

AN ABSTRACT OF THE THESIS OF

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The current study investigated the effect of mood on performance evaluations. Mood (happy or sad) was induced using a series of self-referent statements. After the mood induction, subjects viewed a 15 minute videotaped performance of a teacher in a classroom setting, then evaluated that performance. Support was found for the possibility that mood does influence performance evaluations. However, no support was found for differential effects of mood on memory sensitivity or response bias.

THE EFFECTS OF MOOD ON PERFORMANCE EVALUATION

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CHAPTER I

INTRODUCTION

The purpose of a performance evaluation is to evaluate an employee's work behaviors and the results of those behaviors. These evaluations can be used for a number of organizational purposes, such as promotion, termination, discipline, and merit increases (Landy & Farr, 1983; Cascio, 1991). Theoretically, performance evaluation involves two distinct processes. The first, observation, includes the detection, perception, and recall or recognition of specific behavioral events. The second, judgment, involves the categorization, integration, and evaluation of information (Cascio, 1991). Hence, the process of performance evaluation would, on the surface, appear to be quite simple. However, as is the case in any process where human observation and judgment are necessary, studies have demonstrated that the performance evaluation process is oftentimes invalid and unreliable (Cooper, 1981; Feldman, 1981; Landy & Farr, 1980; Ilgen & Favero, 1985). More specifically, observation may be limited to only those behaviors the evaluator deems important, which may be a problem since not all evaluators deem the same behaviors important (Cascio, 1991). Likewise, judgment may be affected by variables such as the time allotted for the performance evaluation, the form used

for evaluating an employee, or even the evaluator's mood (Cascio, 1991; Sinclair, 1988).

Moods (affective states) fluctuate greatly from person to person and from day to day (Clark & Isen, 1982). Additionally, research (Bower, 1981; Clark & Isen, 1982) has demonstrated that mood can affect what a person remembers. More specifically, mood has been shown to affect the accessibility of positive and/or negative information. Hence, mood may play a role in the overall observations and judgments an evaluator makes regarding the performance of a subordinate. This paper will address mood and its effect on performance evaluation. The purpose of this study is to examine the effect of manipulating mood prior to viewing a ratee's performance on the consequent rating of that performance.

First, the author will briefly discuss performance evaluation. Second, Feldman's (1981) application of automatic and controlled processing to information processing theory will be examined. Third, other cognitive processes that have been found to affect performance evaluation will be reviewed. Fourth, mood will be defined and research reviewed that has demonstrated the effect of mood on cognitive processes. Fifth, this study will propose that mood, as a cognitive mediator, should be examined for its effect

on performance evaluations.

Performance Evaluation

Performance evaluation may be defined as a method or procedure that provides quantitative indices of the degree to which employees demonstrate appropriate work behaviors and the results of those behaviors (Landy & Farr, 1980, 1983). Because these evaluations are used for a number of organizational decisions (Landy & Farr, 1980, 1983; Cascio, 1991), it becomes evident that the accuracy of these measures is critical. However, several errors and systematic biases prevent consistent accuracy in performance ratings (Cooper, 1981). Cognitive mediators such as automatic and controlled categorization (Feldman, 1981), the performance cue effect (Murphy & Jones, in press; Binning, Zaba, & Whattam, 1986; Larson, 1982), and mood (Sinclair, 1988) are factors which may have an impact on distorting performance evaluations.

According to Feldman (1981), depending on the nature of the job, direct supervisory information regarding an employee may be fragmentary. Moreover, direct personal contact with subordinates may be minimal and/or restricted to a particular set of situations. This presents a dilemma whereby the supervisor must rely on memory or recall as a means of evaluating an employee's performance. Therefore, an

understanding of cognitive processes which act as mediators in performance evaluations is of central importance to improving the accuracy of performance evaluation systems.

Automatic and Controlled Processes

Feldman (1981) has made a strong case for the presence of automatic and controlled processes in four tasks which are required for performance evaluations. Those performance evaluation tasks are a) recognition and attention to relevant information, b) organization and storage of information for later access, c) organized recall of the information, and d) integration of the information into a summary judgment (Longenecker, 1984). Feldman (1981) proposes that under conditions in which a person is required to recognize a previously observed stimulus from a set of distracting stimuli, recognition judgments may be made in either an automatic or controlled fashion. Automatic processing occurs under conditions when the rater does not consciously attend to or monitor a particular stimulus or cognitive process (Schneider & Shiffrin, 1977; Shiffrin & Schneider, 1977). In contrast, controlled processing occurs when a stimulus evokes conscious attention, search, direction, and decision making processes.

Before automatic and controlled processes can be

fully understood, it is important to explain the effects of each process on the four stages of information processing discussed in the above paragraph. Lord (1985) states that recognition and attention to relevant information (stage one) is highly dependent on salient stimulus characteristics and the schema (preexisting knowledge which directs perceptual activity and modifies it as perception occurs) guiding automatic processes. Encoding (stage two) is the process by which an external stimulus is translated into an internal symbolic code for the perceiver. According to Lord (1985), this process may consist of equating a stimulus with a preexisting schema but "tagging" generic schema to represent inconsistencies. The tagging of generic schema may require some controlled processes for creating a new internal code for novel stimuli. Storage of information in long-term memory (stage three) depends on conscious, controlled processing. Retrieval (the last stage) is highly dependent on the schema with which it was encoded.

Retrieval of information which is highly dependent on the schema with which it was encoded results in several biases (Lord, 1985). One of the biases is the false recognition of schema-consistent information which was not observed. Here, characteristic behaviors are easily accessed and recognized as having been

observed, whereas uncharacteristic behaviors are accessed more slowly and are not recognized as frequently. As a result, performance evaluations may be more representative of the rater's beliefs and impressions of the ratee and less representative of actual performance. Another such bias relates to raters who depend on self-schema to facilitate encoding and retrieval.

