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**A STUDY OF VARIABLES WHICH CAN INCREASE THE
EFFECTIVENESS OF BEHAVIOR MODELING TRAINING
FOR SUPERVISORS AND MIDDLE MANAGERS**

By

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ABSTRACT

A STUDY OF VARIABLES WHICH CAN INCREASE THE EFFECTIVENESS OF BEHAVIOR MODELING TRAINING FOR SUPERVISORS AND MIDDLE MANAGERS

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Behavior modeling (or Applied Learning) training for supervisors is quite popular in the training literature although only a relatively few studies have been reported in the scientific literature. Results have consistently demonstrated that the training is effective in increasing the knowledge of supervisors, but little is known about how to maximize the effectiveness of the training in the work setting. This study tested several hypotheses about how to increase the effectiveness of the training for behaviors and performance results on the job.

The theoretical framework for the research was drawn from both organizational behavior and social learning theory literature. It was hypothesized that training would be effective for: (1) trained supervisors versus control group supervisors; (2) supervisors trained by managers versus supervisors trained by professional train-

ers. It was also hypothesized that the training would be more effective for supervisors with low self-esteem and a highly supportive working relationship with their managers. Middle managers were also trained and six of them participated as trainers in one supervisors' class. It was predicted that the training would be more effective for: (1) the trained class versus a control group; (2) the middle managers who were trainers versus the middle managers who were trained only; and (3) the supervisors of the trained managers versus supervisors of control group managers.

Fifty-six supervisors were assigned to two training classes, a pre-post control group, and a post-only control group. Twenty-eight managers were assigned to a training class, a pre-post control group, and a post-only control group. The effectiveness of the training was measured according to four criteria for evaluating training (Kirkpatrick, 1976).

The results indicated that the training was effective in increasing the knowledge of the supervisors but that their effectiveness on the job did not change. The training was not effective in increasing the effectiveness of the middle managers although they felt the training was worthwhile and should be repeated.

The implications of the study for training, management ratings, and social learning theory are discussed.

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DEDICATION

This thesis is dedicated in loving appreciation to Karen whose loving support and sacrifice made this odyssey possible, and to Lynne, Keith, and Pam whose acceptance stilled my conscience.

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CHAPTER I

RESEARCH AND HYPOTHESES

INTRODUCTION

Training programs for supervisors utilizing "behavior modeling" or "applied learning" components have become quite popular. One author estimates that 500,000 supervisors have been trained in this technique (Robinson, 1980). Published scientific research indicates this technique produces positive results in changing supervisory behavior as well as counseling behavior (Decker, 1979). The training is based on tested psychological theory, namely, social learning theory (Bandura, 1967, 1977).

The training is easy for supervisors and adults to comprehend because very little theory is discussed and the desired behaviors are specifically described (Kraut, 1976). The course instruction is instructor-intensive, with 1-2 instructors working with six to 12 people per session. However, there are three factors which have not been fully explored: (1) scientific research with middle- and upper-level managers; (2) substitution of line managers for professional trainers; and (3) self-esteem and managerial support as moderators of the training's effectiveness. The purpose of the research is to investi-

gate methods which increase the effectiveness of the training in the work setting.

The purpose of this research was to develop an applied learning training program which would include first level supervisors and middle managers at the second level (2L), third level (3L) and fourth level (4L), and then measure the results of the training. Results were measured using the four criteria for evaluating training: (1) the reactions of the trainees to the training; (2) learning the content of the training program; (3) changing behaviors as a result of the training; and (4) improving effectiveness as a result of the training (Kirkpatrick, 1976). The training was conducted in two steps. During the first step the middle managers (2-4L managers) were trained by professional trainers; the second step involved training supervisors in two separate classes, one conducted by the same professional trainers who taught the middle managers (trainers' class), and the other was taught by six of the managers from the middle managers' class (managers' class). The trainees were given measures to determine their perceptions of the power of the trainers in each class so the different levels of perceived power could be examined. In addition there were control groups of 2-4L managers and supervisors who received no training.

The questions which were explored in this research were: (1) was the training more effective for the trained supervisors in both classes when they were compared to the control groups; (2) was the training more effective when conducted by the 2-4L managers when compared to the training by the professional trainers; (3) was the training effective for the 2-4L managers who received the training when they were compared to the 2-4L managers who received no training; (4) were the supervisors of the 2-4L managers who received the training more effective than the supervisors of the 2-4L managers who received no training. The trainees were also given measures of self-esteem and managerial support to determine whether these variables would moderate the effects of the training.

Since the training was based on social learning theory (SLT), the following section reviews the literature on SLT, followed by a review of behavior modeling training. A summary of the hypotheses concludes the chapter.

Social Learning Theory

Social learning theory was developed by Albert Bandura and is based on extensive research (Bandura, 1969, 1977). The theory states that psychological functioning can be understood through the interaction of a person's individual characteristics, the environment surrounding

the individual, and his/her behaviors in that environment. It is a continuously interacting relationship.

Within this framework, the individual's observational learning goes on through vicarious, symbolic and self-regulatory processes. In the vicarious process, the person observes the behavior of another person (i.e., model) and relates those behaviors to consequences for him/herself. The observer actually makes two judgements of the observed behaviors: first, whether it is possible to imitate the behaviors; second, whether it is advisable to imitate the behaviors given the likely consequences. If the model is receiving rewards or reinforcements for the behaviors and the observer thinks he/she would receive them also, he/she will probably imitate the behavior. If on the other hand, he believes that imitating the behaviors would result in negative consequences, the behaviors may be learned but not repeated, e.g., if the model is punished, the observer may be able to imitate the behaviors, but will studiously avoid them.

The symbolic processes are the words and pneumatic codes people use to provide instructions or memorize lists or directions. The symbolic capability of people allows them to retain the learned behaviors and reproduce them at a later date. In fact, behavior modeling training is based on first describing the desired behaviors, and then having a model perform the behaviors for people to ob-

serve. This uses both the symbolic and vicarious reinforcement processes.

The third process people use is self-regulation, where the individual can set goals for him/herself, or provide self-reinforcement (e.g., go home only after a person's work has been finished). Self-regulation assumes a person is autonomous, interacting with the environment to set up rewards to reinforce desired behaviors. Thus the individual is seen as interacting with his/her environment and not just responding to its reinforcements, rewards, and punishments. This description is similar to interaction psychology (Terborg, 1980).

Social learning theory places emphasis on the cognitive learning capabilities of the individual. People are continuously observing other behaviors within their surroundings, codifying them in their memory, determining the behavior's value to themselves, and behaving in a way which they feel will generate rewards and reinforcements for those behaviors. The continuous observation is composed of a complex set of factors which influence the degree of learning by the observer. Bandura (1977) has established a diagram of the process which he labels the "observational learning process." (see Figure 1). The components of observational learning are described below.

Figure 1

Observational Learning Process

ATTENTIONAL	RETENTION	MOTOR	MOTIVATION
PROCESSES	PROCESSES	REPRODUCTION	

Observational Learning Process

The process which the observer uses to understand the model's actions or behaviors is called observational learning. The process is composed of four steps: (1) focusing attention on the behaviors (attentional); (2) retaining the behaviors (retention); (3) rehearsing the behaviors with feedback (rehearsal); and (4) being motivated to perform the behaviors (motivation). Acquisition of the skills by the observer occurs in the attentional, retentional, and rehearsal stages, but use of the skills is determined by the reinforcement stage. All four steps in the process must be present for the individual to observe, acquire and use the behaviors, because each phase contributes something unique. Each phase of the process is described in greater detail below.

