Accuracy of Performance Measurement: An Investigation of Training Method and Amount of Practice

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ACCURACY OF PERFORMANCE MEASUREMENT: AN INVESTIGATION OF TRAINING METHOD AND AMOUNT OF PRACTICE

by

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B.A. December 1982, University of San Diego
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A Dissertation Submitted to the Faculty of Old Dominion University in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY
PSYCHOLOGY

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ABSTRACT

Director: Terry L. Dickinson, Ph.D.

The purpose of this research was to investigate the effects of training method and amount of practice-and-feedback on the accuracy of performance ratings and behavioral observation. This research was a 3 x 3 factorial ANOVA design. Training method was comprised of frame-of-reference, cognitive modeling, and a no-training control group. Practice-and-feedback consisted of 0, 1, and 3 practice trials. Undergraduates (N=99) were randomly assigned to one of nine experimental conditions. Each participant viewed and rated 7 videotaped interview simulations. The results for performance ratings indicated that (a) frame-of-reference training produced the most accurate ratings for elevation, differential elevation, and differential accuracy, and (b) practice-and-feedback did not improve accuracy. The results for behavioral observation revealed that (a) cognitive modeling training was effective in reducing the raters' 1-hit rates, (b) training method had no effect on false alarm rate, and (c) practice-and-feedback were ineffective for both observation error rates. Interpretation and suggestions for future research are discussed.
DEDICATION

I dedicate this dissertation to my mom and her sister Betty. Despite being raised as orphans, they overcame their misfortune—through courage, not complaint—and became successful mothers, wives, and professionals. Their children and husbands are fortunate to have them.
ACKNOWLEDGEMENTS

In April of 1983, I received a letter from Dr. Ben Morgan stating that I was one of 8 applicants accepted into the industrial/organizational psychology program at Old Dominion University. Now, six years later, I'm the 29th Ph.D. from that program. During this, my final month at Old Dominion, I've experienced many emotions; of these, none is more prevalent than humility. I am truly indebted to a great many people who have helped me become a psychologist.

Though I seldom practice what is preached, the first person I must thank is our Lord. I thank Him not only for being with me these past 5 and a half years, but for being with my family since our inception.

The love I have for my family is beyond measure. Individually and collectively, they are "who I am, what I am, what I believe in." Since I've been at Old Dominion, your support has been unwavering; your sacrifices, continuous; and your love, relentless. After more than a handful of years, it's finally time to echo Neil and say, "Hello Again."

In addition to my family, my relatives have supported me every step of the way toward my Ph.D. However, my aunt Betty deserves special mention for her consistent thoughtfulness and encouragement. Thanks and I love you.

Over the past 3 years Coleen Thornton has redefined the term best friend. During that time, she has given me strength, support, and love; I've tried to reciprocate, and will continue to do so. Other than I love you, all I can say is: get your Ph.D.

In addition to Co, Michele Terranova, Mark Teachout, Todd Baker, Vickie Greene, Eric Vanetti, Rob Delprino, and most of all Rick Tannenbaum, have been instrumental in my professional development. I thank each of you! To those of you who haven't already done so, do me one more favor: graduate.

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And last yet most important, "Mom, Dad, Shanny, and Kev: Hello Again."
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ACCURACY OF PERFORMANCE MEASUREMENT: AN
INVESTIGATION OF TRAINING METHOD AND AMOUNT OF PRACTICE

I. INTRODUCTION

Performance appraisal is the process of measuring, evaluating, and influencing an employee's job-related attributes, behaviors, and outcomes (Schuler, 1984). The strategic role of performance appraisal is clearly evident in various human resource management practices aimed at developing, motivating, and retaining employees. In specific, performance appraisal has been shown to be an integral component in effective executive development (Sorcher, 1985), compensation programs (Wallace & Fay, 1983), identification of training needs (Goldstein, 1986), and legal compliance (Barrett & Kernan, 1987; Kleiman & Durham, 1981).

The frequent use of performance appraisal was originally documented by Guion (1965). In a review of validation studies published in Personnel Psychology and the Journal of Applied Psychology between the years of 1950 and 1955, Guion noted that 81% of the criterion variables were some type of judgmental rating of performance. Similarly, Landy and Trumbo (1980) reviewed subsequent validation studies published in the Journal of Applied Psychology from 1965 to 1975 and found that ratings were
the criterion measure in 72% of the studies. Further substantiation of the reliance on performance ratings as criteria was illustrated in a recent meta-analysis on validation studies by Schmitt, Gooding, Noe, and Kirsch (1984), who reviewed the *Journal of Applied Psychology* and *Personnel Psychology* between the years of 1964 and 1982, and found that performance ratings were used nearly three times more often than turnover, which was the second most frequent criterion measure.

While performance ratings are a popular method for assessing work performance, researchers have consistently found them to be inaccurate and susceptible to various types of rater bias (Bernardin & Villanova, 1986). Researchers have attempted to improve the psychometric quality and accuracy of performance ratings through the development of better performance appraisal instruments and by training raters to evaluate performance more accurately (Bernardin & Beatty, 1984). The results of research on rating scales has often been contradictory and as a result no single rating format is seen as being clearly superior (Kingstrom & Bass, 1981). As inconclusive as the research on rating formats has been, the research on rater training has been equally definitive: Rater training does improve the psychometric quality and accuracy of behavioral observation (Spool, 1978) and performance appraisal ratings (Smith, 1986).
Rater Training

In a review of observation training programs, Spool (1978) concluded that effective training is characterized by content beyond that of the basic lecture or cognitive learning format. Spool's justification centers on the belief that increased trainee involvement stimulates the trainee's level of interest in the training program itself, thereby leading to more precise observation and eventually to more accurate performance ratings. This element of trainee involvement promotes increased depth of cognitive processing, clarity of information storage, better learning, and improved retention of the training content (Athey & McIntyre, 1987).

The principles of active trainee involvement (e.g., practice-and-feedback) are necessary components for improving rating accuracy (Smith, 1986). Practice-and-feedback are incorporated within the frame-of-reference method of rater training, which has frequently been found to improve rating accuracy (Athey & McIntyre, 1987; Heneman, Wexley, & Moore, 1987; McIntyre, Smith, & Hassett, 1984; Pulakos, 1984, 1986; Silverhart & Dickinson, 1985a; Smith, 1984). Likewise, cognitive modeling also recognizes the importance of practice-and-feedback as being fundamental to successful training (McIntyre, 1986). Recently, cognitive modeling training has been shown to increase observation accuracy (McIntyre & Bentson, 1984).
and rating accuracy (Johnson, 1987). Given the theoretical similarities between frame-of-reference training and cognitive modeling and their ability to improve rating accuracy, one purpose of this research was to compare the effectiveness of each method for improving the accuracy of performance ratings and behavioral observation.

The second purpose of this research also focused on the relationship between practice-and-feedback and rating accuracy. The positive effects of practice-and-feedback on skill acquisition have been well documented in several areas of study (Ellis, 1965; Royer, 1979, 1986). However, this relationship has received little attention in the area of behavioral observation (McIntyre, 1986) and has never been examined within the area of rating accuracy. Given this research need, the second purpose of this research was to investigate the effects of differential amounts of practice-and-feedback on the accuracy of performance ratings and behavioral observation.

The research literature for both purposes will be reviewed. In reference to the first purpose, the literature on frame-of-reference training and cognitive modeling training will be reviewed. Secondly, the research on practice-and-feedback within the area of behavioral observation will then be presented. The research hypotheses for each purpose will follow their respective literature reviews.
Frame-of-Reference Training. The concept of frame-of-reference was originally suggested by Borman (1979) and later adopted and developed into a formal method of rater training by Bernardin and Buckley (1981). Borman (1979) recommended that rater training strategies should include the teaching of a "common nomenclature" to the training participants. This common nomenclature, or frame-of-reference, is intended to replace the raters' idiosyncratic performance standards with a more consistent knowledge of the relevant rating dimensions and appropriate performance standards, both of which are necessary for accurate performance evaluation (Athey & McIntyre, 1987; Bernardin & Buckley, 1981). A primary purpose of frame-of-reference training is to increase observational accuracy by directing the rater's attention to the pertinent performance dimensions and away from extraneous cues.

McIntyre, Smith, and Hassett (1984) investigated the effects of frame-of-reference training on the accuracy of performance ratings. This research compared the effects of three training methods (rater error training, frame-of-reference, and a combination of both methods) on rating accuracy. The frame-of-reference method provided the participants with (a) information describing the job to be rated, (b) an opportunity to practice rating a videotaped ratee's performance, (c) feedback identifying the discrepancy between the participant's rating and the target
score of the practice ratee, and (d) the behavioral rationale for each dimension target score. Results indicated that the frame-of-reference training and the combination training method yielded significantly more accurate ratings than either the rater error training or no-training control methods. McIntyre et al. (1984) interpreted the combination method as being "cost-ineffective" as evidenced by its inability to improve accuracy beyond frame-of-reference training alone.

In a similar study, Pulakos (1984) compared the effects of four training methods on rating accuracy. The four methods were: (a) rater error training, (b) rater accuracy training (i.e., frame-of-reference), (c) a combination of rater error and rater accuracy training, and (d) no-training control. Pulakos' (1984) version of frame-of-reference training was slightly different from that used previously by McIntyre et al. (1984). Specifically, Pulakos' version contained a lecture that noted the multidimensionality of jobs and emphasized the importance of observing the ratee's performance in terms of discrete dimensions, rather than in terms of a single global judgment of performance. Moreover, Pulakos discussed general rather than specific behaviors that represented different performance levels.

The results reported by Pulakos (1984) closely paralleled those obtained by McIntyre et al. (1984). The
rater accuracy training method provided ratings that were significantly more accurate than the other three methods. Pulakos (1984) explained the inaccuracy of the combination method in two ways. First, she interpreted the inaccuracy as being a function of information overload, in that the participants were not cognitively able to encode, assimilate, and retrieve correctly all of the content presented in combination training. Secondly, she stated that the rater error component could have distracted the raters' focus away from the accuracy-relevant content (e.g., frame-of-reference). In sum, Pulakos (1984) confirmed the McIntyre et al. (1984) finding that frame-of-reference training is capable of improving the accuracy of performance ratings compared to no training.

Smith (1984) compared the effects of three rater training methods (observation, performance dimension, and performance standards) on observation accuracy and rating accuracy. Smith's performance standards method was conceptually similar to the frame-of-reference training employed by McIntyre et al. (1984). Results from Smith's (1984) study revealed no training effect for observation accuracy. However, all three training methods produced ratings that were significantly more accurate than those of the no-training control method. Despite the fact that post-hoc analysis revealed no statistically significant differences among the three training methods, the
performance standards method did produce the most accurate ratings.

Results similar to those found by Smith (1984) were obtained in research by McIntyre and Athey (1985), who investigated the effects of group size and type of training method (frame-of-reference, placebo, and control) on performance rating accuracy. The frame-of-reference method used in this study was identical to that described in McIntyre et al. (1984). The placebo method was designed to control for length of training. This method did not receive frame-of-reference training. The frame-of-reference training method produced significantly more accurate ratings than the placebo method, but not more than the no-training control method. Despite accuracy ratings similar to those of the no-training control method, frame-of-reference training did produce the most accurate ratings across the training methods. Furthermore, it is interesting to note that the magnitude of accuracy in this study closely approximated the value obtained earlier by McIntyre et al. (1984).

In another study, Silverhart and Dickinson (1985a) examined the effects of rater training (frame-of-reference vs. control group) and rating format (graphic rating scale, mixed standard scale, and behaviorally anchored rating scale) on rating accuracy. The frame-of-reference training used in this study was consistent with that used earlier by
McIntyre et al. (1984), with one exception. In an attempt to emphasize the amount of inaccuracy within a participant's rating, Silverhart and Dickinson had the participants actually compute the absolute difference between their ratings and those provided by the target scores. Results showed that the frame-of-reference training led to greater accuracy than that obtained by the no-training control method. This ability of frame-of-reference training to increase accuracy is consistent with results obtained in previous research (McIntyre et al., 1984; Smith, 1984).

More recently, Athey and McIntyre (1987) attempted to assess the effects of frame-of-reference training on rating accuracy by isolating its components differentially across three treatments: frame-of-reference, information-only, and a no-training control. The frame-of-reference training method was identical to that used previously by McIntyre et al. (1984). The information-only method involved (a) training on the proper use of the rating scale, (b) a presentation of the performance items and behavioral components for each scale item, and (c) the opportunity to rate one practice videotaped lecture. However, the information-only method did not provide feedback on the accuracy of ratings. The frame-of-reference method was the only method to provide target score feedback on the accuracy of the practice rating and a presentation of
behavioral cues which corresponded to the target score ratings on each performance dimension. The results clearly showed that the frame-of-reference method improved accuracy significantly more than either the information-only or the no-training control methods. Conceptually, these results are consistent with those found by Smith (1984) in that, the inclusion of rating standards and behavioral examples of the rating dimensions (e.g., performance standards training) appear to be responsible for the effectiveness of frame-of-reference training on improving rating accuracy.

Unfortunately, the success of frame-of-reference training has not been consistent. Several studies have been unable to increase rater accuracy using the frame-of-reference methodology (Dickinson & Silverhart, 1986; Hassett, 1989; Silverhart, 1987; Silverhart & Dickinson, 1985b). Silverhart and Dickinson (1985b) suggested several reasons for the lack of success: complexity of the rating format, the videotapes evaluated in the rating task, and information overload in training.

Cognitive Modeling Training. The success of modeling training has been well documented (Luthans & Kreitner, 1985). Despite this success, the accurate application of modeling training is limited to specific tasks (Harmon & Evans, 1984). Behavioral modeling has been shown to be effective for overt tasks, while cognitive modeling has been successful for tasks which are covert in scope.
Cognitive modeling attempts to make the model's cognitive processes more salient to the participants, thereby allowing them to understand and replicate those processes accurately in order to improve task performance. Much of the available research on the use of cognitive modeling has been concentrated in the area of clinically-oriented tasks: impulsivity-reflectivity (Ridberg, Parke, & Hetherington, 1971), test anxiety (Sarason, 1973), and avoidance behavior (Meichenbaum, 1971). As a result of this success, cognitive modeling has recently been applied to the areas of behavioral observation (McIntyre & Bentson, 1984) and performance ratings (Johnson, 1987).

McIntyre and Bentson (1984) investigated the effects of training method (cognitive modeling, behavioral example, error training, and no-training control) on the accuracy of behavioral observation. Within the cognitive modeling treatment, a model verbalized the specific mental steps that he was making as he observed behaviors for each of the performance dimensions. The model's "thinking aloud" provided the participants with the proper cognitive strategy necessary for accurate behavioral observation.

McIntyre and Bentson defined observation accuracy as a ratio of the number of "good" observations made by the participants to the total number of "good" observations made by experts. An observation was judged to be "good" if
it (a) described a ratee's action or behavior that was potentially indicative of a performance-relevant attribute and (b) was more descriptive than evaluative. Woods and Dickinson (1988) have noted that this type of observation task does not require the same cognitive demand associated with making performance ratings.

The results of the study clearly illustrated that cognitive modeling produced significantly more accurate observations than the other training methods. In discussing their results, McIntyre and Bentson suggested that cognitive modeling is effective because it provides vicarious reinforcement, reduces task ambiguity, and encourages the development of a goal setting paradigm that stimulates increased performance.

Following from the work by McIntyre and Bentson (1984) on behavioral observation, research by Johnson (1987) examined the effects of cognitive modeling training on the accuracy of performance ratings. Methodologically, the procedure employed by Johnson was similar to that used by McIntyre and Bentson in that a model verbalized his thinking process while making ratings of a videotaped ratee. This "thinking aloud" focused on the specific behaviors of the ratee and thus provided a behavioral rationale for each dimension rating. Prior to making their dimension ratings, the raters completed an observational checklist. Wherry and Bartlett (1982) have noted that
performance ratings that follow the completion of a checklist will be more accurate than ratings made without the use of a checklist.

Johnson's (1987) results supported his hypothesis that cognitive modeling training leads to more accurate ratings of performance. Unfortunately, the level of observation accuracy obtained with the checklist was not evaluated.

Silverhart (1987) restated the point made by Wherry and Bartlett (1982), that the checklist probably served as a learning heuristic. As a heuristic, the checklist operationalized the performance dimension training and clarified the observation and encoding processes required for accurate performance evaluation (DeNisi, Cafferty, & Meglino, 1984).

In discussing the beneficial aspects of cognitive modeling training on improving rating accuracy, Johnson (1987) echoed the opinion of Latham (1986) by identifying the similar background between modeling and frame-of-reference training. Both authors view the success of each training method as being contingent upon the ability of the training content to provide the participants with a common frame-of-reference that occurs through (a) behavioral justifications for effective and ineffective performance, (b) practice ratings, and (c) target score feedback on rating accuracy (Levine & Butler, 1952; Smith, 1986; Spool, 1978). However, cognitive modeling represents an
advancement over frame-of-reference training in that it actually provides the raters with the cognitive sequence necessary for making accurate performance ratings.

The comparison between frame-of-reference training and cognitive modeling provides researchers and practitioners with valuable evidence regarding the effectiveness of rater training on improving the accuracy of performance measurement. Likewise, given the importance of observation to performance ratings (Wherry & Bartlett, 1982) and the limited research activity concerning the effects of training on observation accuracy (McIntyre & Bentson, 1984; Thornton & Zorich, 1980), this research will examine the effects of rater training on observation accuracy.

Lord (1985) has proposed that research investigating the accuracy of behavioral observation should be addressed through the principles of Signal Detection Theory (see Swets & Pickett, 1982). In the context of behavioral observation, Signal Detection Theory categorizes true behaviors (i.e., those target-score behaviors on a checklist) as "signals" and other behaviors as "noise". An accurate rater is able to distinguish between signals and noise consistently. In other words, observation accuracy is a function of the rater's ability to focus on the occurrence of those behaviors found on a checklist, while bypassing all other behaviors. Lord (1985) has stated that observation accuracy can be improved if training programs
are able to increase the strength of a signal without increasing the level of noise present in the task.

In discussing the positive results of their research McIntyre and Bentson (1984) interpreted the success of cognitive modeling similarly to the recommendations suggested by Lord (1985). In specific, McIntyre and Bentson proposed that cognitive modeling serves as a clarification process that makes the abstract nature of behavioral observation more concrete. Furthermore, they maintained that this clarification promotes consensus agreement among the participants by identifying the requisite cognitive procedure necessary for accurate observation.

Despite the fact that frame-of-reference and cognitive modeling incorporate the active training principles outlined by Spool (1978), frame-of-reference training has not been successful at improving observation accuracy (Pulakos, 1986; Smith, 1984). As has been mentioned previously, a key difference between these two training methods is the "thinking aloud" component inherent within cognitive modeling. This suggests that the model's "thinking aloud" provides raters with the necessary cognitive framework that allows them to distinguish accurately between relevant (signal) and irrelevant (noise) behaviors.
Summary of Rater Training

In summary, both frame-of-reference and cognitive modeling have increased the accuracy of performance ratings. This suggests a direct comparison between the two methods. Despite its relative success, the inability of frame-of-reference training to improve rating accuracy significantly on a consistent basis, implies caution regarding its overall effectiveness. This shortcoming has been recognized and elaborated on by Silverhart (1987). Conversely, cognitive modeling has proven to be effective in the clinical (Sarason, 1973) and performance rating areas (Johnson, 1987). Therefore, based upon the results within the domain of rater accuracy training, the following hypotheses were made:

Hypothesis 1a: Rater training based on cognitive modeling will lead to significantly more accurate ratings of performance than will rater training based on the frame-of-reference approach.

Hypothesis 1b: The frame-of-reference approach will produce more accurate ratings of performance than no training.

Similar to its effectiveness on performance ratings (Johnson, 1987), cognitive modeling has also demonstrated success in improving observation accuracy (McIntyre & Bentson, 1984). In order to improve observation accuracy, a training program must contain a fundamental strategy that
will enhance the raters' ability to dichotomize between signal and noise cues. The "thinking aloud" component of cognitive modeling training distinguishes it from frame-of-reference, in terms of training content and effectiveness. Given the evidence from the behavioral observation literature, the following hypothesis was made:

**Hypothesis 2:** A cognitive modeling training approach will lead to significantly more accurate behavioral observations than either a frame-of-reference approach or no training.

**Practice-and-Feedback**

A commonly accepted notion concerning skill acquisition is that practice-and-feedback strengthen new stimulus-response associations which in turn facilitate the learning process (Holding, 1965). Specifically, practice-and-feedback promote the transfer of correct responses from short term memory to long term memory and prolong the length of time that the training content will be stored for use (Baldwin & Ford, 1988). Ellis (1965) has stated that, "extensive practice on the original task increases the likelihood of positive transfer to a subsequent task, whereas more limited practice may yield no transfer or even negative transfer" (p. 71). This causal link between practice-and-feedback and learning has been noted in educational (Ausebel, 1968), cognitive (d'Ydewalle & Lens, 1981), and rater training (Goldstein & Musicante, 1986)
A number of rater training studies have reported that the principles of practice-and-feedback typically result in improved rating accuracy (Athey & McIntyre, 1987; Johnson, 1987; McIntyre & Athey, 1985; McIntyre et al., 1984; Pulakos, 1984, 1986; Silverhart & Dickinson, 1985a; Smith, 1984). However, several rater training studies using the practice-and-feedback component have been unable to increase rating accuracy significantly (Dickinson & Silverhart, 1986; Hassett, 1989; Silverhart, 1987; Silverhart & Dickinson, 1985b). Still, the vital role of practice-and-feedback with regard to rating accuracy is clearly evident in that, only one study (Bittner, 1948) has been able to increase rating accuracy without the use of practice-and-feedback. As a result of this evidence, Smith (1986) concluded that, "practice and feedback exercises appear to be a necessary ingredient for increasing accuracy in ratings" (p. 37).

In their original article, Bernardin and Buckley (1981) suggested that frame-of-reference training should include three practice vignettes, corresponding to outstanding, average, and unsatisfactory levels of job performance. The purpose of this repeated practice is to provide the raters with the opportunity to develop an understanding of what constitutes each particular level of performance, thereby allowing raters to distinguish between
the three performance standards. Despite Bernardin and Buckley's (1981) recommendation, most of the studies investigating rating accuracy typically provide only a single practice rating (e.g., McIntyre et al., 1984). To date, no research has examined the effects of differential amounts of practice-and-feedback on performance rating accuracy, and only one study has examined the effects of multiple practice-and-feedback trials on the accuracy of behavioral observation (McIntyre, 1986).

McIntyre (1986) conducted a study that assessed the effects of training method (cognitive modeling vs. lecture) and amount of practice-and-feedback (none vs. one trial vs. two trials) on the accuracy of behavioral observation. The results of the study indicated a significant effect for practice-and-feedback. Post-hoc analysis revealed that the one and two trial practice-and-feedback conditions produced significantly more accurate behavioral observations than the no practice-and-feedback condition. There was no significant difference between one and two trials of practice-and-feedback. In discussing these results, McIntyre's interpretation focused on the role of feedback by stating that it must be both personalized and task-specific if practice-and-feedback is going to facilitate positive transfer of training (Craik & Lockhart, 1972).

Summary of Practice-and-Feedback

The positive effects of active practice-and-feedback
on rating accuracy (Smith, 1986) and behavioral observation accuracy (Spool, 1978) have recently been reviewed. Unfortunately, very little research has investigated the effects of multiple practice-and-feedback trials on observation accuracy (McIntyre, 1986). Further, no research has examined the influence of practice-and-feedback in the context originally outlined by Bernardin and Buckley (1981) in that they recommended three practice-and-feedback trials to facilitate rating accuracy. Based on the limited research literature regarding practice-and-feedback and rating/observation accuracy, the following hypotheses were made:

**Hypothesis 3a:** Rater training incorporating three practice-and-feedback trials will produce significantly more accurate ratings of performance than will training that provides a single practice-and-feedback trial.

**Hypothesis 3b:** A single practice-and-feedback trial will produce significantly more accurate ratings of performance than will no practice-and-feedback.

**Hypothesis 4a:** Training consisting of three practice-and-feedback trials will produce significantly more accurate behavioral observations than will a single practice-and-feedback trial session.

**Hypothesis 4b:** A single practice-and-feedback trial will produce significantly more accurate behavioral observations than will no practice-and-feedback.
II. METHOD

Participants

The participants were 99 students at Old Dominion University (38 male and 61 female). The median age of the participants was 22. Participants chose to receive either $20.00 or 2 course credits for their involvement.

Design

This research employed a 3 x 3 factorial design with training method (frame-of-reference, cognitive modeling, no-training control) and amount of practice-and-feedback (0, 1, 3 trials) as independent variables. The participants were randomly assigned to one of the nine experimental cells. There were 11 participants in each cell.

Stimulus Instruments

The stimuli were videotapes of 10 managers who role played giving performance feedback to a subordinate. The role play was one of five assessment center exercises constructed as part of research funded by the United States Air Force Human Resources Laboratory (Dickinson & Hedge, 1988). The goal of this research was to develop a test bed for conducting research on the accuracy and validity of performance ratings.

The 10 videotaped role plays were selected based upon their representativeness of performance across several
rating dimensions. Each of the videotapes was transcribed verbatim and then re-enacted with drama students from the university. This re-enactment was done in order to improve the technical quality of the stimulus tapes and to conceal the identity of the original role-play participants. The content of the final videotapes closely resembled the dialogue from the original role plays. The length of the role plays ranged between 6 and 15 minutes. The scripts for all role plays are found in Appendix A.

Rating Instruments

The participants used 5-point, behaviorally anchored rating scales (BARS) and a behavioral checklist to evaluate the performance of each ratee on three dimensions (problem analysis, problem solution, and sensitivity). The checklist consisted of 15 behaviors for each dimension. The definitions of the three dimensions are found in Appendix B. The BARS are presented in Appendix C and the behavioral checklists are shown in Appendix D.

Target Score Development

Dimension target scores for the BARS and behavioral checklists were developed for each of the 10 videotaped role plays. The target scores were obtained from five "expert" raters who were doctoral students in an industrial/organizational psychology program. Each of the expert raters was familiar with performance measurement and assessment centers.
Prior to viewing each videotape, the expert raters were given a transcript of the role play as well as copies of the BARS forms and the behavioral checklists. Once they had familiarized themselves with the content of the role play and the rating instruments, the expert raters viewed each videotape at least twice. The experts rated each videotape with the BARS and checklists. In an attempt to reduce possible order effects, the rating sequence was counterbalanced for each videotape. In specific, for the first videotape two of the expert raters completed the BARS first and then the checklists, while the other three experts completed the checklists first and then the BARS. This process was alternated for the ratings of subsequent videotapes.

