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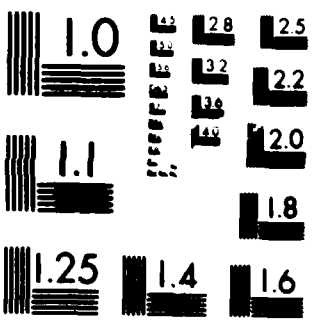

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Roseanne J. Foti
and
Brett A. Cohen

September, 1986
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Texas A&M University
and
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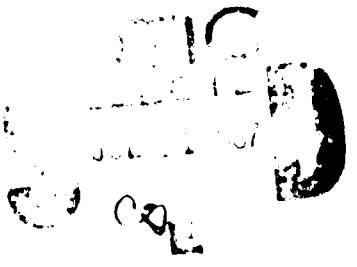

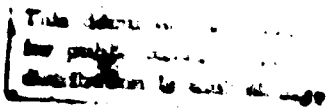

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This research evaluated differences in the psychometric quality of supervisor vs observer performance ratings. Specifically, type of rater (supervisor vs. observer) and type of instructions (rating vs. neutral instructions) were manipulated in a 2 X 2 factorial design to compare the traditional laboratory performance appraisal approach with a more realistic experimental design. Results indicated supervisors demonstrated more halo and leniency error in rating subordinates' behavior than did observers. Type of instructions given to the raters had no effect.

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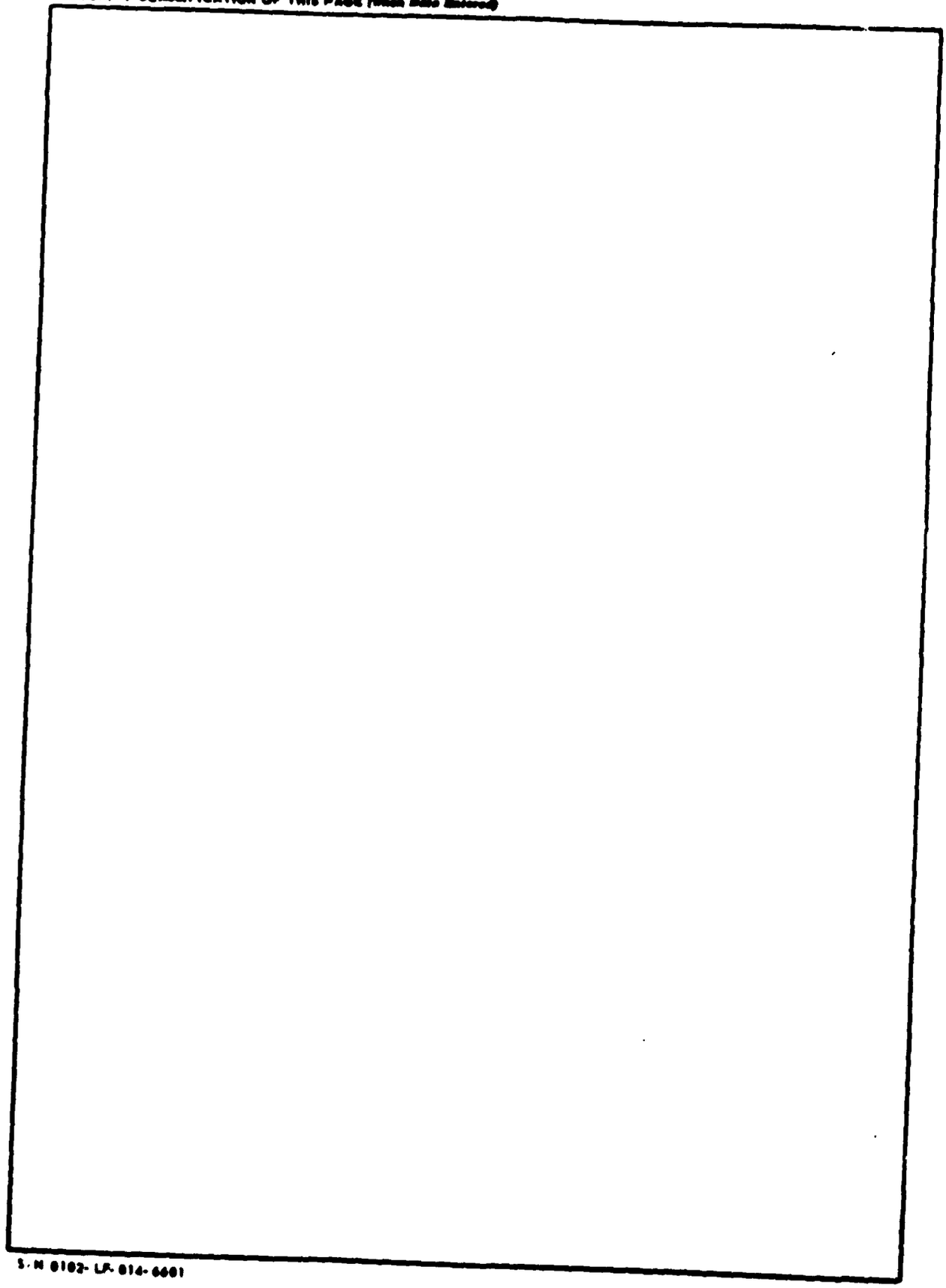
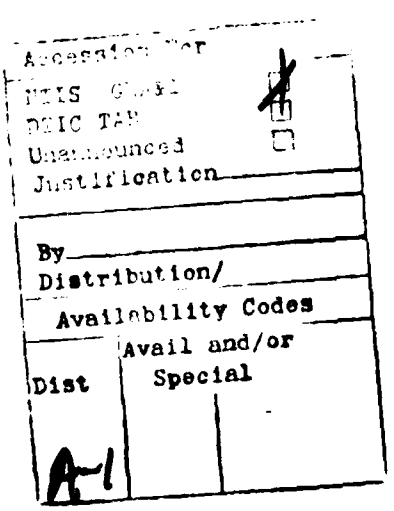


