion (as clarified above).

3. Pre-marital sex.

- _____ I strongly believe that pre-marital sex should be accepted and condoned by society.
- _____ I believe that pre-marital sex should be accepted and condoned by society.
- _____ To a slight degree, I believe that pre-marital sex should be accepted and condoned by society.
- _____ To a slight degree, I believe that pre-marital sex should not be accepted and condoned by society.
- _____ I believe that pre-marital sex should not be accepted and condoned by society.
- _____ I strongly believe that pre-marital sex should not be accepted and condoned by society.

4. Legalization of marijuana.

- _____ I strongly favor legalization of marijuana.
- _____ I favor legalization of marijuana.
- _____ I am mildly in favor of legalizing marijuana.
- _____ I am mildly opposed to legalizing marijuana.
- _____ I oppose legalization of marijuana.
- _____ I strongly oppose legalization of marijuana.

5. Drafting women for combat duty.

- _____ I strongly support drafting women for combat duty.
- _____ I support drafting women for combat duty.
- _____ I mildly support drafting women for combat duty.
- _____ I mildly oppose drafting women for combat duty.
- _____ I oppose drafting women for combat duty.
- _____ I strongly oppose drafting women for combat duty.

6. Mandatory capital punishment.

- _____ I strongly favor mandatory capital punishment for some crimes.
- _____ I favor mandatory capital punishment for some crimes.
- _____ I mildly favor mandatory capital punishment for some crimes.
- _____ I mildly oppose mandatory capital punishment for some crimes.
- _____ I oppose mandatory capital punishment for some crimes.
- _____ I strongly oppose mandatory capital punishment for some crimes.

7. Cut-back of social security benefits.

- _____ I am very much in favor of cutting back social security benefits.
- _____ I am in favor of cutting back social security benefits.
- _____ To a slight degree, I am in favor of cutting back social security benefits.
- _____ To a slight degree, I am opposed to cutting back social security benefits.
- _____ I am opposed to cutting back social security benefits.
- _____ I am very much opposed to cutting back social security benefits.

8. Continuing Affirmative Action in business and government.

- _____ I am very much in favor of continuing Affirmative Action programs.
- _____ I am in favor of continuing Affirmative Action programs.
- _____ I am slightly in favor of continuing Affirmative Action programs.
- _____ I am slightly opposed to continuing Affirmative Action programs.
- _____ I am opposed to continuing Affirmative Action programs.
- _____ I am very much opposed to continuing Affirmative Action programs.

9. Birth control for minors without the consent of parents.

- _____ I feel strongly that minors should have access to birth control methods without the consent of their parents.
- _____ I feel that minors should have access to birth control methods without the consent of their parents.
- _____ I feel that perhaps minors should have access to birth control methods without the consent of their parents.
- _____ I feel that perhaps minors should not have access to birth control methods without the consent of their parents.
- _____ I feel that minors should not have access to birth control methods without the consent of their parents.
- _____ I feel strongly that minors should not have access to birth control methods without the consent of their parents.

10. Reagan's cut-backs in federal welfare programs.

- _____ I strongly support Reagan's cut-backs in federal welfare programs.
- _____ I support Reagan's cut-backs in federal welfare programs.
- _____ I mildly support Reagan's cut-backs in federal welfare programs.
- _____ I mildly oppose Reagan's cut-backs in federal welfare programs.
- _____ I oppose Reagan's cut-backs in federal welfare programs.
- _____ I strongly oppose Reagan's cut-backs in federal welfare programs.

Individual and Group Characteristics

Age _____

Race _____

Sex _____

Occupation _____

Years of experience as a supervisor _____

Part of country you were born in _____ (Northeast, Southeast, Northwest,
Southwest, Midwest, Foreign)

Check one.

____ Mother worked most of the time when you were growing up
____ Mother stayed home most of the time when you were growing up

College major _____

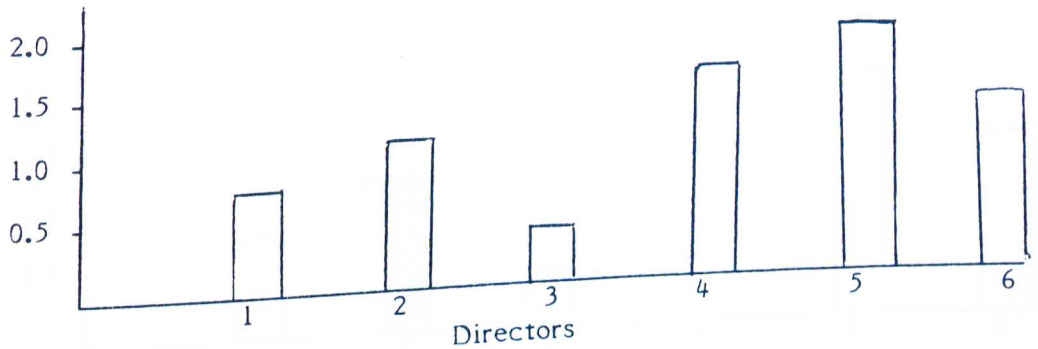
GPA (overall grade point average) _____

Thank you.

Dick Baxter is a general manager for the GCI Corporation which designs and manufactures aircraft to meet the specifications of government defense contracts. The Corporation has been in existence for over 30 years. It has two major facilities, one in California and one in Baltimore. GCI employs approximately 8000 people.

Mr. Baxter gained most of his experience as a project manager for a competitor. He accepted the position of Director of Engineering Projects at GCI to replace a Director of Engineering Projects who passed away.