Attentional

The attentional phase refers to the characteristics of the model and the observer which cause the observer to notice the model's behaviors. In a training program several characteristics of both the model and the observer

could be expected to be significant. The observer's friendship with the model, the frequency of the behaviors, the observer's perception of the functional value of the behaviors, and the individual characteristics of the model (e.g., status, power) all will contribute to the likelihood that the behaviors will be imitated. The observer's past reinforcement and the perceptual biases of the observer at the time are also important.

Research has generally found the model's characteristics to be more important than the observer's characteristics (for review of the literature see Bandura, 1969, 1977; Flanders, 1968; and Wodarski and Bagarozzi, 1979). Research predicts imitation is more likely where the model confers symbols of status, is physically attractive, comforting, possesses desirable characteristics of social power, has control over past, present, or future resources, and/or is similar to the observer with respect to socio-economic status, age or sex. Results are not as clear about the impact of the observer's view of his/her own competence on the observed task, nor about the friendship between the observer and the model.

Model's Characteristics. The studies of the model's characteristics in the SLT literature can be classified into French and Raven's (1965) six sources of power: legitimate, reward, coercive, expert, status, and refer-

ent. The research has well established that legitimate, reward, coercive, status, and referent power contribute to the model's effectiveness, but the research on power has been confounded by the self-esteem of the observer. The next section discusses the influence of the various forms of the model's power, followed by a section on the influence of the characteristics of the observer.

Legitimate, Reward and Coercive Power. These sources of power have usually been combined by researching the effects of modeled behavior from adults who have control over future resources valuable to the observer. The model's power has been legitimate (parent or teacher) but also frequently included the ability to give rewards and reinforcements or punishments. A child identified with the more aggressive parent (legitimate and coercive power) when there was low warmth by both parents (Heatherington and Frankie, 1967). Adults who were identified as a child's future teacher and who provided rewards was more effective as a model than an adult who was not identified as being a future teacher and who was not rewarding (Grusec and Mischel, 1966). So combinations of reward, coercive and legitimate power have been shown to make models more effective. Other research indicates that reward power by itself is an important factor.

Two studies of models with the ability to confer group social status demonstrated that these models were imitated more than other children Lippitt, Polanski, and Rosen (1952). They studied the social behaviors and relationships in three boys' camps and concluded that the boys were likely to imitate those members that they perceived to have the most social power. The boys imitating the models wanted the models to reward them with high social status in the group. In another study, trainers were given control over the rewards they could provide the trainees (Justis, Redia, and Stephans, 1978). The study gave the trainers the authority to reward performance for one group with an incentive system, another with a bonus, and a third group with a salary. The incentive performers were the better of the three groups. The research demonstrated that reward power had an effect, but the results could be explained by incentive systems instead of the reward power of the trainer. Further research is needed to clarify the respective contributions. Nonetheless, power to reward and reinforce or punish or coerce appears to significantly increase the importance of the model's behaviors to the observer.

Status Power. A person with apparent status will more likely be imitated than one without the status. Strangers were more likely to follow a model wearing a business suit across the street against a red light than

they were a person dressed in denims (Lefkowitz, Blake, and Mouton, 1955). The study in the boys camp also demonstrated that those boys who were given higher status in the group were imitated by the other boys (Lippitt, et al., 1952). Managers, in an organization with higher status such as seniority, or a high status job, e.g., Coordinator of Career Planning, would be expected to be effective models for supervisors and trainees.

Expert Power. The research on expert power is more complex. Essentially, research shows that a model's expert power contributes to his/her effectiveness, but is even more effective when the observers are either low in confidence pertaining to a certain task or low in self-esteem. Researchers manipulated the observer's perception of the model's competence in a series of studies (Mausner, 1953, 1954a, 1954b; Mausner and Bloch, 1957). Overall, the results indicated that the greater the competence of the model compared with that of the observer, the greater the likelihood the observer would imitate the model. However, these results should be viewed with caution. Observers paired with an "expert art director" were likely to imitate the expert, but so were observers matched with "just another student." (Mausner, 1953). Both groups of observers were significantly different from a group whose participants worked alone, but the observer's groups were

not significantly different from each other. The existence of a partner was more important than whether the partner was an expert.

Observers given negative feedback during a study measuring lines were more likely to agree with a model than observers given positive feedback (Mausner, 1954a). This study should be identified as a study of the self-confidence of the observer although it is referred to as a study of the competence of a model (Flanders, 1968 and Bandura, 1977). The last two studies did demonstrate that the "success" of the model in earlier trials influenced the observer to imitate the model (Mausner, 1954b and Mausner and Bloch, 1957). A study of fifth graders essentially replicated these last two findings using grades as a measure of competence (Gelfand, 1962). Finally, videotaped models who were competent increased the effectiveness of the training (Justis, et al., 1978). A videotaped model demonstrated high competence in a sorting task by successfully completing the task on videotape while another videotaped model unsuccessfully demonstrated the task. The models who demonstrated the task successfully were the more effective models, indicating the perceived competence of the model may not be as much a factor as the actual quality of the modeling. The better models produced better results by modeling better behaviors more frequently. Considering all of the above studies, it

seems apparent the competence of the model does increase his/her effectiveness but that the self assessments of competence of the observer also plays a significant part. (See the section on observer characteristics for a further discussion)

Consideration (referent power) by the supervisor was found to be another important variable of the model influencing employee values (Weiss, 1977, 1978). Regardless of level of self-esteem, the employees shared similar values with considerate supervisors. In summary, models with greater power which include French and Raven's (1965) five sources: legitimate, referent, status, reward, coercive and expert, would be seen as increasing the effectiveness of behavior modeling training.

Observer Characteristics. Observers who lack self-esteem, are dependent, or have been rewarded in the past for copying behavior are more likely to imitate a model. Fifth graders who had been made to fail at a previous task were more likely to imitate a model than observers who had succeeded at the task (Gelfand, 1962). High self-esteem naval cadets resisted imitation significantly more than low self-esteem cadets in a study of 73 participants (deCharms and Rosenbaum, 1960). Numerous other studies have found an inverse relationship between social conformity and self-esteem (see Gergen and Bauer, 1962). The

previously reviewed work by Mausner and Weiss directly measured the confidence of observers in tasks with other people. Weiss measured the supervisor-employee relationship and found low self-esteem employees imitated their supervisors if they felt their supervisors were either successful or competent. High self-esteem employees did not imitate their supervisors' values even if they did view them as successful or competent (1977, 1978).

Still another observer characteristic is his/her history of past reinforcement. As reviewed in Mausner (1953, 1954a, 1954b) and Mausner and Bloch (1957), the past reinforcement of the observer directly related to observer imitation. Further, observers in a small group who were immediately rewarded for imitating the behavior of a model in the group were more willing to repeat that behavior (Schein, 1954). This underlines the point that one of the most potent considerations for imitating behavior is the perceived consequences for the observer. If imitation is rewarded or has been rewarded in the immediate past, imitation of behavior will continue.

To summarize the attentional phase of the observational learning process, the perceived power of the model, the self-esteem of the observer, and the consideration of the model will be significant indicators of imitation of behavior. An organization which maximizes the power of

the trainers, has reinforced participants in the past, and has models high in consideration should have more effective training programs. Low self-esteem among the trainees will make the programs even more effective.