Both automatic and controlled processes result in assigning a person to a category based on a prototype (Feldman, 1981). A prototype functions as a standard to which a body of input is compared and in relation to which new input is assimilated into the set of items remembered about a given experience or list of stimuli (Cantor & Mischel, 1977, 1979). Once a stimulus is categorized, the recall and recognition of that stimulus are biased toward general characteristics of the category or prototype, including the recognition of information that was never presented. It appears that these biases are due to differential forgetting and information accessibility (Feldman, 1981). Therefore, it is essential to examine cognitive processes which may act as mediators in conjunction with these automatic and controlled processes.

Memory Sensitivity and Response Bias

Two outcomes, derived from signal detection theory

that may result from automatic and controlled processes, are memory sensitivity and response bias (Snodgrass & Corwin, 1988). Memory sensitivity can be used to determine the degree to which different processes were used to encode the information. Given that raters attend to behaviors which are prototypical or expected for a specific category, information consistent with a prototype may enhance a rater's tendency to automatically process that information. In contrast, if a rater is presented with information that does not match a given prototype, a rater is more likely to use controlled processes to evaluate the information.

Measures of memory sensitivity (Pr) are calculated by subtracting the hit rate from the false alarm rate and thus represent the subject's ability to discriminate between behaviors which have been observed and behaviors which have not been observed (Snodgrass & Corwin, 1988). Hit rate (H) is defined as the probability that the subject classifies exhibited behaviors as having been observed and unexhibited behaviors as not having been observed. False alarm rate (FA) is defined as the probability that the subject classifies exhibited behaviors as having not been observed and unexhibited behaviors as having been observed. The calculation for memory sensitivity,

then, is $Pr = H - FA$.

Response bias represents the degree to which the subject systematically biases his or her ratings. In the present context, given that both automatic and controlled processes result in the assignment of a person to a category based on a prototype, raters may bias evaluations toward the general characteristics of the prototype, including information which was never presented. Response bias (Br) is calculated by subtracting memory sensitivity from the false alarm rate divided by one (Snodgrass & Corwin, 1988). The calculation for response bias (Br) is $Br = FA \div [1 - (H - FA)]$. Past research (Martell & Guzzo, 1991; Murphy & Jones, in press) has investigated the influence of memory sensitivity and response bias as they pertain to performance cues.

Studies examining the performance cue effect utilize descriptions of individuals or groups as either effective or ineffective. These descriptions are then given to subjects before or after observation (Larson, 1982; Binning, Zaba, & Whattam, 1986; Martell & Guzzo, 1988; Murphy & Jones, in press). The result of a performance cue is the activation of preconceived ideas that produce differential ratings of prototypical behaviors associated with the level of performance indicated by the cue (Binning, Zaba, & Whattam, 1986).

This line of research is important because it has found the evaluations of subjects given a performance cue of effective behaviors bias their ratings by recalling more effective behaviors and fewer ineffective behaviors. Likewise, subjects given performance cues of ineffective behaviors recall significantly more ineffective behaviors and fewer effective behaviors (Binning, Zaba, & Whattam, 1986; Murphy & Jones, in press).

Martell and Guzzo (1991) examined the degree performance cues affect evaluative judgments and the reporting of factual, descriptive information about groups. Subjects viewed a videotape depicting five men attempting to build a bridge of planks and ropes to transport themselves and a box across a pool of water. Performance cues were manipulated after observation. Positive and negative performance cues influenced both the descriptive reports of what took place in the group and the evaluations of those observed groups. Observers provided with a positive performance cue exhibited a bias to judge the occurrence of effective behaviors as more probable. However, observers given negative process or outcome cues recollected more ineffective behaviors as mediated by a probabilistic response bias. Other studies (Larson, 1982; Binning, Zaba, & Whattam, 1986; Murphy & Jones, in press) have

also identified the performance cue effect as a cognitive mediator which distorts performance ratings.

Another source of cognitive distortion found to affect evaluative outcomes is mood. Past research has found that mood affects helping behavior (Isen, Clark, Shalker, & Karp, 1978), the recall of positive versus negative words (Clark & Isen, 1982), the uniqueness of word association (Isen, Johnson, Mertz, & Robinson, 1985), state-dependent-learning (Bower, 1981), and performance evaluations (Sinclair, 1988).

Mood

Although Schachter and Singer (1962) argued that feeling states involve labeling or interpretation, Isen (1984) has defined mood as a pervasive, global, generalized affective component or state that influences seemingly non-affect related events. In mood research various techniques are used to induce mood prior to subjects completing memory or evaluative tasks. Mood induction techniques which have been used include hypnosis and imagery (Bower, 1981), gift giving (Isen et al., 1978), combinations of music, facial feedback (smiling\frowning), and memory elicitation (Weaver and McNeill, 1992), the use of word-association to affectively loaded words (Isen et al., 1985), and the reading of self-referent statements (Velten, 1967, 1968; Sinclair, 1988; Seibert & Ellis, 1991). This

line of research has found that mood can affect what a person remembers. More specifically, mood has been shown to affect the accessibility of positive and/or negative information.

Isen et al. (1978) conducted a study of 148 individuals walking through a mall and found that persons who are likely to be feeling good have a more positive outlook and their evaluations of recalled information reflect this positive bias. Additionally, they found that subjects in a positive mood will make more positive judgments about familiar items which are already stored in memory than control subjects. In a second study manipulating victory and defeat, Isen et al. (1978) found that subjects who had experienced a positive outcome at the time of recall remembered significantly more positive words. The same was not true, however, for those experiencing a negative outcome. In other words, subjects in the victorious condition did not recall more words than those in the defeat condition. They did, however, recall more positive words.