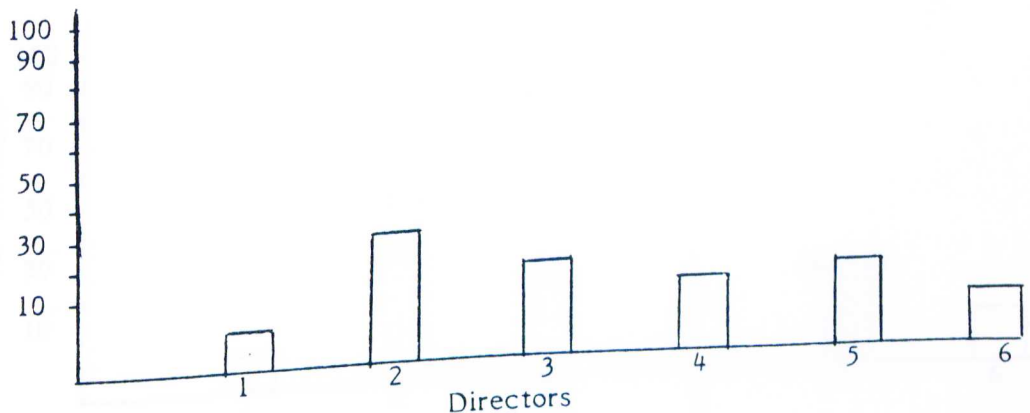
PERFORMANCE REPORT FOR DIRECTORS OF ENGINEERING PROJECTS



Dollars Generated from Follow-on Business
Under Present Contracts
(Indicated for each Director)

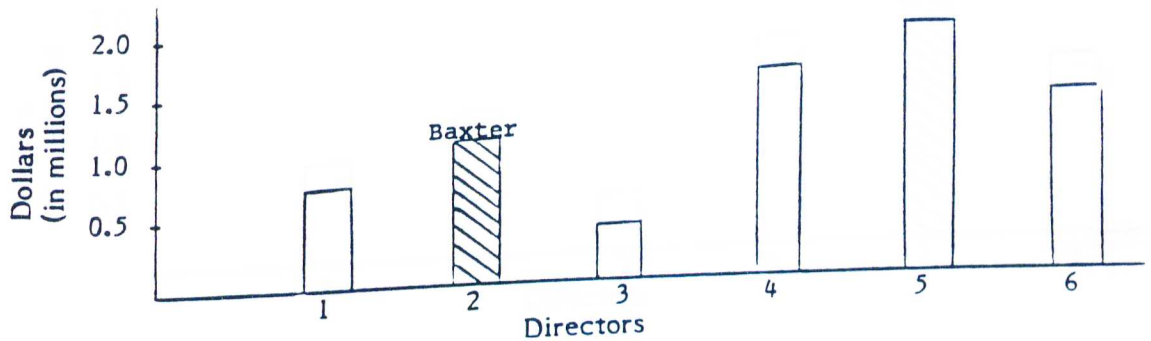
*Definition of "follow-on" business: Directors generate revenue for the company through personal contacts with customers. Directors promote services the company can provide in addition to those set forth in the original contract. This is known as "follow-on" business.

**Department sizes are equal in numbers of engineers and in dollar sizes of contracts.



Accept Rate on Contract Proposals
Authorized by Directors

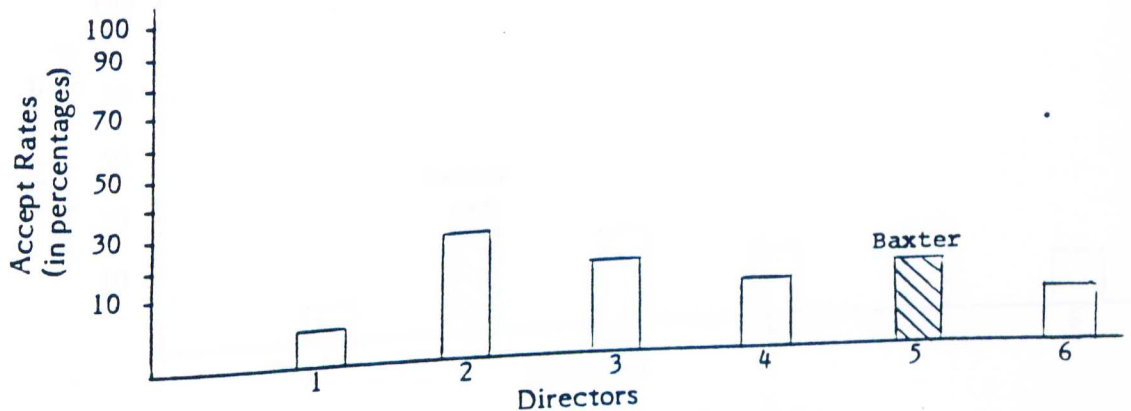
PERFORMANCE REPORT FOR DIRECTORS OF ENGINEERING PROJECTS



Dollars Generated from Follow-on Business Under Present Contracts (Indicated for each Director)