Retention

The second step in the observational learning process is the retention stage. This stage involves both cognitive and physical learning, where cognitive learning is defined as mental understanding and ability to recall the learning, and the physical learning is the ability to actually physically perform the behaviors. A person may be able to watch and understand someone working with an employee on a disciplinary problem, but may have great difficulty actually going through the steps with an employee himself. It is similar to knowing what should be done to return a tennis serve, but having a great deal of difficulty in doing it.

Cognitive learning involves symbolically coding information, organizing it for recall, or mentally rehearsing the behaviors. For example, Decker (1979, 1980, 1981) showed that when participants were given pneumatic codes to help memorize modeled behaviors, and were asked to mentally rehearse them, the participants generalized the behaviors to other settings better than participants who were not given the codes nor the mental rehearsal instruc-

tions. In another experiment in assertiveness training, rehearsal out loud with coaching was more significant than either rehearsal or coaching alone (McFall and Twentyman, 1973). Stone and Vance (1976) also found that combinations of instructions, modeling, and rehearsal were more effective than any variable alone. The implications for training are clear: the training program can be enhanced where instructions, modeling, rehearsal and coaching are all included in the design of the program. Furthermore, the instructions can be enhanced where the participants are given pneumatic codes to improve recall.

Motor Reproduction Processes

The motor reproduction process is the process where a person performs a behavior and then receives feedback on the performance. The capability to physically perform the behaviors is the first obvious requirement. However, the accuracy of self-feedback and feedback from others are paramount to actually performing the behaviors in a similar fashion. Videotape has been introduced in a number of training programs because of the accuracy of the feedback to the participants (Byham and Robinson, 1976; O'Connor, 1979). No studies have been found or were reported in the literature reviews, which focused on the specific motor

reproduction steps. However, a significant number have concentrated on the effect of reinforcement or punishment.

Motivational Processes

The attention, retention, and motor reproduction steps are essential for the individual to acquire the behaviors, but the last step is essential for the behaviors to be reproduced at a later date. There is considerable evidence to demonstrate that external, vicarious and self-reinforcement contribute significantly to the use of the behaviors. Flanders' (1968) review of imitation concluded: (1) contingent reinforcement (tied directly to the behavior) produces strong results; (2) vicarious reinforcement (reinforcing the model) also produces strong results in direct relation to the size of the reward; (3) partial contingent reinforcement also produces increased imitation; (4) both partial and continuous reinforcement produce greater amounts of imitated behavior if the reinforcement is based on the behavior and not "success." This is identical to the findings in goal setting theory where better results are achieved for specific goals compared to being "successful" (Locke, 1976). (5) modeling with no reinforcement will increase imitation, but the results are not as strong as with reinforcement. There is also evidence that self-administered reinforcement is effective. When children self-administered reinforcement

by determining their own rewards for completing a task, they created significantly more modeled behavior than a control group (Bandura and Perloff, 1969). Limited research in the training literature supports the importance of reinforcement. The often cited training studies at International Harvester provide evidence that supervisors will not use learned skills in the workplace if the climate is not favorable (Fleishman, Harris, and Burt, 1955, and Harris and Fleishman, 1955). A study of the implementation of training skills for Indian managers indicated the managers used the skills only where the organizational climate was favorable (Baumgartel and Jeanpierre, 1972).

Still further evidence that vicarious reinforcement is effective comes from a study of supervisory effectiveness (O'Reilly and Weitz, 1980). The authors found that supervisors who frequently used sanctions against marginal performers produced better sales results and fewer employee and customer complaints. The authors point out that operant conditioning theory predicts punishment will not lead to any increased behaviors for the individual, but they argue that punishment of the marginal performers in a unit may cause others in that unit to avoid the same behaviors. SLT argues punishment plays a lead role in group behavior: unpunished behaviors may well be imitated and therefore reduce the unit's performance; punished

behaviors will be inhibited and usually replaced by unpunished behaviors which will increase performance.

This concludes the review of the current research on the observational learning process and its four components: attention, retention, motor reproduction, and motivation. The first three were seen as important components to learn the behaviors, while the last one was described as important to the imitation of the skills. Behavior modeling training which increases the effectiveness of those components should increase the effectiveness of the training.

Film vs Live Models

Another facet of the research in behavior modeling is that using film instead of live models is equally effective (Bandura, 1969, 1977). Participants in two groups that were instructed to observe either live models or film models were significantly more aggressive than a control group, but not significantly different from each other (Bandura, Ross, and Ross, 1963). The results were subsequently replicated (Bandura, et al., 1967; Hill and Lieber, 1967; Klinger, 1967).

The only exception to these results was found in a study of videotaped group leaders presented as models in comparison with live group leaders. (Walter, 1976). The participants who viewed the videotaped leaders were more

effective than the participants who viewed the live leaders. However, the videotapes were presented to the participants as clear, overt models of role behaviors, while the "natural" groups were observed by the participants without any advanced emphasis on the targeted behaviors of the leaders. The researchers tested whether the participants would observe the behaviors of the live models without any advanced emphasis. Walter believes the live models would have been equally effective if the participants had been instructed in the same manner as groups who viewed the videotapes. The substitution of live models for film models should have no effect on the training if both the models and their targeted behaviors are identified in advance.

Applications of Social Learning Theory

Social learning theory has been used to teach new behaviors to adults in clinical counseling and training (Bandura, 1969, 1977; Decker, 1979; Wodarski and Bagarozzi, 1979). Assertiveness behavior has been increased in college students with covert modeling (Kazdin, 1975), and with modeling, rehearsal, and coaching in four studies by McFall and Twentyman (1973). Thirty-six female undergraduates overcame extreme unrealistic fears of snakes when they viewed models who exhibited behaviors

overcoming the same fears (Meichenbaum, 1971). Experimenters were given assistance more frequently by 135 male college students if a model was observed also giving assistance (Rosenbaum, 1956). Participants exhibited more empathic responses in interviews when the participants were trained with instructions, modeled behaviors, and rehearsal than any one variable alone (Stone and Vance, 1976).

Social learning theory has only recently begun to find application in the organizational behavior literature even though it has been researched extensively in the clinical and counseling literature. Davis and Luthans (1980) presented SLT as an approach tying together the various elements of organizational behavior and call for research on its potential use for self-management techniques. A similar article argues self-management can provide greater insight into leadership research (Manz and Sims, 1980). Empirical work in SLT relating specifically to vicarious learning is summarized in yet another article by Manz and Sims (1981). They review the literature and describe two areas of management where the modeling can be used most effectively: in day-to-day modeling, and in training. In day-to-day modeling, two studies discussed earlier have been reported supporting SLT in industrial settings (Weiss, 1977; O'Reilly and Weitz, 1980). While both these studies were able to use social learning theory

to explain their results (imitated work values of subordinate foremen, Weiss; the impact of sanctions on unit performance, O'Reilly and Weitz), they did not test actual changes in supervisory behavior through modeling training.

Summary

Social learning theory is a comprehensive description of the processes which people use to understand and interact with their environment and can be used to understand learning in an organizational environment. The observational learning process has four stages which are supported by extensive research. The attentional phase describes the importance of the perceived power of the model and the self-esteem and prior reinforcement of the observer. The retention, motor rehearsal, and reinforcement phases of the model are also well researched and provide important techniques to improve training programs. Social learning theory has been used to change behavior in numerous situations with adults and children, and has been useful in explaining why punishment has increased the effectiveness of work units. Another area where the theory has been effectively used is behavior modeling or as it has also been labeled, in the scientific literature, applied learning training programs, where the training is based on social learning theory.