Once the group of expert raters had rated a videotape, the members presented their dimension ratings and checklist observations to the group for consensus discussion. In the event of a rating discrepancy, the experts provided specific behavioral rationales to justify their ratings. Once discussion was completed, the group members made final dimension ratings. A target score was defined as the average of the expert raters' final dimension ratings. The BARS target scores for each videotaped simulation are presented in Appendix E.

In the event of a checklist discrepancy, the behavior in question was replayed on the videotape and discussed by
the experts to determine a consensus understanding regarding the occurrence or non-occurrence of that behavior. A checklist target score was determined by the experts' consensus for each behavioral item on each checklist. The checklist target scores for each videotape are found in Appendix F.

The dimension target scores for the BARS were analyzed by means of a 5 x 10 x 3 analysis of variance. The independent variables were Raters, Ratees, and Dimensions. This analysis indicated a significant Ratees effect ($F (9, 36) = 101.83, p < .01$) and a significant Ratees x Dimensions interaction ($F (18, 72) = 32.44, p < .01$). A summary of this analysis is shown in Table 1.

The significant Ratees effect represents convergent validity which signifies that the ratees were ordered similarly by the expert raters. The significant Ratees x Dimensions interaction is indicative of discriminant validity. Discriminant validity signifies that the ratees were ordered differentially across all performance dimensions. Both of these findings indicate high quality target scores (Dickinson, 1987; Kavanagh, MacKinney, & Wolins, 1971). The results also show a non-significant Raters effect. The lack of significance for this effect is interpreted positively in that it indicates a high degree of interrater agreement on the target scores.
Table 1

Summary of the Analysis of Variance Results for the Target Scores.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raters (R)</td>
<td>4</td>
<td>0.06</td>
<td>0.50</td>
</tr>
<tr>
<td>Ratees (E)</td>
<td>9</td>
<td>12.22</td>
<td>101.83 *</td>
</tr>
<tr>
<td>Dimensions (D)</td>
<td>2</td>
<td>20.65</td>
<td>7.07 *</td>
</tr>
<tr>
<td>R x E</td>
<td>36</td>
<td>0.12</td>
<td>No Test</td>
</tr>
<tr>
<td>R x D</td>
<td>8</td>
<td>0.05</td>
<td>0.55</td>
</tr>
<tr>
<td>E x D</td>
<td>18</td>
<td>2.92</td>
<td>32.44 *</td>
</tr>
<tr>
<td>R x E x D</td>
<td>72</td>
<td>0.09</td>
<td></td>
</tr>
</tbody>
</table>

* Quasi F-Ratio.

$p < .01$.

Procedures

The present research required the participants to attend sessions on two successive days. The first session involved the administration of training and practice-and-feedback. In the second session, the participants evaluated the performance of the ratees in seven videotaped role plays.

Day 1. The beginning of this session was identical for all experimental conditions. First, each participant completed an informed consent form and was assigned a randomly selected identification number to ensure anonymity.
of ratings. Next, participants were instructed to complete a pre-training questionnaire that required (a) matching behavioral statements to one of the three performance dimensions and (b) rating the quality of the statements on a 5-point scale. These behavioral statements were selected from the checklist developed by Campbell (1986). A copy of this pre-training questionnaire is found in Appendix G.

Between 4 and 6 participants were present in each training session. In each session, the experimenter defined the purpose, task, and process of the research. The experimenter explained that the purpose of the research was to produce accurate observations and ratings of managerial performance. Furthermore, the participants were informed that they would be asked to evaluate several videotaped role plays of a manager giving feedback to a subordinate. In an attempt to increase the participants' understanding of the task, the experimenter provided a description of the role play. This description was identical to that given to the original assessment center participants. A copy of the description is included in Appendix H. Finally, the participants viewed a videotaped demonstration of the role play, and depending upon condition, made practice ratings on 1 or 3 videotapes.

The amount of time spent in training was contingent upon training method and amount of practice-and-feedback received. Time of training for the no practice-and-
feedback conditions was: 30 minutes for no-training control, three hours and 30 minutes for frame-of-reference, and approximately four hours for cognitive modeling. Additional practice-and-feedback trials increased training time by 30 to 45 minutes per trial. The procedures for each of the rater training methods will now be presented. An overview of the training procedures is presented in Table 2.

No-Training Control. Participants in the no-training control method received only basic instructions concerning the proper use of the BARS (Silverhart, 1987) and the checklists. These participants did not receive training regarding the dimension definitions. Instead, they were given time to familiarize themselves with the dimensions.

Once participants indicated familiarity with the dimensions, the experimenter pointed out that each behavioral statement on the BARS represented a different level of performance. A "5" on the BARS represented the highest level of ratee performance, while a "1" signified the lowest level. The experimenter then emphasized the interpretation of the phrase "could be expected to" which is included in every behavioral anchor on the BARS. Participants were instructed to watch the entire videotape, and for each dimension, decide which one of the five behavioral anchors they felt the ratee could be expected to
Table 2
Overview of Training Procedures.

<table>
<thead>
<tr>
<th>No Training</th>
<th>Frame-of-Reference</th>
<th>Cognitive Modeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Training Questionnaire</td>
<td>Pre-Training Questionnaire</td>
<td>Pre-Training Questionnaire</td>
</tr>
<tr>
<td>Orientation</td>
<td>Orientation</td>
<td>Orientation</td>
</tr>
<tr>
<td>Basic BARS Training</td>
<td>Basic BARS Training</td>
<td>Basic BARS Training</td>
</tr>
<tr>
<td></td>
<td>Performance Dimension Training</td>
<td>Performance Dimension Training</td>
</tr>
<tr>
<td></td>
<td>Performance Standards Training</td>
<td>Performance Standards Training</td>
</tr>
<tr>
<td>Basic Checklist Training</td>
<td>Extensive Checklist Training</td>
<td>Extensive Checklist Training</td>
</tr>
<tr>
<td>Demonstration Videotape</td>
<td>Demonstration Videotape</td>
<td>Demonstration Videotape</td>
</tr>
<tr>
<td></td>
<td>Thinking Aloud</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Target Score Feedback</td>
<td>Target Score Feedback</td>
</tr>
<tr>
<td></td>
<td>Behavioral Rationale</td>
<td>Behavioral Rationale</td>
</tr>
<tr>
<td></td>
<td>Group Discussion</td>
<td>Group Discussion</td>
</tr>
<tr>
<td>Practice Videotape (s)</td>
<td>Practice Videotape (s)</td>
<td>Practice Videotape (s)</td>
</tr>
<tr>
<td></td>
<td>Public Rehearsal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Target Score Feedback</td>
<td>Target Score Feedback</td>
</tr>
<tr>
<td></td>
<td>Thinking Aloud</td>
<td>Thinking Aloud</td>
</tr>
<tr>
<td></td>
<td>Behavioral Rationale</td>
<td>Behavioral Rationale</td>
</tr>
<tr>
<td></td>
<td>Group Discussion</td>
<td>Group Discussion</td>
</tr>
<tr>
<td>Post-Training Questionnaire</td>
<td>Post-Training Questionnaire</td>
<td>Post-Training Questionnaire</td>
</tr>
</tbody>
</table>
perform on a consistent basis. The participants were reminded that their ratings were to be based on all and not a sample of the behaviors demonstrated by the ratee. At this point, the experimenter mentioned the possibility that a ratee could exhibit a behavior that also appeared as an anchor on the BARS. The participants were cautioned not to base their rating on the existence of a single behavior, but on how they would expect the ratee to perform consistently. This explanation was also presented for the frame-of-reference and cognitive modeling methods. However, participants in the no-training control method did not receive training on the specific behavioral anchors found on the BARS.

The checklist training was also basic in scope. The experimenter informed the participants that if they felt the ratee demonstrated one of the checklist behaviors, they should circle the number that corresponded to that specific checklist behavior. These instructions were also presented in the frame-of-reference and cognitive modeling methods.

Next, no-training control participants were given 0, 1, or 3 trials of practice ratings. However, the participants who were given the opportunity to practice (i.e., 1 or 3 trials) did not receive target score feedback on their BARS ratings or their checklist observations. Once the participants evaluated the last videotape they
were asked to complete a post-training questionnaire (see Appendix I). This questionnaire was also administered in the frame-of-reference and cognitive modeling methods. Upon completion of the questionnaire the session was terminated.

**Frame-of-Reference.** In addition to the information presented in the no-training control method, the frame-of-reference method also received performance dimension, performance standards, and checklist training. The experimenter began the performance dimension training by informing the participants that job performance consists of many different dimensions of work (e.g., organization and planning, leadership). Furthermore, the experimenter explained the importance of behavioral dimensions to the accuracy of performance measurement. It was stated that rating accuracy and observation accuracy could be improved if performance is categorized and evaluated on behavioral dimensions, rather than on a global interpretation of performance. The three behavioral dimensions were then presented and defined. Operational descriptions for the dimensions were provided, and the experimenter generated a group discussion of the dimensions. Once the participants had an understanding of the dimensions, the experimenter read aloud each behavioral statement on the checklist and generated a discussion focusing on the inclusion of the behaviors and their interpretation. After the checklist
training was completed, performance standards training was introduced.

The experimenter read aloud each behavioral anchor and its rationale for the appropriate rating dimension. This allowed the experimenter to identify behavioral examples of outstanding, average, and poor performance for the dimension. In order to clarify potential ambiguity, the experimenter encouraged the participants to ask questions and discuss the behaviors or their placement within the dimensions. Following this training, the demonstration videotape was shown to the participants.

Similar to the no-training control method, the frame-of-reference method also received 0, 1, or 3 trials of practice ratings. For participants who made practice ratings, they were instructed to watch a videotape carefully and to take notes on the manager's performance. Unlike the participants in the no-training control method, however, the participants in the frame-of-reference method received target score feedback for each dimension rating (Smith, 1986) and behavioral checklist (Spool, 1978). Moreover, the experimenter provided videotaped checklist behaviors as the behavioral rationales for each dimension target score. A group discussion of the target ratings and target behaviors was included as part of the feedback. This discussion attempted to develop a consensus understanding of the behaviors that determined the
dimension target scores for the BARS and the checklists.

**Cognitive Modeling.** The participants in the cognitive modeling method were given the same performance dimension, performance standards, and checklist training, provided in the frame-of-reference method. Following this training, the demonstration videotape was shown to the participants.

The cognitive modeling training differed from frame-of-reference training in several ways. First, the role of the experimenter was presented differently in the cognitive modeling method. The experimenter was presented as an expert in the area of performance measurement. Research (Bandura, 1977; Goldstein & Sorcher, 1974) has found that the effectiveness of modeling training can be facilitated if the model is perceived to be high in professional status and an expert relative to the behavior being displayed. This expert power (French & Raven, 1960) increases the likelihood that the participants will emulate those behaviors demonstrated by the model (McIntyre & Bentson, 1984). Therefore, for the cognitive modeling method, the experimenter conducted the training sessions as an expert in the area of performance measurement.

A second difference between the two training methods was that once the demonstration videotape was shown, the expert in the cognitive modeling method verbalized the behavioral observations that he made of the manager's
performance. This "thinking aloud" provided the participants with the correct strategy required to observe and evaluate the manager's performance accurately. Next, a group discussion of the expert's cognitive strategy was initiated in order to clarify the participants' understanding of the cognitive steps necessary for accurate performance evaluation.

Participants in the cognitive modeling method also received 0, 1, or 3 trials of practice rating. Following a practice videotape, each participant's dimension ratings were put on a flip chart. The participants were then instructed to state how they reached each dimension rating. This verbalization was required only from the participants in the cognitive modeling method. After all participants verbalized their cognitive strategies for their ratings, they were given target score feedback on their dimension ratings. Following the target score feedback, the participants were shown the checklist target behaviors as videotaped behavioral rationales for the dimension ratings. The expert then generated a group discussion which identified similarities and differences between the observation and rating strategies employed by the participants and those that were modeled by the expert. This allowed the participants to receive feedback on their observation processes as well as their rating strategy and to rehearse that strategy mentally, prior to the viewing of
subsequent videotapes (Bandura, 1977; Luthans & Kreitner, 1985). Thus, the participants in the cognitive modeling method received practice-and-feedback on their observations, ratings, and on the cognitive sequence necessary for observing and rating performance accurately.

Day 2. The procedure for the second session was constant for each of the nine experimental conditions. The participants were given a review of the dimension definitions and proper use of the behavioral checklists and the BARS. The experimenter then administered a pre-rating questionnaire (see Appendix J) to assess the amount of information that was retained from the training held on the previous day. The content of this questionnaire was similar to that of the pre-training questionnaire administered the previous day. Once they had completed the pre-rating questionnaire, the participants were instructed to view and rate the dimension performance of the manager in seven videotaped role plays using the checklists and the BARS. After their last videotape, the participants were asked to complete a post-experimental questionnaire to assess their reactions to the research (see Appendix K). Following the completion of the questionnaire, the participants were debriefed, paid, and allowed to leave.

**Manipulation Checks**

Mean scores were calculated for the pre-training, post-training, and pre-rating questionnaires. Each of the
questionnaires assessed the participants' ability to match behavioral incidents to the appropriate performance dimension and rate the effectiveness of each behavioral statement on a 5-point scale. These mean scores were compared in order to determine the effectiveness of the training methods.

Accuracy

For the purposes of this research, rating accuracy was operationalized in terms of an extension of the basic accuracy design (Dickinson, 1987). Accuracy of behavioral observation was defined within the framework of Signal Detection Theory (Baker & Schuck, 1975).

**Rating Accuracy.** Dickinson (1987) has developed an analysis of variance (ANOVA) approach for assessing rating accuracy that provides a psychometric interpretation for each component in the person perception design (Cronbach, 1955; Sulsky & Balzer, 1988). The person perception design is premised on the belief that accuracy is a composite of four mathematically independent components: elevation accuracy, differential elevation accuracy, stereotype accuracy, and differential accuracy.

The basic accuracy design includes the factors of Rating Sources, Ratees, and Traits. The factor of Rating Sources includes the target scores of the expert raters and the ratings given by the raters. A summary of the factors within the basic accuracy design and their psychometric
Elevation accuracy is represented by the Rating Sources main effect. This factor is indicative of a mean difference between the target scores and the ratings given by the raters. A significant Rating Sources main effect is interpreted as rater inaccuracy.

Differential elevation accuracy is represented by the interaction between Rating Sources and Ratees. This interaction indicates the degree of disagreement between the ranking of the ratees given by the experts and the ranking of the ratees given by the raters. A significant Rating Sources x Ratees interaction represents rater inaccuracy.

Stereotype accuracy can be seen in the interaction between Rating Sources and Dimensions. This interaction reflects the raters' ability to rank the ratees' dimension strengths and weaknesses similarly to the target scores. A significant Rating Sources x Dimensions interaction indicates that the raters are inaccurate in evaluating the dimension performance of the ratees.

Differential accuracy is represented by the interaction between Rating Sources, Ratees, and Dimensions. This interaction signifies the degree of dissimilarity between the ratings of the raters and those of the experts, in terms of the individual differences of the ratees on the dimensions. A significant three-way interaction of Rating
Table 3

Summary Table for the Psychometric Interpretations of the Basic Accuracy Design.

<table>
<thead>
<tr>
<th>Source</th>
<th>Psychometric interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating Sources (S)</td>
<td>Elevation accuracy</td>
</tr>
<tr>
<td>Ratees (E)</td>
<td>Convergent validity</td>
</tr>
<tr>
<td>Dimensions (D)</td>
<td>Trait bias</td>
</tr>
<tr>
<td>S x E</td>
<td>Differential elevation accuracy</td>
</tr>
<tr>
<td>S x D</td>
<td>Stereotype accuracy</td>
</tr>
<tr>
<td>E x D</td>
<td>Discriminant validity</td>
</tr>
<tr>
<td>S x E x D</td>
<td>Differential accuracy</td>
</tr>
</tbody>
</table>

Sources x Ratees x Dimensions is indicative of inaccurate performance ratings.

The basic accuracy design is capable of being extended to include additional factors that could explain rating accuracy. In an extended design, the focus is on Rating Sources and its interactions with the remaining factors. For the present research, the basic accuracy design was extended to include the factors of rater training method and amount of practice-and-feedback. A summary of the extended design and the psychometric interpretations for each factor are presented in Table 4. The error terms for each effect are presented in Table 5.
Table 4
Summary Table for the Psychometric Interpretations of the Extended Accuracy Design.

<table>
<thead>
<tr>
<th>Source</th>
<th>Psychometric interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Raters</strong></td>
<td></td>
</tr>
<tr>
<td>Rating Sources (S)</td>
<td>Elevation accuracy</td>
</tr>
<tr>
<td>Training Method (T)</td>
<td>Elevation accuracy differing by training method</td>
</tr>
<tr>
<td>Practice (P)</td>
<td>Elevation accuracy differing by amount of practice</td>
</tr>
<tr>
<td>T x P</td>
<td>Elevation accuracy differing by training method and amount of practice</td>
</tr>
<tr>
<td><strong>Within Raters</strong></td>
<td></td>
</tr>
<tr>
<td>Dimensions (D)</td>
<td>Stereotype accuracy</td>
</tr>
<tr>
<td>D x T</td>
<td>Stereotype accuracy differing by training method</td>
</tr>
<tr>
<td>D x P</td>
<td>Stereotype accuracy differing by amount of practice</td>
</tr>
<tr>
<td>D x T x P</td>
<td>Stereotype accuracy differing by training method and amount of practice</td>
</tr>
<tr>
<td>Ratees (E)</td>
<td>Differential elevation accuracy</td>
</tr>
<tr>
<td>E x T</td>
<td>Differential elevation accuracy differing by training method</td>
</tr>
<tr>
<td>E x P</td>
<td>Differential elevation accuracy differing by amount of practice</td>
</tr>
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Table 4 (concluded)

<table>
<thead>
<tr>
<th>Source</th>
<th>Psychometric interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>E x T x P</td>
<td>Differential elevation accuracy differing by training method and amount of practice</td>
</tr>
<tr>
<td>D x E</td>
<td>Differential accuracy</td>
</tr>
<tr>
<td>D x E x T</td>
<td>Differential accuracy differing by training method</td>
</tr>
<tr>
<td>D x E x P</td>
<td>Differential accuracy differing by amount of practice</td>
</tr>
<tr>
<td>D x E x T x P</td>
<td>Differential accuracy differing by training method and amount of practice</td>
</tr>
</tbody>
</table>

a Each of the remaining effects represents an interaction with Rating Sources.

Observation Accuracy. The method of analysis for the accuracy of behavioral observation is based on the principles of Signal Detection Theory. Table 6 illustrates the outcomes of a rater's decisions about the occurrence of a behavior. Table 6 is partitioned into four sections: hit, miss, false alarm, and correct rejection. A "hit" is a correct decision by the rater that a behavior actually did occur. A "miss" is a decision by the rater that a behavior did not occur, when in fact it did occur. A "false alarm" is a decision by the rater that a behavior occurred, when in fact it did not occur. A "correct rejection" is a correct decision by the rater that a
Table 5

**Summary Table for the Error Terms of the Extended Accuracy Design.**

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Raters</strong></td>
<td></td>
</tr>
<tr>
<td>Rating Sources (S)</td>
<td>R/TxP</td>
</tr>
<tr>
<td>Training Method (T)</td>
<td>R/TxP + ExT - ExR/TxP</td>
</tr>
<tr>
<td>Practice (P)</td>
<td>R/TxP + ExP - ExR/TxP</td>
</tr>
<tr>
<td>T x P</td>
<td>R/TxP + ExTxP - ExR/TxP</td>
</tr>
<tr>
<td>Raters (R/TxP)</td>
<td>ExR/TxP</td>
</tr>
<tr>
<td><strong>Within Raters</strong></td>
<td></td>
</tr>
<tr>
<td>Dimensions (D)</td>
<td>DxE + DxR/TxP - DxExR/TxP</td>
</tr>
<tr>
<td>D x T</td>
<td>DxExT + DxR/TxP - DxExR/TxP</td>
</tr>
<tr>
<td>D x P</td>
<td>DxExP + DxR/TxP - DxExR/TxP</td>
</tr>
<tr>
<td>D x T x P</td>
<td>DxR/TxP + DxExTxP - DxExR/TxP</td>
</tr>
<tr>
<td>D x R/TxP</td>
<td>DxExR/TxP</td>
</tr>
<tr>
<td>Ratees (E)</td>
<td>ExR/TxP</td>
</tr>
<tr>
<td>E x T</td>
<td>ExR/TxP</td>
</tr>
<tr>
<td>E x P</td>
<td>ExR/TxP</td>
</tr>
<tr>
<td>E x T x P</td>
<td>ExR/TxP</td>
</tr>
<tr>
<td>E X R/TxP</td>
<td>No Test</td>
</tr>
<tr>
<td>D x E</td>
<td>DxExR/TxP</td>
</tr>
<tr>
<td>D x E x T</td>
<td>DxExR/TxP</td>
</tr>
<tr>
<td>D x E x P</td>
<td>DxExR/TxP</td>
</tr>
</tbody>
</table>

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Table 5 (concluded)

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>D x E x T x P</td>
<td>DxExR/TxP</td>
</tr>
<tr>
<td>D x E x R/TxP</td>
<td>No Test</td>
</tr>
</tbody>
</table>

Each of the remaining effects represents an interaction with Rating Sources.

Quasi F-Ratio.

behavior did not occur.

Observation accuracy was defined in terms of two observation error rates: one minus (1-) hit rate and false alarm rate. Both error rates were calculated for each rater; smaller values indicate greater observation accuracy. A 1-hit rate value was computed by (a) dividing the total number of hits, by the sum of hits and misses, and then (b) subtracting that quotient from 1.00. A false alarm rate was computed by dividing the total number of false alarms made by a rater, by the sum of false alarms and correct rejections.
Table 6


<table>
<thead>
<tr>
<th>Rater's Decision</th>
<th>Behavior Occurred</th>
<th>Behavior Did Not Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occurred</td>
<td>HIT</td>
<td>MISS</td>
</tr>
<tr>
<td>Actual Behavior</td>
<td>FALSE ALARM</td>
<td>CORRECT REJECTION</td>
</tr>
<tr>
<td>Did Not Occur</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. RESULTS

Overview

Preliminary analyses concerning the effectiveness of the training and the raters' perceptions of the experimenter will be presented first. The second section will present the results for rating accuracy. The final section will report the results for observation accuracy.

Dimension Training

A repeated-measures ANOVA was conducted to determine the number of behavioral statements correctly matched by the raters to the performance dimensions on the pre-training, post-training, and pre-rating questionnaires. The results of this analysis are shown in Table 7, and the means for the training and practice conditions are presented in Table 8.

The training methods were not significantly different from each other on the pre-training questionnaire (p > .05). This finding indicates that prior to training, the raters did not differ significantly in their ability to match behavioral statements to the dimensions.

A significant Questionnaires main effect (F(2,180) = 111.45, p < .01) illustrates that the raters improved in their ability to match behavioral statements with the correct performance dimensions. A Newman-Keuls post hoc test indicated that the raters performed significantly
Table 7

Summary of the Analysis of Variance Results for the Pre-Training, Post-Training, and Pre-Rating Questionnaires.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Ratio</th>
<th>VC</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Raters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training (T)</td>
<td>2</td>
<td>13.15</td>
<td>1.04</td>
<td>.0037</td>
<td>.0003</td>
</tr>
<tr>
<td>Practice (P)</td>
<td>2</td>
<td>49.79</td>
<td>3.95 *</td>
<td>.2505</td>
<td>.0250</td>
</tr>
<tr>
<td>T x P</td>
<td>4</td>
<td>6.38</td>
<td>.51</td>
<td>-.0836</td>
<td>----</td>
</tr>
<tr>
<td>Raters (R/TxP)</td>
<td>90</td>
<td>12.59</td>
<td>2.9167</td>
<td>.2914</td>
<td></td>
</tr>
<tr>
<td><strong>Within Raters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaires (Q)</td>
<td>2</td>
<td>427.97</td>
<td>111.45 **</td>
<td>2.8562</td>
<td>.2853</td>
</tr>
<tr>
<td>Q x T</td>
<td>4</td>
<td>14.35</td>
<td>3.74 **</td>
<td>.1415</td>
<td>.0141</td>
</tr>
<tr>
<td>Q x P</td>
<td>4</td>
<td>2.03</td>
<td>.53</td>
<td>-.0244</td>
<td>----</td>
</tr>
<tr>
<td>Q x T x P</td>
<td>8</td>
<td>2.86</td>
<td>.74</td>
<td>-.0264</td>
<td>----</td>
</tr>
<tr>
<td>Q x R/TxP</td>
<td>180</td>
<td>3.84</td>
<td>3.8400</td>
<td>.3836</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** If a source's variance component was negative, that value was set equal to zero and then used in the denominator to compute the intraclass correlation coefficients. Questionnaires = Sequence of the three questionnaires (i.e., pre-training, post-training, and pre-rating); VC = Variance component; ICC = Intraclass correlation coefficient.

* p < .05. ** p < .01.
Table 8  
**Means of the Pre-Training, Post-Training, and Pre-Rating Questionnaires by Training Method and Amount of Practice.**

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>CM</th>
<th>FOR</th>
<th>NTC</th>
<th>3P</th>
<th>1P</th>
<th>0P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Training</td>
<td>15.21</td>
<td>15.88</td>
<td>16.09</td>
<td>16.18</td>
<td>14.85</td>
<td>16.15</td>
</tr>
<tr>
<td></td>
<td>(3.26)</td>
<td>(2.99)</td>
<td>(3.16)</td>
<td>(3.09)</td>
<td>(3.18)</td>
<td>(3.02)</td>
</tr>
<tr>
<td>Post-Training</td>
<td>19.97</td>
<td>19.79</td>
<td>18.76</td>
<td>19.61</td>
<td>18.64</td>
<td>20.27</td>
</tr>
<tr>
<td></td>
<td>(2.54)</td>
<td>(2.46)</td>
<td>(2.25)</td>
<td>(2.07)</td>
<td>(3.16)</td>
<td>(1.66)</td>
</tr>
<tr>
<td></td>
<td>(2.06)</td>
<td>(2.51)</td>
<td>(2.05)</td>
<td>(2.03)</td>
<td>(2.72)</td>
<td>(1.93)</td>
</tr>
</tbody>
</table>

**Note.** Standard deviations appear in parentheses. CM = Cognitive Modeling; FOR = Frame-of-Reference; NTC = No-Training Control; 3P = 3 Practice Trials; 1P = 1 Practice Trial; 0P = 0 Practice Trials. Maximum possible score for each questionnaire was 23.

better immediately following training, and maintained that improvement prior to viewing the videotapes on Day 2 (i.e., pre-rating questionnaire).