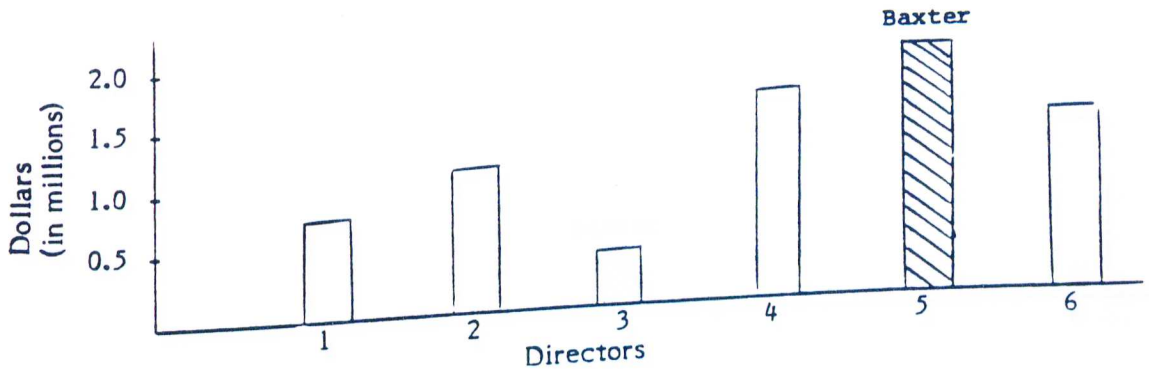
*Definition of "follow-on" business: Directors generate revenue for the company through personal contacts with customers. Directors promote services the company can provide in addition to those set forth in the original contract. This is known as "follow-on" business.

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Accept Rate on Contract Proposals Authorized by Directors

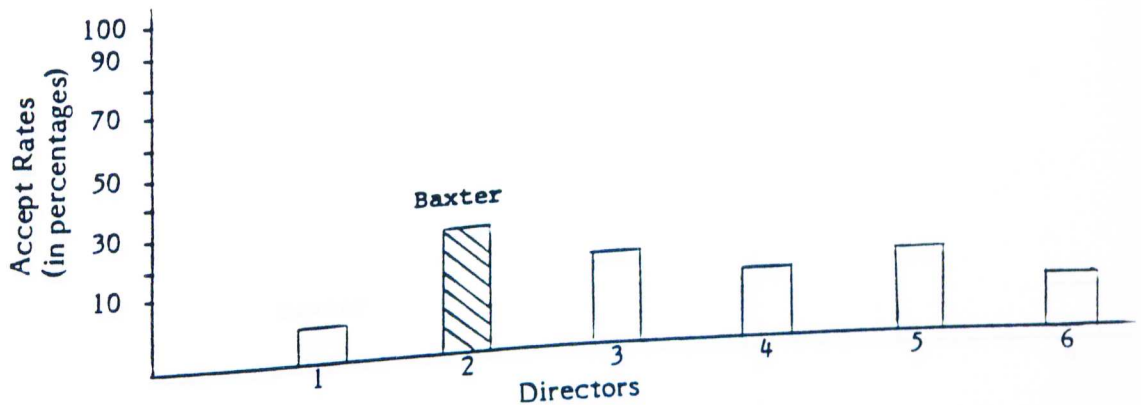
PERFORMANCE REPORT FOR DIRECTORS OF ENGINEERING PROJECTS



Dollars Generated from Follow-on Business
Under Present Contracts
(Indicated for each Director)

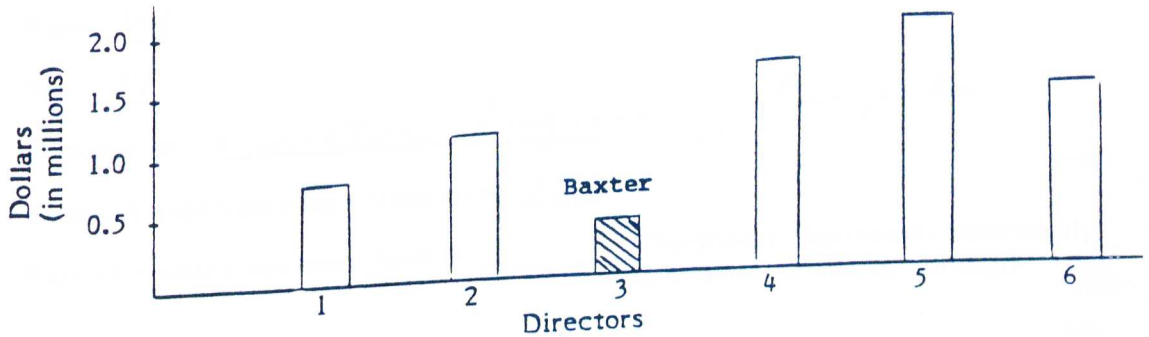
*Definition of "follow-on" business: Directors generate revenue for the company through personal contacts with customers. Directors promote services the company can provide in addition to those set forth in the original contract. This is known as "follow-on" business.

**Department sizes are equal in numbers of engineers and in dollar sizes of contracts.



Accept Rate on Contract Proposals
Authored by Directors

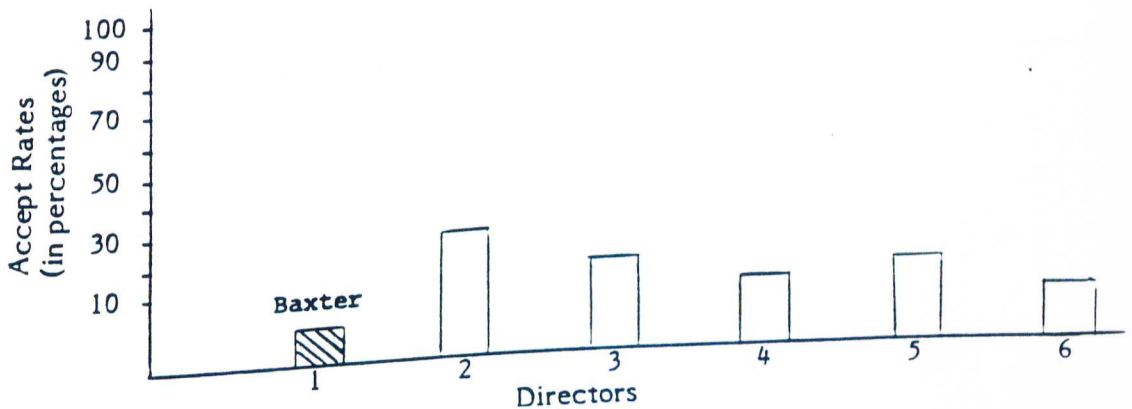
PERFORMANCE REPORT FOR DIRECTORS OF ENGINEERING PROJECTS



Dollars Generated from Follow-on Business Under Present Contracts (Indicated for each Director)