Applied Learning Training

Applied learning training focuses on behavioral changes in management training programs (Goldstein, 1974, 1980; Goldstein and Sorcher, 1974; Latham and Wexley, 1981). Training has traditionally concentrated on attitudes which are difficult to measure and do not necessarily produce significant changes in behavior and performance (Campbell, Dunnette, Lawler, and Weick, 1970). Applied learning, on the other hand, focuses on behaviors and lets attitudes develop through the mastery of the steps (Kraut, 1976). Applied learning consists of four steps which are closely linked to social learning theory: (1) modeling the behaviors; (2) rehearsing the behaviors; (3) socially reinforcing the participants after rehearsal; and (4) providing learning experiences which transfer the training from the classroom to the job (Goldstein and Sorcher, 1974). (See Table I-1 for a summary of the similarities and differences between SLT and applied learning training.)

Components

Modeling

The modeling step is designed after the attention phase in the observational learning process. It begins

Table I-1¹

Observational Learning Processes Compared With
Applied Learning Training Components

<u>Applied Learning Training</u>	<u>Observational Learning Processes</u>
<u>Behavior Modeling</u> <ul style="list-style-type: none"> . Presentation of a model . Providing summarized learning points of the behaviors 	<u>Attention Processes</u> <ul style="list-style-type: none"> . Model and observer characteristics <u>Retention Processes</u> <ul style="list-style-type: none"> . Symbolic coding . Cognitive organization
<hr/> <u>Rehearsal</u> <ul style="list-style-type: none"> . Behavioral or covert rehearsal of the modeled behavior 	<hr/> <u>Retention</u> <ul style="list-style-type: none"> . Symbolic rehearsal . Motor rehearsal <u>Motor Reproduction</u> <ul style="list-style-type: none"> . Physical capabilities . Availability of component responses
<hr/> <u>Social Reinforcement</u> <ul style="list-style-type: none"> . Feedback and reinforcement, coaching, rehearsal 	<hr/> <u>Retention</u> <ul style="list-style-type: none"> . Symbolic coding . Cognitive organization <u>Motor Reproduction</u> <ul style="list-style-type: none"> . Self-observation . Accuracy of feedback <u>Motivation</u> <ul style="list-style-type: none"> . External reinforcement . Vicarious reinforcement . Self-reinforcement
<hr/> <u>Transfer Training</u> <ul style="list-style-type: none"> . Expanding rehearsal to various job experiences 	<hr/> <u>Retention</u> <ul style="list-style-type: none"> . Cognitive organization . Symbolic rehearsal . Motor rehearsal <u>Motor Reproduction</u> <ul style="list-style-type: none"> . Self-observation . Accuracy feedback <u>Motivation</u> <ul style="list-style-type: none"> . Self-performance

¹Adapted from Bandura, 1977, and Manz and Sims, 1981.

with a leader describing the targeted behaviors followed by a carefully chosen model demonstrating a mastery performance. The model is similar in appearance to the targeted participants. Applied learning literature describes the use of videotaped or filmed models primarily, because of several advantages: they are more consistent, can be reused, and are portable. The modeling is frequently accompanied with handouts summarizing the behaviors and then the behaviors are modeled again (Decker, 1981; Goldstein and Sorcher, 1974; Latham and Saari, 1979; Wexley and Latham, 1982).

Behavioral Rehearsal

In order to aid the trainee in retention, the second step requires the participants to practice the modeled behaviors. Various approaches are used here such as letting a pair of participants practice before a group, followed by group discussion about the effectiveness of the practice, or breaking into dyads or triads and having the people practice with each other assuming the role of supervisor and subordinate (or observer if triads are used). The key is to give all participants sufficient practice to acquire the skills either directly or vicariously. The participants are instructed to play themselves as they rehearse the managerial behaviors, while one of the participants role plays the subordinate. The

role-playing participants are thus experiencing the use of the behaviors, but also re-observing them while in a different role.

Social Reinforcement

The third step provides feedback and reinforcement to the individuals about their performance. This process provides positive feedback so that participants will know what they have performed well and what behaviors they could use to perform even better (Goldstein and Sorcher, 1974; Latham and Saari, 1979; Wexley and Latham, 1982). Since virtually all the behaviors typically taught are easily physically performed, the important part is to provide accurate feedback and enough reinforcement to ensure their use in the future. The trainers play a key role here in using positive reinforcement and feedback.

Transfer Training

This step requires the use of rehearsals and discussions which increase the likelihood that the behaviors will be used on the job. The more situations which can be discussed, the more the participants will generalize to other aspects of their job. The first modeling of behaviors usually consists of a fairly simple set of behaviors, while subsequent rehearsals incorporate more elaborate,

complex, or emotional situations to simulate on-the-job conditions. Examples include making subordinates more hostile or having someone assume the role of a union leader in the discussion of a disciplinary action. The trainees gain more skills in the process and begin to see additional situations where they could use the training to their benefit. Those benefits may include external reinforcements by their managers or self-reinforcements in controlling or resolving interpersonally difficult situations.

Social Learning Theory and Applied Learning Training

Table I-1 summarizes the different steps in applied learning and the different phases of the observational learning process which are included in each step. The applied learning steps do not correspond exactly but every step in the observational learning process is included in a full program of applied learning. Each step of the applied learning is necessary to encompass all of the observational learning processes. Applied learning is seen by several reviewers as grounded in a sound theory of how people can learn new behaviors (Goldstein, 1980; Manz and Sims, 1980; Wexley and Latham, 1982).

Applied Learning Scientific Literature

A search of the literature revealed six studies of applied learning in industrial settings. Four of them were contained in a symposium edited by Kraut (1976): Burnaska; Byham, Adams, and Higgins; Moses and Ritchie; and Smith (See Table I-2). A fifth study by Latham and Saari (1979) extended the design of the evaluation of the research, and Decker (1979, 1980, 1981) tested components of the process. A seventh study was described in an unpublished manuscript and Organizational Dynamics but it was part of an organizational development effort (Porras and Anderson, 1981, 1982 and Porras, Patterson, Kerry, Maxfield, Bies, Roberts, and Hargis, 1980). The results are consistently positive even though the first four have methodological weaknesses. Each of the six articles is reviewed briefly below, followed by a critique of the studies and a summary of the organizational development program.