The results also indicated a significant Questionnaires x Training interaction \( (F(4,180) = 3.74, \ p < .01) \). A Newman-Keuls test revealed that Questionnaires were significantly different for each of the training methods. Prior to training, the no-training control method had the greatest mean score, while the cognitive modeling
method had the smallest mean. However, after the training, both the frame-of-reference and the cognitive modeling methods had greater mean scores than the no-training control method. A Scheffe's test for multiple comparisons was calculated to assess the differences between the levels of improvement for each training method. The results showed that the cognitive modeling method improved significantly more than the no-training control method from pre-training to pre-rating ($p < .05$). Apparently, the training principles demonstrated in the cognitive modeling method facilitated the learning of the training content, as well as its retention.

The results also demonstrated a significant Practice main effect ($F(2,90) = 3.95$, $p < .05$). A Newman-Keuls test showed that the 0 practice-and-feedback condition had a significantly greater mean value than the 1 practice-and-feedback condition ($p < .05$), while the difference between the 3 practice-and-feedback condition and 1 practice-and-feedback condition approached statistical significance ($p < .06$). Apparently, receiving a single practice-and-feedback trial had a detrimental effect on the accurate matching of behavioral statements to the dimensions, while receiving either 0 or 3 practice-and-feedback trials improved matching performance.

Post-Experimental Questionnaire

For the purposes of this research, two items from the
post-experimental questionnaire deserve elaboration. Item 
#7 asked, "To what extent did you perceive the experimenter 
as knowledgeable in observation and performance rating?"
This item yielded the following mean values: 3.93 for the 
no-training control method, 4.42 for frame-of-reference, 
and 4.58 for cognitive modeling. These means were analyzed 
with a one-way ANOVA. This ANOVA revealed a significant 
difference between methods (F(2,96) = 7.29, p < .01). A 
Newman-Keuls post hoc test revealed that the mean ratings 
of the frame-of-reference and cognitive modeling methods 
were significantly greater than the mean of the no-training 
control method. Item #10 stated, "The experimenter seemed 
like an expert in behavioral observation and performance 
rating." This item produced the following means: 3.69 for 
the no-training control method, 4.21 for the frame-of-
reference method, and 4.48 for cognitive modeling. A one-
way ANOVA revealed a significant difference between methods 
(F(2,96) = 8.94, p < .01). A Newman-Keuls post hoc test 
demonstrated that the mean ratings of the frame-of-
reference and cognitive modeling methods were significantly 
greater than the mean of the no-training control method.

The raters in the frame-of-reference and cognitive 
modeling methods perceived the experimenter to be 
significantly more knowledgeable and more of an expert, 
than did those raters in the no-training control method. 
There was no significant difference between the frame-of-
reference and cognitive modeling methods. This indicates that despite describing himself as an expert in the cognitive modeling method, the experimenter was perceived similarly in the frame-of-reference training method. Apparently, simply demonstrating a professional manner within a training situation evokes positive perceptions about expertise.

Rating Accuracy

The accuracy of the performance ratings was evaluated with the extended accuracy design described in Table 4. The factors from the basic accuracy design (i.e., Rating Sources, Dimensions, and Ratees) were included as repeated measures. In addition, orthonormal contrasts were formed to test the difference between the ratings given by the raters and the target scores generated by the expert raters (Dickinson & Hedge, 1988). These 21 contrasts described variation due to the discrepancies between the ratings and the target scores for the seven ratees on the three dimensions.

The extended accuracy design utilizes ANOVA to indicate accuracy through a lack of statistical significance for a given effect (i.e., small discrepancies between the ratings and the target scores). The results of the ANOVA are summarized in Table 9.

A unique characteristic of the extended accuracy design is that it allows for the interactions between the
Table 9

Summary of the Analysis of Variance Results for the Extended Accuracy Design.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Ratio</th>
<th>VC</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Raters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rating Sources (S)</td>
<td>1</td>
<td>151.31</td>
<td>80.06 **</td>
<td>.0718</td>
<td>.0813</td>
</tr>
<tr>
<td>Training (T)</td>
<td>2</td>
<td>13.16</td>
<td>3.99 *</td>
<td>.0047</td>
<td>.0053</td>
</tr>
<tr>
<td>Practice (P)</td>
<td>2</td>
<td>3.01</td>
<td>1.26 b</td>
<td>.0003</td>
<td>.0003</td>
</tr>
<tr>
<td>T x P</td>
<td>4</td>
<td>1.82</td>
<td>1.11 b</td>
<td>.0002</td>
<td>.0002</td>
</tr>
<tr>
<td>Raters (R/TxP)</td>
<td>90</td>
<td>1.89</td>
<td>2.33 **</td>
<td>.0514</td>
<td>.0582</td>
</tr>
<tr>
<td><strong>Within Raters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions (D)</td>
<td>2</td>
<td>11.26</td>
<td>.65 b</td>
<td>-.0028</td>
<td>----</td>
</tr>
<tr>
<td>D x T</td>
<td>4</td>
<td>.45 b</td>
<td>.32 b</td>
<td>-.0009</td>
<td>----</td>
</tr>
<tr>
<td>D x P</td>
<td>4</td>
<td>1.43 b</td>
<td>2.80 * b</td>
<td>.0009</td>
<td>.0010</td>
</tr>
<tr>
<td>D x T x P</td>
<td>8</td>
<td>1.18 b</td>
<td>2.07 b</td>
<td>.0012</td>
<td>.0013</td>
</tr>
<tr>
<td>D x R/TxP</td>
<td>180</td>
<td>.57 b</td>
<td>1.16 b</td>
<td>.0114</td>
<td>.0129</td>
</tr>
<tr>
<td>Ratees (E)</td>
<td>6</td>
<td>23.88</td>
<td>29.48 **</td>
<td>.0388</td>
<td>.0439</td>
</tr>
<tr>
<td>E x T</td>
<td>12</td>
<td>2.22</td>
<td>2.74 **</td>
<td>.0071</td>
<td>.0080</td>
</tr>
<tr>
<td>E x P</td>
<td>12</td>
<td>1.31</td>
<td>1.62</td>
<td>.0025</td>
<td>.0028</td>
</tr>
<tr>
<td>E x T x P</td>
<td>24</td>
<td>.56 b</td>
<td>.69 b</td>
<td>-.3787</td>
<td>----</td>
</tr>
<tr>
<td>E x R/TxP</td>
<td>540</td>
<td>.81 b</td>
<td>.1066</td>
<td>.1207</td>
<td></td>
</tr>
<tr>
<td>D x E</td>
<td>12</td>
<td>17.12</td>
<td>34.94 **</td>
<td>.0839</td>
<td>.0949</td>
</tr>
<tr>
<td>D x E x T</td>
<td>24</td>
<td>1.31 b</td>
<td>2.67 ** b</td>
<td>.0124</td>
<td>.0140</td>
</tr>
<tr>
<td>D x E x P</td>
<td>24</td>
<td>.43 b</td>
<td>.88 b</td>
<td>-.0009</td>
<td>----</td>
</tr>
</tbody>
</table>
Table 9 (concluded)

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Ratio</th>
<th>VC</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>D x E x T x P</td>
<td>48</td>
<td>.49</td>
<td>1.00</td>
<td>.0000</td>
<td>.0000</td>
</tr>
<tr>
<td>D x E x R/TxP</td>
<td>1080</td>
<td>.49</td>
<td>.4900</td>
<td>.5548</td>
<td></td>
</tr>
</tbody>
</table>

Note. If a source's variance component was negative, that value was set equal to zero and then used in the denominator to compute the intraclass correlation coefficients. VC = Variance component; ICC = Intraclass correlation coefficient.

Each of the remaining effects represents an interaction with Rating Sources.

Quasi F-Ratio.

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

Factors found in the basic accuracy design (i.e., Rating Sources, Ratees, and Dimensions) and the treatments specified by the research paradigm; in this case, training method and amount of practice-and-feedback. The first section will present the results for the basic accuracy design. Once that section is completed, the interactions with training method will be presented, followed by the results for practice-and-feedback.

Basic Accuracy. Significant findings were found for three sources of variation in basic accuracy: Rating Sources, Ratees, and the Dimensions x Ratees interaction.
The significant Rating Sources effect ($F(1,90) = 80.06, p < .01$) indicates that the raters tended to give more lenient ratings ($M = 2.89$) than did the experts ($M = 2.50$).

The significant Ratees effect ($F(6,540) = 29.48, p < .01$) illustrates that the raters evaluated the videotaped interviewers differently than did the expert raters. This effect accounted for 4% of the total rating variance. The mean discrepancies for each ratee are presented in Table 10.

A Newman-Keuls post hoc test revealed that the mean discrepancy for (a) ratee 1 was significantly greater than the mean discrepancies for all ratees, except ratee 3, (b) ratee 3 was significantly greater than those for ratees 2, 5, 6, and 7, and (c) ratee 4 was significantly greater than those for ratees 5 and 6.

T-tests were also performed on the mean discrepancies for each of the ratees to detect significance from zero (i.e., perfect accuracy). Each t-test was evaluated against a p-level of $p < .0018$. This p-level maintained a 1

Mean orthonormal contrast values will be referred to as mean discrepancies. To obtain the actual mean discrepancies, the means and standard deviations reported in the tables need to be multiplied by the square root of 2.0.
Table 10

Mean Discrepancies Between Ratings and Target Scores for Ratees.

<table>
<thead>
<tr>
<th>Ratee-1</th>
<th>Ratee-2</th>
<th>Ratee-3</th>
<th>Ratee-4</th>
<th>Ratee-5</th>
<th>Ratee-6</th>
<th>Ratee-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>.667 *</td>
<td>.203 *</td>
<td>.575 *</td>
<td>.353 *</td>
<td>-.031</td>
<td>-.084</td>
<td>.205 *</td>
</tr>
<tr>
<td>(.597)</td>
<td>(.534)</td>
<td>(.708)</td>
<td>(.667)</td>
<td>(.532)</td>
<td>(.532)</td>
<td>(.491)</td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses. T-tests were based on 98 degrees of freedom. Mean discrepancies near zero reflect greater accuracy.

* denotes a significant t-value with p < .0018.

family error rate of p < .05 for the basic accuracy effects of Ratees and Dimensions x Ratees. As can be seen in Table 10, accuracy improved after ratee 3. The results of the t-tests show that ratees 5 and 6 were rated accurately.

The Dimensions x Ratees interaction is interpreted as differential accuracy. This interaction was significant (F(12,1080) = 34.94, p < .01) and accounted for 9% of the total rating variance. The mean discrepancies for the Dimensions x Ratees interaction are shown in Table 11.

A Newman-Keuls post hoc test was used to assess significant differences between mean discrepancies for the seven ratees on each dimension. For the problem analysis dimension, there were only two mean discrepancies that were not significantly different from each other: the
Table 11

**Mean Discrepancies Between Ratings and Target Scores for the Dimensions by Ratees Interaction.**

<table>
<thead>
<tr>
<th>Ratee</th>
<th>Problem Analysis</th>
<th>Problem Solution</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratee 1</td>
<td>1.079 * (.847)</td>
<td>1.114 * (.750)</td>
<td>-.193 (.888)</td>
</tr>
<tr>
<td>Ratee 2</td>
<td>.400 * (.864)</td>
<td>.393 * (.782)</td>
<td>-.184 (.786)</td>
</tr>
<tr>
<td>Ratee 3</td>
<td>.872 * (1.06)</td>
<td>.478 * (.865)</td>
<td>.375 * (.972)</td>
</tr>
<tr>
<td>Ratee 4</td>
<td>.574 * (.854)</td>
<td>.104 * (.792)</td>
<td>.379 * (.941)</td>
</tr>
<tr>
<td>Ratee 5</td>
<td>-.602 * (.766)</td>
<td>.301 * (.693)</td>
<td>.207 (.876)</td>
</tr>
<tr>
<td>Ratee 6</td>
<td>.012 * (.798)</td>
<td>-.275 * (.712)</td>
<td>.010 (.861)</td>
</tr>
<tr>
<td>Ratee 7</td>
<td>-.115 (.726)</td>
<td>.448 * (.774)</td>
<td>.282 * (.705)</td>
</tr>
</tbody>
</table>

**Note.** Standard deviations appear in parentheses. T-tests were based on 98 degrees of freedom. Mean discrepancies near zero reflect greater accuracy.

* denotes a significant t-value with \( p < .0018 \).

discrepancies between ratee 6 and ratee 7, and ratees 2 and 4. For problem solution, the mean discrepancy for (a) ratee 6 was significantly less than those of the other...
ratees, (b) ratee 4 was significantly less than the mean discrepancies for ratees 2, 3, and 7, and (c) ratee 1 was significantly greater than the mean discrepancies for the other six ratees. For sensitivity, the mean discrepancy for (a) ratee 1 and ratee 2 were significantly less than the mean discrepancies for ratees 3, 4, 5, and 7, and (b) ratee 6 was significantly less than those of ratees 3 and 4.

T-tests for the significance of the mean discrepancies from zero were also calculated on the Dimensions x Ratees interaction. As shown in Table 11, problem solution had 6 mean discrepancies that differed significantly from zero, while problem analysis had 5, and sensitivity had 3. The raters rated sensitivity more accurately than the other dimensions and rated at least one dimension accurately for each ratee, excluding ratee 3.

Training. The Training main effect can be interpreted as elevation accuracy differing by training method. This effect was significant \( F(2,24) = 3.99, p < .05 \), but it accounted for less than 1% of the total rating variance. The mean discrepancies for the three training methods are presented in Table 12.

The Newman-Keuls procedure indicated that the mean discrepancies for the frame-of-reference and cognitive modeling methods were significantly smaller than the mean discrepancy for the no-training control method. The mean
Table 12

Mean Discrepancies Between Ratings and Target Scores for the Training Methods.

<table>
<thead>
<tr>
<th></th>
<th>No-Training Control</th>
<th>Frame-of-Reference</th>
<th>Cognitive Modeling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.428 *(.319)</td>
<td>.183 (.267)</td>
<td>.196 (.317)</td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses. T-tests were based on 32 degrees of freedom. Mean discrepancies near zero reflect greater accuracy.

* denotes a significant t-value with \( p < .00057 \).

Discrepancies for frame-of-reference and cognitive modeling did not differ significantly. These findings illustrate that the ratings given by the raters who received training, were significantly more accurate than those ratings given by the untrained raters.

T-tests were also performed on the mean discrepancies for each training method in order to determine their significance from zero (i.e., perfect accuracy). Each t-test was evaluated against a p-level of .00057. This conservative p-level maintained a family error rate of \( p < .05 \) for the set of t-tests conducted on the conditions of Training, Ratees x Training, and Dimensions x Ratees x Training.

As can be seen in Table 12, only the no-training
control method was significantly different from zero. The ratings given by the raters in the frame-of-reference and cognitive modeling methods were similar to the target scores generated by the expert raters. Thus, the raters who received training rated performance more accurately than did the untrained raters.

A Ratees x Training interaction represents differential elevation accuracy differing by training method. This interaction was statistically significant ($F(12,540) = 2.74, p < .01$) and accounted for 1% of the total rating variance. The mean discrepancies for the ratees for each training method are presented in Table 13.

The Newman-Keuls procedure showed that (a) for ratees 3, 4, and 5, the mean discrepancies for the frame-of-reference and cognitive modeling training methods were significantly smaller than the corresponding mean discrepancy for the no-training control method, and (b) for ratee 2, the mean discrepancy for the frame-of-reference method was significantly smaller than the mean discrepancy for the no-training control method. Also for ratee 2, there was no significant difference between the mean discrepancies of the cognitive modeling and no-training control methods.

Examination of Table 13 illustrates the following: raters in the frame-of-reference method began rating accurately after ratee 1; the cognitive modeling method
Table 13

Mean Discrepancies Between Ratings and Target Scores for the Ratees by Training Interaction.

<table>
<thead>
<tr>
<th>Ratee</th>
<th>No-Training Control</th>
<th>Frame-of-Reference</th>
<th>Cognitive Modeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratee 1</td>
<td>.732 * (.613)</td>
<td>.697 * (.574)</td>
<td>.570 * (.608)</td>
</tr>
<tr>
<td>Ratee 2</td>
<td>.398 (.610)</td>
<td>.062 (.473)</td>
<td>.142 (.462)</td>
</tr>
<tr>
<td>Ratee 3</td>
<td>.914 * (.776)</td>
<td>.357 (.679)</td>
<td>.455 * (.536)</td>
</tr>
<tr>
<td>Ratee 4</td>
<td>.727 * (.736)</td>
<td>.127 (.471)</td>
<td>.205 (.616)</td>
</tr>
<tr>
<td>Ratee 5</td>
<td>.164 (.544)</td>
<td>-.157 (.535)</td>
<td>-.100 (.471)</td>
</tr>
<tr>
<td>Ratee 6</td>
<td>-.067 (.489)</td>
<td>-.067 (.537)</td>
<td>-.117 (.578)</td>
</tr>
<tr>
<td>Ratee 7</td>
<td>.131 (.343)</td>
<td>.267 (.532)</td>
<td>.217 (.570)</td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses. T-tests were based on 32 degrees of freedom. Mean discrepancies near zero reflect greater accuracy.

* denotes a significant t-value with p < .00057.

began rating accurately after ratee 3; and the no-training control method began rating accurately after ratee 4. T-tests for the significance of the mean discrepancies from
zero were calculated and showed that the frame-of-reference method was accurate for 6 ratees, while the cognitive modeling method was accurate for 5 ratees, and the no-training control method was accurate for 4 ratees. Ratees 2, 5, 6, and 7 were rated accurately in all methods. It is interesting to note that raters in the no-training control method rated the final three ratees similarly to the experts.

The interaction of Dimensions x Ratees x Training is indicative of differential accuracy differing by training method. This interaction was significant \(F(24,1080) = 2.67, p < .01\) and accounted for 1% of the total rating variance. The mean discrepancies for this interaction are presented in Table 14.

The results of the Newman-Keuls post hoc procedure revealed that the mean discrepancies for the frame-of-reference and cognitive modeling methods were significantly different from the mean discrepancy of the no-training control method for ratee 1-sensitivity, ratee 2-problem analysis, ratee 3-problem analysis, ratee 4-problem solution, ratee 4-sensitivity, and ratee 7-problem analysis. The mean discrepancy for the frame-of-reference method was significantly less than that of the no-training control method for ratee 4-problem analysis and ratee 5-sensitivity. And finally, the mean discrepancy for cognitive modeling was significantly less than the mean
Table 14

Mean Discrepancies Between Ratings and Target Scores for the Dimensions by Ratees by Training Interaction.

<table>
<thead>
<tr>
<th>Ratee and Dimension</th>
<th>No-Training Control</th>
<th>Frame-of-Reference</th>
<th>Cognitive Modeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratee 1-PA</td>
<td>.964 * (.981)</td>
<td>1.329 * (.805)</td>
<td>.947 * (.699)</td>
</tr>
<tr>
<td>Ratee 1-PS</td>
<td>1.071 * (.831)</td>
<td>1.179 * (.699)</td>
<td>1.093 * (.731)</td>
</tr>
<tr>
<td>Ratee 1-S</td>
<td>.163 (.739)</td>
<td>-.416 (.825)</td>
<td>-.328 (.994)</td>
</tr>
<tr>
<td>Ratee 2-PA</td>
<td>.943 * (.929)</td>
<td>.043 (.660)</td>
<td>.216 (.717)</td>
</tr>
<tr>
<td>Ratee 2-PS</td>
<td>.446 (.909)</td>
<td>.381 (.749)</td>
<td>.354 (.693)</td>
</tr>
<tr>
<td>Ratee 2-S</td>
<td>-.193 (.940)</td>
<td>-.236 (.722)</td>
<td>-.126 (.696)</td>
</tr>
<tr>
<td>Ratee 3-PA</td>
<td>1.286 * (1.04)</td>
<td>.579 (1.02)</td>
<td>.752 * (1.01)</td>
</tr>
<tr>
<td>Ratee 3-PS</td>
<td>.699 (1.01)</td>
<td>.227 (.805)</td>
<td>.510 * (.708)</td>
</tr>
<tr>
<td>Ratee 3-S</td>
<td>.759 (1.20)</td>
<td>.266 (.884)</td>
<td>.103 (.652)</td>
</tr>
<tr>
<td>Ratee 4-PA</td>
<td>.879 * (1.00)</td>
<td>.236 (.520)</td>
<td>.611 * (.863)</td>
</tr>
<tr>
<td>Ratee 4-PS</td>
<td>.536 (.936)</td>
<td>.000 (.637)</td>
<td>-.223 (.571)</td>
</tr>
<tr>
<td>Ratee 4-S</td>
<td>.767 (1.16)</td>
<td>.146 (.728)</td>
<td>.227 (.775)</td>
</tr>
</tbody>
</table>
Table 14 (concluded)

<table>
<thead>
<tr>
<th>Ratee and Dimension</th>
<th>Training Method</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No-Training Control</td>
<td>Frame-of-Reference</td>
<td>Cognitive Modeling</td>
<td></td>
</tr>
<tr>
<td>Ratee 5-PA</td>
<td>-.493 (.800)</td>
<td>-.664 * (.683)</td>
<td>-.649 * (.818)</td>
<td></td>
</tr>
<tr>
<td>Ratee 5-PS</td>
<td>.514 (.815)</td>
<td>.236 (.604)</td>
<td>.154 (.606)</td>
<td></td>
</tr>
<tr>
<td>Ratee 5-S</td>
<td>.471 (.913)</td>
<td>-.043 (.847)</td>
<td>.193 (.815)</td>
<td></td>
</tr>
<tr>
<td>Ratee 6-PA</td>
<td>.163 (.599)</td>
<td>-.094 (.913)</td>
<td>-.030 (.848)</td>
<td></td>
</tr>
<tr>
<td>Ratee 6-PS</td>
<td>-.279 (.769)</td>
<td>-.257 (.657)</td>
<td>-.291 (.726)</td>
<td></td>
</tr>
<tr>
<td>Ratee 6-S</td>
<td>-.086 (.964)</td>
<td>.150 (.805)</td>
<td>-.032 (.812)</td>
<td></td>
</tr>
<tr>
<td>Ratee 7-PA</td>
<td>-.429 (.789)</td>
<td>.107 (.615)</td>
<td>-.024 (.673)</td>
<td></td>
</tr>
<tr>
<td>Ratee 7-PS</td>
<td>.373 (.691)</td>
<td>.480 (.843)</td>
<td>.493 (.799)</td>
<td></td>
</tr>
<tr>
<td>Ratee 7-S</td>
<td>.450 * (.554)</td>
<td>.214 (.696)</td>
<td>.182 (.829)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses. PA = Problem Analysis; PS = Problem Solution; S = Sensitivity. T-tests were based on 32 degrees of freedom. Mean discrepancies near zero reflect greater accuracy. * denotes a significant t-value with $p < .00057$.
T-tests for significant mean discrepancies from zero showed that the cognitive modeling and the no-training control methods each had 6 discrepancies that differed significantly from zero, while frame-of-reference had only 3. Also, ratee 1 had the greatest number of differences significantly greater than zero (6), while ratee 6 had the fewest (0). In terms of dimensions, problem analysis had 10 mean discrepancies that were significantly different from zero, while problem solution had 4, and sensitivity had 1. These results indicate that (a) the frame-of-reference method produced the greatest number of accurate ratings, (b) ratee 1 was rated inaccurately the most number of times, and (c) the raters were most accurate when rating the dimension of sensitivity and least accurate when rating problem analysis.

Practice-and-Feedback. The Practice main effect is interpreted as elevation accuracy differing by amount of practice-and-feedback. This effect was found to be nonsignificant \( F(2,31) = 1.26, p > .05 \) and accounted for less than 1% of the total rating variance. The mean discrepancies for the three practice-and-feedback conditions are presented in Table 15. The results show that the amount of practice-and-feedback received by the raters did not improve their ability to rate performance accurately.

Despite the lack of significance for the Practice
Table 15

Mean Discrepancies Between Ratings and Target Scores for Practice.

<table>
<thead>
<tr>
<th>Practice</th>
<th>Trials</th>
<th>1 Practice Trial</th>
<th>3 Practice Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>.193 *</td>
<td>(.292)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.307 *</td>
<td>(.380)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.308 *</td>
<td>(.270)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses. T-tests were based on 32 degrees of freedom. Mean discrepancies near zero reflect greater accuracy.

* denotes a significant t-value with \( p < .00416 \).

main effect, t-tests were performed on the mean discrepancies to detect significance from zero. Each t-test was evaluated against a p-level of \( p < .00416 \). This p-level maintained a family error rate of \( p < .05 \) for the effects of Practice and Dimensions x Practice. As can be seen in Table 15, all three levels of practice-and-feedback were significantly different from zero. This indicates that more practice-and-feedback did not enable the raters to rate performance like the expert raters.

A Dimensions x Practice interaction represents stereotype accuracy differing by amount of practice. This interaction was statistically significant (\( F(4,27) = 2.80, p < .05 \)) and accounted for less than 1% of the total rating variance. The mean discrepancies for the Dimensions x
Practice interaction are presented in Table 16.

The Newman-Keuls test showed that the mean discrepancy for the problem solution-1 practice condition was significantly greater than the mean discrepancies for the sensitivity-0 practice and the sensitivity-1 practice conditions. The remaining dimension comparisons between the mean discrepancies for the practice conditions were not significant. The results of the t-tests revealed that each of the three practice-and-feedback conditions had significant mean discrepancies from zero for the problem analysis and problem solution dimensions. Furthermore, sensitivity was rated accurately in each of the practice-and-feedback conditions.