*Definition of "follow-on" business: Directors generate revenue for the company through personal contacts with customers. Directors promote services the company can provide in addition to those set forth in the original contract. This is known as "follow-on" business.

**Department sizes are equal in numbers of engineers and in dollar sizes of contracts.



Accept Rate on Contract Proposals Authorized by Directors

Individual and Group Characteristics

Age 45

Race W

Sex M

Occupation Director Engineering Projects

Years of experience as a supervisor 15

Part of country you were born in _____ (Northeast, Southeast, Northwest, Southwest, Midwest, Ebreign)

Check one.

☐ Mother worked most of the time when you were growing up
☒ Mother stayed home most of the time when you were growing up

College major Gen Business

GPA (overall grade point average) 2.7

Thank you.

QUESTION SHEET

Please answer the following questions about Baxter and his organization. You may look back through the material for answers.

1. How old is Baxter? _____ years
2. What is his current position at GCI? _____
3. What was he doing before he took the position?

4. How similar to yourself is he with respect to attitudes? (as indicated by his responses to the attitude survey)

Check one:

- _____ very similar to my own attitudes
 - _____ similar to my own attitudes
 - _____ neither similar nor dissimilar to my own attitudes
 - _____ dissimilar to my own attitudes
 - _____ very dissimilar to my own attitudes
5. What was his undergraduate major? _____

QUESTION SHEET

Please answer the following questions about Baxter and his organization. You may look back through the material for answers.

1. How old is Baxter? _____ years
2. What is his current position at GCI? _____
3. What was he doing before he took the position?

4. What was his undergraduate major? _____

APPENDIX 2
DEPENDENT MEASURES

MANAGER PERFORMANCE CATEGORIES

GUIDELINES FOR MAKING PERFORMANCE RATINGS

The next section of this booklet contains six (6) Performance Categories relevant to the job of Manager (Structuring and Controlling the Interview, Establishing and Maintaining Rapport, etc.). The Performance Categories are designed to help you make accurate judgments about the performance of managers on several important facets of this job.

Now we will describe features of the Performance Categories booklet and provide guidelines for proper use of the rating scales.

First, notice that each of the six Performance Categories is labeled and defined carefully at the top of the page. In addition, directly below each category definition are three sets of behaviorally-oriented descriptors representing low level, average, and high level performance. Finally, below the descriptors is a numerical scale ranging from one to nine. The number "9" represents the highest level of performance for that Performance Category; the number "1" represents the lowest level.

Here is how you should use Performance Category information to rate a particular ratee. Referring first to Category A (Structuring and Controlling the Interview), read over the label and definition, then study the level descriptors below it. Make a judgment about

the performance level exhibited by the ratee using the descriptors as benchmarks or guides. Remember, the ratee may not exhibit behavior exactly like that depicted in the examples used for level descriptors. Instead, think of what you would expect of your ratee in terms of level descriptors. That is, would you expect behavior most like that reflected in the high level performance descriptors, average, or low level. Then select one number on your rating instrument which you think best indicates the level of performance demonstrated by the ratee you observed. Circle the number.

Choose only one number for each Performance Category (i.e., 1, 2, 3, 4, 5, 6, 7, 8 or 9). Do not attempt to mark in the spaces in between numbers.

Example:

1 2 3 4 5 6 7 8 9

Remember, you are evaluating the role of Baxter, the manager in this segment.

THINGS TO GUARD AGAINST

Several sources of error can contribute to inaccuracies in your ratings. Here are a few suggestions for overcoming them.

1. Consider each Performance Category separately from all the rest. Take enough time to get clearly in mind what each separate category of performance refers to. Remember, we are asking you to describe or evaluate each ratee on a number of different categories. Consider each category separately from all others.
2. Avoid using your own definitions for the various Performance Categories. A common reason for inaccurate ratings is that raters have different definitions of Performance Categories. This is why it is so very important for you to read the definitions and level descriptors carefully. Avoid any previous impressions of what these things have meant to you. Base your ratings on the information provided in the Performance Categories Booklet.
3. A common error is to avoid using numbers on the extremes of the scale. That is, some raters will not circle a "1" or a "9" even when an extreme score most accurately reflects the manager's performance. Use extreme scores when you think they are appropriate.

A. Structuring and Controlling the Interview

Clearly stating the purpose of the interview and maintaining control over the interview; displaying an organized and prepared approach to the interview versus not discussing the purpose of the interview, displaying a confused approach; allowing his or her subordinate to control the interview inappropriately; attempting to re-gain lost control by becoming authoritarian.

Low Level Performance

- *Fails to indicate the purpose of the interview.
- *Appears unfamiliar with file information.
- *Is unable to control the course of the interview.
- *Attempts to re-gain lost control by becoming defensive and punitive.