Clark & Isen (1982) have proposed an accessibility hypothesis whereby an affective state can function like a category name or other organizing unit as a cue to prime related cognitive material. In fact, they proposed that positive feeling states may affect

judgments and behavior through automatic processes. Additionally, an affective state at the time of encoding has been found to be associated with superior memory for information compatible with that affective state (Isen, 1984).

In a study examining the influence of positive affect on the uniqueness of word associations, Isen et al. (1985) found that positive feelings result in more positive and more unusual first associations to neutral words. In a second study, Isen et al. (1985) found that positive affect resulted in an increased number of unusual word associations given in response to neutral stimuli. Hence, they postulated that cognitive organization is influenced by affect. More specifically, if positive affect results in a change in cognitive categorization that is characterized by an increased breadth of concepts and increased perceptions of relatedness or integration of cognitive material, then it would follow that such a change may result in a broader range of associations.

In his 1981 study, Bower induced mood using hypnosis and imagery then asked subjects to recall childhood memories prior to age 15. Subjects in a happy mood recalled more pleasant than unpleasant memories and subjects in a sad mood recalled more unpleasant than pleasant memories. Furthermore, a

mood-state-dependent effect was found (i.e., recall mood interacted with learning mood). More specifically, emotional mood was helpful in distinguishing target material from interfering material.

Finally, Sinclair (1988) conducted a study to investigate the effects of order of information acquisition and mood state on performance appraisal decisions. Subjects were asked to read a paper description of a teacher's background and then a set of 32 behaviors which were loaded with either positive or negative information. The experimenters induced subject mood using the Velten (1968) technique whereby subjects read a series of cards containing self-referent statements. Finally, subjects were asked to write a brief open-ended description of their impressions of the teacher.

Sinclair (1988) found that subjects encoding initial positive information made more positive global evaluations than those encoding initial negative information. This was also true of the final written evaluations. Subjects who encoded initial positive information wrote more positive descriptions of the target than did subjects who encoded initial negative information. Furthermore, subjects in the elated group retrieved more positive and less negative information

when compared to subjects in the neutral and depressed groups. In contrast, subjects in the depressed and neutral groups retrieved less positive information than did subjects in elated states.

Thus far, performance evaluations have been discussed, cognitive processes which have been found to affect evaluations have been discussed, and research examining the effect of mood on evaluations has been discussed. The implication of this line of research is that if cognitive processes affect performance evaluations and mood affects cognition, then mood should affect performance evaluations.

Hypotheses

- 1a. Subjects in the sad mood condition will be more accurate in reporting ineffective present behaviors than subjects in the happy mood condition.
- 1b. Subjects in the sad mood condition will be less accurate in reporting ineffective absent behaviors than subjects in the happy mood condition because they will be more biased with respect to ineffective behaviors.
- 2a. Subjects in the sad mood condition will be equally accurate in reporting effective present behaviors to subjects in the happy mood condition because their mood will not affect the fairness of rating effective behaviors.

- 2b. Subjects in the sad mood condition will be more accurate in reporting effective absent behaviors than subjects in the happy mood condition.
3. There will be an interaction between mood and effectiveness of behavior on response bias.
 - 3a. Response bias for subjects in the happy mood condition will be more liberal than that of subjects in the sad mood condition for effective behaviors (more effective behaviors will be reported as present).
 - 3b. Response bias for subjects in the sad mood condition will be more liberal than that for subjects in the happy mood condition for ineffective behaviors (more ineffective behaviors will be reported as present than in the happy mood condition).
4. There will be an interaction between mood and effective behaviors on memory sensitivity.
 - 4a. Memory sensitivity for effective behaviors in the happy mood condition will be greater than that for the sad mood condition.
 - 4b. Memory sensitivity for ineffective behaviors in the sad mood condition will be greater than that for the happy mood condition.

CHAPTER II

METHODOLOGY

Subjects

One hundred fifteen undergraduates enrolled in psychology and special education courses at Emporia State University, Emporia, Kansas volunteered to participate in the study. Subjects were run in large groups.

Instruments

Mood Induction. The mood induction procedure employed in this study was a modification of the Velten technique (1967, 1968) in which a series of self-referent statements were employed. It differed from the Velten technique in that the mood induction items a) contained contemporary language familiar to typical college undergraduates; b) contained no reference to potential cognitive processing deficits or strategies that may either interfere with or facilitate performance on some criterion cognitive task; c) contained no reference to suicidal or somatic states; and d) was briefer as it contained 25 items rather than the 60 items employed in the Velten procedure. The mood induction procedure employed was designed by Seibert and Ellis (1991). It was found to be effective as assessed by a depression adjective checklist (DACL) and by the induction of both sad and happy moods

producing poorer recall than neutral moods.

In this procedure, one self-referent statement was typed on an unlined 8 1/2 x 11 inch sheet of paper. Subjects were asked to read each of the 25 statements separately (see appendix D). Finally, after each sentence was read, subjects were asked to think about events from their lives thereby "building" the mood (Sinclair, 1988).

Postinduction Mood Scale. To assess the success of mood induction, a modified version of the Wessman and Ricks (1966) Elation-Depression Scale was employed. The terms "happy" and "sad" were substituted for the terminology "elation" and "depression" (see appendix C).

Videotape. The 15 minute videotape showed an instructor's performance during a classroom situation. The instructor exhibited five effective and five ineffective behaviors.