Observation Accuracy

The accuracy of the checklist observations was evaluated in terms of two observation error rates: 1-hit rate and false alarm rate. The 1-hit rate indicates the relative frequency (i.e., frequency per 100 no reports) that a rater reported a behavior did not occur, when in fact it did occur. The false alarm rate indicates the relative frequency (i.e., frequency per 100 yes reports) that a rater reported a behavior occurred, when in fact it did not occur.

1-Hit Rate. This dependent variable was analyzed with a 3 x 3 (Training x Practice) ANOVA. A summary of the analysis is shown in Table 17, while the
Table 16

Mean Discrepancies Between Ratings and Target Scores for the Dimensions by Practice Interaction.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>0 Practice Trials</th>
<th>1 Practice Trial</th>
<th>3 Practice Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Analysis</td>
<td>.239 * (.321)</td>
<td>.308 * (.434)</td>
<td>.406 * (.370)</td>
</tr>
<tr>
<td>Problem Solution</td>
<td>.249 * (.370)</td>
<td>.504 * (.427)</td>
<td>.345 * (.291)</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>.092 (.404)</td>
<td>.109 (.485)</td>
<td>.173 (.428)</td>
</tr>
</tbody>
</table>

Note. Standard deviations appear in parentheses. T-tests were based on 32 degrees of freedom. Mean discrepancies near zero reflect greater accuracy.

* denotes a significant t-value with $p < .00416$.

means for each condition are presented in Table 18.

The results of the ANOVA reveal a significant effect for Training ($F(2,90) = 4.11, p < .05$) that accounted for almost 6% of the total observation variance. A Newman-Keuls post hoc test indicated that raters who received cognitive modeling training had a significantly smaller 1-hit rate ($M = 30.30$) than raters who received either frame-of-reference training ($M = 37.85$) or no training ($M = $...
Table 17

Summary of the Analysis of Variance Results for Total 1-Hit Rate.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Ratio</th>
<th>VC</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training (T)</td>
<td>2</td>
<td>521.16</td>
<td>4.11 *</td>
<td>7.9699</td>
<td>.0574</td>
</tr>
<tr>
<td>Practice (P)</td>
<td>2</td>
<td>332.24</td>
<td>2.62</td>
<td>4.1531</td>
<td>.0299</td>
</tr>
<tr>
<td>T x P</td>
<td>4</td>
<td>102.80</td>
<td>.81</td>
<td>-.9643</td>
<td>----</td>
</tr>
<tr>
<td>Error</td>
<td>90</td>
<td>126.67</td>
<td>126.6700</td>
<td>.9126</td>
<td></td>
</tr>
</tbody>
</table>

Note. VC = Variance component; ICC = Intraclass correlation coefficient.

* p < .05.

These results indicate that raters who received training consisting of the experimenter verbalizing his cognitive strategy for behavioral observation were less likely to report that a behavior did not occur, when in fact it did occur, than those raters who received either frame-of-reference training or no training.

False Alarm Rate. This dependent variable was analyzed with a 3 x 3 (Training x Practice) ANOVA. A summary of the analysis is shown in Table 19, while the means for each condition are presented in Table 20.

The results indicate nonsignificant effects (p > .05) for Training and Practice as well as their interaction.
Table 18  
**Mean Values of the Total 1-Hit Rate by Training and Practice Conditions.**

<table>
<thead>
<tr>
<th>Training Method</th>
<th>0 Practice Trials</th>
<th>1 Practice Trial</th>
<th>3 Practice Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Training</td>
<td>36.92 (8.73)</td>
<td>38.32 (14.63)</td>
<td>33.43 (8.56)</td>
</tr>
<tr>
<td>Frame-of-Reference</td>
<td>39.72 (8.07)</td>
<td>42.38 (15.19)</td>
<td>31.47 (10.57)</td>
</tr>
</tbody>
</table>

**Note.** Standard deviations appear in parentheses.

Thus, Training and Practice were ineffective in reducing the raters' false alarm rates.
Table 19

Summary of the Analysis of Variance Results for Total False Alarm Rate.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F-Ratio</th>
<th>VC</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training (T)</td>
<td>2</td>
<td>19.79</td>
<td>.45</td>
<td>-.4798</td>
<td>----</td>
</tr>
<tr>
<td>Practice (P)</td>
<td>2</td>
<td>75.75</td>
<td>1.74</td>
<td>.6507</td>
<td>.0142</td>
</tr>
<tr>
<td>T x P</td>
<td>4</td>
<td>79.57</td>
<td>1.83</td>
<td>1.4556</td>
<td>.0318</td>
</tr>
<tr>
<td>Error</td>
<td>90</td>
<td>43.54</td>
<td>43.5400</td>
<td>.9538</td>
<td></td>
</tr>
</tbody>
</table>

Note. VC = Variance component; ICC = Intraclass correlation coefficient.
### Table 20

**Mean Values of the Total False Alarm Rate by Training and Practice Conditions.**

<table>
<thead>
<tr>
<th>Training Condition</th>
<th>0 Practice Trials</th>
<th>1 Practice Trial</th>
<th>3 Practice Trials</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Training</td>
<td>21.35 (5.05)</td>
<td>20.47 (5.37)</td>
<td>22.95 (6.06)</td>
</tr>
<tr>
<td>Frame-of-Reference</td>
<td>20.29 (4.72)</td>
<td>23.05 (7.44)</td>
<td>17.05 (3.37)</td>
</tr>
<tr>
<td>Cognitive Modeling</td>
<td>18.25 (9.05)</td>
<td>24.87 (9.48)</td>
<td>20.84 (6.51)</td>
</tr>
</tbody>
</table>

**Note.** Standard deviations appear in parentheses.
IV. DISCUSSION

The purpose of this research was to investigate the effects of training and practice-and-feedback on the accuracy of (a) performance appraisal ratings and (b) behavioral observation. Three training methods were investigated: frame-of-reference, cognitive modeling, and a no-training control. It was hypothesized that cognitive modeling training would produce more accurate performance ratings and behavioral observations than the frame-of-reference or no-training control methods, with the no-training control being the least accurate. The practice-and-feedback conditions were: 0, 1, and 3 practice trials. It was hypothesized that raters who received 3 practice-and-feedback trials would make more accurate ratings and behavioral observations than those raters who received either 1 or 0 practice-and-feedback trials; the 0 practice-and-feedback condition was predicted to be the least accurate.

Overview

Across a majority of the rating accuracy measures, the results demonstrate that training improved accuracy while practice-and-feedback did not. The positive results due to training are consistent with previous research findings (McIntyre et al., 1984; Pulakos, 1984). However, the cognitive modeling and frame-of-reference methods did not
differ appreciably in their levels of accuracy. The hypotheses regarding the positive relationship between practice-and-feedback and rating accuracy were not supported. The raters who received 3 practice-and-feedback trials were not more accurate than those raters who received either 1 or 0 practice-and-feedback trials.

The results indicate partial support for the hypotheses concerning observation accuracy. For the 1-hit rate measure, training improved observation accuracy. As hypothesized, raters who received cognitive modeling training were more accurate in their observations than were raters who received either frame-of-reference training or no training. The hypotheses concerning practice-and-feedback were not supported; practice-and-feedback did not reduce the raters' 1-hit rates. For the false alarm rate measure, neither training or practice-and-feedback had a significant effect.

The following discussion will examine these results in detail and interpret them in the context of the research hypotheses. Rating accuracy will be presented first, followed by observation accuracy, and finally, overall conclusions.

Rating Accuracy

Training Effects. The results clearly indicate that rater training did improve the accuracy of performance ratings. These findings are consistent with those found in
previous studies demonstrating the positive effects of training on rating accuracy (McIntyre et al., 1984; Pulakos, 1984; Smith, 1986). Training was found to have a significant effect for three accuracy measures: elevation, differential elevation, and differential accuracy.

The significant Training effect illustrates that type of training method had a differential effect on elevation accuracy. Elevation accuracy represents the relationship between the overall mean performance rating given by the raters and the overall mean target rating generated by the experts. In general, the raters judged performance more leniently than did the experts. However, as expected, the participants who received either frame-of-reference training or cognitive modeling training produced ratings that were more accurate than those ratings made by the untrained raters. Also as expected, the raters in the frame-of-reference and cognitive modeling methods evaluated the raters similarly to the experts (i.e., accurately), while the raters in the no-training control method did not. Surprisingly, the raters in the cognitive modeling method were not more accurate than those raters who received frame-of-reference training.

The pattern of results found in the Training effect is also evident in the significant Ratees x Training interaction (i.e., differential elevation accuracy). The raters in the frame-of-reference and cognitive modeling
methods produced greater levels of differential
elevation accuracy than did those raters in the no-training control method. There were no significant differences between the mean discrepancy ratings given by the frame-of-reference and cognitive modeling methods. However, the raters in the frame-of-reference method were slightly more accurate than those raters who received cognitive modeling training.

Additional support for the effectiveness of frame-of-reference training in improving rating accuracy is seen in the significant Dimensions x Ratees x Training interaction (i.e., differential accuracy). Frame-of-reference training produced the most accurate ratings. In specific, frame-of-reference training produced only 3 inaccurate ratings (out of 21 possible ratings), while the cognitive modeling and no-training control methods each gave 6 inaccurate ratings. The ability of frame-of-reference training to increase differential accuracy is consistent with previous research (Pulakos, 1986), as is the inability of cognitive modeling to increase differential accuracy (Johnson, 1987).

The results clearly illustrate that cognitive modeling is not more effective than frame-of-reference at improving the accuracy of performance ratings. Explanations for these findings focus on the (a) shortcomings of the cognitive modeling training used in this research and (b) positive qualities inherent within frame-of-reference
training.

Similar to the research by Johnson (1987), the cognitive modeling training employed in this research has a common foundation with frame-of-reference training. For example, both training methods consisted of performance dimension training, performance standards training, practice-and-feedback, and behavioral rationales. Despite this common foundation, it was hypothesized that the additional cognitive component inherent within cognitive modeling training would promote a better understanding of the requisite strategy necessary for making accurate performance ratings. This hypothesis was not confirmed.

One possible explanation centers on the added cognitive demand put on the raters who received cognitive modeling training. The added responsibility of having to "think like an expert" may have been either too much information to process correctly (quantitative overload; McIntyre et al., 1984; Pulakos, 1984) or too difficult to understand (qualitative overload; DeNisi et al., 1984).

Both McIntyre et al. (1984) and Pulakos (1984) have shown that "combination training" methods are no better at improving rating accuracy, than simple frame-of-reference training. Essentially, the cognitive modeling method was a combination training method that incorporated the principles of frame-of-reference training with the cognitive element of having the expert verbalize his rating
strategy to the raters by "thinking aloud." Given the similar contents of the training methods and the results, it appears that the cognitive aspect of training was not incrementally effective in improving rating accuracy. Perhaps the raters who received cognitive modeling training were presented with too much information, discarded the expert's "thinking aloud," and focused their attention only on the more basic learning principles of training that were also part of frame-of-reference training (e.g., performance dimension training, performance standards training, practice-and-feedback).

Rater training research has suggested the following: If raters adopt the expert's response set (Bernardin & Pence, 1980) or understand the appropriate distribution of ratings (Bernardin & Beatty, 1984), then higher quality ratings will result. Cognitive modeling has a similar premise: Modify the raters' cognitive processing to be more like that of the expert; this will make the abstract task of performance evaluation more concrete, then deeper levels of cognitive processing will occur and more accurate ratings will result. This cognitive-processing modification may have been too difficult for the raters to understand or too difficult to apply to the rating task. It is possible that the attempt to alter the raters' cognitive-processing sequence may have made an abstract task appear even more complex.
Rather than evaluating performance according to their normal and stable procedures, the raters were confronted with a competing style of cognitive processing. Thus, instead of clarifying the rating task, the "thinking aloud" component may have complicated it by distorting the raters' cognitive representations of the ratees' behavior and biased subsequent information storage, integration, and retrieval (DeNisi et al., 1984; Ilgen & Feldman, 1983).

Unable to adopt the expert's cognitive strategy as their own, the raters may have reverted to their usual methods of information processing (Snyder & Cantor, 1979) and focused their attention onto the more straightforward training concepts (i.e., those included in frame-of-reference). As such, this information overload-induced selective perception may explain those instances where there was no appreciable difference between the ratings given by the frame-of-reference and cognitive modeling methods.

Another explanation concerning the inability of cognitive modeling to produce more accurate ratings than frame-of-reference training is related to the presentation of the checklist behaviors to the raters. These behaviors were presented after a role play was shown to the raters. Presenting the behaviors after the role play, allowed the experimenter to verbalize his cognitive sequence and provide behavioral rationales for each dimension (Johnson,
1987). However, this method of presentation may have increased the ambiguity of the rating task. This would have biased the encoding of information as well as subsequent information processing (e.g., synthesis, retrieval), and resulted in less accurate performance ratings.

The cognitive modeling approach employed by McIntyre and Bentson (1984) is more straightforward than the procedure used by Johnson (1987) or this research. In McIntyre and Bentson's (1984) version of cognitive modeling, the expert identified the critical behaviors demonstrated by the ratee as the interview progressed naturally, using a "stop-action" procedure. Stated simply, once a critical behavior was demonstrated, the videotape was stopped and the expert began "thinking aloud." This process continued for the entire interview. Obviously, the "stop-action" technique interrupts the flow of the interview, but it maintains the context within which the "thinking aloud" occurs. This "stop-action" technique may facilitate the raters' comprehension of the expert's cognitive processes necessary for making accurate performance ratings. In specific, the importance of minimizing stimulus ambiguity in order for cognitive modeling to be effective is underscored by the fact that the raters' information processing, like the expert's cognitive strategy, is an interrelated and sequential
process. Thus, information that is presented logically should facilitate accurate information processing. It is suggested that a cognitive modeling training program involving a "stop-action" method of stimulus presentation will result in more accurate ratings, than the cognitive modeling method used in the current research.

Several investigators have indicated that social reinforcement is an integral element necessary for modeling to be successful (e.g., Bandura, 1977; Luthans & Kreitner, 1985). Accordingly, this research included social reinforcement as a part of the cognitive modeling method. Each rater was provided with individualized feedback and reinforcement on each dimension rating. It was expected that this personalized feedback would shape a rater's cognitive strategy more definitively, than would the typical group level feedback method used in most rater training programs (e.g., McIntyre et al., 1984; Pulakos, 1984).

Despite the fact that the individualized approach was intended to enhance the positive qualities of the feedback and serve as reinforcement, it is possible that the approach had a negative effect. Assuming that the raters who received cognitive modeling training were confused or frustrated due to the previously mentioned problems (e.g., overload, stimulus ambiguity), the feedback process may have served to publicize their lack of understanding
concerning the expert's "thinking aloud," rather than their comprehension of it. This would have led the inaccurate raters to perceive the feedback as punishment or public embarrassment to be avoided instead of as social reinforcement to be desired. Of course, this would only add to the raters' frustration and minimize the likelihood that they would adopt the expert's cognitive strategy. The lack of reinforcement and increasing levels of frustration may explain those instances where the raters in the cognitive modeling method were less accurate than the raters who received the less anxiety provoking frame-of-reference training.

McIntyre and Athey (1985) found that raters who received frame-of-reference training reported less anxiety than those raters who received either placebo training or no training. In the present research, it is conceivable that the raters in the cognitive modeling method were under more pressure than the raters in the frame-of-reference or no-training control methods, because they had to "think like an expert" who was also the source of their feedback. The results presented by McIntyre and Athey (1985) suggest that additional reaction data may be useful for understanding the process of performance evaluation and its implications for the design of subsequent training programs.

In sum, there are several possible explanations for
the relative ineffectiveness of cognitive modeling training in improving rating accuracy. The factor of rater motivation is central to each of those explanations (DeCotiis & Petit, 1978). The stated explanations of task overload, stimulus ambiguity, limited reinforcement as well as others such as length of training and complexity of the rating scale, may have affected the raters' motivation to rate accurately.

The effectiveness of frame-of-reference training relative to cognitive modeling was surprising. Research has shown that frame-of-reference does improve rater accuracy (Athey & McIntyre, 1987; McIntyre & Athey, 1985; McIntyre et al., 1984; Pulakos, 1984; 1986), although not consistently (Dickinson & Silverhart, 1986; Silverhart, 1987; Silverhart & Dickinson, 1985b).

McIntyre (1986) alluded to the inconsistency of frame-of-reference training when he addressed the validity of rater training programs. He suggested that training effectiveness is more contingent upon "the local implementation of the training" (p. 41), rather than the training content itself. In frame-of-reference training, certain basic components are included (e.g., performance dimension training, performance standards training, practice-and-feedback); however, structural variations also occur. The frame-of-reference training used in the present research is slightly different from other frame-of-
reference applications. These variations, or local implementation factors, may explain the success of frame-of-reference training in improving rater accuracy.

A primary difference between the various frame-of-reference methods is the stimulus materials used in the research. The frame-of-reference methods that have been able to improve rater accuracy can be classified according to the videotaped stimuli that are used. McIntyre and his associates (Athey & McIntyre, 1987; McIntyre & Athey, 1985; McIntyre et al., 1984; Smith, 1984) have consistently used the set of videotapes developed by Murphy, Garcia, Kerkar, Martin, and Balzer (1982). These videotapes involve an instructor making a lecture presentation to an audience. Pulakos (1984; 1986) has used the videotapes developed by Borman (1977) which consist of a manager talking with a problem employee. The present research employed videotapes developed by Dickinson and Hedge (1988) which involve a store manager providing performance appraisal feedback to a new department manager.

The content of the videotapes used by Pulakos and this research demonstrate more social interaction by the ratees than those used by McIntyre and his associates. The stimulus videotapes are socially interactive in the sense that the role players engage in communication exchange; the videotapes are characterized by dialogue. Conversely, the Murphy videotapes are "non-interactive" in that the
lecturer is the sole focus of the videotapes. Perhaps the nature of the videotapes may dictate frame-of-reference effectiveness.

The videotapes used in this project as well as those used by Pulakos represent a more dynamic stimulus than those used by McIntyre and his colleagues. In specific, the interaction between the role players makes it difficult for the raters to take accurate notes, follow the progression of the interview, and complete the behavioral checklists accurately (Baker, 1986). In contrast, the Murphy videotapes are more unidimensional and place fewer demands on the rater (Silverhart & Dickinson, 1985b). For example, the lack of interaction in these videotapes minimizes much of the "noise" that may bias a rater's performance evaluation. This noise is present in the interactive stimuli and thus requires the rater to attend more closely to the ratee's performance. It would be interesting to see a cross validation of the frame-of-reference methodology. For example, an application of McIntyre's version of frame-of-reference with interactive videotapes would address the "local implementation problem" and thereby clarify the question of generalizability concerning the effectiveness of frame-of-reference training.

As was mentioned earlier, there are obvious structural variations between the different frame-of-reference
methods. Evidence supporting this is illustrated in the time length of a training session: McIntyre, 30 minutes; Pulakos, 90 minutes; and this research, 3 hours and 30 minutes. One factor that contributes to differences in training time is the use of a group discussion that is intended to facilitate the effective understanding of performance standards training and target score feedback.

This research and that done by Pulakos emphasize the importance of discussing the behavioral basis for each BARS rating and the appropriate target score. It is believed that group discussion among the raters and the experimenter promotes a consensus understanding of what constitutes an accurate rating. McIntyre's version of frame-of-reference does not include this group discussion component. Perhaps the nature of the non-interactive videotapes (i.e., lecture presentation) and the rating task used by McIntyre are more familiar to the student-raters, than the materials used in other frame-of-reference research. If this is the case, the group discussion may be unnecessary in that it provides redundant information to the raters. The incremental accuracy of the group discussion could be investigated by comparing McIntyre's version of frame-of-reference with an adaptation of his method that does include a group discussion component.

It is important to note that the inclusion of group discussion, as part of frame-of-reference training, does
not guarantee that rating accuracy will be improved. Research on frame-of-reference training done by Silverhart and Dickinson (Dickinson & Silverhart, 1986; Silverhart, 1987; Silverhart & Dickinson, 1985b) has been unsuccessful in improving rating accuracy. However, the group discussion used by Silverhart and Dickinson is different from the group discussions used in this research and in the work done by Pulakos.

The common theme between the discussions employed in this research project and those of Pulakos is the principle of active trainee involvement (Smith, 1986). These two methods of rater training stress the importance of having the raters actively participate in the performance standards phase of training as well as during the target score feedback process. For instance, the performance standards phase is characterized by an active discussion for each of the BARS anchors and the types of behaviors that represent each specific level of performance. The group discussion is "active" in that it is dominated by the raters; accurate raters present and discuss their observation and rating techniques with other raters. This lateral training by a rater's peers may be perceived differently than the vertical training offered by an experimenter. The experimenter initiates the discussion between the raters and then serves as a discussion guide. However, the experimenter is not a lecturer. Also, it is
important to note that answering questions posed by the raters is not interpreted as discussion. A group discussion should be focused on the lateral transfer of knowledge, not the vertical transfer.

This method of group discussion is contrasted to that used in research by Silverhart and Dickinson. In their method, the discussion is more general in scope and does not actively encourage each rater to have input into the discussion. This lack of involvement may result in an underdeveloped interpretation of the performance standards or the behavioral rationale feedback. A common understanding of the performance standards and behavioral rationales is vital to accurate performance evaluation (Athey & McIntyre, 1987). Given the cognitive demands of the rating task, an active group discussion may clarify some of the ambiguity associated with the task and serve as a social reinforcement mechanism. Smith (1986) noted that group discussions are usually combined with practice-and-feedback, which clouds the value of having a group discussion as part of the training program. Future research could examine the singular effects of group discussion by comparing the effects of a training program that includes both a group discussion and practice-and-feedback versus a training program that involves discussion without practice-and-feedback.

It is apparent that the frame-of-reference methods
used by Pulakos and this research share several qualities that differentiate them from other interpretations of frame-of-reference. For example, both methods use interactive videotapes as their rating stimuli and emphasize the importance of an active group discussion in order to facilitate a consensus understanding of accurate performance evaluation. Despite these similarities, there are structural differences between the two research efforts that deserve consideration.

One difference between the two training programs is the procedure that addresses the performance dimension aspect of frame-of-reference training. Pulakos presents her performance dimension training (a) through a lecture on the multidimensionality of job performance, (b) by providing dimension definitions to the raters, and (c) as part of the group discussion phase of training. As was mentioned previously, Pulakos relies heavily on the active participation of the raters to generate a consensus understanding of rating accuracy. Similarly, the current research also incorporated each of those elements into its performance dimension training. However, the current research also used a behavioral checklist as an additional component of performance dimension training.

Wherry and Bartlett (1982) have stated that rater training that uses a behavioral checklist will produce more accurate ratings than training that does not use a
checklist. Empirical evidence by Murphy et al. (1982) lends support to Wherry and Bartlett's (1982) proposition. Murphy et al. (1982) found that accuracy on an observation task was related to rating accuracy. Apparently, the checklist functions as a learning heuristic by indicating specific behaviors that operationalize a performance dimension and by priming the rater's encoding process (Johnson, 1987). These factors should enhance the rater's ability to develop an accurate prototype for each rating dimension. The prototype indicates the behavioral parameters for each dimension by defining which behaviors are representative or unrepresentative of that dimension. Further, the prototype serves to clarify the difference between the signal and noise for each dimension. This enables the raters to view and evaluate the ratees' behavior in terms of dimension performance, rather than on a single global impression (Smith, 1986).

The final point concerning frame-of-reference training is a comparison of the target score feedback procedures used by Pulakos and this research. Both training programs provide the raters with expert target scores as feedback and then generate an active group discussion to foster a consensus understanding of that performance level. The specificity of feedback given by Pulakos approximates that given by the cognitive modeling training used in this research. For example, Pulakos provides individualized
feedback to the raters by focusing on the process they used in deciding upon a dimension rating. The frame-of-reference method used in Pulakos' research allows the raters to verbalize the exact process they used in making a performance rating. Perhaps, Pulakos' version of frame-of-reference is more cognitively-oriented than other interpretations of frame-of-reference. This may partially account for why her version of frame-of-reference training improves rating accuracy.

Pulakos also incorporates the behavioral rationale aspect of frame-of-reference into her group discussion. However, she does not show the actual videotaped behaviors to the raters as support for the rationales. This differs from the procedure that was used in the present research, which relied on the dimension checklists as the basis for the behavioral rationales. In specific, the experimenter presented each target behavior to the raters, then provided the behavioral rationale, and finally replayed the videotaped occurrence of that behavior. Following this, the experimenter encouraged questions concerning that specific behavior and then stimulated a discussion of that behavior and its rationale. This was done for each target behavior on the checklists. Once all of the target behaviors for a dimension were presented, the experimenter generated a discussion concerning the raters' understanding of that dimension.
In sum, the behavioral checklist fulfilled both of its intended purposes: observation guide and feedback device. Despite the effectiveness of Pulakos' frame-of-reference training, there is considerable support for the use of a checklist as part of a rater accuracy training program (Murphy et al., 1982; Wherry & Bartlett, 1982).

**Summary of Training**

The results of this research support Smith's (1986) claim that rating accuracy will be improved if a rater training program requires active participation. Despite the positive results that were obtained, the hypothesized superiority of cognitive modeling over frame-of-reference was not demonstrated. The less than optimal effects of cognitive modeling were attributed to factors such as: information overload, stimulus ambiguity, and low rater motivation. The surprisingly high level of accuracy produced by the frame-of-reference training was discussed in terms of the structural variations that have liberalized the term "frame-of-reference." Suggestions concerning future research were mentioned for cognitive modeling and frame-of-reference training.

The importance of rating accuracy has been demonstrated in several human resource management practices. Beyond performance appraisal (Becker & Cardy, 1986), accurate ratings are relevant to the areas of: job analysis (Harvey & Lozada-Larsen, 1988), assessment centers
(Lorenzo, 1984), interviewing (Cesare, Dalessio, &
Tannenbaum, 1988), and the Walk Through Performance Testing
done by the U.S. Air Force (Hedge, 1984). The results of
this research suggest that rater training should be applied
to each of those areas in order to improve the current
level of rating accuracy.

Practice-and-Feedback. Whereas rater training
improved the accuracy of performance ratings, additional
practice-and-feedback did not. The hypotheses regarding
practice-and-feedback were not supported. Intuitively,
these results contradict a basic learning principle:
Practice-and-feedback enhance skill acquisition (Holding,
1965). Yet, it is important to remember that the
hypotheses were based on limited research in the rater
training area (Bernardin & Buckley, 1981). The ensuing
discussion will attempt to explain the general
ineffectiveness of practice-and-feedback and interpret the
significant Dimensions x Practice interaction.