Average Performance

- *States the purpose of the Interview but fails to cover some areas he or she intended to discuss.
- *Appears prepared for the interview but at times is unable to control the interview or guide it into areas planned for discussion.

High Level Performance

- *Outlines clearly the areas to be discussed.
- *Skillfully guides the discussion into those areas.
- *Displays good preparation for the interview.
- *Effectively uses information about his subordinate to conduct a well-planned interview.

1

2

3

4

5

6

7

8

9

B. Establishing and Maintaining Rapport

Setting an appropriate climate for the interview; opening the interview in a warm nonthreatening manner; being sensitive to subordinate versus setting a hostile or belligerent climate; being overly friendly or familiar during the interview; displaying insensitivity toward subordinate.

Low Level Performance

- *Projects little feeling or sensitivity toward subordinate; makes no friendly gestures.
- *Is confrontive and inappropriately blunt during the interview.

Average Performance

- *Displays some sincerity and warmth toward subordinate.
- *Indicates by his responses to subordinate and his problems that he is reasonably sensitive to subordinate's work-related needs.
- *Is overly familiar such that the subordinate may feel ill at ease.

High Level Performance

- *Draws subordinate out by projecting sincerity and warmth during the interview.
- *Discusses subordinate's problem in a candid but nonthreatening and supportive way.

1

2

3

4

5

6

7

8

9

C. Reacting to Stress

Remaining calm and cool, even during subordinate's outbursts; apologizing when appropriate but not backing down or retreating unnecessarily; maintaining composure and perspective under fire versus reacting inappropriately to stress; becoming unreasonable, irate, or defensive in reaction to complaints; backing down inappropriately when confronted.

Low Level Performance

- *Becomes aggressively authoritative with subordinate or becomes helplessly silent during subordinate's outbursts.
- *Escalates conflict by reacting defensively to subordinate's outbursts or accusing subordinate of causing problems.

Average Performance

- *Maintains composure during most of the interview but may appear unsettled, self-conscious, or defensive in reaction to some of subordinate's outbursts.
- *May become rattled when confronted but recovers quickly.

High Level Performance

- *Remains calm during subordinate's outbursts and responds in a rational, problem-solving manner.
- *Is firm but nondefensive in response to subordinate's verbal assaults; admits fault when appropriate but maintains an effective, problem-solving orientation when interacting with subordinate.

1

2

3

4

5

6

7

8

9

D. Resolving Conflict

Moving effectively to reduce the conflict between his or her subordinate and others; making appropriate commitments and setting realistic goals to ensure conflict resolution; providing good advice to subordinate about his relationships with others, versus discussing problems too bluntly or lecturing subordinate ineffectively regarding the resolution of conflict; failing to set goals or make commitments appropriate to effective conflict resolution; providing poor advice to subordinate about his relationships with others.

Low Level Performance

- *Lectures ineffectively or delivers inappropriate ultimatums to subordinate about improving his relationships with others or about changing his "attitude" toward people or problems.
- *Fails to make commitments to help subordinate resolve problems or provides poor advice to subordinate about his relationships with others.

Average Performance

- *Puts forth some effort to reduce conflict between subordinate and others but usually does not commit himself or herself to helping with this conflict resolution.
- *Tends to smooth over problems and provide reasonably good advice to subordinate about conflict situations.

High Level Performance

- *Effectively reduces conflict between subordinate and others by making appropriate and realistic commitments to help subordinate get along better in the department
- *Provides good advice about solving problems and about improving subordinate's peer relationships with his subordinates and others.

1

2

3

4

5

6

7

8

9

E. Developing the Subordinate

Offering to help the subordinate to develop professionally; displaying interest in the subordinate's professional growth; specifying developmental needs and recommending sound developmental action versus not offering to aid in subordinate's professional development; displaying little or no interest in subordinate's professional growth; failing to make developmental suggestions or providing poor advice regarding the subordinate's professional development.

Low Level Performance

- *Expresses little or no interest in the subordinate's professional development.
- *Fails to offer developmental suggestions or provides poor advice regarding the subordinate's professional growth and development.

Average Performance

- *Provides general developmental suggestions but usually fails to make a personal commitment to aid in the subordinate's professional development.
- *Shows moderate interest in the subordinate's development; may direct the subordinate to seek developmental suggestions elsewhere.

High Level Performance

- *Displays considerable interest in subordinate's professional development and provide appropriate, high quality developmental suggestions.
- *Makes commitments to help personally in the subordinate's development.

1

2

3

4

5

6

7

8

9

F. Motivating the Subordinate

Providing incentives for the subordinate to stay at GCI and to perform effectively; making commitments or motivating the subordinate to perform his job well, to remain with GCI, and to help GCI accomplish its objectives; supporting the subordinate's excellent past performance versus providing little or no incentive for the subordinate to stay at GCI and perform effectively; failing to make commitments encouraging the subordinate's continued top performance; neglecting to express support of the subordinate's excellent performance record.

Low Level Performance

- *Fails to express support for the subordinate's past performance.
- *Provides little or no incentive for the subordinate to remain at GCI.

Average Performance

- *Compliments the subordinate appropriately at times but is only moderately effective in using these compliments to encourage high performance, loyalty to GCI, etc.
- *Provides some incentives for the subordinate to perform effectively and to stay at GCI, but generally makes few if any personal commitments to support the subordinate in his or her job.

High Level Performance

- *Provides encouragement and appropriate incentives to persuade the subordinate to stay with GCI and to perform effectively on his job.
- *Uses appropriate compliments of the subordinate's technical expertise and excellent past performance to motivate the subordinate to meet the objectives of the department.