Kraut Studies (1976)

Burnaska Training Studies (1976).--Applied learning training had been conducted on 1,200 managers at General Electric but Burnaska's study summarized the tests on 124 of the managers. The managers supervised professional employees, but it is not clear what level employees they

Table 1-2
APPLIED LEARNING TRAINING SYMPOSIUM (KRAUT, 1976)

Author(s)	N	Participants	Selection	Design	Measures	Rel.	Results	Design Strengths and Weaknesses
Burnaska (1)	62 62	Supervisors	Random	$x \text{ } o_1 \text{ } o_2$ $- \text{ } o_3 \text{ } o_4$	Assess- ment Ctr.	.50	$(o_1 \text{ } \& \text{ } o_2) >$ $(o_3 \text{ } \& \text{ } o_4)$	Strong design Instrument decay Role playing skill as an alternative hypothesis Mortality not reported Each time period not measured separately
Byham, Adams, 8/19 Kiggins	183	Employees	Random	$o_1 \text{ } x \text{ } o_2$ $o_3 - \text{ } o_4$	Employ. Percep.	nr. ¹	n.s.	Internal validity weak ²
Moses and Ritchie	90 90	Super/subord. Supervisors	Static Group	$o_1 \text{ } x \text{ } o_2$ $o_3 - \text{ } o_4$	Employ. Percep.	nr.	Positive $(o_2 > o_4)$ $(o_1 > o_2)$	No significance reported Employees randomly selected by group, not stratified Internal validity weak Data not reported to rule out alternative hypothesis
Moses and Ritchie	90 90	Supervisors	Matched Static Group	$x \text{ } o_1$ $- \text{ } o_2$	Assess- ment Ctr.	nr.	Signif. $o_1 > o_2$	Internal validity weak ² Data not reported to account for alternative hypothesis Matching is stronger than no pre-test at all
Smith (1)	18 13	Branch Mgrs. Branch Mgrs. Groups	Matched Static Groups	$o_1 \text{ } x \text{ } o_2$ $o_3 \text{ } x \text{ } o_4$	Employ. Percep.	nr.	Signif. $o_2 > o_4$	Internal validity weak ² Data not reported to account for these differences Matching by equal survey responses better and branch characteristics better than no matching

¹nr. = not reported

²Threats include instrument decay, regression to the mean, history, mortality.

Table 1-2
APPLIED LEARNING TRAINING SYMPOSIUM (KRAUT, 1976)
(continued)

Author(s)	N	Training	Days	Selection	Design	Measures	Rel.	Results	Design Strengths and Weaknesses
Smith (2a) Note: M/W - Branch Mgns./ Employees	12/700	(A) Model + Team Bldg.	(2)	Matched	$o_1 \ x_1 \ o_2$	Employee Satisfac- tion	nr.	Sig. for Gain Scores	Internal validity weak Gain score analysis is weak design Data not reported
	11/700	(B) Modeling only	(2)		$o_3 \ x_2 \ o_4$				
	12/700	(C) Trad. Training	(1)		$o_5 \ x_3 \ o_6$			$o_2 > o_1$	
	12/700	(D) Control	-		$o_7 - o_8$			$o_4 > o_3$	
(2b)						Customer Satisfac- tion	nr.	$t = .743$ (Commun. skills & later levels of customer satisfaction) No sig. in customer satisfaction at 4 mos. or 10 mos.	t not clarified Single statistic No other data reported
(2c)						Sales Per- formance Gains	nr.	Sig. for (A)	Chi-squared with gain scores techniques not explained Gain scores analysis is weak design

were supervising. Two groups of 62 managers each were tested after one group received training in nine behavioral learning modules. Behavioral role-playing and employee perception measures were taken in a post hoc control group design with repeated measures ($X_{0_1} \quad 0_2$). After four judges' results were factor analyzed to correct for low reliabilities, the results were significant for the behavioral measures. The managers in the trained group actually role-played significantly better in the second test which was four months after the training than they did in the first test which was one month after the training. The perceptual measures were given to subordinate employees one month before and four months after the training, but the results were significant for only two different behaviors in two of eight locations, a result explainable by chance alone. Burnaska notes the measures were trying to identify "good guys," and didn't focus on the behaviors included in the training. One hundred eighty-three employees were involved in both time periods for the test group, and 91 for both time periods in the control group.

Byham, Adams and Kiggins (1976).—The purpose of this training was to develop first- and second-level managers to better handle interactions with subordinates. Nine modules were given to groups of six supervisors, with each lasting two and three-quarters hours per day except for

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one series of three which were given in one day. The managers of the trainees were briefed on the study with a presentation on the content of the program. The study reported on eight supervisors in each of two accounting groups who served as the evaluation groups. Twenty percent of the subordinates of each group were randomly sampled in a structured interview about their observations of supervisory behaviors in counseling sessions. There were 19 employees in the trained group and 24 in the control group, but they were selected randomly and there is no way of knowing how many subordinates of each supervisor were included. The results showed the percentage of correct responses were in the predicted direction (though not statistically tested), both on a "pre-post" test for the trained group, and a "post-post" test for the two groups. The authors note that, if the employees had not had a problem with the supervisor in the past seven months, they would not have been able to observe possible changes.

Moses and Ritchie (1976).--One hundred eighty-three supervisors participated in the study at AT&T. The supervisors were matched in two groups and then one group was assigned to treatment (n = 93) and the other to the control (n = 90). The training was similar to the nine modules used in the Burnaska study and Goldstein and

Sorcher (1974). A special behavioral assessment center was established to examine the supervisors' ability to respond to a series of problem discussions. Four individuals who received special training assessed the supervisors, using a specially constructed scale, two months after the training. Each supervisor was given three problem sessions: absence, discrimination, and theft. The results for each of the three role plays were significantly better than the control group.

Smith (1976).-This study reports on two behavior skills training programs at IBM, one for employee morale and one for customer satisfaction and branch performance. The morale study trained 18 branch managers in conducting meetings which were used to present feedback reports to employees. Four months after the training, the employees in the branches were asked about the use of the survey information. The trained group had a larger percentage of total employees with a more favorable opinion than the control group, but the results are not reported by each branch. One year after the training, the managers with the training had employees whose opinions of the company and its policies were significantly more favorable. Here again, the results were summarized for trained versus non-trained employees instead of by branch and there were no pre-test results.

The second training program taught one group of managers skills on how to handle complaining customers and other customer communication skills. One group received the communication training and a team-building module also. Two other groups of managers were given either standard training or no training at all. Written measures immediately before and after showed significance in communications skills for the treatment groups and not the placebo and control groups. Customer satisfaction was significantly correlated to improved skills based on one correlation which is reported without any further clarification. The actual quota sales performance for the treatment plus team building was significantly higher than the other three groups, based on a Chi-squared test. It did not measure whether they were significantly different than the previous year's, nor which were significantly different from each other, although only one branch group had sales results higher than the previous year.

Critique

In a critique of the four studies above, McGehee and Tullar (1979) cited the methodological weaknesses in the studies. In summary, all four of the studies use a non-equivalent control group design, which does not protect against instrument decay, regression to the mean, historical causes, or selection biases (see Table I-2). The

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static group designs (Moses and Ritchie; Smith) assigned treatment by group instead of randomly by employee, which is considerably weaker than randomization (Campbell and Stanley, 1963). Other factors for which the studies can be criticized include the data reporting gaps, (e.g., the basis for the correlational measures) lack of reliability measures, statistical methodology, and the lack of clearly spelled out procedures to replicate the results. McGehee and Tullar conclude by saying applied learning should be viewed with considerable caution because the field research designs leave considerable question about actual causes of the results, and that the role-playing evaluations may just be measuring the ability of the participants to play roles more effectively, and not be an improvement in mastering the skills.

Clearly, the designs could be strengthened (the authors themselves called for more studies which would replicate these results in more experimentally controlled conditions; see Hakel, 1976). However, there are several factors which mitigate the criticism against applied learning at the present time. First, there are a series of other training programs that have used behavior modeling on adults which have been successful (Decker, 1979). Secondly, the work by Bandura is the basis for the applied learning programs and has considerable research to support much of the foundations of applied learning. Third, a

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study by Latham and Saari (1979) has encompassed many of the points raised by McGehee and Tullar.