Abstract

This research evaluated differences in the psychometric quality of supervisor vs. observer performance ratings. Specifically, type of rater (supervisor vs. observer) and type of instructions (rating vs. neutral instructions) were manipulated in a 2 X 2 factorial design to compare the traditional laboratory performance appraisal approach with a more realistic experimental design. Results indicated supervisors demonstrated more halo and leniency error in rating subordinates' behavior than did observers. Type of instructions given to the raters had no effect.



Enhancing the External Validity of Laboratory Performance Appraisal Studies

For a laboratory experiment on performance appraisal to be externally valid, it should be as similar to the actual work setting as possible. Feldman (1981) suggests that the laboratory evaluator should be required to perform other tasks in addition to observing the ratee, since a supervisor in an actual work setting would not be able to concentrate solely on the employee's performance. Similarly, Banks and Murphy (1985) have emphasized the importance of incorporating contextual variables present in organizational settings into laboratory experiments on performance appraisals. The traditional laboratory experiment in which the subject is informed that s/he will be evaluating a stimulus person, and subsequently views a videotape of that person performing various tasks (Bigoness, 1976; Murphy, Martin & Garcia, 1982), is missing some crucial characteristics of the actual work setting. As a result, the entire cognitive process induced by this experimental procedure may be different than the one which would generally be employed by the rater in an actual work setting.

By instructing the subjects that their sole task in the experiment is to rate the performance of a target person, the experimenter is forcing the raters to attend to a specific type of stimulus input. The experimenter has induced a controlled process of attention in the subject. A rater in an actual work setting is concerned with a number of tasks, each of which requires some degree of attention. It is therefore likely that any information available to the rater in this setting will have been encoded by means of an automatic process of attention (Schneider & Shiffrin, 1977). The manner in which information is

encoded will strongly influence the availability of that information on subsequent judgements of the stimulus person (Srull & Wyer, 1979). A controlled process of attention should result in the specific behaviors observed by the rater being available during the subsequent performance appraisal. An automatic process of attention should result in the information being encoded into general schemas. The performance ratings in these instances will be influenced by the prototypes of the categories in which the information was stored, and should therefore exhibit rating errors (halo and leniency) based on a global impression of the ratee (Nathan & Lord, 1983).

The present experiment employed a 2 X 2 factorial design (rating instructions vs. neutral instructions X supervisor vs. observer) to compare the traditional laboratory performance appraisal approach with a more realistic, and therefore externally valid, experimental design. The dependent variables were the amount of halo and leniency errors committed on the rating forms. It was hypothesized that: 1) the supervisors would exhibit more halo and leniency errors in their ratings than the observers, and 2) the subjects receiving the neutral instructions would exhibit more halo and leniency errors than the subjects in the rating instructions condition.

Method

Subjects

One hundred and fifty introductory psychology students volunteered for the study, and received experimental credit for participating.

Task

All work groups performed a manufacturing game developed by Foti (1981). The purpose of the game is for the group to manufacture as many models in the

fastest time possible, in order to maximize profits. The subjects start out with $3,000 (play money), and are given a price list for raw materials and the finished products. The game requires some strategy in terms of deciding what to manufacture (there are instructions for 2 different models), the amount of raw materials to buy, and how to divide up the labor.

Procedure

Five subjects were run in each experimental session. One individual was randomly assigned to view the group on a monitor in a separate room; and one of the remaining four subjects was randomly assigned the role of supervisor for the group. Once the subjects were seated, they were either told that they would be asked to rate the performance of the group members on the task (rating instructions) and then instructed to follow the task directions as closely as possible, or they were merely instructed to follow the task directions as closely as possible (neutral instructions). The subjects were then given 10 minutes to read the instructions, and discuss how they would perform the task. It was the supervisor's responsibility to assign tasks, keep a running tab of monies spent on raw materials and monies earned, as well as evaluate the quality of each model produced. The person viewing the monitor received the same instructions. The work group was then given two 15-minute sessions to construct the models while the observer in the other room watched on the monitor. At the end of the second session the experimenter administered the questionnaire to all all five of the subjects.