1 2 3 4 5 6 7 8 9

TRAIT RATING SCALES

Evaluate the manager on the five personal characteristics listed below. For each characteristic, put a check in the box which you feel most accurately characterizes the manager you observed.

	Excellent	Very Good	Good	Slightly Better Than Average	Average	Slightly Less Than Average	Poor	Very Poor	Unacceptable
1. Organization (ability to structure and organize presentations in a meaningful way)									
2. Communication Skill (ability to communicate effectively; acceptance of others' needs and feelings)									
3. Composure (ability to maintain composure under stress)									
4. Conflict Resolution Skill (ability to assist and advise others in resolving conflicts constructively)									
5. Employee Development Skill (ability to inspire and assist others to develop themselves professionally)									
6. Leadership (ability to stimulate others to perform their jobs effectively)									

Put a checkmark next to the statement that most accurately describes your feelings toward the manager you observed. Check only one statement for each question.

1. Degree to which you think you would like working with this manager, as a co-worker:

☐ I would probably enjoy working with this person very much.
☐ I would probably like working with this person.
☐ I would probably like working with this person to a slight degree.
☐ I would neither particularly like nor dislike working with this person.
☐ I would probably dislike working with this person to a slight degree.
☐ I would probably dislike working with this person.
☐ I would probably dislike working with this person very much.

2. Degree to which you feel you would like this manager as a person:

☐ I would probably like this person very much.
☐ I would probably like this person.
☐ I would probably like this person to a slight degree.
☐ I would neither particularly like nor dislike this person.
☐ I would probably dislike this person to a slight degree.
☐ I would probably dislike this person.
☐ I would probably dislike this person very much.

APPENDIX 3

SCRIPTS

New C

- Baxter: Come on in, Marshall, and have a seat. Coffee?
- Whipker: Ah, thank you.
- Baxter: I don't know where Brenda gets this coffee. I suspect she goes to the machine down the hall. I think it looks better in the pot. Don't you?
- Whipker: Yes, I guess so.
- Baxter: I've been looking forward to talking with you. Before this meeting I spent some time reviewing your situation, and I'd like the purpose of our discussion to be covering some problems of mutual concern. Maybe together we can work out some solutions.
- Whipker: O.K.
- Baxter: Something has come up quite recently that's been bothering me. It's the situation between you and Valva. As you see things right now, Marshall, what kind of cooperation are you getting with Technical Services?
- Whipker: Well, as far as I'm concerned, those guys over there are a bunch of idiots.
- Baxter: What makes you feel that way, Marshall?
- Whipker: I feel that way because Valva is a complete dunderhead. He doesn't know what the hell he's doing.
- Baxter: Let's get down to cases. Exactly what is it about Valva that causes you to feel that he doesn't know what he's doing?
- Whipker: He isn't able to give me any help on my contracts.
- Baxter: That's partly because Paen cut back on their hours in Tech Services. Have you outlined specifically what it is you need from Valva?
- Whipker: I've tried that with him, but he doesn't know what I'm talking about.
- Baxter: I'd like to ask you what happened when you and Valva had that rather

heated exchange recently?

Whipker: Nothing really happened, except I called him a jackass and stormed out of the area.

Baxter: Well, I think you can see, Marshall, that that kind of thing creates a lot of friction in the organization. It makes it that much more difficult for us to get our job done. If you had it to do over again, can you think how you might have handled the situation differently?

Whipker: Screw it. Valva isn't worth my time.

Baxter: He has to be worth your time. Like it or not, you need his cooperation to meet the deadlines on your projects.

Whipker: Unfortunately.

Baxter: Well, my suggestion, Marshall, is that you put down on paper exactly what it is you need from Valva. Then you and I can go over it. If it looks reasonable, I'd like for you to approach Valva and see if he will be able to meet your deadlines. Does that sound reasonable?

Whipker: I think the whole thing is hopeless, but if you want me to, I guess I'll try it one more time.

Baxter: If you find yourself running into more frustration with Valva, please bring it to my attention. I'd be glad to sit down with the two of you to facilitate the discussion any way I can.

Whipker: Well... I'll see him on my own first.

Baxter: Fine. I'll expect an outline from you, then, in the next couple of days, so we can have a look at it. Let's move on to another area of concern. Let's talk about your relationships with your subordinates. How are you getting along with them would you say?

Whipker: O.K.

Baxter: What does O.K. mean?

- Whipker: They do their jobs, they stay out of trouble, and they don't get any flak from me.
- Baxter: How are you and Ted Ecklund getting along?
- Whipker: Why Ted Ecklund?
- Baxter: He's new, he's young. Do you think he feels free to bring his problems to you? What kind of help would you want from your boss if you were in his situation?
- Whipker: Listen, before we go on with this, I'd like to know why you think you're such a hotshot. I've been here for all these years and instead of me getting the job, they give it to some "outsider" like you.
- Baxter: Why do you feel you should have gotten the promotion instead of me?
- Whipker: Because I'm a better engineer than you are.
- Baxter: Quite frankly, I don't know all the ins and outs of why I'm in the job and you're not. You definitely deserve to move up in the company. You've obviously done an outstanding job and I'd like to see a promotion come your way.
- Whipker: I've done a hell of a good job. I've brought in profits on all my projects.
- Baxter: Let me ask you this -- What skills do you think you might need as a manager other than the top-notch technical skills that you already have?
- Whipker: I don't know what you mean.
- Baxter: Well, how about human relations skills. Human relations skills are very important, too. In this job, human relations skills can affect how well your subordinate's cooperate with you, and with each other, their commitment to the organization, and their general happiness

at work, among other things.