The nonsignificant Practice main effect illustrates
that viewing and evaluating additional videotaped ratees
does not necessarily improve rating accuracy. In fact,
examination of the mean discrepancies for the Practice main
effect (found in Table 15) demonstrate a trend that
indicates practice-and-feedback were counterproductive; the
raters who did not receive practice-and-feedback were more
accurate than those raters who did receive practice-and-
feedback. One possible explanation is that the raters who did receive practice-and-feedback may have been presented with too much information for them to process appropriately. Moreover, the results imply that they processed the information inappropriately. Given the complexity of the rating task and the specificity of the feedback, this "overload" interpretation is plausible.

Annett (1961) has postulated that the relationship between feedback specificity and skill learning is non-linear; it has the shape of an inverted U. This curve suggests that the specificity of feedback is facilitative at a certain level of precision. Once the feedback becomes increasingly more specific, a performance decrement results. The nature of the feedback given in the present research was extremely specific. For example, raters received precise feedback on the performance standards, expert target scores, checklist behaviors, and behavioral rationales, as well as the justifications for each of those factors. Clearly, the specificity of feedback could have overwhelmed the raters, complicated their understanding of the rating task, and resulted in inaccurate ratings.

Research has shown that most people overestimate their level of performance (Thornton, 1980). For example, research by Meyer (1975) found that approximately 80% of the people rate their own performance as being in the top 25th percentile. Accordingly, in order to protect their
inflated self-image, people tend to avoid any information that contradicts their perceptions (Miller, 1976). However, when negative feedback is given, the recipients feel "demoralized" (Thompson & Dalton, 1970) and their performance level decreases (Meyer, Kay, & French, 1965). Perhaps, this same "depression effect" happened to the raters who received practice-and-feedback in this research.

The present research suggests that once the raters evaluated their first practice ratee, they felt positive about themselves and the accuracy of their ratings. Then, when the target score feedback indicated that their ratings were not as accurate as they originally thought, the raters experienced lowered self-confidence. This sense of low self-confidence in conjunction with the complexity of the task and their misperceptions concerning the reinforcement may have put the raters into a state similar to learned helplessness (Abramson, Seligman, & Teasdale, 1978; McIntyre, 1986).

The similar mean discrepancies for the 1 practice-and-feedback trial and 3 practice-and-feedback trial conditions suggest that learned helplessness occurred after the raters received feedback on their ratings for the first practice trial ratee and continued for the rest of the research. Because the raters perceived the reinforcement to be beyond their control, they resigned themselves to perform at the same level they attained on the first practice trial.
Conversely, the no practice-and-feedback control group did not receive negative feedback. Thus, their self-confidence was not lessened and they did not experience the "depression effect." Consequently, their ratings were more accurate than those given by the raters who did receive practice-and-feedback. Given these negative consequences of practice-and-feedback (e.g., lowered self-confidence, inaccurate ratings), it is incumbent upon the experimenter to alter the raters' attributions, by modifying their perceptions of the feedback (Ilgen, Fisher, & Taylor, 1979).

It was mentioned earlier that the raters may have perceived the feedback to be a form of punishment rather than positive reinforcement. This relates to recent research by Stone, Gueutal, and McIntosh (1984) which investigated how perceptions of feedback are formed. Stone et al. (1984) found that if feedback is conveyed in a positive-negative sequence, it will be perceived by the recipient as being more accurate, than the same feedback presented in a negative-positive sequence. The feedback given in the current research was not given in any particular sequence. The finding by Stone et al. (1984) suggests that the feedback given to the raters in this research should have begun with some form of praise (e.g., accurate observation/rating) and then progressed to the areas of inaccuracy. Had the feedback been given in this
positive-negative sequence, the raters may have perceived it as positive reinforcement, which could have resulted in more accurate ratings.

In order to give the practice-and-feedback interpretations credibility, empirical research needs to be done. One such study should investigate the effects of practice-without-feedback, practice-with-feedback, and no practice-and-feedback on rating accuracy. Although feedback is thought to be vital for learning (Holding, 1965), the results of this research suggest further investigation should be done in order to clarify that relationship. Additional research should also try to identify which aspects of rater feedback are vital, redundant, and/or counterproductive. This will help identify those feedback elements that should be deleted from subsequent application.

Although the present research suggests that more practice-and-feedback is counterproductive, it is possible that 3 practice-and-feedback trials were not enough to improve rating accuracy.

Another research avenue would be the scheduling of the research. Perhaps a fatigue effect occurred during training. In response to this, the research could have spanned three days instead of only two. Specifically, the training could have been done on Day 1, the practice-and-feedback on Day 2, and the actual evaluation of the ratees.
An additional research idea centers on the nature of the practice videotapes. The three practice videotapes used in this research had dissimilar dimension ratings within each videotape. Perhaps, practice-and-feedback would have been more beneficial to the raters if the videotapes were constructed according to the recommendation of Bernardin and Buckley (1981); one ratee would have low target scores on all three dimensions; another ratee would be average on all the dimensions; and the third ratee would be rated high on the three dimensions. This internal consistency would have clarified the raters' understanding of the actual performance standards, which may have led to a more clear prototype for each performance level, resulting in improved rating accuracy.

The significant Dimensions x Practice interaction signifies that amount of practice-and-feedback had a differential effect on stereotype accuracy. This interaction occurred due to the raters' ability to rate the dimension of sensitivity more accurately than either problem analysis or problem solution. One explanation for this finding is that the raters may have had a common understanding of "sensitivity," while "problem analysis" and "problem solution" were more novel to them (Wherry & Bartlett, 1982). The potential consequences of conducting research involving dimensions that are familiar to the
raters may yield different results from research that uses unfamiliar dimensions. This raises the question of whether certain (types of) dimensions are easier to rate accurately? Or do some dimensions require a higher level of cognitive complexity than others in order to be rated accurately (Schneier, 1977)? Perhaps the raters should have evaluated the practice videotapes one dimension at a time in order to clarify understanding of the dimensions. Given the importance of dimension ratings to the performance appraisal process, this dimension-focused research deserves additional consideration.

**Summary of Practice-and-Feedback**

This research represents the first attempt to investigate the effects of differential amounts of practice-and-feedback on the accuracy of performance ratings. Contrary to the hypotheses, the results of this research demonstrate that greater amounts of practice-and-feedback had a decremental effect on rating accuracy. Interpretations of this finding focused on the quality of the feedback that the raters received. It was stated that feedback specificity, inflated self-perceptions, and a lack of perceived reinforcement may have created a learned helplessness state that produced a "depression effect" on the raters, which led them to give inaccurate ratings. Suggestions for improving the quality of the feedback and additional research on the rating dimensions were provided.
Observation Accuracy

1-Hit Rate. The results indicate partial support for the hypotheses. Cognitive modeling training produced smaller 1-hit rates than either frame-of-reference training or the no-training method. Conversely, practice-and-feedback was not effective in reducing the raters' 1-hit rates.

The significant Training effect is consistent with previous literature that has cited the effectiveness of modeling training in improving the accuracy of behavioral observation (McIntyre & Bentson, 1984; Spool, 1978). In his review of behavioral observation training programs, Spool (1978) stated that an active learning approach to training (Goldstein & Sorcher, 1974) is necessary to improve observation accuracy. This research and that of McIntyre and Bentson (1984) have confirmed Spool's recommendation.

By comparing frame-of-reference and cognitive modeling, this research has shown that cognitive components are necessary for training to improve observation accuracy. Specifically, the cognitive modeling method used in this research consisted of the same training principles as frame-of-reference, plus two cognitive factors: The expert's "thinking aloud" and individualized feedback which focused on the rater's mental rehearsal of his/her cognitive strategy for observation. It appears that these
cognitive components are responsible for minimizing those situations when a rater reports that a behavior did not occur when in fact it did occur. The positive results of this research support the research by McIntyre and Bentson (1984) which found that cognitive modeling improved behavioral observation significantly more than either error-reduction training or behavioral-example training.

McIntyre and Bentson (1984) offered several explanations regarding the effectiveness of cognitive modeling training. First, they noted that cognitive modeling provides the raters with the opportunity to identify with an expert, emulate him, and then receive reinforcement from him. Second, cognitive modeling informs the raters "how" to observe performance accurately, instead of just identifying "what" to observe or not observe. Thus, cognitive modeling emphasizes a process-oriented approach to training while other training programs (e.g., error-reduction) are more content-focused. Furthermore, cognitive modeling requires that raters use deeper levels of mental processing (Craik & Lockhart, 1972) in order to facilitate the comprehension and recall of the training content. Third, McIntyre and Bentson claim that cognitive modeling sets specific goals for the raters to achieve. These goals clarify the raters' attention onto the relevant behaviors demonstrated by the ratee and increase the raters' motivation to observe performance.
accurately. In addition to these three explanations, it should also be stated that cognitive modeling requires active trainee involvement, which has been found to have a positive relationship with observation accuracy (Spool, 1978).

Beyond the effects due to training, the results also indicated a nonsignificant Practice effect. Raters who received practice-and-feedback did not differ in accuracy compared to those raters who received no practice-and-feedback. This finding contradicts the results found by McIntyre (1986) which showed that raters who received either 1 practice-and-feedback trial or 2 practice-and-feedback trials made more accurate behavioral observations than a 0 practice-and-feedback control condition. There was no significant difference between the conditions that did receive practice-and-feedback. Interpretation should be made with caution since this research and that by McIntyre (1986) operationalized accuracy differently. McIntyre defined observational accuracy as a ratio of the number of "good" observations made by the raters to the total number of "good" observations made by the experts. This research measured accuracy in terms of the raters' 1-hit rates. Given this difference, a direct comparison between the two studies is not possible.

The positive results for training on observation accuracy contradict the findings for rating accuracy.
Cognitive modeling was effective at reducing the 1-hit rate (i.e., improving observation accuracy), while it was relatively ineffective at increasing rating accuracy. Therefore, the results of this research illustrate clearly that the training method required to improve accuracy is moderated by the evaluation task: observation or rating.

Several information-processing models of performance appraisal suggest that observation is the initial phase of performance evaluation (Borman, 1978; Landy & Farr, 1983). It is believed that accurate behavioral observation promotes accurate performance rating (Murphy et al., 1982). The results of this research contradict that relationship.

This research showed that cognitive modeling is most effective at improving behavioral observation; yet it is not superior beyond the observation phase of information processing. Future research needs to locate the precise point in the information-processing sequence (e.g., storage, synthesis, or retrieval) where cognitive modeling becomes less effective. This identification will allow researchers to design specific training components necessary for improved information processing. Moreover, it appears that the raters may have had problems understanding the appropriate performance standards necessary for accurate performance rating. Perhaps the raters viewed the behaviors correctly, but weighted them incorrectly when they made their BARS ratings (Wherry &
Bartlett, 1982). Similarly, the high levels of observation accuracy can be attributed to the videotaped feedback for each target behavior on the checklists. However, this mode of feedback may have been too fragmented to facilitate the proper synthesis of the behaviors which is necessary for an accurate dimension rating.

In reference to practice-and-feedback, the results are consistent for observation accuracy (i.e., 1-hit rate) and rating accuracy: Additional practice-and-feedback did not have a significant effect on observation accuracy. However, it should be noted that raters who received 3 practice-and-feedback trials did produce more accurate behavioral observations than raters who received either 1 or 0 practice-and-feedback trials. This raises the question concerning the effects of additional practice-and-feedback trials. For example, will 5 or 7 practice-and-feedback trials reduce 1-hit rates more than 3 practice-and-feedback trials?

Another research idea centers on the longitudinal effectiveness of cognitive modeling and practice-and-feedback on observation or rating accuracy. For example, Latham, Wexley, and Pursell (1975) found that raters who received rater training in the form of an intensive workshop produced high quality ratings 6 months after they had received that training. A similar type of research design should be applied to the areas of observation versus
rater training and practice-and-feedback.

False Alarm Rate. Whereas the 1-hit rate indicates accuracy in terms of what the raters did not observe, the false alarm rate measure focuses on what the raters did observe. In reference to training, the results for the false alarm measure are not consistent with those found for 1-hit rate. Training method had a significant effect on 1-hit rate, while no effect was found for false alarm rate. The results for practice-and-feedback were similar for both observation indices: Practice-and-feedback did not improve observation accuracy.

The inconsistent effects of training on 1-hit rate and false alarm rate deserve elaboration. This inconsistency implies that observation may not be a unidimensional phase of information processing. If the observation process is as straightforward and simplistic as the literature suggests, the results for false alarm rate and 1-hit rate would have been more similar. For example, why didn't cognitive modeling improve observation accuracy for both error rate indices? Perhaps the process of observation consists of two different subprocesses: One that pertains to the over-observation of behavior (i.e., false alarm rate) and one which relates to under-observation (i.e., 1-hit rate). This dichotomy suggests that signal and noise levels may be attended to and processed differently by the rater. If so, an observation training program would have
to be designed according to the specific facet of observation (e.g., errors with under-observation or over-observation).

Substantiation for this point is evident in the significant difference between the mean values for 1-hit rate and false alarm rate ($t(98) = 8.56, p < .01$). The relatively small mean values for false alarm rate indicate that observation training caused the raters to observe the ratees' performance in a very conservative (and accurate) manner; the raters seldom reported that a behavior occurred when in fact it did not occur. However, the same observation training produced inaccuracy for the 1-hit rate measure; the raters missed approximately one third of the behaviors that the ratee actually demonstrated. Clearly, the training content had a differential effect on the two error rate measures. Additional research needs to investigate the validity of these observation subprocesses and their specific relationship to subsequent information processing.

Summary of Observation Accuracy

The results of this research are moderately consistent with previous research that has demonstrated the effectiveness of observation training on the accuracy of behavioral observation (McIntyre & Bentson, 1984; Spool, 1978). The experimental hypotheses were confirmed for the 1-hit rate measure. Cognitive modeling produced
significantly smaller 1-hit rates than either frame-of-reference training or no-training. Conversely, the same hypotheses were not supported for the false alarm rate measure. Practice-and-feedback were ineffective in improving either observation measure.

It was suggested that the differential effectiveness of cognitive modeling may be the result of a dichotomy within the raters' observation process. One subprocess may be responsible for the under-observation of behavior (i.e., 1-hit rate), while the other subprocess is accountable for over-observation (i.e., false alarm rate). This necessitates that observation training programs contain separate components to address each subprocess in order to improve observation accuracy. Given the importance of observation training to assessment centers (Thornton & Byham, 1982), Walk Through Performance Testing (Hedge, Dickinson, & Bierstedt, 1985), and performance appraisal systems involving a behavioral observation scale (Latham & Wexley, 1977), additional research is needed to clarify this differential observation process.

Limitations

The results and conclusions of this research must be interpreted within the context of limitations. First, this research was conducted in a laboratory setting involving college students as raters. These individuals are equivalent to those used in other rating accuracy research,
yet the results may not generalize to managers in an organizational work setting. Likewise, the laboratory setting minimized many of the social and organizational factors that have been found to influence performance ratings (e.g., purpose of rating). An application of this research to a field setting would increase the generalizability of the results and allow for a comparison between student and managerial raters.

Additionally, the observation and rating tasks in this research were simpler than those typically used by managers when they conduct performance appraisals. For example, the raters assessed the performance of 7 ratees on 3 dimensions. This is contrasted to a manager who may be responsible for rating the annual performance of a dozen subordinates on 7-10 dimensions. Thus, the limitation concerning the amount of information that the raters were required to encode, store, process, and recall is not indicative of a typical performance rating situation.

Conclusions

This research contributed to the research literature on performance measurement in two ways: (1) A comparison was made between frame-of-reference training and cognitive modeling training on the accuracy of performance ratings and behavioral observation; and (2) various amounts of practice-and-feedback were investigated to determine their differential effect on rating/observation accuracy.
Strong support was found for the effectiveness of rater training on the accuracy of performance ratings. Surprisingly, raters who received frame-of-reference training were more accurate than those raters who received cognitive modeling training. In specific, frame-of-reference training produced greater levels of accuracy for three accuracy statistics: elevation, differential elevation, and differential accuracy. This effectiveness was discussed in terms of several factors that are not routinely included as part of frame-of-reference training. For example, the inclusion of active group discussion, behavioral checklists, and videotaped behavioral rationales contributed to the effectiveness of frame-of-reference training. Likewise, the relative ineffectiveness of cognitive modeling was also attributed to methodological factors (e.g., information overload, stimulus ambiguity, and misperceived feedback). It was suggested that future research adopt a microanalytic focus in order to assess the incremental accuracy for these factors.

The hypotheses regarding the positive relationship between practice-and-feedback and rating accuracy were not confirmed. Raters who received either 1 or 3 practice-and-feedback trials were less accurate than those raters who did not receive practice-and-feedback. It was mentioned that the specific nature of the feedback given to the raters, in conjunction with the lack of perceived
reinforcement, may have produced a "depression effect" that led to inaccurate performance ratings. Suggestions for improving the raters' perceptions of the target score feedback were offered.

The results for observation accuracy revealed that cognitive modeling was effective in reducing the raters' 1-hit rates, but not their false alarm rates. Practice-and-feedback were ineffective for both observation measures. This suggests that a cognitive emphasis is necessary for accurate behavioral observation. However, the inconsistent effect of cognitive modeling on observation accuracy (i.e., 1-hit rate vs. false alarm rate) implies that behavioral observation is not a unidimensional process and may reflect a multivariate perspective. Future research should investigate the rater's information-processing sequence in order to identify where information is lost or biased. Such research will provide direction for the design of subsequent rater training programs and theory development.
REFERENCES


APPENDIX A:

SCRIPTS FOR THE INTERVIEW SIMULATIONS
Script for Demonstration Videotape Simulation

<table>
<thead>
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<th>Problem Analysis</th>
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C: Hello Pat. How are things going?

P: Not bad. I have been pretty busy, but I think things are going pretty well.

C: How do you like being here at this store?

P: It's OK. It's taking a little time to get comfortable with all the changes, but basically I really like it here.

C: What kind of changes are you referring to?

P: Well, there are a lot more customers with the higher volume, and I have a lot more staffers here than at my other store.

C: Yes. I realize it is difficult to get used to things when you move to a bigger store. But based on your past performance, I'm sure you'll do fine here. Looking at the recommendations you had, I can see why you were promoted to this store.

P: I really like this company and would like to move up.

C: OK. Well that's really what I wanted to talk you about. I can see that you're really putting in a lot of time effort and that tells me a lot about how serious you are about your job. What we want to do here is to take a look at your performance and see how we can improve upon it because I consider it my job to help you move up. It's important for you to let me know what I can do to help you resolve any problems you may have.

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2 Script responses for Pat Winchell are designated with a "P" label, and those of Chris Harmon (i.e., the assesseee) with a "C" label.
P: I appreciate that.

C: There are some things that have been brought to my attention that I would like to discuss with you. You mentioned earlier that it was taking you some time to get comfortable with the changes here. Are you having any problems with that?

P: No, I don't think so.

C: OK. Before we get started, is there anything that you would like to discuss?

P: Well there have been a couple of things, but I don't think anything that more time here won't resolve.

C: One of the things that concerns me is that you've made some questionable decisions?

P: I'm not sure I know what you mean.

C: Let me give you an example. Whenever you place an order for merchandise, it is important that you go back and check previous inventory records to give you some idea of how much to order.

P: Are you talking about the picnic tables?

C: Yes. You underordered on those because you didn't check the inventory; that cost us.

P: I don't consider that my fault.

C: Whose fault was it?

P: We had such a crowd rush that no one could have guessed how many we needed. I thought I ordered the right amount.

C: OK. But in the future, I think it's important that you check the inventory records because we lost a lot of customers by not having the tables. You've got to pay attention to little details like that. Another area that I think we need to talk about is scheduling. I assume that you were responsible for the scheduling at the other store.

P: Right.

C: Did you have any problems with that?

P: None that I was aware of.
C: Well it has come to my attention that some of your subordinates are not happy with the way you have been writing the schedule. Has anyone voiced any concerns about this to you?

P: They have complained to you? No, no one has said anything to me about this.

C: It seems that you have been scheduling your full-time employees to work weekend nights.

P: At my other store that was what my full-timers wanted. They could make their most money in commission.

C: Have you talked to your employees to see if that were true here?

P: No.

C: OK. I think you need to sit down and talk with your employees and see if they have particular preferences as to when they would want to work, especially the full-timers. It's not safe to assume that people here will prefer the same schedule as those at your other store. It's important that you consider these preferences because it shows that you are concerned about them.

P: That's fine. I just wish that if these people had problems they would talk to me first. I told these people when I came here that I had an open door policy but no one has approached me with any problems.

C: Let's talk about that. There may be a reason why your people are not coming to you. I have noticed that you seem to be a little impatient when responding to your employees.

P: I'm not sure I know what you mean.

C: Well I know of one incident where you snapped at a staffer who had asked you about the inventory. Can you tell me about that?

P: I think you are referring to the incident with John. He had been slacking off all day and he saw this as another opportunity for me to do his work.

C: Have you had other problems with John?

P: No, not really.
C: Have you had problems with any of the others in your department?

P: There have been a few.

C: Can you explain?

P: I may tell some individuals to do something, but, I don't know, they don't seem to do it very well or sometimes they don't do it at all.

C: Can you give me an example?

P: Well, for example, I told someone to set up a display in the front of the store. Later I went up there to check it and it was a mess. I had to redo it myself which took an hour that I didn't have.

C: Do you have any thoughts on why these people are not performing their jobs?

P: I just think there are some people here that don't want to work. I think we need to get rid of some of these people and replace them with people who want to work. Either that or give them more money. I feel like that you get what you pay for. We pay these people minimum wage and that is the type of help we get.

C: OK. Let's think about that. First of all, to simply fire everyone and replace them is not very cost effective. We would have to go through the whole process of selection and retraining if we did. It's also difficult to pay them much more than minimum wage because the profit margin of the store is so small. Let me ask you, do you think more training would help those people?

P: I'm not sure.

C: Do you think they know what you expect of them and how you like the work to get done?

P: They should know. These people have been here a lot longer than I have.

A. Yes, but you have to remember that these people may be much different than people you worked with at your other store. Because you're new here, people may not know what you expect of them so it's important that you make this clear up front. How do you feel about this?
P: I agree. But I have high standards and I expect people to give me their best work.

C: And you should expect that. But I think it's also important to try to look at this from the employee's perspective. Some have complained that they don't feel you are giving them enough responsibility. I have noticed the number of hours that you are working and I appreciate your dedication. But it seems you do a lot of the work that your employees should do.

P: Well, I'm ultimately responsible for how well this department is run. If they don't get it done, then I have to do it. That's why I'm working 60-hour weeks.

C: Are you saying then that you work so many hours because your employees aren't doing the work you delegate to them?

P: That's exactly what I'm saying. I never had this problem at my other store.

C: Well I think you are ultimately responsible for this department, and you have the authority to take the appropriate action when needed. You have to let them know that you are in charge of the department. It seems your working so many hours may account for some of the other problems you've had like losing your patience. Do you have any suggestions, other than firing them or giving them raise, that would improve how you work with your employees and how they work with you?

P: No. I wish I did.

C: OK, let me suggest something. Perhaps you could sit down with your employees and get a feel for some of the things that concern them. For example, the scheduling. Find out if they understand what you expect of them, and give them more responsibility. Perhaps you could have shown John how you wanted the display to be set up for example. You have to remember that these people may want to move up in the company just like you. If that's the case, you need to use your expertise so that they understand the importance of doing their jobs properly for themselves and for the business.

P: I have tried to delegate on more than one occasion.

C: And what happened when it wasn't done?
P: I did it myself.

C: Do you know what we expect of you?

P: Yes I think so.

C: Then you know that your primary responsibility is to manage and not just be another employee, and it is as a manager that we can best use you. You can't always do their work and get the things done that you need to as department manager. Probably in your other store you could do those things more often because it was a smaller store. But the size of this store makes it almost impossible to operate that way and I'm sure it is difficult to get used to that. But you can't do their work for them.

P: Things would be much easier if they completed what I delegated to them.

C: Let's do this. Meet with your employees just as I am doing with you. It doesn't have to be a formal meeting. It is probably better that you do it informally. Discuss their concerns, let them know what you expect, and how you will evaluate their performance, and reinforce them when they do the job correctly. But it's important that you give them more responsibility so that you can spend more time with your responsibilities. You need to do it now so that the problem gets no larger and you don't burn yourself out working so many hours. What do you think about this?

P: I will certainly try.

C: If this doesn't work then you have the responsibility to take the appropriate steps even if that means cutting their hours back or letting them go. But show them first what you expect and let them do it. That way if they know what you expect and that they will be held accountable you won't have to be concerned when you're doing what you need to do or when you're not there. In fact, you may want to train someone to step into your role so that you can move up.

P: I understand.
C: I'd like to see you reduce the number of hours that you're working to maybe about 45 or so in the next three weeks but it all starts with you communicating with your employees. Let's try this for a couple of weeks and see what happens. Then we can get back together to evaluate how this is working out.

P: Fine.

C: Ok. Thanks for coming in and if there is anything I can help you with in the meantime, just let me know.
Script for Practice Simulation #1

Problem Analysis
2.0

Problem Solution
4.2

Sensitivity
4.2

C: So how do you like working here at our new store?

P: Good. It's a lot busier than what I'm used to; but, generally I like it pretty well.

C: How have you adjusted to the big city life?

P: It's good. Again, it is a lot more crowded, but it's, it's fine.

C: Ok, let's talk about a few things here. Overall, you have done a pretty decent job, but there is some room for improvement. That is why we are here, not to criticize or anything, but what we're trying to do here is talk about a few things and hope that we can build for the future, to improve on everyone's performance, not just your's or mine but everybody's. Everybody needs to open up the lines of communication. The first thing I noticed is that you need to delegate some of your responsibilities a little more thoroughly. You seem to have trouble delegating. You seem to want to have a hands-on approach to accomplishing the tasks in your department. I'm sure that at your last job your department was a lot smaller and you had to take a hands-on approach and assume a lot of these responsibilities. Here we would like you to take the role of supervisor. What we would like you to do is delegate and let the others do the work, and just guide them along in their duties, not so much to do them yourself and assume the responsibilities.