Performance Evaluation Form. The performance evaluation form (see appendix G) was developed from a list of 250 scaled incidents of college classroom teaching behaviors (Sausser, Evans, & Champion, 1979). The validity of this evaluation form was established by a panel of four expert judges. Additionally, a pilot study was conducted to examine the form for reliability.

Filler Task. The filler task, one minute in length, consisted of subjects circling threes on a table of random numbers. This task was included to allow for a time-interval between viewing the performance and rating the performance.

Procedure

This procedure was presented as two purportedly unrelated studies. Two experimenters entered the class. Experimenter 1 (E1) explained she was interested in validating a mass mood induction procedure. Experimenter 2 (E2) explained she was interested in validating a new teacher performance evaluation form. Then, E1 explained it was convenient to collect the data for both studies at the same time since a time lag was required for both. After signing the consent form, subjects were randomly assigned to either the happy or sad condition. The mood induction was then administered and, immediately following, subjects completed the mood scale.

The mood induction materials consisted of a booklet containing instructions for the mood induction procedure (see appendix D) and 25 self-referent statements (see appendices E and F) typed individually on 8 1/2 x 11 inch unlined sheets of paper. Subjects were instructed not to go to the next page until the experimenter instructed them to do so. The sentences

were paced at 20 second intervals as in the Velten (1967) and Seibert and Ellis (1991) techniques. The mood induction was followed by a three-minute incubation period where subjects were asked to build on the mood by reflecting on personal experiences (Sinclair, 1988). After the mood induction was completed, E2 explained that subjects were to view a videotaped performance of an instructor during a normal classroom period and that they would evaluate the instructor's performance using a new performance evaluation form that was in its developmental stages and which subjects were helping to refine. Subjects then viewed the videotape. The one minute filler task, circling threes on a table of random numbers, was completed, followed by a second mood scale. The subjects completed the evaluation form, were debriefed and thanked for their participation.

Statistical Design

The independent variables in this design were mood (happy or sad) and effectiveness of instructor behavior (effective or ineffective). The dependent variable was the score on the teacher evaluation form. The score was calculated in the following manner a) for present behaviors, it was the sum of the five effective present behaviors, and b) for absent behaviors, it was the sum of the five reversed effective absent behaviors.

Demographic information was collected for use in describing the sample.

CHAPTER III

RESULTS

Manipulation Check.

Mood Check 1. Mood Check 1 was conducted immediately following the mood induction procedure. The effectiveness of the mood manipulation was analyzed using an Anova design with manipulated mood as the independent variable and Mood Check 1 as the dependent variable. Manipulation of mood resulted in a significant main effect for manipulated mood ($F(1, 112) = 99.4, p < .0001$). When asked about their mood, those in the happy treatment condition reported being happier ($\bar{X} = 7.43$) than those in the sad treatment condition ($\bar{X} = 4.41$), thus demonstrating the effectiveness of the mood manipulation.

Mood Check 2. Mood Check 2 was conducted after subjects viewed the 15 minute video-taped performance of the teacher they were to evaluate. Mood Check 2 was analyzed using an Anova design with manipulated mood as the independent variable and Mood Check 2 as the dependent variable. The effect of the mood manipulation was found to be significant ($F(1, 112) = 99.4, p < .0001$). Subjects in the happy treatment condition still reported being happier ($\bar{X} = 6.75$) than those in the sad treatment condition ($\bar{X} = 5.66$).

Hypotheses

Hypotheses 1 and 2 predicted a 3-way interaction of effectiveness of behavior, presence\absence of behavior, and mood. The Omnibus F-test indicated the 3-way interaction was significant ($F(1, 112) = 4.65, p < .03$). As a result, simple comparisons were conducted for each of the four hypotheses which are discussed below. The means for the 3-way interaction are presented in Table 1 and the 3-way interaction is graphically depicted in Figure 1.

Hypothesis 1a. It was predicted subjects in the sad mood condition would be more accurate in reporting ineffective present behaviors than subjects in the happy mood condition. Although the comparison did not indicate a significant difference ($F(1, 112) = 3.69$), the means were in the predicted direction. Subjects in the happy mood condition were less accurate than subjects in the sad mood condition.

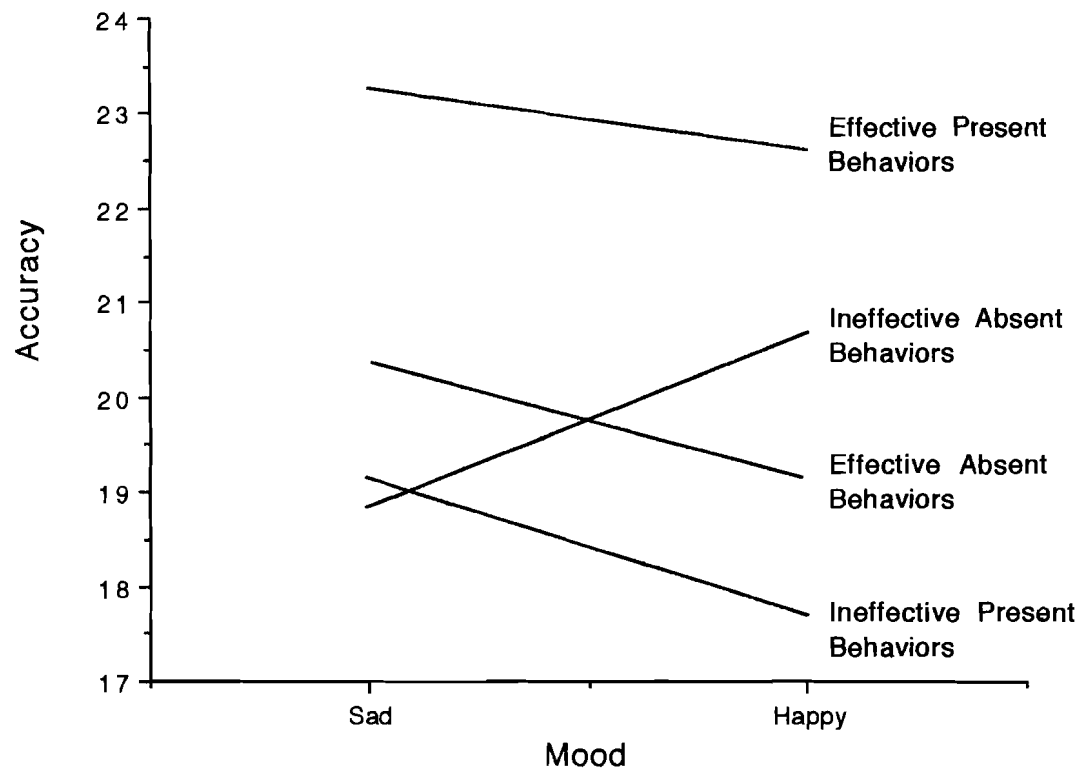
Hypothesis 1b: Subjects in the sad mood condition were predicted to be less accurate in reporting ineffective absent behaviors than subjects in the happy