Whipker: Can you be more specific? I mean, all the human relations crap is a little abstract, don't you think? I mean, can you come up with some real concrete ideas how I can get a better job around here?

Baxter: Well -- I got an idea what a good start might be -- there's a Human Relations course for managers sponsored by the American Management Association--that's coming up in two weeks. I'm thinking of taking it myself. Would you like to come with me? We could get together after classes and chat about what they're doing in the sessions and how it might tie in with the job here at GCI. Do you want to give it a shot?

Whipker: I suppose so. I don't have much to lose.

Baxter: Well, that'd be great. I'll send your name in with mine.

Whipker: It's O.K. to give it a try I guess, but they sure as hell better not try to make me into one of those softy managers.

Baxter: I don't think that'll happen, Marshall. I think there are promotion opportunities here for you at GCI that'll make this worth your while. Now, let me summarize what I think we've agreed to today. First, we've agreed to meet soon--within the week--about your plans for using Technical Services. I'd like for you to get back with Valva to clear up the difficulty and hopefully improve the relationship there. And, I think we've agreed that it would be useful for you to sit down with Ted Ecklund and find out what his problems are. We can talk about your chat with him, also, when we meet later this week. Meanwhile, I'll be looking into the promotion situation for you and get back to you sometime in the next three weeks. If we can find a job that seems right for you, we'll really have something concrete to

aim for. . .

Whipker: O.K. (brightens a little)

Baxter: Good. Then I'll expect to hear from you by the end of the week about your plans for Technical Services and your conversation with Ted.

Whipker: All right. Good-bye.

Baxter: Nice talking with you, Marshall.

SCRIPT D

Baxter: Come in. Hello, Marshall. I'm Dick Baxter.

Whipker: Hi.

Baxter: Well, now tell me, how's it going for you, Marsh?

Whipker: Well, so-so.

Baxter: Have a seat and make yourself comfortable. I'd like to review your progress at GCI.

Whipker: O.K.

Baxter: Let's see--I see here that you took primarily math, science, and engineering courses in school and that you were able to get grades in the A range. Gee, I have always found those technical and math courses difficult myself. I guess I'm glad to have somebody technically competent to be working for me. I'll be relying on you to hold up the technical end of the shop.

Whipker: Okay. I can certainly handle that.

Baxter: I've heard rumors, Marsh, that you're thinking about a job with CDC.

Whipker: Who did you hear that from?

Baxter: Oh, just through the grapevine, you know. . .

Whipker: That's what's wrong with this place--it seems like whenever you tell somebody something in confidence, the word spreads like wild-fire. But, for really important information, you're lucky to find out what's happened two years or two months or whatever after it happens.

Baxter: What do you mean?

Whipker: You know very well what I mean. I mean, for instance, the memo about a reduction in Tech Services hours. Why wasn't I informed about it? How come I had to get the word from that fool Valva instead of from you?

Baxter: Didn't you get a copy of the memo from Pean on this?

Whipker: No, I didn't get the memo from Pean on this. And another thing-- when is somebody going to do something about that son-of-a-bitch Valva?

Baxter: Now wait a minute. Just hold, Marshall. I don't think name-calling (rattled) is necessary here. What was this run-in with Valva all about anyway?

Whipker: If you read your in-basket memos, you'll know that L Company sprung some last minute design changes on the F-1040 Ferits we're making for them. So this puts us a little behind schedule on that contract.

Baxter: Yes, I know about that. . .so. . .

Whipker: So, I thought I'd get some overtime out of Valva's Tech Services people so, you know, to get us back on target.

Baxter: Sounds reasonable.

Whipker: So, anyway, when I asked Valva about it, he just shook his head and mumbled some things about his being restricted to printed circuit boards and not being able to give me the development help I need.

Baxter: According to Valva, you were pretty abusive to him. He says that you hollered and stomped around and insulted him and his subordinates.

Whipker: So what if I did. That dunderhead deserved it. Dammit, I'm sick and tired of putting up with the incompetence and hand-holding that goes on around here.

Baxter: What do you mean "incompetence?"

Whipker: Okay, take Valva. Nobody does any work in his shop. All they do is drink coffee, and read magazines, and play with the secretary, Miss

Buxomberry, or whatever her name is. Whoever promoted Valva into that job must have been blind.

Baxter: I really don't think that's the case.

Whipker: And the promotion policy around here! I don't know how it works, but it sure isn't giving the guys the promotion who are doing the work to get ahead. Dammit, you know, I've been busting my buns for nine years, and I've got the best profit margins in the company--so what happens when the boss dies? They fly some Flash Gordon up from California in here who's not even an engineer!

Baxter: Damn! I don't think you're in a position to speak to my qualifications for this job, but I do know why you haven't been promoted must have something to do with your temper. You know, according to Valva, you really blew up when you saw him, and from your reactions right here, I'd say you probably could learn to control your temper more and maybe learn better how to get along with people. You know as well as I do that we just can't run an organization if people are running around blowing their stacks all the time. Maybe you and I could sit down some time and try to work out ways to help you get along with others better. The thing with Valva is really too bad. I'm sure you can find a way to--oh--approach him and sit down and work something out that would help the two of you get along and work smoothly together without coming to blows each time you see each other.

Whipker: O.K., maybe I can work on that. Is there anything else?

Baxter: Ah, no, I guess not. Let me just add, Marsh, that all in all you've been doing well her at GCI and it would be a shame to lose you to CDC. You just need a little more training to be more effective as a

supervisor. Perhaps you could check out a few courses on this. Why don't you ask the personnel department what's available?