P: Well, I try to do that.

C: Ok, well, what we would like to see in the future is for you to expand on that role. Delegate some of the decision-making. The lesser decisions should go to some people in your department. Um, that way we can see how they do. Sort of groom them along, and the only way that you are going to move up is to groom someone who can take your position.
P: Well, I'll try to do that. I just hope that they do the work when I tell them to.

C: Well, that's it. It's not so much telling them as it is teaching them. You know how to do the job. You do it very well. The trick now is for you to teach someone else, your subordinates. Delegate the responsibility to them. Let them make the decisions and teach them so you can move up in the organization.

P: I will try.

C: OK, good. I noticed when I observed you that sometimes you need a little more patience in dealing with your employees. A lot of times they don't know as much as you, and it is frustrating. I know with myself one of my biggest problems is trying to teach people things because I don't have a lot of patience, but it is something that we're all going to have to work on. We have to try. What you need to do is give them the benefit of your years of experience and training and then you can impart that on the people that work for you. That way they will be better workers, so when you are away from the job the person you leave in charge, you'll know can handle the job so when you come back after the weekend you know that everything will be in order.

P: Well, I've been trying to do that. I just have some people who don't want to work.

C: Ok, well, do you think there are some people in your department who don't belong there?

P: Yes. I think there are a couple of people who shouldn't be in that department.

C: Ok, well, do you think that those people are destructing your department?

P: Well, I told them things to do and they don't always do it.

C: And what happens when they don't do it?

P: Then I do it.

C: Oh, Ok. If that job is going to get done you need to sit down with that person, not yelling or screaming or anything, but sit down with them and teach them how to do it. In a patient manner explain it to them and tell them what needs to be done and sort of set a goal.
Give them a task, set a goal and let them accomplish that.

P: Ok.

C: Does that sound reasonable?

P: Yes, I'll try to do that.

C: Ok. Now the other thing - Um, how are you handling scheduling at your department?

P: Pretty much the same way I did at my other store.

C: Ok, and how was that?

P: Well, I had a schedule set for my full-timers to work on weekends.

C: Ok. The way we try to do things around here is we try to rotate the weekend schedule, that way it gives everyone a chance to have the weekends off, as well as giving everyone a chance to work with everyone else on the weekends. That way everyone has a weekend off, and that's good because everyone likes to have a weekend off, as I'm sure you do, to spend with their children.

P: Well, I wish people would tell me that. I mean no one has mentioned this to me at all. I feel like they're coming to you with all their problems, and I told them that if they had things they were concerned about they could come to me.

C: Ok. They should come to you. You are perfectly right. I am not saying that people come here, I just heard a few things and I just want to get things out into the open so we can talk about them. Um, maybe you need to have a meeting with your employees to bring some of these problems out in the open. Just have a meeting, maybe even away from the office so that they'll feel more comfortable speaking with you. Now, that way we can open the lines of communication. It's nothing personal. If they're not bringing the problem to you then you can't read their minds. I know that. We need to open up the communications, I think this is the most important thing we have to try and do. Ok, now, the job rating I'm going to give you for this first period here is just an average rating. Now, I know you are used to higher ratings, but I think that with coming to a new store, and the new employees and adjusting to the big city life, I think that's the major part of that. Um, I expect you to be receiving higher ratings in the
future as you have in the past.

P: Well, I think I'll be all right, it's the people I have.

C: Well, the problem is though, that you're just one person and however many people there are in your department, 15 or 20, um, we can't just wipe out all of those people when we bring a new manager in. We have to work with what we have. The labor pool here is a little different than what you're used to back home, and a lot of the people you'll be working with won't be what you're used to. Sometimes you'll tell them to do something and they won't always do it. So what we have to do here is have a little more patience. I know it's tough, that's why I'm saying to you use the hands-off approach. Don't assume the responsibilities but delegate the responsibilities to your employees and be with them. Show them how to do it and be with them until they've done it a few times, until they feel very comfortable with it. Ok, now, it takes a lot of patience, I know it does because that is one of my major problems, so I can sympathize with you. Now, if you need any help or advice in the future don't hesitate to come to me because I know it is frustrating, and I can empathize with you because I've been through it all myself.

P: Ok.

C: Um, like I said, I don't see any problem with things improving. I think you have all the right qualifications. You have done a good job in the past, and I expect you'll do a good job in the future.

P: Ok.

C: All right, well, thanks very much for dropping by, and in the next six months I hope to give you a higher rating.
### Script for Practice Simulation #2

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C: How are things going?

P: Pretty well. I have been busy, but I think things are going OK.

C: How's the family?

P: Fine.

C: Kids doing all right?

P: Yeah, they're doing okay.

C: It's quite an adjustment moving from a smaller store to one quite as large as we are.

P: Yeah. It has been an adjustment. I mean there are a lot more customers to deal with but I think I have done pretty well. I mean I like the higher volume. I like keeping busy.

C: Good. Well, I know you are working really hard.

P: Yeah.

C: So, how are things going in your department?

P: About as well as could be expected, I guess.

C: Any problems?

P: There are just problems that you would normally expect, I guess.

C: Like what kind of problems?

P: Well, I don't think I'm always getting the support I am asking for.
C: Okay. So, you're having problems with the responsibility that you delegate. Do you think that your employees are not handling this responsibility?

P: That's it for the most part.

C: You feel that your employees are not handling this responsibility?

P: That's it.

C: Okay. There have been some problems in your department with things not getting done and hasty decisions being made. What can we do to help you with your scheduling and overcome some of these personnel problems?

P: Well we can get rid of some of the people or give them more money.

C: You feel that giving them more money...

P: Well, I think that's to some extent part of it. They are not motivated to work if we are just paying them $3.50 hour.

C: Well, some of your employees have complained that they are not given responsibility and they feel...

P: I have tried to give them responsibility.

C: Yes, okay.

P: I have tried to do that.

C: Maybe we can work together and set up some real goals and layout how we can delegate some of that responsibility and hold your employees more accountable.

P: That will be fine with me.

C: Ok. Some of your employees have also expressed that you sometimes show a lack of concern on occasion.

P: They said that to you?

C: Yes.

P: See when I came here I told these people that I had an open door policy. If they had problems or had things on their mind that they could come and see me. No one has approached me yet.
C: Ok. I think your employees are maybe feeling that they can't communicate with you, that you are not receptive to their problems.

P: They haven't given me a chance to be.

C: So you don't think your employees are giving you a chance? Do you think there is a personality conflict between you and your employees?

P: I don't think so. Not for the most part. I mean, there are a couple of people that I'll tell them to do something and they don't do it. But for the most part, no, I don't think there is any conflict at all. From my eyes there is not.

C: Okay. If you are responsible for the employees in your department then it is up to you to take action when the employees are not performing their duties. Are you dealing with them on a regular basis and giving them feedback for their performance of the job?

P: Probably not every single time because I don't have time to baby sit these people. I mean, they have been here a lot longer than I have and they should know how to do the job. Now, do you agree with me or not?

C: Oh, sure.

P: Then in that case I am doing the best I can. I try to tell them what to do and there are so many other things I have to get done that I don't always have time to go back and follow up.

C: Ok. How can we relieve some of that work that you have daily that seems to get you so bogged down? Can we help you in any way?

P: You can get me some more help.

C: Get you some more help? And yet you have employees in your department that sometimes feel that they don't have things to do to keep them busy. How can we delegate some more work to them and keep them motivated and challenged in their job?

P: I thought I was.
C: Okay. Maybe these are some of the things that you can look at try to work on. Specifically, set up job descriptions for your employees or let them know what you expect of them and how it is going to be measured when the job gets done. Now I know that takes time in the beginning, but I think that you'll find that it will save you time in the long run, and will give you a chance to manage instead of doing the job yourself.

P: I can try, I guess.

C: Okay. Well let's see how things go in about a month, and let's get back together. What do you think about that?

P: That's fine with me.

C: Okay. I appreciate your attitude in trying to work with them.
Script for Practice Simulation #3

Problem Analysis | Problem Solution | Sensitivity
---|---|---
3.0 | 2.8 | 5.0

C: Hi Pat. How do you like your job here so far?

P: Fine.

C: Good. Good. Glad to hear that. Mr. Randolph from store 15 spoke highly about you. Are you familiar with the performance evaluation meeting? Have you ever been to one?

P: Yes, I have had a couple of them.

C: What we want to do today is talk about your performance here and do what we can to work out any problems that you might have or find out any points I might have noticed. We want to do what we can to work better together. What comes to my attention first off: a couple of complaints that employees have come to me with...

P: My employees?

C: Your employees have come to me with...have you had any trouble with your employees that you feel they might direct at you, complaints?

P: I'm not sure what they are complaining about. If anybody should be complaining it's me.

C: What are some of your complaints with them right now?

P: Well, I've had better workers before.

C: So you feel like they are not as dedicated as they should be.

P: No, not as much as my other store.

C: If you could improve anything with your employees what would it be?
P: I think we should get rid of some of them and get some people in here that want to work, either that or give them more money. I think we pay these people minimum wage and that's the type of help we get.

C: OK. You do have a point there. Let me, I don't want to be too abrupt with you but let me talk to you about a couple of critical incidents that people have spoken to me about and things that I have noticed. I don't want to put you on the defensive side but I...we need to work at this and figure how...if any, what the problem is that exists. I sometimes wonder if you are paying attention to detail. You are definitely dedicated. As far as I come in I see you are working 60 hour work weeks. You are also willing to come in on off hours, and I appreciate that. I am wondering maybe if your time could just be better spent if you would manage it better and possibly delegate some responsibilities.

P: Well, I try to delegate.

C: Did...what type...did you work out any specific system of delegating responsibilities?

P: No. If something needed to be done I would just tell someone do it.

C: And as related to that I had 2 staffers...I overheard 2 staffers ask you how the inventory system worked. You told them that you hope they found out soon. I was not sure of what your meaning was behind that.

P: Well those 2 people had been slacking off all day long. I had been doing their work most of the day and this was just another chance for them to get me to do the inventory for them.

C: And then yelling at a staffer...I guess that was for the same reason.

P: Same reason. Same reason.

C: They were aggravating you...also I noticed that the weekly inventory has not been taken so we'll know what to order and we'll have some accuracy in the department. I know you work long hours. Some things I consider critical just aren't being done: the inventory and cleaning behind the back ledge which always is getting dirty from all the plants we have back there. I'm just thinking that possibly you could assign some specific tasks, or maybe give them
notecards with their specific responsibilities on it. Uh...sit down and talk to the employees you know, if necessary decide they are going to be your friends even if...they are not going to have an agreeable basis between you, even if they seem to be contrary. You know, just do the best you can. And get them to agree to the task that you want to assign them and maybe work out a few little things. Maybe if they feel that they would be better at one little thing or another...

P: Do you think that'll work?

C: I was thinking, sit down and go over the task with them, and then write them a notecard for what they are supposed to do.

P: These people have been here a lot longer than I have. They should know what their jobs are.

C: OK. Well it seems that they could be in need of some direction and they could want some more direction I feel. I think it is good that you are willing to do the work, but a lot of mundane tasks that I've seen you doing and I just really feel like one of them could be doing and you could be using your time more wisely doing the things that requires your experience. Mr. Randolph from your other store has told me about your expertise, things that require skills that these workers don't have. But to go back to assigning the tasks, you can pitch in occasionally and let them know that you are not afraid to work, that you have delegated these tasks to them. "I can do anything that I assign you to do." But I don't want you doing other people's jobs. I don't care how bad they moan and groan...

P: Well, I am ultimately responsible for how this department is run.

C: OK. Well let's try this...no matter how bad they do moan and groan just tell them that it's their job and in a nice way follow up and find out if they are having problems rather than just leaving them and telling them they are going to have to do it. Try to listen to what they have to say and get some feedback and if it absolutely doesn't work out, then come to see me and then we'll get rid of them. It seems to me that you are possibly doing a lot of things that you could be delegating to some other people. And if they knew what their direction is, possibly they would be more inclined to do the work if they knew what it is that they have to do. Unfortunately, minimum wage, which is
all we could pay, attracts only a certain mentality you might say, or a certain type of person...uh...and a lot of times that type of person responds to just lists, and mundane orders...just...they want to know what they have to do. They are people with low initiative a lot of times. What is your overall opinion on this?

P: Well, I guess my opinion is if we want go-getters why do we pay these people minimum wage?

C: You can be the go-getter that runs the department and delegates these tasks-mundane, the mindless things, cleaning the back ledge, counting items for the inventory. You can use the inventory and order things so that we don't have the trouble like we had with the picnic tables.

P: Well, I don't really consider the picnic tables my fault.

C: OK, what was the problem?

P: We had such a crowd that day, there was no way I could have ordered the right amount.

C: So maybe we ought to even start planning ahead on that too. Maybe you can give the deadlines of the tasks, on the tasks that aren't daily tasks like, you know, "as you get time, I need the front windows cleaned by Tuesday- "I'll need a count on aisles 2 and 3 of all the merchandise on aisles 2 and 3 on Wednesday afternoon so I can get it in here by Friday." Try to realize that they have been here for a long time and I've gotten to know some of them—not on a personal basis—but I've seen them. I feel like their intentions are good and they feel sort of misdirected and without direction sometimes possibly. How do you feel? Do you think this will work for you?

P: I'll try. That's all I can say.

C: Did you have any type of system like that at the other place?

P: No. Those people there wanted to work.

C: Just everybody pitched in and you never had to tell anybody to do their particular task?

P: Well, sometimes I did, but generally people knew what they had to do.
C: How about if we say...I think you need to spend more
time at home...at least away from work. I know you
would like to work and you are a good worker and I
appreciate it, and I'd like to see you strive for a
40-hour work week delegating as much responsibility as
you can. Some nights you'll have to work late maybe...
if a truck comes in and you want to make sure things
get put in their proper place. Whenever possible just
give a little bit of responsibility to the people
working for you and let them know that you trust them,
generally. I hope this will work for you.

P: Well, I'll try to do that.

C: If not just come back and we can try to work something
else out. I almost feel you might be overworked.

P: I feel that way too.

C: I know you're frustrated too. I appreciate it. Maybe
deleagting these tasks and making sure the employees
agree with what they are going to have to do, like I
say even giving them a notecard with what they're going
to do...uh...pitch in just occasionally to show them
that you're not afraid to get your hands dirty and
listen for feedback. And is there something I can do
to improve your job or your working condition?

P: No. I don't think so.

C: Is there anything you feel like you need to talk about,
or explain or...any gripes?

P: No. I just hope you don't think that I'm the problem.

C: Well, I see problems and I trust you're going to do
what you can to work out the problems in your
department.

P: Well, I will try.

C: I want you to be aware of them, that I notice things...
that I realize it's not your fault that all these
matters are coming up. But I'd appreciate it if you
would give it a try.

P: I will.

C: Well, I'm going to have to put you in for...what do you
feel like your performance rating should be for the
last 6 months?
P: I think it should be at least a six. I'm working a 60-hour week and I think this department has been one of the best departments.

C: OK. Do you feel like...what do you feel like is the highest level you could get to?

P: Well, 7 is top of the scale.

C: Well, how about if we let you work on these areas and would you feel like...a 5 is not a low rating compared to many managers who get less than 5. Would you feel like a 5 would be a tarnish on your reputation?

P: I would just feel like you're taking my people's performance more into consideration than my own actual performance.

C: I feel like the employee problems as far as...I know the fact that you are overworked is probably why you yelled at the staffer across the store that day which sort of embarrassed me...and the 2 people who asked you about the inventory...something you're in a position of respect and you have to constantly realize that you are looked up to. I feel like if you improve on that you could easily get a 6 or maybe even a 7 next time. How about if we just put you in for a 5 today and hope for some improvement?

P: OK.

C: OK. It's not a personal thing but I think you can look at the personal items as far as how you treated people when you're overworked and upset with them. Maybe you can put in not as many hours. Delegate responsibility and not therefore be so irritable at them, you know, because of their lack of performance.

P: OK.

C: OK. Is there anything else you want to add?

P: No, I don't think so.

C: Ok, that will be it Pat. Thanks.

P: Thanks.
**Script for Experimental Simulation #1**

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C: How's it been going since you started working here at Kendall 66?

P: It is going pretty good, a lot busier than the other store, but generally I like it.

C: Good, well as I indicated in your first week when you came in to start working here, that periodically what I like to do is sit down with the new people and to talk about their performance, to talk about some of those things which you are doing well and areas that perhaps need a little improvement in them, and ways I can help you to work on those...

P: Ok.

C: ...Set up a development plan, and then come back at a later date and see how we are doing. One of the things that I've certainly observed in your work since you've been here is the amount of enthusiasm and the amount of time you spend in working. You seem to put a lot of effort into your work.

P: Well I feel like it's my department and I want to make sure that it runs well.

C: Do you tend to be satisfied with how your employees are doing?

P: They're ok.

C: What sort of employee relationships did you have in your previous job?

P: We were close. I mean all the people would, if they had problems, I felt like they could talk to me, and vice versa. If I told them something to do they would do it and those type of things. But I thought we were a real good group.
C: Good, good. A couple of the areas that I've observed that I'm a little concerned with is perhaps in making some of your decisions. Sometimes I get the impression that you might be a little bit hasty and not thinking them through.

P: Why's that?

C: Well, Um, sometimes in scheduling some of your employees, in that you had some of them working on weekends, full time employees, and uh, that's not the best utilization of them. (Pat interrupts while Chris continues to talk, "some of them have complained")

P: That's our busiest time. They've complained to you?

C: Well, I've heard complaints that have come from other people.

P: Well, see that's something I don't understand. I told these people when I came to work here that if they have problems they can come to me and they're already not doing it.

C: Are you getting any feedback from them at all?

P: No, I mean that's the first I've heard about that situation.

C: Ok, it certainly is appropriate for them to do that. Another one of the concerns that I have is in the area of time management. I'm a little concerned you may burn yourself out in the number of hours that you're working (Pat interrupts at number of hours "Well I'm working a lot of hours"). You seem to be working 60 hours in a week and all, you know in a short period of time probably, in special situations...

P: (interrupts) But again I'm doing it because I feel like I've got to do it. I'm ultimately responsible for how well this department is run, you know, and I've got to be here.

C: Sure, well sometimes and it certainly is a difficult thing for people to learn how to do. I certainly had difficulty with it in my first management position, in learning how to let things go and delegate them.

P: Well, I've tried to do that.
C: That takes a long, long time to get comfortable with that and to expect other people to do it and feel comfortable with that. Um, the last area that concerns me a little bit is perhaps in being impatient with some of your employees and their doing things, perhaps maybe not being clear in your instructions to them of what you want them to do.

P: I've tried to tell them what they need to get done. I expect them to do it. They've been here a lot longer than I have.

C: Um hum, well sometimes it helps to define for people so that they will know what your expectations are rather than sort of just, you know, demanding, sometimes it helps, it helps to clarify for them what your performance standards are. You know all managers operate a little bit differently. It will take them some adjustment period for them to get used to you.

P: I'll try to that. I've tried to do that a couple of other times, and it doesn't always seem to work.

C: Yes, well, I think that if you keep at it over a period of time as they adjust to you they'll get used to that and your expectations of them. Um, perhaps I should ask you if there are any particular areas that you would, that you feel you need help on, that you would like, you know, to put into the development plan that we are going to put together.

P: Well, just that I've, you know, I've tried to tell some things to some people and it's not always done very well. That's...I never had that at my other store.

C: Do you, uh, can you identify any of the reasons for that difference?

P: No, I don't know what the reason is. I mean, the people here just don't seem to be motivated to do the job. I mean I've told them things to do, and I've gone to check behind them and it's either not done very well or not all. And I have to do it myself.

C: Um hum.

P: I think one thing is the money. I think we're not paying these people enough. I would think that for the type of work that they are doing we could pay them more. I would like to give all these people a raise or just get them out and get some people in that want to work.
C: Well, that's certainly something that we can look at, and talk with our personnel people to look at our salary scales and see what we can do that.

P: I think that's something we need to do.

C: Ok, that's a good suggestion. We'll certainly look into that. What I'd like to do is to meet again with you in another month and to sit down and talk to see how you are doing. You know, and talk again about what areas are working well for you, and what areas still may need a little more work on. It certainly takes, takes time to get up to speed in working in a different place.

P: Yes, it takes time to adjust.
Script for Experimental Simulation #2

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C: I'm Chris Harmon, I don't know if we've met previous to this or not. How do you like it here, working here, compared to the other store?

P: I like it pretty well. It's a lot busier. There's more volume so there's a lot more customers and a lot more staff. But I like it pretty well. I mean, it's a nice store, I like keeping busy.

C: Yes. I can tell. You've been putting a lot of hours in so...uh...is it uh...if it's busier and you're staying busier, I mean, how's it, and the volume's more...

P: Yes, we just have more customer traffic so I'm here a lot more.

C: We want you to work out well here at the store, we've done an evaluation. We do evaluations twice a year on people. I don't know how the other stores have been doing them. We do them twice a year. We want to make sure everyone understands what their responsibilities are and they're doing all right. I was worried about...the only...I see some good things. Sixty hours, that's a lot of hours you can put into a week. I know you must been bushed and all that. I wanted to encourage you to...um...put your people to work as much as you can.

P: (interrupts) Well, I mean I try to do that.

C: (continues) So we might take some of this load off you, rather than overworking you. You're not going to do us any good when you're worn out.

P: Well I've tried. I've tried to give my people more work.

C: How many people you got working under you right now?

P: I have about 16.
C: 16, OK. Are you keeping them plenty busy so you can take...

P: Well, I mean I've tried to give them work to do.

C: Are you...What I...I think where I'm mostly concerned is I see how many hours you are putting in and I want you to be able to figure out a way so that you can cut down your hours and put your people to work as much as possible.

P: I, well, I feel like I am ultimately responsible for the success of the department and if things need to be done I need to make sure it is done and that's why I'm working so much.

C: Have you got particular work categories for leaving people so that work...so that they know automatically.. .so they know where their assignments are, where their responsibilities are. Do you have a clear cut...so that they know and you know where...for each situation rather than having them come in and watching all the time they pretty much know where your categories are?

P: I thought they did. I mean they've been here longer than I have and I just assumed they knew what their jobs were.

C: But you're not too sure?

P: Apparently not. I mean I...

C: (interrupts) Well I think, I think it would be beneficial for you, again 60...I think you are working as much as 60 hours a week and um...I know it is a big jump from the store you were at to this store so um... I'm wondering if you might want to get together with your people to work underneath you to have maybe a meeting to define some of the responsibilities that have been going...Because before you got here the man that you took...whosoever place you took probably had policies established and I think we need to reinforce how you want to have your people function what...what capacity you want them to function in and that will take some of the load off of you so you don't have to put in those long hours like you've been doing. And it does the company no good to have you worn out all the time and having to extend yourself so far. Um, I suggest, and I trust your judgment on this, and I suggest, that it would be good to get together with the people that work for you and just clarify for your own
sake, and for their sake how your responsibilities are going to flow. And, uh...you've got some good people working under you and I'm pretty sure that from what all I've heard are pretty responsible, and they probably want that responsibility assigned to them if you can get comfortable with that. It's hard sometimes to turn over...uh...turn over responsibility because it's hard to...because sometimes it feels like you are losing some control.

P: I've tried to give them some responsibility and they haven't really, haven't always taken it.

C: Can you give me an example?

P: Well I told John the other day to fix the display in front and it really wasn't done very well or done, you know, a halfway job...

C: (interrupts) To your expectations?

P: So I had to do it myself.

C: Could you have had John redo it? Would he have made improvements...next time you're going to have that same go round with him next time you ask him to do a display. Either you're going to have to do it yourself or you're going to have to get John...or you're going to redo what John did. And that's...in essence that's going to make it harder on you, number one because you're going to have to go behind him all the time, and number two, I think it's going to make him feel bad about himself because he can see what you're doing, that you're following behind him and doing that so it's going to demoralize him and it's going to wear you out. Um...it's a hard...I think it's hard telling...keeping other people in line is a hard job but from your own work load you don't have the time to be redoing any work for him.

P: No.

C: You can work with them a little bit...uh...and tell him in other words in that case tell him what he did wrong because you've got that expertise. He's calling on what information and knowledge he's got on his...in his background and you see a bigger overall picture, probably see more of the business all the way around because you're the manager so go ahead and call on your expertise and tell him what he did wrong that time. Uh...and he'll probably be a little miffed at first, but he will probably think about it and see that what
you're saying is right...better that than do it over and him seeing that his work is changed and that we didn't give him the benefit of learning from it. Go ahead and see if we can't...you know go ahead and delegate that job to him to do again. Show him what points you want improved and the next time he will be a better man and you won't be so worn out. For 60 hours you can't keep this up.

P: Yeah, I'll try.

C: OK. I appreciate the hours that...that's a lot of hard work and that means you have a lot of loyalty there. I don't think anyone is going to put in 60 hours and not have loyalty to the company. I appreciate that. We just don't want to wear our workhorses out, because we want you to be around for a while in the company. We want you to practice getting those people underneath you to do what they've been paid to do and we want you to show them how to do it, not be spending your hours doing it for them. Other than that everything looks good. I think you can slow down on the hours and increase the number of things that you can...put these other people to good work. It will keep them out of trouble that way, and I think it will work out all right. Is there any question that you have of what responsibilities or obligations or um...that you are having that we can work on now, and find some objectives to reach before we have our next performance evaluation?

P: No, not really.

C: Not really...because I'm sure it's a two-way street. Sometimes these situations get kind of locked into the manager. Upper management sort of cracks the whip and the other person doesn't have much input. I hope that we can get you off this 60-hour a week routine as much as possible because, like I said, it doesn't do us any good if you're so worn out that you can't do what you need to do. Well, I've sure enjoyed seeing you again.

P: (nods his head)

C: And we will meet here after 6 months and go over again to see how well you can get these other people underneath you to work, and you come back with me with what you think can be done.
C: Okay, it is performance evaluation time.

P: Yes.

C: Pat, it seems you came from store #15 with a favorable recommendation. Your performance evaluations in the past have been good. I don't understand what has been happening since you came to our store.

P: Why do you say that?

C: Well, it seems you have been making some very hasty decisions. This is just one example, but there was a time you ordered picnic tables without even checking last year's inventory.

P: Well, I don't really consider that my fault.

C: Whose fault would it be?

P: Well, you saw how busy we were that day. Nobody could have guessed right on the picnic tables.