Additional Training Studies

Latham and Saari randomly assigned 40 supervisors to two classes and two control groups of ten trainers each. The training used the same nine modules as in the Burnaska study and was conducted over a nine-week time period. The training was based on a needs assessment and was evaluated using reaction, behavior, learning, and results measures. The reactions were not significantly different when measured immediately after the training as compared to eight months after the training. The learning measures were significantly different between the groups six months later as measured by a multiple-choice questionnaire which covered not only the learning points, but similar issues as well. Behavior measures, taken by role-playing situations three months after the training, were significantly different when evaluated by blind raters listening to the audio tapes. Job performance was measured by Behavioral Observation Scales (BOS) (see Latham, Fay, and Saari, 1979, and Latham and Wexley, 1980) one month before and one year after the training. The results were not significantly different before the training, but they were one year later. Furthermore, performance appraisal forms not originally intended for the test were examined and the

same results were obtained. The control group then received the training and reported equal test results and behavioral assessments.

One final factor concerning the validity of applied learning is the fact that all five studies are the only studies in the scientific literature. They were the initial steps in establishing a scientific approach to applied learning training and its evaluation. Goldstein (1974) describes an overall process for training which should involve assessments, training, and evaluation. All the five studies have used assessment techniques, designed the training based on the results of those assessments, and finally, evaluated the results based on behavioral criteria. More research to verify training results is needed in experimentally controlled designs.

Another study in organizational development literature which included behavioral modeling deserves mention here. (Porras and Anderson, 1982, 1981 and Porras, Patterson, Kerry, Maxfield, Bies, Roberts, and Hargis, 1980). The OD effort was based on social learning theory. It encompassed senior management training, behavior modeling, and goal setting. Six plants were selected for the interventions and a seventh was designated as a control group. The senior managers were given extensive training and then key managers were selected to conduct behavior

modeling training for supervisors. In what is apparently representative of all the plants, all the supervisors in two of the intervention plants (8 in one and 5 in the other) were given training by a key senior level manager in the plant for six hours once a week for 10 weeks. The training also included work from human relations research and systems four type management (Likert, 1966). At the conclusion of the training the managers and supervisors established contracts for situations where the supervisors would use the new skills. The supervisors and the managers met two months later at a pre-arranged time to review the status of the contracts. Results measured by employee perceptions of managerial behaviors and production, grievance and turnover statistics were favorable. The employees reported observing the behaviors and multiple regression analysis indicated productivity and turnover statistics were more favorable in comparison with the control plant.

The study has not been published in any scientific literature that this author could find, although one plant's results were reported in *Organizational Dynamics* (1981) and a summary was reported in the Stanford Graduate School publication (1982). The behavioral measures are not identified in the unpublished manuscript and the behavioral results are all analyzed by gain scores using individual "t" tests. Either MANOVA or MANCOVA would have

been more rigorous (Maxwell and Howard, 1981) if change scores had to be used. The design was the non-equivalent control group design with the limitations already described for similar studies. No historical data is reported. The results cannot be attributed solely to behavior modeling training because of the extent of the intervention and the additional training, but it certainly describes how training can be placed within an overall intervention effort to achieve positive results.

Component Processes of Applied Learning

The function and contribution of component processes of applied learning is an area of the applied learning literature which is not developed sufficiently. Hakel (1976) noted the importance of the trainers and the reinforcement by the peers as key components that can be overlooked. Trainers, for example, may be more important than the film itself (Hakel, 1976). Their role is to provide cues for the learning points, act as an example of social reinforcement, and provide positive feedback to the participants. During the training session they serve to answer questions about the techniques, encourage full participation, solicit ideas and ways the training can be transferred to the workplace, and encourage discussion of

attempts to use the learning on the job (see Latham and Saari, 1979, and Goldstein and Sorcher, 1974, for examples).

The participants provide feedback to each other during the training and listen to their peers for suggestions in improving their own performance. A related study indicates the effort of women in overcoming the fear of snakes is more effective if they can view a model who struggles with approach behavior before mastering it (Meichenbaum, 1971). It would seem natural that supervisors seeing their peers making mistakes at implementing the new behaviors before mastering them may be more willing to attempt them and ultimately succeed than simply seeing them demonstrated.

The role of the superiors of the people receiving the training is also important. The assessment phase has to establish that the working environment will be supportive of the training (Goldstein, 1974). A classic study in training illustrated this point when supervisors were trained to increase their consideration (Fleishman, et al., 1955, and Harris and Fleishman, 1955). The tests immediately after the training indicated success, but when a second set of data was collected, the significance vanished. The researchers discovered the working environment was not supportive of that type of behavior so the supervisors quickly dropped it. The role of middle managers is recognized as being so critical, several of the

studies have included the bosses of the participants in some phase of a preview of the program. Latham and Saari (1979) gave the managers the same training and stressed the need for reinforcement; Byham (1976) gave the superiors a preview of the training. Other comments stress its importance (see Byham, 1977; Byham and Robinson, 1977; Robinson, 1980; Robinson and Gaines, 1980). However, there has been no research comparing the effects of actually involving the managers directly in the training, even though their importance is universally recognized.

In sum, applied learning training research has been found to increase the targeted behaviors, although more research in experimentally controlled conditions is still called for. The training theory is established on a sound theoretical base which has strong research support. However, there appear to be gaps in knowing exactly how to increase the effectiveness of the training on the job. The present research will focus on these issues.

Hypotheses

This research reports on the results of applied learning training for supervisors when line and staff managers are substituted for professional trainers controlling for self-esteem and supportive managerial relationship as moderators. Supervisors and middle level

managers were divided up into seven groups as described in Table I-3.

The middle-level managers were divided into three groups; the first group was given the training by professional trainers; the second group was a control group given pre- and post-BOS measures; the third middle level managers group was given post-measures only. Supervisors were assigned to four groups. The first group of supervisors was trained by professional trainers that trained the middle managers; the second group of supervisors was trained by six line and staff managers that participated in the middle management training; a control group which was given pre- and post-measures; the fourth group was a control group that was given post-measures only. The results of the training were measured using Kirkpatrick's (1976) four measures for training results; (1) reaction of the participants to the training; (2) learning the content of the training; (3) behavioral changes on the job as a result of the training; (4) performance improvements as a result of the training. The hypotheses for the supervisory and middle level management groups are discussed below.

Supervisors

The first hypothesis was that the training for the supervisors in the two training classes would be effective

Table I-3

OBSERVATIONS AND GROUPS OF TRAINEES

<u>Supervisors</u>		<u>Groups</u>	
<u>Group Number</u>	<u>Pre-Measures</u>		<u>Post Measures</u>
1.	BOS Learning Performance	Trainers Class	BOS Learning Performance
2.	BOS Learning Performance	Managers Class	BOS Learning Performance
3.	BOS Learning Performance	Pre-Post Test Control Group	BOS Learning Performance
4.		Post-Test Only Control Group	BOS Learning
<u>2-4L Managers</u>			
	<u>Measures</u>		<u>Measures</u>
5.	BOS Learning	Management Training Class	BOS Learning Reaction
6.	BOS	Pre-Post-Test Control Group	BOS Learning
7.		Post-Test Only Control Group	BOS Learning

when compared to the two groups which received no training. This would replicate several other studies in applied learning training, (see Goldstein, 1980; Kraut, 1976; and Wexley and Latham, 1982). The contribution of the present research was to provide a second rigorous test of the training method in addition to the work by Latham and Saari, (1979).