Table 1:
Cell Means and Standard Deviations of Accuracy for the
3-way Interaction

	Effective		Ineffective	
	Present	Absent	Present	Absent
Mood				
Happy	22.61	19.18	17.67	20.67
	5.29	4.46	4.79	5.40
Sad	23.26	20.38	19.12	18.84
	4.45	3.25	5.16	5.02

Note. Within each cell, the upper number refers to the mean, while the lower number refers to standard deviation.

Figure 1: The Interaction of Mood, Presence/Absence and Behavior Effectiveness on Rating Accuracy



mood condition because they would be more biased with respect to ineffective behaviors. This hypothesis was supported ($F(1, 112) = 8.46$).

Hypothesis 2a: It was predicted subjects in the sad mood condition would be equally accurate in reporting effective present behaviors to subjects in the happy mood condition because their mood would not affect the fairness of rating effective behaviors. This hypothesis was supported in that no differences were found between the two groups ($F(1, 112) = 1.07$).

Hypothesis 2b: Subjects in the sad mood condition were predicted to be more accurate in reporting effective absent behaviors than subjects in the happy mood condition. Support was found for this prediction ($F(1, 112) = 5.31$).

Hypothesis 3: Hypothesis 3 predicted an interaction between mood and effectiveness of behavior on response bias. This interaction was not significant ($F(1, 112) = .955, p < .329$). However, the main effect for effectiveness of behavior was highly significant ($F(1, 112) = 62.051, p < .001$). The means are presented in Table 2. As indicated by these means, subjects used a much more liberal decision criterion for effective behaviors than for ineffective behaviors.

Hypothesis 4: Hypothesis 4 predicted an interaction between mood and effectiveness of behavior

on memory sensitivity. Although in the predicted direction, this hypothesis did not reach statistical significance ($F(1, 112) = 2.79, p < .096$). This interaction is presented in Figure 2, and the means are presented in Table 3.

Hypothesis 4a: Memory sensitivity for effective behaviors in the happy mood condition was predicted to be greater than the sad mood condition. This prediction was not supported. In fact, subjects in the sad mood condition were more sensitive to memory for effective behaviors than subjects in the happy mood condition ($F(1, 112) = 8.09$)

Hypothesis 4b: Memory sensitivity for ineffective behaviors in the sad mood condition was predicted to be greater than the happy mood condition. This prediction was not supported ($F(1, 112) = 1.07$). Memory sensitivity for ineffective behaviors was relatively equal across both groups.

Table 2:

Cell Means and Standard Deviations of Response Bias for
the 2-way Interaction

	Effective	Ineffective
Mood		
Happy	.72 .33	.36 .28
Sad	.74 .31	.46 .29

Note. Within each cell, the upper number refers to the mean, while the lower number refers to standard deviation.

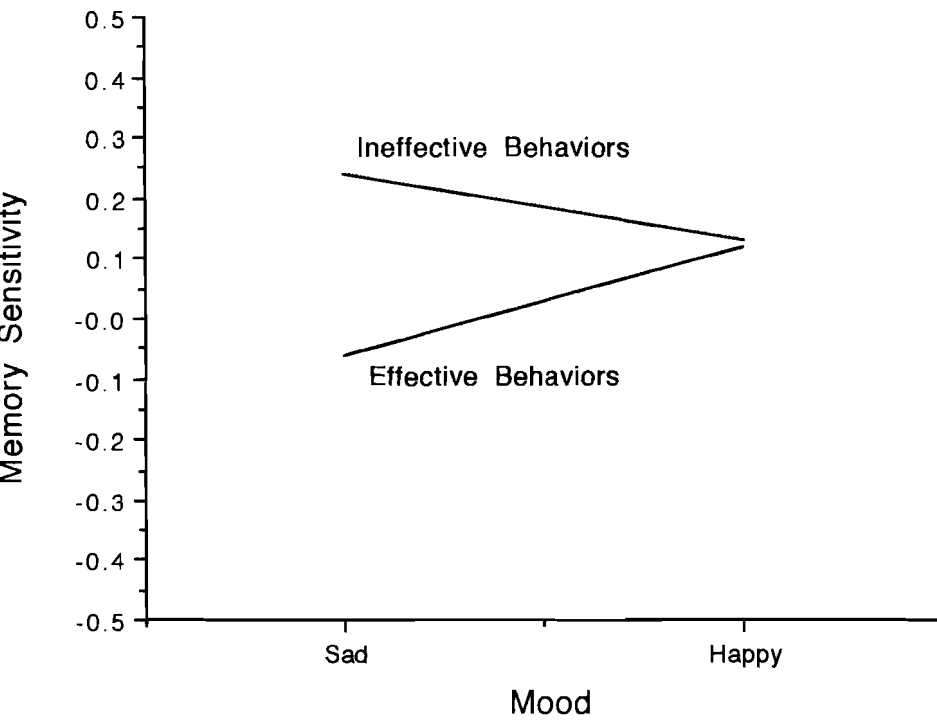
Table 3:

Cell Means and Standard Deviations of Memory
Sensitivity for the 2-way Interaction

	Effective	Ineffective
Mood		
Happy	.333	.186
	.260	.344
Sad	.438	.152
	.308	.255

Note. Within each cell, the upper number refers to the mean, while the lower number refers to standard deviation.

Figure 2: The Interaction of Mood and Behavior Effectiveness on Memory Sensitivity



CHAPTER IV

DISCUSSION

Analyses of the 3-way interaction of effectiveness of behavior, presence\absence of behavior, and mood supported Hypotheses 1 and 2. Specifically, subjects in the sad mood condition were less accurate in reporting ineffective absent behaviors than subjects in the happy mood condition. Subjects in the sad mood condition and subjects in the happy mood condition were equally accurate in reporting effective present behaviors. Subjects in the sad mood condition were more accurate in reporting effective absent behaviors than subjects in the happy mood condition. Lastly, although in the predicted direction, hypothesis 1a did not reach statistical significance. Therefore, the prediction that subjects in the sad mood condition would be more accurate in reporting ineffective present behaviors than subjects in the happy mood condition was not supported.

Hypothesis 4 was not supported by the 2-way interaction between mood and effectiveness of behavior on memory sensitivity. Hypothesis 4a which predicted that, for effective behaviors, memory sensitivity for subjects in the happy mood condition would be greater than subjects in the sad mood condition was not supported. In fact, it was found subjects in the sad

mood condition had greater memory sensitivity for effective behaviors than subjects in the happy mood condition, which is in opposition to the prediction. Support of this hypothesis would indicate subjects in the happy mood condition would encode effective behaviors better and, therefore, would be more likely to report effective behaviors than subjects in the sad mood condition. However, findings in the present study suggest just the opposite. Hypothesis 4b, which predicted, for ineffective behaviors, memory sensitivity for subjects in the happy mood condition would be lesser than subjects in the sad mood condition, was not supported. This indicates that subjects in the happy mood condition do not encode ineffective behaviors less well. These results suggest that a differential memory sensitivity does occur and is affected by an evaluator's mood.

Analyses did not support Hypothesis 3, which predicted a 2-way interaction between mood and behaviors on response bias. Hypothesis 3a, which predicted response bias for effective behaviors in the happy mood condition would be more liberal than the sad mood condition, was not supported. This indicates subjects in the happy mood condition are not more likely to lower their threshold for effective behaviors than subjects in the sad mood condition. As a result,

both groups hold effective behaviors to a similar standard. Hence, both groups are more likely to recall and report effective behaviors. Hypothesis 3b, which predicted response bias for ineffective behaviors in the sad mood condition would be more liberal than the happy mood condition, was not supported. This indicates response bias for ineffective behaviors was found to be relatively equal across both groups.

Theoretical Implications

Consistent with past theoretical research on mood and cognitive activity (Isen et. al, 1978; Isen, 1984; Isen et. al, 1985; Bower, 1981; Sinclair, 1988), the present study demonstrated that mood can influence the cognitive processing of information about a target, thereby influencing evaluations of that target.

In support of Murphy and Jones (in press), the present study indicated a pattern, whereby, subjects may process effective behaviors differently than ineffective behaviors. Subjects in both the happy and sad mood conditions reported more effective than ineffective behaviors due to a more liberal response bias for these behaviors. This pattern of results indicates a tendency for subjects to report more effective behaviors regardless of what they have witnessed, which would result in high accuracy for effective present behaviors and low accuracy for

effective absent behaviors. These results indicate that raters are more likely to err in a positive direction than in a negative direction. This may be operating when recruiters\interviewers have a high rate of false-positive hires or when performance appraisers exhibit leniency in their judgments.

The results of this study indicate further research in the area of mood and performance evaluation is warranted. Ilgen and Favero (1985) state "a rater may attend to or recall only that information which he or she feels is relevant to evaluating a given ratee (p. 313)." If mood is acting as a cognitive mediator (Bower, 1981; Isen, et al., 1978; Isen, 1984; Sinclair, 1988), it may be fruitful to examine the differential effects of mood on encoding and recall. Such a study would enable a researcher to differentiate between the differences in the effects caused by mood at encoding and recall.

Research Implications

The present study looked at the effects of mood at encoding only. However, it is impossible to determine whether these effects were created by errors of encoding, recall or both. If future research added to the present study a mood manipulation just prior to the completion of behavioral ratings, the effects of mood on recall and the effects of mood on encoding would

become much clearer.

Although the present study resulted in support for some of the hypotheses regarding mood and performance ratings, future replications of the present study may be enhanced if the videotaped performance is reduced to 10 minutes instead of the current 15 minutes. In the present study, it appears the moderate effects of the mood induction, coupled with the 15 minute videotape perhaps allowed the effects of the mood manipulation to wane and the subject's original mood to return. More dramatic results may be found if mood is allowed to remain in the manipulated state at time of evaluation. Additionally, the shorter videotape may allow for stronger effects of mood at evaluation.