C: Why didn't you just look in last year's records? You never, ever, you don't have to have a degree to know that you never order anything without checking the stock to see what we already have.

P: I thought I ordered the right amount.

C: Well that cost us because there were a lot of things we couldn't order because we ordered those. It also seems you have been repeatedly scheduling the same employees for weekend nights. Do you have a grudge against these people or what?

P: No, I just thought they wanted to do that. At my other store the full-timers loved the weekends because they could make their most money.
C: Well, have you talked to your employees here? I mean not everybody is alike. Maybe the employees at your other store needed the money, but with the system here we are getting complaints about it. Your employees obviously don't want it that way. I think maybe you need to talk to them.

P: Well, I told these people when I came here that I had an open door policy. If they had problems they could talk to me about them, no one has approached me about anything.

C: I think they might be scared of you Pat.

P: Scared of me?

C: Yeah. It seems you are very demanding. You yell at them.

P: Well, I have high standards.

C: I'm sure, I'm sure, but the way it gets through to me, it just seems like you are not patient with them. You need to sit down and listen to what they have to say. You can't sit there and yell at them for not knowing something, yell at them for not remembering something. I have an example here. Someone actually heard you say ...two of your staffers had asked you to explain how the inventory systems worked.

P: I remember that. Those two guys had been slacking off all day long. They had not done anything.

C: Maybe they did not know how. Did you think of that?

P: Well, they have been here a lot longer than I have. They should know how.

C: That's what it says you said. How are they going to know if there is no one to turn to to tell them?

P: Well, they wanted me to go back and do their stock inventory for them and I wasn't going to do that.

C: Well, I think you just need to sit down with your employees and find out exactly where the problem is laying.

P: I can tell you that.

C: So, you obviously think it is in your employees.
P: Well, if I tell someone to do something and they don't do it or they don't do it very well then I have to go back behind them to do it.

C: That's not the way it should be.

P: I know it's not. It was never like that in my other store.

C: Something's just not right here. Somewhere down the line you are not clicking with your employees. I've got six months before another performance evaluation and I want to see something done. I don't care how you do it, but somehow you've got to start communicating with your employees.

P: I will try.

C: If it takes discipline, if it takes a reward...

P: Well, see I agree with both of those. There are people here that don't want to work. I think we should either get rid of those people or get some people in that want to work, or give them more money. We pay these people minimum wage and that's the type of help we get.

C: Yes. I agree. But you know, try the system it takes to get respect. I want your employees to be able to respect you, but I also don't want them to be scared of you. I want them to be able to come to you with a problem, and I want you to solve it with no conflict.

P: I'll try.

C: Okay.
Script for Experimental Simulation #4

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C: Pat, um, I see that you've been transferred from Kendall 66 to Kendall 15, and you have favorable recommendations, so it looks like your doing a pretty good job. There are a few small incidents that I've been informed about.

P: Problems?

C: Yes. One is that I've been told that you have poor decision-making judgments.

P: Who told you that?

C: Um, (pauses and looks up) I uh, I uh have been informed that, you know. Well, I have a specific incident here where you ordered picnic tables without checking last year's inventory records.

P: Well, that wasn't my fault. We had such a crowd rush that day there was no way we could have had enough picnic tables ordered.

C: And this resulted in underordering of merchandise that was needed.

P: Again, that was because of the crowd rush.

C: Crowd rush that we weren't expecting?

P: No, I mean there's no way we could have been able to tell that.

C: And you've been scheduling the same full time employees to work on weekend nights.

P: Right, I thought that's the way they wanted it.

C: Well maybe, you could uh, you know, move them around and have other employees working on weekend nights.
P: You see, I feel like they're telling you all their problems and not saying anything to me.

C: Well, I'll, uh, talk to them about that. Maybe they should be talking to you instead of to me but I am talking to you about this now. So uh, why don't you go back to your subordinates and talk to them about it. Maybe some people that have been working long weekend hours would rather not work on weekends. And it says that you do a lot of work that you could delegate to other people, that you do some jobs that a staffer could be doing.

P: Well, I'm ultimately responsible for how this department goes, so it's, you know, I want to make sure things are done correctly. I feel like you're saying that I'm the problem in all of this and I don't agree with that.

C: (pauses while looking down at paper) Well it is important to, um you know, rely on the help of others and not do all the work yourself.

P: Oh, I agree. I've told some of my people to do things.

C: You have been working 60 hours a week and (pause while looking down at paper) it says here that you yelled at a staffer...

P: Well, if I did because I'm sure there was reason to.

C: What, what exactly happened?

P: I told John to set the display up front.

C: Uh huh.

P: And when I went up there he had it all screwed up. So I had to do it myself.

C: Um, well, I'll talk to John about that. (pause) Well, I'll talk to some of your people that you work with and uh, we'll see.

P: OK, I appreciate that, I mean, am I going to get a bad review?

C: Um, maybe, a mixed review.

P: See I think I'm taking the blame for a lot of things that are my people's fault.
C: Uhmm, I didn't consider that. I'll talk to uh, I'll talk to some people.

P: OK, I appreciate it.

C: OK.

P: Is that all?

C: Yes.

P: OK, thanks.
**Script for Experimental Simulation #5**

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C: How are you doing today?

P: Pretty good.

C: Okay. I, uh, just wanted to talk to you about your performance evaluation.

P: OK.

C: Ok, I noticed you're a real hard worker.

P: Yeah, I like to make sure things are done right.

C: Yes, I noticed from, ah, the other store, that looking at your recommendation, they said you work really hard.

P: Yeah, I try to. I had a good store over there.

C: Ok, then compared to the other store, we're a bigger store over here, so that we have more staff. And it seems that you need to delegate more responsibility. You understand what I'm talking about when I say that?

P: Well, I'm working a lot of hours and I've tried to delegate.

C: Yeah, I see that it says you're working up to 60 hours a week.

P: Yeah.

C: Now, I think what you need to do is that we have a pretty good staff. You need to let them help you out more, do things in the stock room and stuff.

P: Yeah, I tried all that.

C: It seems that you need to take more time to schedule their hours better and work on the inventory and stuff like that. Let them do more of work, so you can manage them.
P: Yeah, I tried to do that.

C: Is there a problem with your workers?

P: Yeah, well I told a couple of people to do something and they didn't do it quite right. It wasn't up to my standards so I had to do it.

C: Can you give me an example?

P: Well, I told John to move some furniture for a display and it wasn't done very well. He moved a couple pieces here and a couple pieces there. So, I ended up doing it.

C: Well, did you tell him exactly what you wanted done?

P: John's been here longer than I have. He should know how to do that.

C: (pause) Well, have you had any other problems with him?

P: Not him specifically, no.

C: Well, what would you say in general with the staff you have here? Are you pretty satisfied with them?

P: Ah, they're average.

C: Average. You think you give them enough responsibility?

P: Ah, like I said, I tried on more than one occasion. But you know paying people $3.45 an hour, it's the type of help we get.

C: How do you think we can get them to show more responsibility?

P: I don't know. I mean, I would think that if you give them anything, let them do it. But, apparently that's not the case.

C: (pause) Well, maybe, maybe you should give them more responsibility? See how that works for awhile.

P: I can try.

C: I think that would be a real good idea.

P: OK.
C: I think, um, if you try that, you, ah, you should have more time to attend to your other responsibilities, see that things get done.

P: Yeah.

C: So, you know, so you can have more time, to, ah, schedule, to do the inventory, stuff like that...ah, take care of the problems.

P: What problems?

C: Well, like the ordering.

P: Oh, that wasn't my fault. I mean that we just had a big rush that day. I thought I ordered the right amount.

C: Okay, well I think to avoid, you say you had a rush that day? How come?

P: That's a good question. I think because we had such a good sale.

C: Well, I think in that kind of environment, I think what you need to do is if you let your, ah, staff do more for you...let them do the stuff more.

P: OK, that's fine with me. I'll be glad to do that.

C: Good, I think you give them more responsibility, you can spend more time, ah, doing the inventory...ah, checking the stock, seeing what we need to order.

P: OK.

C: Well, let me see what else I have.

P: Something else? I feel like you're saying I'm doing a bad job, and I think things are going pretty well.

C: Well, I don't know. I see how much you work and I know you're working very hard, but I think we can utilize you better, ah, if your not doing so much of the routine stuff, the day to day stuff, if your doing more managing.

P: OK.
C: Yeah, I mean I, I see you out there 7 days a week, 10 hours a day, ah, moving furniture around, and that's not what we paid you for. We, ah, we don't really need that. We need a good manager.

P: Well, like I said, I tried that. I mean I tried to give them more responsibility.

C: Okay. Yeah, because we, ah, we didn't hire you, ah, because we're paying you more than them. We're paying you more than we pay them. We expect you to help out more in the running of the operation, okay?

P: OK, I can try.

C: Okay, well I think that should, should do it. Ah, if you have any more problems, feel free to come back and see me.

P: OK, fine.

C: OK. Well, thank you.
Script for Experimental Simulation #6

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C: How are you doing Pat?
P: Pretty good.

C: Good, glad to see you. Glad you could come in. So how is the new job going?
P: Good.

C: That's good.
P: It's a lot busier than I'm used to. But I think things are going pretty well.

C: Good, all right, looks good. So, ok, as you know, this is your performance evaluation, the first one that you're going to get from me. And I'd like a little feedback before I start. How are you rating your performance right now on the job that you're doing?
P: Well, I think I'm doing a pretty good job. I'm putting in a lot of hours making sure that the department runs well, and I think things are going pretty smoothly.

C: Any particular troubles you've had so far?
P: A couple of areas, but...

C: OK, all right, well I've got a few problem areas that have come to my light. And I'd like to discuss them with you as well. OK, as you know, you came with very high recommendations from number 15, Kendall 15. And I was curious on a few areas. It's come to my attention that you have, you know, have on occasion made some hasty decisions without, without checking your records, things like that, and things along those lines. You know, making decisions before you've really thought them out.

P: I'm not sure I know what you mean?
C: OK, well, for example, I had ahh...aah, oh, remember those picnic tables came in and you ordered...

P: Well, I don't really consider the picnic tables my fault. I mean we had such a crowd rush that day that I don't think anyone could have guessed the right amount.

C: Well, ok. But if you had checked the schedule, then, if you had checked the past orders, you'd notice that we always stack heavy for that season because there's a big order for it. And it's going to be getting used to the job, I'm sure, but you have to, you know, you have to think in those terms. And look at our old records, our past performances, and because that'll tell you a lot of insights to things like that. Because ahh, we've got to be prepared, and we did lose quite a few customers on that thing. OK?

P: Ok.

C: All right, another area, is the full-time workers. You know. I've had some complaints.

P: My workers?

C: Yes.

P: They've complained to you?

C: Well, no, no I hear it from other sources. No, they didn't complain to me.

P: Well, see, I told these people when I came here that I had an open door policy.

C: OK.

P: If they had problems, they could approach me. And no one has said anything to me about those problems.

C: No one has approached you about it?

P: No!

C: OK, all right, well that's good. If you told them that then, they didn't tell you...Well let me make a note of that. Because a lot of the full-time workers here at the store, they tend to think, well, that their weekends are, well that they've earned the right not to work on weekends, stuff like that. And you see, you know, it's things like that.
P: Well at my other store, full-timers loved the weekends because that's when they could make their most money.

C: Really? Ok, all right. Then, it's the nights, especially, that they, really don't like. They want that time to do other things. I'm saying well it's probably that, it's from you changing from a bigger format here that it would it would make it more difficult. It's larger, and some of the things will be different and you just have to go along. All I'm doing here...is, and don't take it negatively, ok? I'm just pointing out to you areas that I have seen as weaknesses in the changing, ok, and a lot of it is probably coming from a smaller to a larger format. You know and, and things like that. And a lot of the policies are going to be a little different, ok?, you know, not much. We try to fill you in as much as possible when you took over the job. But this is just my way of pointing out areas that I see. And you know, I don't want you just to sit here and think I'm cutting down everything that you're doing. These are just weaknesses that have shown up. Let's see...another thing, well, the people around here, they like to have, they like to have the trust of their, you know, their superiors.

P: Right.

C: And, they like, prefer to, for their superiors to tell them what to do and what...and then to have it done. I've noticed that you're a real hands-on type of manager, and really getting in there. And I've seen you occasionally doing things that you can assign someone else to do.

P: Well, I've tried to delegate.

C: You have tried?

P: I've tried.

C: And they're giving you a hard time?

P: Well, there are some times when I tell people to do some things and they're not done very well, or not done at all.

C: Uh, Uhm.

P: So, I end up having to do it.
C: Well, OK. Well, those situations, then that's good. A manager has to do that. That's true.

P: Well see, I feel like I'm ultimately responsible for the success of this department.

C: That's good. Well, that's true. You know as the manager that is very true. However, you gotta, on the same token, I mean, you are responsible. So, I won't interfere with that at all. All you have, you just have to allow the employees the chance. Like if they get a bit, a little behind, instead of you going and doing it, how about talking to them about it? Say, "you know, look, you know, you don't have to leave it behind and, and I've given you this responsibility, so, so, why don't you stick with it? You know you don't, don't leave it behind so that I have to come back and get it." And you know, they'll probably appreciate that more than, than having you go, you know going and doing it. Because, then, they feel like they're not being trusted to do the work. And, and if they don't deserve that trust you know, then we have to do something.

P: Well, see, that's what I was going to suggest.

C: You feel like they don't deserve the trust?

P: Well, I think there are some people we should get rid of, or give them some more money.

C: Ok, well, have you sat down and talked with these people?

P: No, not really. I mean, these people have been here a lot longer than I have. They should know what the situation is.

C: Right, ok, well, that's true. But on the same token, well they are your subordinates. So, maybe, well firing is an extreme. You know we don't like to do that. You know? It's just not good policy. It really isn't. If you can work with them, you know, these people have shown us in the past, you know, they've shown us that they've all been average or above average in their performance. Ok? And you...have you had any personality conflicts?

P: No, those things are going to pop up though if they're not doing the work I'm delegating to them.

C: Uhm Uhm...
P: But, I don't think anything major.

C: OK, all right, that's good, that's good. I'd recommend that you ask them, you know that you sit down and talk, especially if you've got one or two that seem to be slacking off, and slacking off the responsibilities that you're giving them. Sit down with them and discuss it. You'll find that most of them, you know, that they're pretty open-minded. You know, they'll listen to you. And, and if that doesn't work, then come to me and we'll sit down again, and we'll work it out. OK? I mean if we got to fire them, then that's the way it is. I mean that's something that, that's ultimately your decision as, you know it's your decision as well. I mean it's your department. Let's see, the only other thing I can really think of, that I've had problems with, or that other people you know have been working with you, is that you gotta watch all of these people as far as demanding too much. OK, now keep them working. You know, you gotta be patient with them though. Because if you're not patient with them, they take an attitude.

P: Well, I have high standards.

C: Well, ok. That's fine. There's nothing wrong with high standards you know. But, you gotta realize that they might not have standards as high as yours. OK? And if you want them to reach these then you have to express it and don't, say...if you berate them about it, they're not going to do it. All right? And if you go in there and and, you know jump on them, it's kind of like, like you know, the cart pulling the mule. They're not going to be able to work for you, by jumping on them. It's better to try and sit down and say, "you know look, you know, this is what I expect. This is what I want you to do." And don't go in there and say you know, you didn't do this, and tell them they're doing a bad job. Say, "this is what I expected of you and, and you're not, I'm not getting quite as much out of you as I expect from you. I'm not getting what I want out of you, and you're going to have to put, perform a little more, and put a little more effort into it." Try to, you know try to talk to them a little more on their level than as a subordinate-superior. You know try to say I understand the job. Show them that you understand the job and and not demand that they do it. You follow that all?

P: Yes, I'll try to do that.
C: Ok. Well, if it works out, you know all right. You're filling in someone else's shoes. Ok, you know that's always going to be a problem. All right, whenever there's a management change, and people are more accustomed to his way than yours, and you've probably back...I'm sure that the guy who came into your place is having the same amount of trouble. I'm just saying that you have to work with them, because, because people have shown in the past that they're dependable. And they are good workers. And I don't want any animosity between you and your workers, because of of your differing styles. And these are the areas that I feel you have to work on. All I'm trying to do is resolve these problems. OK? That's what I want to do. These are the problems that have been brought to my attention. And I just want to resolve them. Now is there any other ways I can help you resolve them?

P: Well, I just hope you don't think that I'm the problem. I'm not trying to be a problem here.

C: Yeah, right, right, I know. I realize that. I'm not blaming you, per se. OK? You know. I'm not saying it's your fault. I'm not. I'm just saying that these are areas where something is going to have to be worked on, or they will become problems. You've only been here four months, and you're still getting your feet wet with everyone involved. I'm not trying to tell you that you are the problem. But I'm saying, you know that these are problem areas, and if we don't do something about it, there is going to be a definite problem. And it's going to be either, you know, we're going to fire all of them, or move them, or move you around. And I'd rather have it work out with you, with you to work out with them so that everybody can stay here. And, and you all work together as a team. That's, what I think is the best way to get things accomplished. That's my personal philosophy. And as your superior, you know I prefer people to work it out, you know, than to have to move people around. You know, Uhm, you know and fire them, you know. And these are the areas that I feel need some work. You know, just take your time. And we don't, well unless it's something right there on the floor that needs your immediate attention, take a little extra time, and think about your decisions before you make them, you know? Do a little research if you have the chance. You know, watch out for the full-time employees, and give them a break, because they've been here for a while. Give them a weekend off every now and then, or like a weekend night...something like that. Give them
a day on the weekend. That's the way we've always done it here, and they've come to expect that. Ok?

P: Ok.

C: And, you know there's no sense in changing that. You should be able to change instead of them, because we've pushed for that over a period of time. Oh, and they've come to expect that. Ok, well that's something to watch for, you know. Give them a little time. And, and give them a little rein. If they're not doing their job, then you got to sit down and talk to them, you know. Like, you don't, should, be there. You know, you shouldn't be down doing the staffer's job. You put in a lot of hours, and it's just that, you know, you're following up behind your employees, and you're really not accomplishing anything. Because they should you know, because they should be doing this. They should be getting the work done. And it shouldn't be in your lap. And, if they're not getting the work done then you gotta talk to them. And if that still didn't, doesn't work, then the three of us will come up here and we'll sit down together, you, me and the employee. And if that still doesn't work out, then you know, there's something wrong and he's going to have to go, or she's going to have to go. But give them a chance, because they really, well, in the past, they've been able to do the work. OK? And like I said, it's a rough period and right now, so give them the chance and have a little patience with them.

P: Ok, I'll try to do that.

C: Ok. That that's about all I can say. Those are the only...overall your performance hasn't been bad. OK, so I guess there's a few problem areas. I know you're changing to a new situation, which always causes problems for you and your subordinates. But you know, you gotta work them out. OK?

P: Ok.

C: Ok. Good you could come in. Glad we could get things straightened out.
Script for Experimental Simulation #7

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C: Hello Pat, and how are you doing?

P: Fine, thanks.

C: Good. Well, as you know, this is the semi-annual evaluation. First of all I'd like to ask how you feel the job's been going for you since you moved over?

P: It is going pretty well. It is a lot different here. It's a larger volume store, more customers, larger staff. But I think I've adapted pretty well.

C: Do you feel you keep pretty busy, busier than you were before?

P: Yeah. I've been working a lot of hours.

C: Yes, you have been putting in quite a few. Well, have you run into any specific problems that you need to ask us about or anything I can help you with? From your experience any major problems?

P: No, not really.

C: OK. Well, a few complaints have been made to me and I think we need to discuss them. One comes from several employees and it involves scheduling difficulties. Scheduling the same full-time employees to work weekend nights. They have expressed some complaints about this to us.

P: They complained to you?

C: Yes. I am not sure exactly how it got to me but it got to me. I don't know who complained first.

P: See, I thought that's the way they wanted it. At my other store the full timers loved the weekends because that's when they could make their most money.

C: Really? So they haven't told you about this?
P: No.

C: Okay. Do you have regular meetings with them or is there any way they can get in touch with you to find out how serious a matter it is? It may have been a casual remark, but when it got to my level it was a complaint.

P: Well, I haven't talked to them about it, not as of yet. I told these people when I came here that I have an open door policy, and that if they have problems they could come to see me about them, and haven't approached me about anything.

C: Maybe it would be a good idea to find out how these people feel. Do you have regular staff meetings?

P: No.

C: Maybe you might want to have one. We'll wait and see on that. Something else here, several staff members have expressed dissatisfaction about having very little responsibility. Can you shed some light on that?

P: I have tried to give them some responsibility, they just don't accept it.

C: OK. Do you have a hard time getting the performance that you want from them?

P: Sometimes I do.

C: Is that frustrating?

P: Sure it is.

C: Well, I guess at this point I'd like to talk to you a little bit about delegation versus supervising. I'm not sure how much, you worked with a smaller staff before and maybe that's part of the difficulty of adjusting to a larger staff, but with delegation, how much training have you had in delegation?

P: I know what delegation is and I've tried to give my people things to do, but again, it's just not getting done.
C: OK. When I think of delegation I think of assigning a certain task to someone who is responsible and someone who has the capability to handle that task. You get them started on whatever it is and you make yourself open. You said you have an open door policy. Are you showing them this open door policy when they approach you?

P: I think so. I think that's part of the problem. People just haven't approached me about anything.

C: Maybe there is a problem because they are complaining, but they're not complaining to you. I know that you put in more hours and you're more frustrated. Maybe you are losing a bit of your sensitivity. It happens when you put in more hours.

P: Well, I put in more hours because I want to make sure things get done. If I tell someone to do something and it's not done very well, or not at all, then I have to do it. I'm ultimately responsible for the success of this department.

C: True.

P: So I've got to make sure things get done and that is why I work so many hours.

C: So you don't want to do it yourself if it's not done?

P: Right.

C: OK, Well I would suggest to you, instead of taking that course, that if you have delegated it to someone and given them proper assistance, and told them that you have an open-door policy, and you've told them to come to you if they have any problems and they still have not done it; maybe instead of going and doing it yourself you should pull that person back and say, "what's the problem here?" Follow-up on them because they're not always going to come to you, and say, "Look, I've got a problem here," especially you're new, 3 or 4 months. And they might feel intimidated or whatever, and if it's wrong say, "what can I do to help you with this?" Because you have certain responsibilities that are in your job description that aren't being done, and you can't afford the time to do all of their things and if they're saying they don't feel that they have enough responsibility something has got to be worked out so that you are not doing it.
P: See, these people have been here a lot longer than I have.

C: True. Do you think they need more training after observing them for a certain length of time?

P: I think there are a couple of people who need something. Whether we should get rid of them or give them some more money.

C: So, you don't think training would help?

P: I don't know. These people have been here a long time. If they haven't learned their jobs by now I'm not sure exactly what training would do for them.

C: Maybe we need to do some evaluations with them like what I'm doing with you right now. Maybe we need to evaluate them to see if they're trainable, and if they're not trainable then fine, we can get rid of them. But maybe they need another chance. This is another point. Several employees have informed me that sometimes they feel you're too demanding with them, that you don't show enough concern with them. From what I have seen, talking to you now, you do seem frustrated. When you are working so many hours and you have this extra responsibility I can see how this can happen.

P: Well I have high standards. I thought that is how you got ahead in this company, and I expect my people to have high standards as well. This problem never occurred at my other store.

C: You can set high standards, but you've got to help these people live up to those high standards. You can't say, "I'm not going to give you any more training. I don't care what kind of person you are, you don't meet up to my standards, you're fired." That's not good personal relationships. I'm sure you understand the value of good personal relationships because it directly affects the performance of a person. Maybe we need to talk about communication. How well do you communicate with these people? Do you have any specific personal problems with any of the employees?

P: Well, I think there are some people that don't give me the respect that I deserve. But, see, I feel like you're saying that I am the problem, when I think it's because the people are not doing what I tell them to do.
C: You're saying that is the root of the problem? Well if the root of the problem is that they are not doing what you are telling them to do, maybe we should look at how you're telling them to do it. If you are demanding, then you are not going to get their respect. If I commanded you to do this, this is my standard and you don't meet up to it, then I am firing you. That doesn't come across well and you are not going to respect me. So maybe we should try seeing it from their point of view. How do you come across?

P: Well I think I come across ok.

C: Do you see what I am saying?

P: I see what your point is.

C: I know you put in a lot of hours, and there are some things in your job description that are not being done, and I realize again that you're new and it's hard adjusting to new things sometimes when you're new, but I think that you should try to work on your relations and how you communicate with them. You've got to play a game with them, you've got to get them to want to do a good job, and if you can communicate that to them, and have them start doing their own responsibilities and you don't always have to go in and always clean up behind them, then pretty soon, maybe you can turn your attention to your own job description. Do you understand? These things do tend to slack off if you're always going in and doing other people's work and you can't do your own. Do you understand?

P: Yeah, I understand.

C: Do you know how you can do anything about...what are you going to do?

P: Well, if it were up to me again, I would either give these people more money or get rid of some of these people.

C: Do you think that they deserve more money?

P: Well, I think that if you pay people $3.50 an hour, that's the type of help you get.
C: Maybe we should try a little more personal relations. Work on communication and we can meet in a few weeks and see how it's going. But, I don't think that's an option for us right now to just fire them, that would be too expensive to fire them. To just totally fire them and hire new people would cost us in other ways I think. So what are you going to do?

P: I will talk to them now, I guess.

C: How? Talk to them as in this is not what you're doing or...

P: Well I feel like if those people need some help I'll be there to help them.

C: Ok. The problem, as I understood it, they don't feel that you're patient enough with them or that you're not concerned with their needs. Do you understand what their needs are? Do you have a perspective of what their needs are, like what equipment they need, or how much time they have to get something done?

P: I think so.

C: Maybe you should ask them. Instead of always saying I'm here if you need me, say you need me because you're not getting this work done and what can I do to help you. I think that would be a better approach.

P: Okay.

C: Okay. We'll get back together in a couple of weeks and see how things are going.

P: Okay, fine.

C: Well, in the meantime, as that area starts to improve you will find that you have less work to do and there will be less frustration, and I think you will be able to get your work done as well.

P: I hope so.

C: I hope so too. Now are there any questions or anything that I can help you with?

P: No.

C: Ok, thanks Pat for coming in and talking with me today.