The second hypothesis refers to the effectiveness of training by managers. The research in SLT has consistently demonstrated that models with high power will be more effective in modeling behaviors than lower power models. (Grusec and Mischel, 1966; Heatherington and Frankie, 1967; Justis, et al., 1978; Mischel and Grusec, 1966). The professional trainers were hypothesized to be viewed by the supervisors as ranking lower in power than the middle managers because they had no legitimate authority over the supervisors and could not provide as many reinforcements or rewards. Furthermore they would be seen as having less expertise in handling the kind of problems the supervisors had to face. In contrast they would view the managers conducting the training as successful in handling the kind of problems the supervisors had to face. So it was predicted that the supervisors in the training classes would view the management trainers as having more power than the professional trainers.

The second hypothesis was that supervisory training by the company's middle level managers would be more effective than supervisory training by the professional trainers. These managers were in positions to support grievances or disciplinary actions of the supervisors, reward good performance, and reinforce the behaviors of the supervisors. Since all of these factors represent French and Raven's (1965) six sources of power (legitimate, referent, expert, status, reward, and coercive) the managers were predicted to be more effective trainers.

A third major hypothesis was that the self-esteem of the supervisors and the supportive relationship with their immediate managers would both play moderator roles in the results. Low self-esteem has consistently been shown to cause increased imitation of models in both laboratory and field settings (deCharms and Rosenbaum, 1960; Gelfand, 1962; Gergen and Bauer, 1962; Weiss, 1977, 1978). The effects of low self-esteem on applied learning training programs has not been studied to date, but the literature suggested that low self-esteem supervisors would be influenced by the training more than high self-esteem supervisors.

The supportive role between a supervisor and his manager was hypothesized to be a moderator based on the research by Weiss (1977, 1978). He found that employees imitated their supervisors when the supervisors were high

in consideration. Earlier research has demonstrated that training is not effective if the working environment is not supportive of it (Baumgartel and Jeanpierre, 1972; Fleishman, et al., 1955). A history of past reinforcement has also been shown to cause modeling to be more effective (Mausner, 1953, 1954a, 1954b; Mausner and Bloch, 1957; Schein, 1954.)

The individual relationship between the supervisor and his manager was based on the vertical dyad linkage (VDL) model (Dansereau, Graen, and Haga, 1975, Graen, 1976, and Liden and Graen, 1980). The VDL measures the supervisor's perception of managerial support from the supervisor's manager. The research on the VDL is sparse (Shaw, 1981), but several outcomes appear to result from the close relationship. First the supervisor receives more support from his/her manager and more attention in interpersonal interactions than people with a low supportive relationship. Individuals with a supportive relationship (high VDL) report they have managers who have a greater responsiveness to their needs, clearer job behavioral expectations, and a subordinate-manager relationship which is freer of problems than subordinates with a low VDL relationship. Combining these findings with the unpublished findings of Wexley (note 1), it is clear the result of this extra attention is a more trusting and

friendlier relationship between the supervisor and his/her manager.

The supportive VDL relationship has also been linked with higher value for job performance rewards. This would indicate that supervisors with a supportive VDL relationship will have a history of past reinforcement that was positive and would more likely imitate the behaviors on the job. Consequently, hypothesis three predicts that the training will be more effective for supervisors with low self-esteem and those with a supportive relationship with their manager.

In summary, the training from the managers was predicted to be more effective than the training from the professional trainers because the managers would be perceived as more powerful. Both training classes were predicted to benefit from the training when compared to a control group. Finally, both supervisory self-esteem and the supportive relationship of the supervisors with their immediate managers would be moderator variables.

Middle Level (2-4L) Managers

A fourth hypothesis was that the training for the middle managers would be effective when their results were compared with the control groups. The applied learning literature has primarily focused on the supervisor, but there is no reason to expect the training would not be

effective for the middle level managers also.

A fifth hypothesis was that the middle managers who were trained but also served as trainer/leaders for the supervisory class would demonstrate better results than the managers who were trained but did not participate as trainers/leaders. Rehearsing and preparing to conduct the training would increase their retentive and motor rehearsal experiences so there would be more opportunity to learn and they would be modeling the behaviors and reinforcing the participants which would increase their motor rehearsal and reinforcement experiences. Consequently, they should have had a greater mastery of the material and would be expected to be more willing to use it.

Finally, the last hypothesis predicted that the supervisors of the trained managers would demonstrate better results than the supervisors of the managers who received no training. The middle level managers who received the training were expected to provide better models for their supervisors in the work place. It was predicted that the supervisors would observe these behaviors and would imitate the training content also.

In conclusion, social learning theory predicted training the middle level managers would produce significant results when they were compared to the control groups. Social learning theory also led to the prediction

that those managers who were trainers would be more effective than those managers who received the training but were not trainers. Finally, the supervisors of the middle level managers would exhibit the effects of the training by observing the modeling of their immediate managers.

CHAPTER II

METHODOLOGY

Proposal Phase

Introduction

The research effort was designed to evaluate two types of supervisory training programs conducted in a large industrial firm. One training program was conducted by the managers of the plant, and the other by professional trainers. It was felt that supervisors who received training from plant managers would benefit more since there would be stronger support from their own managers for the training, the models would be people the supervisors could identify with, and there would be more reinforcement of the training program by the managers in the job environment. The following section identifies the corporate background and the stages of the training program.

The training was held in an industrial plant that was owned by a wholly owned subsidiary of a Fortune 500 company. The plant manufactured automotive supplies, and employed approximately 1,500 people. The corporation operated three other plants, but this plant contributed 45% of the corporation's sales. The automotive depression

of 1980-81 had forced layoffs of over half their personnel, so they were operating with high seniority people in both their management and hourly ranks.

The plant management structure consisted of five levels of management. The general supervisors (2nd level of management), superintendents (3rd level of management), and divisional managers (4th level of management) will be referred to as second to fourth level (2-4L) managers, and the supervisors as first level (1L) managers. The number of managers at these four levels in the organization is listed in Table II-1.

The four phases of the research project were: (1) the proposal phase, (2) the assessment phase, (3) the training phase, and (4) the evaluation phase. Table II-2 summarizes the major elements of the first three phases. The proposal phase extended from January 1981 to April 1981 due to corporate economic conditions and the need for careful support-building among the 4L managers. The assessment phase identified the need for six separate modules of interpersonal skills which would be taught in separate sessions of two hours each.