Future studies may also be enhanced by running subjects individually as opposed to the large groups the current study used. This variation would, at minimum, reduce extraneous variation introduced by the mass data collection.

Practical Implications

The practical implications for the present study point to the encouragement of evaluators to take mood into consideration when evaluating another's performance. This would hold true in traditional performance appraisals, job interviews, assessment center ratings, and other evaluation processes. Since

the present results indicate evaluators err on the positive side, false-positives and other evaluator leniency errors may continue regardless of training and/or objective evaluation techniques.

As a final note, the generalizability of the present study to applied evaluation processes might be questioned. However, two arguments strengthen the value of this study. First, the experimental situation used here is similar to other rating situations where the rater has a highly restricted view of the ratee. Second, since mood is a transient state, the present study replicates the effects which may be modifying rater's evaluation of a ratee.

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Appendix B

PROTOCOL

Please listen carefully to the following instructions. If you do not understand a part of the procedure, please ask and I will be happy to go over it again.

I am going to pass out packets to each of you. It is important that you read and follow the directions carefully. You are to read only what I instruct you to read, and you will not go on to any other part of the packet until you are instructed to do so. If you have any questions once the procedure has begun, you will raise your hand and I will come to your desk. You will not ask the question aloud.

Two studies will be conducted simultaneously. By that, I mean that the data for each one of the studies will be collected at the same time. The first study is the validation of a mass mood induction procedure. The second study is to validate a teacher evaluation form which is in its developmental stages and which you are helping to refine. The mood induction study will be conducted first, followed by the teacher evaluation study. The two studies are being conducted in this fashion to save time. Are there any questions?

Appendix C
WESSMAN AND RICKS SCALE

Please read all of the following statements, then circle the number that corresponds with how you feel now.

1. Utter sadness and gloom. Completely down. All is black and leaden.
2. Tremendously sad. Feeling terrible, miserable, "just awful."
3. Sad and feeling very low. Definitely "blue."
4. Spirits low and somewhat "blue."
5. Feeling a bit low. Just so-so.
6. Feeling neutral.
7. Feeling pretty good, "O.K."
8. Feeling very good and cheerful.
9. Happy and in high spirits.
10. Very happy and in very high spirits. Tremendous delight and buoyancy.
11. Complete happiness. Rapturous joy and soaring ecstasy.

Appendix D

INSTRUCTIONS FOR MOOD INDUCTION

In using these scales, the sentences are printed separately on 8 1/2 x 11 inch unlined sheets of paper and they are paced at 20 second intervals (Velten, 1967,1968; Seibert & Ellis, 1991). A three minute incubation period will follow the mood induction procedure to aid in building the mood (Sinclair, 1988).

1. I will read each of the following statements to myself.
2. In this part of the experiment, I will be reading a series of statements. These statements represent a mood state. In order to participate fully and successfully, I will need to be willing to feel and experience each statement as it would apply to me personally. In other words, when I read each statement, I will allow myself to respond as though the statement had been my own original thought. I will go with the feeling and not try to stop it.
3. At first I might feel like resisting the mood. However, I will see that it is the case that I have the opportunity to learn to talk myself into a mood, and obviously, I will also learn how to talk myself out of one. When this happens, I will find that I have learned something valuable about myself; I can learn to control my moods. Thus, I will try to experience the mood suggested.
4. I will feel each item, making the statement my own. I will experience the mood suggested and will not attempt to stop it. I will visualize a scene in which I have had such a feeling or thought. Then I will begin to think whatever comes to my mind that relates to the feeling. This is a type of free association--letting thoughts that pertain to the feeling flow freely.
5. I am now ready to experience the statements that follow. From this point forward whenever the experimenter signals me, I will go on to the next page. I will spend the time between sentences reading the statements and experiencing the feelings they suggest to me. I am ready to begin.

Appendix E

HAPPY MOOD INDUCTION SCALE

1. Being in college makes my dreams more possible.
2. The world is full of opportunity and I'm taking advantage of it.
3. I know if I try I can make things turn out fine.
4. I bet things will go well for the rest of the day.
5. When I have the right attitude, nothing can depress me.
6. Most people like me.
7. I've got some good friends.
8. I can make things happen.
9. My parents brag about me to their friends.
10. I know I can get the things I want in life.
11. My future is so bright I've got to wear shades.
12. I feel creative.
13. Nothing can bum me out now.
14. Things look totally awesome.
15. The relationships I have now are the best I've ever had.
16. It doesn't get any better than this.
17. I can make any situation turn out right.
18. I feel completely aware.
19. I'm in charge of my life and I like it that way.
20. Life's a blast, I can't remember when I felt so good.
21. I'm going to have it all.
22. When it comes right down to it, I'm just too cool.
23. I know I can do; I'm going to seize the day!
24. I'm energized.
25. It's great to be alive!

Appendix F

SAD MOOD INDUCTION SCALE

1. I feel a little down today.
2. My classes are harder than I expected.
3. Everyone else seems to be having more fun.
4. Sometimes I feel so guilty that I can't sleep.
5. I wish I could be myself, but nobody likes me when I am.
6. Today is one of those days when everything I do is wrong.
7. I doubt that I'll ever make a contribution in the world.
8. I feel like my life's in a rut that I'm never going to get out of.
9. My mistakes haunt me, I've made too many.
10. Life is such a heavy burden.
11. I'm tired of trying.
12. Even when I give my best effort, it just doesn't seem to be good enough.
13. Nobody understands me or even tries to.
14. I don't think things are ever going to get better.
15. I feel worthless.
16. What's the point of trying?
17. My parents don't know who I am.
18. When I talk no one really listens.
19. I feel cheated by life.
20. Why should I try when I can't make a difference anyway?
21. Sometimes I feel really guilty about the way I've treated my parents.
22. Every time I turn around, something else has gone wrong.
23. I'm completely alone.
24. There is no hope.
25. I feel I am being suffocated by the weight of my past mistakes.