Whipker: Yeh, well, I can check it out.

Baxter: Thanks for coming in, Marsh. I'll be talking to you later.

Whipker: O.K.

SCRIPT H

Baxter: Come in. Marshall Whipker, right?

Whipker: Right.

Baxter: I'm Baxter. Have a seat.

Whipker: Thank you.

Baxter: Aren't you a U.C.L.A. graduate?

Whipker: No, I'm not.

Baxter: Oh. Ah, well, Marshall, do you have any idea why I've asked you to come in here today?

Whipker: No, I don't. . . why don't you tell me?

Baxter: I just thought we could chat a bit. By the way, I received a complaint about you from Valva.

Whipker: Valva's such an idiot.

Baxter: He's not an idiot. What do you have to say about that confrontation that you had?

Whipker: What about it?

Baxter: That's what I want you to tell me.

Whipker: All that happened is I had a little argument with Valva about his work on my projects. Is that why you called me in here?

Baxter: Well, Valva didn't fill me in on all the details, but he did say that you started ranting and raving at him in front of his men when he told you about the cut in Tech Services hours. He said that apparently you hadn't gotten the word from Pean about it and you really lost control. That kind of an outburst is something we do just fine without here at GCI.

Whipker: No, I didn't get the memo. Why do you think I was so pissed off when Valva had to tell me about it?

- Baxter: Well, that memo came right from Pean's office. Everyone got one. There's really no excuse for the way you treated Valva.
- Whipker: Okay, okay, so maybe it wasn't his fault, but can you tell me, Baxter, how in hell am I supposed to meet my deadlines around here now that they've cut the hours on me? Especially when I've got to depend on Valva and those other jackasses down in Tech Services?
- Baxter: Well, I think that's something you'd better talk to Valva about. Pean had his reasons for sending out the memo, and there's nothing we can do about that now. I think you'd better talk it over with Valva and try to come to some kind of an agreement about priorities.
- Whipker: Fat chance! Listen, even before the cut in overtime hours, I couldn't get any work out of him and the rest of those SOB's down there are just as bad. When I go down there and ask them for a little help, half the time their twiddling their thumbs and telling nursery rhymes to one another. And then they say they're too busy when I ask them for a favor.
- Baxter: You're dead wrong! I think Valva has done an excellent job of coordinating Tech Services hours to the needs of other departments. I've found him to be extremely cooperative and competent in that respect. If you have deadlines to meet, I'm sure he'll understand and try to fit into his schedule.
- Whipker: The way things are now, well I'll be lucky to make any of my deadlines. Okay, listen can't you talk to Pean and ask him to change his mind about those overtime hours?
- Baxter: From what I've heard, this isn't the first time you've blown your stack around here, now. You're just going to have to cool it when you're dealing with Valva and the other people. You may think

you've got problems--okay, maybe you do--but things aren't always so easy for them either.

Whipker: That's for damn sure I've got my problems. Getting any cooperation from anyone around here is worse than pulling teeth.

Baxter: Well, there must be a good reason why you're having so much trouble. It's really not important what your personal feelings are for Valva, or anyone else for that matter. The important thing is to at least treat them as human beings and try to work together as a team. Is that clear?

Whipker: I guess so. . .

Baxter: Look, Marshall, you either get along with Valva, or else. We can't tolerate disrespect being shown for our people, especially a good man like Valva. Now, moving on. . .Are there any other things you want to lay on the table?

Whipker: Well, there is one thing that's been eating at me.

Baxter: Yes, what's that?

Whipker: Okay, I've been here at GCI for a long time and doing one hell of a good job as an engineer and always bringing in profits for the company on all my projects. Okay, so what do they do? Instead of putting someone on the job who really knows what's he's doing, they bring someone in who doesn't know a ferit from a flatiron like you!

Baxter: What? You're saying you should have gotten this job instead of me?

Whipker: You're damn right I'm saying it.

Baxter: Well...what in the hell makes you think you're better qualified for this job than I am!

Whipker: Well, for one thing. I'm a damn good engineer. And people know who's boss with me. I tell them what I expect from them--I expect

results--and I get it. Just look at your files--it's all in there. I've done an outstanding job on all my projects, I meet my deadlines and always make a sizeable profit.

Baxter: True, but the decision was made and the fact is that you didn't get the job. Now I guess there's not much that can be done about that now, is there? Besides, what makes you think you would want to get into management if you had the chance?

Whipker: Why not? I'm not getting any place where I am right now. Besides, there's good money in management. And from what I've seen, you don't have to work very hard to get it, either.

Baxter: Oh, is that what you think? Well, I don't know what you think being a manager is all about, but let me tell you, it's not all fun and games. If you expect to be a manager, you're going to have to find some better ways of dealing with people.

Whipker: Such as?

Baxter: Like...you've got to be more effective with the people you work with. I'll live it up to you how you want to handle it. If you really want to change badly enough, you can do it... if you put your mind to it.

Whipker: Can you be a little bit more specific? I mean, all that human relations crap is a little bit abstract, don't you think? I mean, can't you come up with any real, concrete ideas about how I can get a better job around here?

Baxter: That's your problem -- to figure something out.

Whipker: Oh.

Baxter: Well, I'm kind of busy right now, Whipker, but it's been nice talking with you. I always like to keep up on what my people are doing.

Now you keep in mind some of the things we've talked about this afternoon. Let me know what you decide to do.

Whipker: Sure thing.

Baxter: Good-bye, Marshall.

Whipker: Good-bye.

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