P: OK. Thank you.
APPENDIX B:

DEFINITIONS OF THE PERFORMANCE DIMENSIONS
Performance Dimensions

Problem Analysis: The assessee asks questions to uncover unknown aspects of the problem or states how different parts of a problem are related.

Problem Solution: The assessee suggests, recommends, or outlines one or more specific ways to resolve the problems.

Sensitivity: The assessee shows concern for the individual and the individual's problems.
APPENDIX C:

THE BARS RATING FORMS

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Problem Analysis

Problem Analysis: The assessee asks questions to uncover unknown aspects of the problem or states how different parts of the problem are related.

Assessee could be expected to relate the employee's lack of patience in his dealings with his subordinates to his long hours. 5

Assessee could be expected to ask the employee whether he told his subordinates about his standards. 4

Assessee could be expected to ask the employee what he thinks could be done to improve his relations with his subordinates. 3

Assessee could be expected to ask whether the employee has any questions about his responsibilities. 2

Assessee could be expected to inquire whether the employee had ever received any complaints from his subordinates or fails to engage in problem analysis. 1
Problem Solution

Problem Solution: The assessee suggests, recommends, or outlines one or more specific ways to resolve the problems.

Assessee could be expected to outline what the employee should have done when discussing problem areas.

Assessee could be expected to suggest that the employee show his subordinates what he wants them to do rather than doing it himself.

Assessee could be expected to suggest that the employee sit down with his subordinates and attempt to develop a better working relationship.

Assessee could be expected to recommend that the employee try delegating more responsibility to his subordinates.

Assessee could be expected to suggest that a goal could be obtained without specifying the manner in which it could be accomplished or fails to propose solutions to the problems.
Sensitivity

Sensitivity: The assessee shows concern for the individual and the individual's problems.

Assessee could be expected to express the desire to work with the employee to remedy the problems. 5

Assessee could be expected to compliment the employee on the responsibility he feels for his position. 4

Assessee could be expected to acknowledge that the employee's past performance appraisals were good. 3

Assessee could be expected to acknowledge that a lot of employees are apprehensive about the appraisal process. 2

In asking questions, the assessee could be expected to convey the impression that the employee was guilty until proven innocent. 1

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APPENDIX D:

BEHAVIORAL CHECKLISTS
Problem Analysis Checklist

Problem Analysis: The assessee asks questions to uncover unknown aspects of the problem or states how different parts of the problem are related.

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

7) Assessee asks what the employee believes is the reason that his subordinates are not doing their work.

8) Assessee inquires whether the employee's subordinates needed more training.

9) Assessee inquires what the employee has to say about a complaint.

10) Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

11) Assessee inquires as to the reason the employee works so many hours.

12) Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist

Problem Solution: The assessee suggests, recommends, or outlines one or more specific ways to resolve the problems.

1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

6) Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

7) Assessee outlines what the employee should have done when describing errors.

8) Assessee recommends that the employee try delegating more responsibility to his subordinates.

9) Assessee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

10) Assessee suggests that the employee show his subordinates what he wants them to do rather than doing it himself.

11) Assessee suggests that a goal could be obtained without specifying the manner in which it could be accomplished.

12) Assessee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assessee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.
14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plans for employee development.
Sensitivity Checklist

Sensitivity: The assessee shows concern for the individual and the individual's problems.

1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

4) Assessee acknowledges the difficulty of adjusting to a larger store.

5) Assessee states that s/he has confidence in the employee.

6) Assessee indicates that s/he is impressed by all of the hours the employee has been working.

7) Assessee compliments the employee on the responsibility he feels for his position.

8) Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

9) Assessee expresses the desire to work with the employee to remedy the problems.

10) Assessee conveys the impression that the employee is guilty until proven innocent.

11) Assessee listens intently to what the employee has to say.

12) Assessee asks the employee about his feelings of the issues that had been discussed.

13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
APPENDIX E:

TARGET SCORES FOR THE INTERVIEW SIMULATIONS
### Target Scores

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**Note.** Standard deviations appear in parentheses.
APPENDIX F:

CHECKLIST TARGET SCORES FOR THE INTERVIEW SIMULATIONS
**Problem Analysis Checklist: Demonstration Videotape (5.0)**

* 1) Assessee inquires whether the employee has had any problems adjusting to the store.

* 2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

* 4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

* 5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

* 6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

* 7) Assessee asks what the employee believes is the reason that his subordinates are not doing their work.

* 8) Assessee inquires whether the employee's subordinates needed more training.

* 9) Assessee inquires what the employee has to say about a complaint.

*10) Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

*11) Assessee inquires as to the reason the employee works so many hours.

*12) Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

*13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

*14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

*15) Assessee inquires whether the employee has any questions about his responsibilities.

BARS target score is shown in parenthesis, and checklist target behaviors are designated by asterisk.
Problem Solution Checklist: Demonstration Videotape (5.0)

* 1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

* 4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

* 5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

* 6) Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

* 7) Assessee outlines what the employee should have done when describing errors.

* 8) Assessee recommends that the employee try delegating more responsibility to his subordinates.

* 9) Assessee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

*10) Assessee suggests that the employee show his subordinates what he wants them to do rather than doing it himself.

11) Assessee suggests that a goal could be obtained without specifying the manner in which it could be accomplished.

*12) Assessee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assessee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
**Sensitivity Checklist: Demonstration Videotape (5.0)**

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

* 3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

* 4) Assessee acknowledges the difficulty of adjusting to a larger store.

* 5) Assessee states that s/he has confidence in the employee.

* 6) Assessee indicates that s/he is impressed by all of the hours the employee has been working.

* 7) Assessee compliments the employee on the responsibility he feels for his position.

* 8) Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

* 9) Assessee expresses the desire to work with the employee to remedy the problems.

*10) Assessee conveys the impression that the employee is guilty until proven innocent.

*11) Assessee listens intently to what the employee has to say.

*12) Assessee asks the employee about his feelings of the issues that had been discussed.

13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

*14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Practice Videotape #1 (2.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

7) Assessee asks what the employee believes is the reason that his subordinates are not doing their work.

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13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

*14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Practice Videotape #1 (4.0)

1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

* 2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

* 6) Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

7) Assessee outlines what the employee should have done when describing errors.

8) Assessee recommends that the employee try delegating more responsibility to his subordinates.

9) Assessee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

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12) Assessee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assessee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Practice Videotape #1 (4.2)

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

* 3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

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* 9) Assessee expresses the desire to work with the employee to remedy the problems.

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*11) Assessee listens intently to what the employee has to say.

*12) Assessee asks the employee about his feelings of the issues that had been discussed.

13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
**Problem Analysis Checklist: Practice Videotape #2 (3.0)**

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

7) Assessee asks what the employee believes is the reason that his subordinates are not doing their work.

8) Assessee inquires whether the employee's subordinates needed more training.

9) Assessee inquires what the employee has to say about a complaint.

10) Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

11) Assessee inquires as to the reason the employee works so many hours.

12) Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

*14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

6) Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

7) Assessee outlines what the employee should have done when describing errors.

8) Assessee recommends that the employee try delegating more responsibility to his subordinates.

9) Assessee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

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12) Assessee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assessee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Practice Videotape #2 (4.4)

1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

* 4) Assessee acknowledges the difficulty of adjusting to a larger store.

5) Assessee states that s/he has confidence in the employee.

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13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

*15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Practice Videotape #3 (3.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

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*14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Practice Videotape #3 (2.8)

1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

*5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

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14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Practice Videotape #3 (5.0)

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

* 3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

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13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #1 (1.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

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15) Assessee inquires whether the employee has any questions about his responsibilities.

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Problem Solution Checklist: Experimental Videotape #1 (1.0)

1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

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14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #1 (3.8)

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

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*14) Assessee acknowledges that it is difficult to turn over responsibility.

*15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #2 (2.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

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14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

*15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Experimental Videotape #2 (2.4)

1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

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14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #2 (4.0)

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

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*14) Assessee acknowledges that it is difficult to turn over responsibility.

*15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #3 (1.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

* 5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

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14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Experimental Videotape #3 (1.8)

* 1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

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15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #3 (1.2)

1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

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13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

*15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #4 (1.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

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10) Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

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12) Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Experimental Videotape #4 (2.0)

* 1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

* 2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

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12) Assessee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assessee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #4 (1.4)

1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

* 3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

4) Assessee acknowledges the difficulty of adjusting to a larger store.

5) Assessee states that s/he has confidence in the employee.

6) Assessee indicates that s/he is impressed by all of the hours the employee has been working.

7) Assessee compliments the employee on the responsibility he feels for his position.

8) Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

9) Assessee expresses the desire to work with the employee to remedy the problems.

*10) Assessee conveys the impression that the employee is guilty until proven innocent.

11) Assessee listens intently to what the employee has to say.

12) Assessee asks the employee about his feelings of the issues that had been discussed.

13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

*15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #5 (3.0)

1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

7) Assessee asks what the employee believes is the reason that his subordinates are not doing their work.

8) Assessee inquires whether the employee's subordinates needed more training.

9) Assessee inquires what the employee has to say about a complaint.

*10) Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

11) Assessee inquires as to the reason the employee works so many hours.

12) Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

*14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Experimental Videotape #5 (2.0)

1) Assesssee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assesssee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assesssee suggests that the employee explain to the staffers how the inventory system works.

4) Assesssee recommends that the employee exert more authority and let the staffers know who is boss.

5) Assesssee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

6) Assesssee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

7) Assesssee outlines what the employee should have done when describing errors.

*8) Assesssee recommends that the employee try delegating more responsibility to his subordinates.

9) Assesssee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

10) Assesssee suggests that the employee show his subordinates what he wants them to do rather than doing it himself.

11) Assesssee suggests that a goal could be obtained without specifying the manner in which it could be accomplished.

12) Assesssee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assesssee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

*14) Assesssee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assesssee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #5 (3.0)

1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

* 3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

4) Assessee acknowledges the difficulty of adjusting to a larger store.

5) Assessee states that s/he has confidence in the employee.

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9) Assessee expresses the desire to work with the employee to remedy the problems.

10) Assessee conveys the impression that the employee is guilty until proven innocent.

*11) Assessee listens intently to what the employee has to say.

12) Assessee asks the employee about his feelings of the issues that had been discussed.

13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #6 (2.8)

* 1) Assesseee inquires whether the employee has had any problems adjusting to the store.

* 2) Assesseee asks the employee whether there is anything that he would like to bring up.

3) Assesseee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assesseee inquires whether the employee had ever received any complaints from his subordinates.

5) Assesseee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assesseee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

7) Assesseee asks what the employee believes is the reason that his subordinates are not doing their work.

8) Assesseee inquires whether the employee's subordinates needed more training.

9) Assesseee inquires what the employee has to say about a complaint.

*10) Assesseee relates the employee's adjustment to the new store to the problems that he is experiencing.

11) Assesseee inquires as to the reason the employee works so many hours.

12) Assesseee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

13) Assesseee asks the employee what he thinks could be done to improve his relations with his subordinates.

*14) Assesseee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assesseee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Experimental Videotape #6 (4.0)

1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

* 5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

6) Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

* 7) Assessee outlines what the employee should have done when describing errors.

8) Assessee recommends that the employee try delegating more responsibility to his subordinates.

9) Assessee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

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14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #6 (4.0)

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

* 3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

* 4) Assessee acknowledges the difficulty of adjusting to a larger store.

5) Assessee states that s/he has confidence in the employee.

6) Assessee indicates that s/he is impressed by all of the hours the employee has been working.

7) Assessee compliments the employee on the responsibility he feels for his position.

8) Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

* 9) Assessee expresses the desire to work with the employee to remedy the problems.

10) Assessee conveys the impression that the employee is guilty until proven innocent.

*11) Assessee listens intently to what the employee has to say.

12) Assessee asks the employee about his feelings of the issues that had been discussed.

*13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Problem Analysis Checklist: Experimental Videotape #7 (4.0)

* 1) Assessee inquires whether the employee has had any problems adjusting to the store.

2) Assessee asks the employee whether there is anything that he would like to bring up.

3) Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

4) Assessee inquires whether the employee had ever received any complaints from his subordinates.

* 5) Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

6) Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

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* 8) Assessee inquires whether the employee's subordinates needed more training.

9) Assessee inquires what the employee has to say about a complaint.

*10) Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

11) Assessee inquires as to the reason the employee works so many hours.

*12) Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

*13) Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

14) Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

15) Assessee inquires whether the employee has any questions about his responsibilities.
Problem Solution Checklist: Experimental Videotape #7 (3.2)

* 1) Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

2) Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

3) Assessee suggests that the employee explain to the staffers how the inventory system works.

4) Assessee recommends that the employee exert more authority and let the staffers know who is boss.

* 5) Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

6) Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

7) Assessee outlines what the employee should have done when describing errors.

8) Assessee recommends that the employee try delegating more responsibility to his subordinates.

9) Assessee suggests to the employee that he could threaten to reduce the hours of the staffers if they did not do their jobs.

10) Assessee suggests that the employee show his subordinates what he wants them to do rather than doing it himself.

11) Assessee suggests that a goal could be obtained without specifying the manner in which it could be accomplished.

12) Assessee suggests that the employee is going to have to develop better communications with his subordinates.

13) Assessee suggests that the employee hand out notecards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

14) Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

15) Assessee outlines action plan for employee development.
Sensitivity Checklist: Experimental Videotape #7 (4.0)

* 1) Assessee puts the employee at ease by asking him how he likes being at the new store.

2) Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

3) Assessee puts the employee at ease by acknowledging that his past performance appraisals were good.

4) Assessee acknowledges the difficulty of adjusting to a larger store.

5) Assessee states that s/he has confidence in the employee.

* 6) Assessee indicates that s/he is impressed by all of the hours the employee has been working.

7) Assessee compliments the employee on the responsibility he feels for his position.

8) Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

* 9) Assessee expresses the desire to work with the employee to remedy the problems.

10) Assessee conveys the impression that the employee is guilty until proven innocent.

*11) Assessee listens intently to what the employee has to say.

12) Assessee asks the employee about his feelings of the issues that had been discussed.

13) Assessee tells the employee that he is ultimately responsible for ensuring that all of the work is done properly.

14) Assessee acknowledges that it is difficult to turn over responsibility.

15) Assessee doesn't thank the employee for his time at the conclusion of the interview.
Pre-training Questionnaire

Rater # ________________

Before you begin training, we would like to gather some preliminary information. In collecting this information, you will become familiar with the dimensions and the behaviors involved in the research. Your responses will not be used to evaluate your individual performance in this research. It is simply one way we can establish the effectiveness of training. The questions should take approximately 15 minutes to complete. We ask that you give careful consideration to your responses. Please answer all of the questions.

You are asked to match each behavioral item with a performance dimension that you think best represents that behavior and write the letter in the space to the left of the / . Then rate the quality of that behavioral item using the 5-point scale provided below and write the number in the space to the right of the / .

Performance Dimensions

A. Problem Analysis  B. Problem Solution  C. Sensitivity

Hardly  To Some  Quite  An Extreme
Any  Degree  Adequate  A Bit  Amount Of
1-------------2-------------3-------------4-------------5

Behavioral Items

B/5 Assessee outlines what the employee should have done when describing errors.

A/5 Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

A/1 Assessee inquires whether the employee had ever received any complaints from his subordinates.

The letter/number entries preceding each behavioral item are target dimension and target score values.
A. Problem Analysis  B. Problem Solution  C. Sensitivity

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Hardly  To Some  Adequate  Quite  An Extreme

C/4 Assessee compliments the employee on the responsibility he feels for his position.

C/2 Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

A/3 Assessee asks the employee what he thinks could be done to improve his relations with his subordinates.

B/1 Assessee recommends that the employee exert more authority and let the staffers know who is boss.

A/2 Assessee inquires what the employee has to say about a complaint.

A/5 Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

C/5 Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

A/1 Assessee inquires whether the employee has had any problems adjusting to the store.

C/5 Assessee states that s/he has confidence in the employee.

A/2 Assessee inquires whether the employee has any questions about his responsibilities.

B/1 Assessee suggests to the employee that he could threaten to reduce the hours of staffers if they did not do their jobs.

B/4 Assessee suggests that the employee show his subordinates what he wants them to do rather than doing it himself.

B/1 Assessee recommends that the employee try delegating more responsibility to his subordinates.

C/5 Assessee expresses the desire to work with the employee to remedy the problems.

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A. Problem Analysis  B. Problem Solution  C. Sensitivity

Hardly  To Some  Quite  An Extreme
Any  Degree  Adequate  A Bit  Amount Of
1---------2--------3--------4--------5

A/3 Assessee inquires whether the employee's subordinates needed more training.

A/4 Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

A/1 Assessee inquires as to the reason the employee works so many hours.

B/5 Assessee outlines action plans for employee development.

B/2 Assessee suggests that the employee needs to take time to do a better job on his scheduling and ordering.

C/1 Assessee listens intently to what the employee has to say.
APPENDIX H:

BACKGROUND INFORMATION FOR THE INTERVIEW SIMULATION EXERCISE
INTERVIEW SIMULATION

In this exercise you are Chris Harmon, store manager for KENDALL #66. KENDALL is a large chain of retail department stores. You have been the store manager for three years. There are 12 department managers who report directly to you. One of the standard policies of KENDALL #66 is to conduct semi-annual performance evaluation meetings with each of the department managers. One of the department managers is Pat Winchell.

Pat is the manager of the Lawn Furniture department. Pat was recently transferred to KENDALL #66 from KENDALL #15, which is a smaller volume store. Pat comes to KENDALL #66 with favorable recommendations from the KENDALL #15 store manager. In the past, Pat has received especially good performance evaluation ratings. This is your first performance evaluation meeting with Pat, since Pat first joined KENDALL #66 four months ago.

It has come to your attention that at certain times Pat has shown poor decision-making judgments. Pat has frequently made hasty decisions, based on assumptions and emotions, instead of relevant information. For example, there was the time that Pat ordered picnic tables without checking last year's inventory records. This resulted in the underordering of much needed merchandise. Also, Pat has repeatedly scheduled the same full-time employees to work weekend nights. This has led to several employee complaints.

You have also noticed that there are a number of things in the department that don't get done, even though Pat works nearly 60 hours per week. Pat even comes in at off hours to supervise the department. On one occasion you have observed that Pat does the work that a staffer should be doing. Some of the staffers in Pat's department have expressed their dissatisfaction with having so little responsibility, and you suspect that Pat is one of those people who has to do everything, rather than relying on the help of others.

In addition, you have been informed that Pat is often too demanding and does not display the patience and concern for others that the staffers desire. Pat, on at least one occasion, yelled at a staffer who did not remember if a piece of merchandise was still in stock. Moreover, two staffers have asked Pat to explain how the inventory system works, and Pat only replied, "I suggest you find out soon."

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Today is November 19, 1985, the day of your meeting with Pat. Your goal is to discuss Pat's performance evaluation and to resolve any problems. You may handle the situation any way that you feel is appropriate. Act as if the situation were real.

AT THIS POINT, IF YOU ARE UNCLEAR ABOUT YOUR ROLE, ASK FOR CLARIFICATION.
APPENDIX I:

POST-TRAINING QUESTIONNAIRE
Post-training Questionnaire

Rater #_____________

We have completed the training component of this research. We are now interested in determining how effective this training has been in enabling you to distinguish between performance dimensions and performance standards. Therefore, we would like you to complete this questionnaire. Once again, your answers will not be used to evaluate your performance in this study. It is simply a means by which we can establish what you have learned from this training experience. The questions should take approximately 15 minutes to complete. We ask that you give careful consideration to your responses. Please answer all of the questions.

You are asked to match each behavioral item with a performance dimension that you think best represents that behavior and write the letter in the space to the left of the /. Then rate the quality of that behavioral item using the 5-point scale provided below and write the number in the space to the right of the /.

Performance Dimensions

A. Problem Analysis  B. Problem Solution  C. Sensitivity

Hardly  To Some  Quite  An Extreme
Any Degree Adequate A Bit Amount Of
1----------2---------------3-------------4-------------5

Behavioral Items

B/3 Assessee suggests that the employee sit down with his subordinates and attempt to develop a better working relationship.

A/4 Assessee inquires whether the employee consulted his subordinates regarding their scheduling preferences.

C/3 Assessee acknowledges that the employee's past performance appraisals were good.

B/5 Assessee suggests that the employee explain to the staffers how the inventory system works.
A. Problem Analysis  B. Problem Solution  C. Sensitivity

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C/4 Assessee acknowledges that it is difficult to turn over responsibility.

C/1 Assessee states that the employee is ultimately responsible for insuring that all of the work is done properly.

C/4 Assessee acknowledges the difficulty of adjusting to a larger store.

C/2 Assessee asks the employee about his feelings of the issues that had been discussed.

C/3 Assessee puts the employee at ease by asking him how he likes being at the new store.

A/5 Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

C/1 Assessee doesn't thank the employee for his time at the conclusion of the interview.

B/3 Assessee suggests that the employee hand out note cards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

B/4 Assessee suggests the employee talk with his subordinates and find out how they feel about working nights and weekends.

A/3 Assessee inquires about what the employee believes is the reason that his subordinates are not doing their work.

B/1 Assessee suggests that a goal could be obtained without specifying the manner in which it could be accomplished.

B/5 Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.

C/1 The assessee conveys the impression that the employee is guilty until proven innocent.
A. Problem Analysis  B. Problem Solution  C. Sensitivity

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A/5 Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

C/4 Assessee indicates that s/he is impressed by all of the hours the employee has been working.

B/3 Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

B/2 Assessee suggests that the employee is going to have to develop better communications with his subordinates.

A/1 Assessee asks the employee whether there is anything that he would like to bring up.

A/2 Assessee inquires about what the employee has to say about a complaint.
Pre-rating Questionnaire

Rater #____________

Before you begin the rating task, we would again like to assess the effectiveness of training and to re-acquaint you with the dimensions and behaviors. As in the two previous questionnaires, your answers will not be used to evaluate your individual performance in this research. The questions should take approximately 10 minutes to complete. We ask that you give careful consideration to your responses. Please answer all of the questions.

You are asked to match each behavioral item with a performance dimension that you think best represents that behavior and write the letter in the space to the left of the /. Then rate the quality of that behavioral item using the 5-point scale provided below and write the number in the space to the right of the /.

Performance Dimensions
A. Problem Analysis  B. Problem Solution  C. Sensitivity

Hardly Any To Some Adequate Quite An Extreme
To Some Adequate A Bit Amount Of
1-----------------2-----------------3-----------------4-----------------5

Behavioral Items

A/2 Assessee inquires whether the employee has any questions about his responsibilities.

C/1 Assessee states that the employee is ultimately responsible for insuring that all of the work is done properly.

A/5 Assessee relates the employee's lack of patience in his dealings with his subordinates to his long hours.

C/1 Assessee listens intently to what the employee has to say.

B/5 Assessee suggests that if the staffers did not want to work nights and weekends that he should rotate them.
A. Problem Analysis  B. Problem Solution  C. Sensitivity

Hardly  To Some  Quite  An Extreme
Any  Degree  Adequate  A Bit  Amount Of
1---------2---------3---------4---------5

B/4 Assessee suggests that the employee talk with his subordinates and find out how they feel about working nights and weekends.

C/4 Assessee acknowledges the difficulty of adjusting to a larger store.

B/3 Assessee suggests that the employee hand out note cards with responsibilities listed on them to his subordinates as a solution to the delegation problem.

C/2 Assessee acknowledges that a lot of employees are apprehensive about the appraisal process.

A/4 Assessee inquires whether there is a reason why the employee always schedules the full-time employees for weekend nights.

A/1 Assessee inquires whether the employee had ever received any complaints from his subordinates.

A/5 Assessee investigates how the employee took care of the problem when his subordinates didn't do the work or didn't do it well.

C/5 Assessee supports the employee by telling him that s/he wants to see how they can make his performance even better.

B/1 Assessee recommends that the employee try delegating more responsibility to his subordinates.

B/3 Assessee suggests that the employee might want to share his knowledge so that his subordinates would have a better understanding of how the company works.

C/5 Assessee expresses the desire to work with the employee to remedy the problems.

C/1 Assessee doesn't thank the employee for his time at the conclusion of the interview.

A/1 Assessee inquires as to the reason the employee works so many hours.
A. Problem Analysis  B. Problem Solution  C. Sensitivity

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A/1 Assessee inquires whether the employee has had any problems adjusting to the store.

B/1 Assessee suggests that the employee could threaten to reduce the hours of the staffers if they did not do their jobs.

A/5 Assessee relates the employee's adjustment to the new store to the problems that he is experiencing.

A/5 Assessee inquires whether the employee checked last year's inventory before ordering the picnic tables.

B/5 Assessee suggests that the employee explain to the staffers how the inventory system works.
APPENDIX K:

POST-EXPERIMENTAL QUESTIONNAIRE
Post-experimental Questionnaire

Part 1

1. RATER #: ________

2. Sex: Male   Female   (Circle one)

3. Age: ________

4. Race: White   Black   Hispanic   Asian   Other (Circle one)

5. Class: Soph   Junior   Senior   Grad student   (Circle one)

6. To what extent did the training help you evaluate the ratee accurately?

   Not at all  Somewhat  Quite a bit  To a great extent  Completely
   1...........2............3............4............5

7. To what extent did you perceive the experimenter as knowledgeable in observation and performance rating?

   Not at all  Somewhat  Quite a bit  To a great extent  Completely
   1...........2............3............4............5

8. To what extent was the experiment a learning experience for you?

   Not at all  Somewhat  Quite a bit  To a great extent  Completely
   1...........2............3............4............5

9. How confident are you that your ratings are accurate measures of the individual's performance?

   Not at all  Somewhat  Quite a bit  To a great extent  Completely
   1...........2............3............4............5

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Part 2

Please indicate the degree to which you agree with the following statements.

10. The experimenter seemed like an expert in behavioral observation and performance rating.

   Strongly Disagree Strongly Agree
   1............2............3............4............5

11. The experimenter convinced me that behavioral observation and performance rating is a critical skill for managers.

   Strongly Disagree Strongly Agree
   1............2............3............4............5

12. I enjoyed the training experience.

   Strongly Disagree Strongly Agree
   1............2............3............4............5

13. The experimenter seemed interested in the topic he presented.

   Strongly Disagree Strongly Agree
   1............2............3............4............5

14. The experimenter's presentation was logical.

   Strongly Disagree Strongly Agree
   1............2............3............4............5

15. As a result of participating in this experiment, I have learned something significant about evaluating others' performance.

   Strongly Disagree Strongly Agree
   1............2............3............4............5