Dependent Variables

Rating Scales. The measure of subordinate behavior consisted of 10 performance dimensions which were rated on 5-point Likert scales with anchors of poor and excellent. The dimensions were obtained from a pilot study using 15

subjects (three 5-person groups) who performed the manufacturing game and subsequently listed what they felt were relevant performance dimensions. The dimensions used are as follows: behavior flexibility, quality of decision-making, organizing/planning, delegatory skills, communication skills, construction skills, idea contribution, cooperation, quality of product and an overall evaluation of each subordinate.

Halo and leniency. Halo was operationalized as a subject's (either supervisor or observer) standard deviation across all nine performance dimensions for each subordinate (Saal, Downey & Lahey, 1980). Less dispersion among the dimension ratings, as evidenced by smaller standard deviations, indicates a greater halo effect. Leniency was operationalized as simply the average dimension rating for each subordinate.

Data Analysis Procedures

For the halo measure, a 2 X 2 X 3 (instructions X type of rater X subordinates) fixed-factor ANOVA with repeated measures on the latter two factors was performed. For the leniency measure, a 2 X 2 (instructions X type of rater) ANOVA with repeated measures on the rater factor was performed. For both analyses, groups were the unit of analysis. This was necessary because task groups were not constant across each supervisor/observer pair.

Results

It was hypothesized that supervisors would exhibit a stronger halo effect than observers. Results of the 2 X 2 X 3 ANOVA indicated a significant main effect for type of rater, F (1,28) = 4.06, $p < .05$, eta = .04, with means of .56 and .69 for supervisors and observers respectively. Additionally, it was hypothesized that supervisors would also exhibit more leniency. Results of the 2 X 2 ANOVA showed a significant main effect for type of rater, F (1, 28) =

13.77, $p < .001$, eta = .12, with means of 3.89 and 3.51 respectively for supervisors and observers. Thus, both components of hypothesis 1 were supported.

Our second hypothesis, that subjects in the neutral instructions condition would exhibit more halo and leniency error than subjects in the rating instructions condition was not supported. Results of the 2 X 2 X 3 ANOVA to assess the effects of type of instructions on halo error was nonsignificant, F (1, 28) = .73, $p < .39$, as well as the results of the 2 X 2 ANOVA on leniency error, F (1, 28) = .54, $p < .38$.

Discussion

The results of the present study suggest that there is a significant difference in the psychometric quality of performance ratings given by active supervisors versus passive observers. We found that supervisory ratings exhibited more halo and more leniency error. Thus, this study lends support to the contention that laboratory evaluators cannot be made to focus exclusively on the stimulus person's behavior (Banks & Murphy, 1985; Feldman, 1981), if the results are to be directly (rather than theoretically) relevant to employment settings.

Our second hypothesis, that type of instructions given to raters would impact on the psychometric quality of the ratings was not supported. It may be that given a laboratory situation, any type of instructions will induce controlled information processing, and only by making the observations part of some other tasks that the person is doing will automatic processing occur.

In conclusion, although the present research has demonstrated the difference in halo and leniency errors between supervisor and observer ratings, the issue of accuracy was not addressed. Given that there may be a weak positive relationship between certain rating errors (e.g., halo) and accuracy (Cooper, 1981), future research should focus on this issue.

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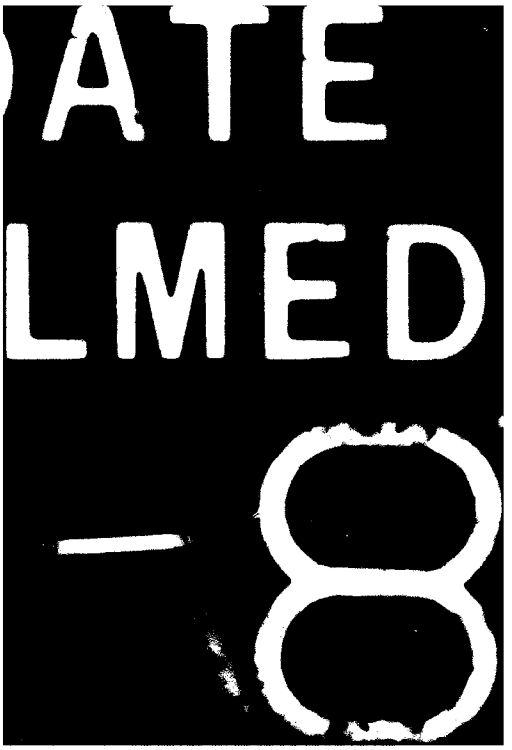
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