Appendix G

TEACHER EVALUATION FORM

Instructions: This evaluation form is intended to collect information about what behaviors were exhibited by the instructor. Please read each behavior and indicate below how certain you are that the behavior was or was not exhibited by the instructor. Please use the following scale.

- 1 - Highly certain the behavior did not occur
- 2 - Certain the behavior did not occur
- 3 - Fairly certain the behavior did not occur
- 4 - Fairly certain the behavior occurred
- 5 - Certain the behavior occurred
- 6 - Highly certain the behavior occurred

Used flowery language and talked above the heads of students.

: 1 : 2 : 3 : 4 : 5 : 6 :

Lectured very rapidly.

: 1 : 2 : 3 : 4 : 5 : 6 :

Tied each topic in with the preceding one.

: 1 : 2 : 3 : 4 : 5 : 6 :

Continuously referred back to notes while attempting to lecture.

: 1 : 2 : 3 : 4 : 5 : 6 :

Tried to relate complex material to the students in a manner that they could understand.

: 1 : 2 : 3 : 4 : 5 : 6 :

- 1 - Highly certain the behavior did not occur
- 2 - Certain the behavior did not occur
- 3 - Fairly certain the behavior did not occur
- 4 - Fairly certain the behavior occurred
- 5 - Certain the behavior occurred
- 6 - Highly certain the behavior occurred

Presented irrelevant information.

: 1 : 2 : 3 : 4 : 5 : 6 :

Used long, involved examples which confuse the class.

: 1 : 2 : 3 : 4 : 5 : 6 :

Stated the objective of the lecture.

: 1 : 2 : 3 : 4 : 5 : 6 :

Wrote everything on the board in outline form to make notetaking easier.

: 1 : 2 : 3 : 4 : 5 : 6 :

Used handouts to present material.

: 1 : 2 : 3 : 4 : 5 : 6 :

Lectured in a very disorganized manner, jumping from topic to topic with no apparent connection.

: 1 : 2 : 3 : 4 : 5 : 6 :

Presented material orderly and concisely.

: 1 : 2 : 3 : 4 : 5 : 6 :

- 1 - Highly certain the behavior did not occur
- 2 - Certain the behavior did not occur
- 3 - Fairly certain the behavior did not occur
- 4 - Fairly certain the behavior occurred
- 5 - Certain the behavior occurred
- 6 - Highly certain the behavior occurred

Sometimes lost his\her place in notes.

: 1 : 2 : 3 : 4 : 5 : 6 :

Spoke clearly and loudly.

: 1 : 2 : 3 : 4 : 5 : 6 :

Asked students if writing on the board was legible.

: 1 : 2 : 3 : 4 : 5 : 6 :

Lectured at an even pace, with pauses after large segments of material or examples.

: 1 : 2 : 3 : 4 : 5 : 6 :

Spoke distinctively and used good grammar.

: 1 : 2 : 3 : 4 : 5 : 6 :

Had difficulty explaining things simply enough for students to understand.

: 1 : 2 : 3 : 4 : 5 : 6 :

Often stammered.

: 1 : 2 : 3 : 4 : 5 : 6 :

- 1 - Highly certain the behavior did not occur
- 2 - Certain the behavior did not occur
- 3 - Fairly certain the behavior did not occur
- 4 - Fairly certain the behavior occurred
- 5 - Certain the behavior occurred
- 6 - Highly certain the behavior occurred

Mumbled during the lecture.

: : : : : :

1 2 3 4 5 6

Appendix H
DEMOGRAPHIC INFORMATION

1. Age:
2. Classification:
3. Major:
4. Place of residence: dorm House Apt
5. Gender: Male Female

Appendix I

DEBRIEFING

Research in psychology is an important activity since, without it, we have no way of gaining new knowledge or insight into human behavior. In the search for answers to some questions, however, occasionally deception must be used. Otherwise, data is contaminated by participant knowledge of what the researcher is trying to find out. This study is one which, unfortunately, deception had to be used in order to collect uncontaminated data.

The true purpose of this study is to determine if mood has any effect on performance evaluation. Past research has shown that cognitive activity (thought processes) affect performance evaluations. Additionally, past research has shown that mood affects a person's cognitive activity. Hence, this research is being conducted to determine if mood affects performance evaluations through affecting a person's cognitive activity. I am sorry that I had to deceive you in order to collect this data.

I want to thank each of you for your participation. I must ask you not to discuss this study with anyone for two weeks as the people you might discuss it with may, themselves, be subjects for this study. Hence, if they know what the purpose of the study is, then their data will be invalidated. Does anyone have questions?

I, Dollia Frizell , hereby submit this thesis\report to Emporia State University as partial fulfillment of the requirements for an advanced degree. I agree that the Library of the University may make it available for use in accordance with its regulations governing materials of this type. I further agree that quoting, photocopying, or other reproduction of this document is allowed for private study, scholarship (including teaching) and research purposes of a nonprofit nature. No copying which involves potential financial gain will be allowed without written permission of the author.

Dollia Frizell
Signature of Author

12-15-93
Date

The Effects of Mood on Performance Evaluation
Title of Thesis\Research Project

Ray Cooper
Signature of Graduate Office Staff Member

12-16-93
Date Received