The 2-4L management training was held first, followed by the supervisors' training. Twelve 2-4L managers received the six modules in a class conducted by a training team formed during the proposal stage. The second stage

Table II-1

NUMBER OF EMPLOYEES AT EACH LEVEL BY DIVISION

<u>DIVISION</u>	<u>MANAGEMENT LEVEL</u>				<u>EMPLOYEES</u>	<u>DIVISION TOTALS</u>
	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>		
Engineering	1					1
Tool Design and						
Fabrication	0	1	1	8	105	115
Plant						
Maintenance	0	1	6	10	230	247
Foundry and						
Division 3	1					1
Foundry	0	1	0	4	46	51
Division 3	0	1	1	4	186	192
Machining						
Divisions 1 & 4	1					1
Division #1	0	1	3			15
Division #4	0	1	2	10	250	263
Personnel	2	0	0	0	0	2*
Production						
Control	1	0	1	3	19	24
Purchasing and						
Central Stores	0	1	0	1	11	13
Quality Control	<u>1</u>	<u>0</u>	<u>3</u>	<u>12</u>	<u>847</u>	<u>16</u>
	7	7	17	63		941

* Includes 1 from corporate personnel

Table II-2

TRAINING PROGRAM SEQUENCE

<u>Phase</u>	<u>Description</u>	<u>Dates</u>	<u>Managers Involved</u>	<u>n</u>
<u>PROPOSAL</u>	Presentation and Approval of Training Program •Form Training Team •Propose Training Design and Costs	Jan-April	Division Staff	10
<u>ASSESSMENT:</u>	Develop BOS Measure	April	Personnel	2
	Review & Approve BOS Measures with 4th Level Managers	April	Division Staff	9
	Raters Training Workshop and BOS Measure Completion	April & May	Levels 1-4	65
<u>TRAINING</u>				
Stage 1:	Middle Management Training Class	May	Levels 2-4	12
Stage 2:	Trainers' Training Class Mon. & Wed.	May-June	1L	13
	Managers' Training Class Tues. & Thurs.	May-June	1L	12 ¹
¹ Thirteen 1L managers began the training, but one participant left the company after the third module.				
<u>EVALUATION</u>				
	Reaction, Learning, Behavior & Performance Measures	May-Nov	Levels 1-4	90

consisted of training the supervisors in two separate classes. One class was conducted by the same professional trainers who conducted the 2-4L managers training (called the trainers' class). The second class was conducted by six of the managers selected from the 2-4L management training class (called the managers' class). Participants in both classes received identical handouts, except the trainers' class used films for modeling the learning points in the modules, while the managers' class used live modeling by the managers who conducted the class.

The evaluation phase included four levels of evaluating training: reaction, learning, behaviors, and performance. The evaluation phase used pre- and post-training evaluation measures to determine the effectiveness of the training, which included self report measures and observations by immediate managers and peers.

Corporate Background

The Plant Council (4L managers) consisted of managers who reported directly to the Plant Manager. Their responsibilities included: (1) Engineering, including Plant Maintenance and Tool Design and Fabrication, (2) Foundry and Machining Division #3, (3) Machining Divisions #1 and #4, (4) Organizational Development, (5) Personnel, (6) Production Control and Shipping and Receiving, (7) Purchasing and Central Stores, and (8) Quality Control.

The plant had a history of violent strikes over the labor contract in 1974 and 1977. They were also beset by frequent labor stoppages until 1979, when they were eliminated by a concerted effort by both parties and the impact of an arbitrator's decision. The present management had not only succeeded in eliminating unauthorized work stoppages but had also implemented a cooperative labor-management program. The plant had operated at a loss for much of the past decade. The plant continued to sustain losses equal to 10% of gross sales even though a number of products and product lines had been eliminated and 50% of the workforce had been laid off. Even more layoffs occurred during the period of the training program as the automotive depression deepened.

The plant continued to struggle against its past management practices. Supervisors had almost always been appointed without previous training, and had received no plantwide training programs. They were selected on the basis of the personal recommendations of their supervisors and given on-the-job training from their managers.

The 2L-3L managers were primarily internal promotions from the plant's supervisors. Two of the Plant Council were internal promotions from the 2-3L management level. One of the Plant Council was brought in from another plant outside the corporation, three were graduates of a management training program established by the parent company,

and the other two were transferred in from other plants of the Corporation.

The present supervisors had high seniority as a result of laying off previously low seniority managers. The lay-off system was plantwide which meant the lowest senior supervisors would be laid off first, regardless what department they supervised or how critical their skills. A supervisor would also be assigned responsibility by plantwide seniority. This meant a supervisor in the foundry who had worked there for his entire working career, could be placed over a machining operation he was not familiar with. Consequently, the supervisor had to depend on interpersonal and managerial skills to perform their jobs and could not depend on their job knowledge.

The participation from each of the divisions is detailed in Table II-3. The supervisors in these divisions were responsible for plant floor operations that either produced products, moved the products, repaired the products or maintained and repaired the plant and equipment which produced the products. The Personnel Manager (4L) and the Corporate Career Planning Director participated in the early assessment phases and the management training for the (middle) 2-4L managers. The Plant Manager excluded one production division and its related quality control personnel from the first phase because they were

Table II-3

PARTICIPANTS INVOLVEMENT BY DEPARTMENT/DIVISION AND LEVEL

DEPARTMENT/ DIVISION	LEVEL	TRAINING		MANAGERS		SUPERVISORS		
		ONLY	LEADER	PRE-POST CONTROL	POST-ONLY CONTROL	TRAINERS CLASS	MANAGERS CLASS	PRE-POST CONTROL
Engineering	4	1	0	0	0			
	3	1	1	0	0			
	2	0	0	7	0	4	5 ¹	9 0
Foundry and Division 3	4	1	0	0	0			
	3	0	1	1	0			
	2	0	1	0	0	2	1	5 0
Machining Divisions 1 & 4	4	0	0	1	0			
	3	1	0	0	1			
	2	0	0	1	4	2	2	6 11
Production Control	4	0	0	1	0			
	2	0	0	1	0	1	1	1 0
Personnel	4	1	1	0	0	0	0	0 0
Purchasing and Stores	3	0	1	0	0	0	1	0 0
Quality Control	4	0	1	0	0			
	2	1	0	1	1	4	2	1 5
		6	6	13	6	13	12 ¹	22 16

¹ One engineering supervisor left the company after the training and prior to the post-tests.

already involved in specialized training for the supervisors. The division was included in the post-tests because their specialized training was completed by that time. The Plant Manager also decided to limit the training to those operations directly connected with production. This meant accounting and payroll, personnel, and industrial engineering departments were not included in the training program, as well as salaried office personnel in production control and purchasing.

This concludes the section on the overall design of the training and the background of the corporation. The proposal, assessment, training and evaluation phases are described in the succeeding sections.

Proposal

An applied learning approach was proposed to the manufacturer because it met several design considerations of the personnel managers at Corporate headquarters and the Plant. One design consideration was the need for a counseling approach between the supervisors and their subordinates. This was particularly important since the supervisors were often not familiar with the jobs their subordinates were performing. The Plant Personnel Manager also was interested in including the middle level and lower level managers in developing more participative management styles. A strong effort to work more coopera-

tively with the Union Leaders and their leadership had been under way for nine months, but the supervisors had not been given any formal training. The program had to be designed so it would complement the on-going cooperation between labor and management. In the Personnel Manager's mind this required a counseling approach between the managers and subordinates. The Personnel Manager also required a program which would give the supervisor a uniform method of dealing with employees during interactions ranging from guidance to reprimands. The Plant Council wanted a training program that had the support of middle management. A plantwide supervisory training program had never been held in the organization, although several programs had been proposed in the past. Consequently, the proposal phase was extensive in order to build lasting support. Finally, the program could not interfere with the supervisors' regular working hours, because severe cutbacks in manpower limited the flexibility in removing people from their jobs. The managers preferred a training program which would require only a few hours after each shift and could be spread out over several weeks.

The proposal phase lasted four months. The Corporate Personnel Director expressed interest in the program, but indicated it first required plant management support. The Plant Personnel Manager felt it was worthwhile to pursue

and accompanied this author in a discussion with the Plant Manager. His directions were to present the idea to the entire Plant Council and if they supported it, the program could be implemented. The personnel Manager recommended a team to guide the project which consisted of the plant Training Director, who reported to the Personnel Manager, the Manager of Organizational Development, who reported to the Plant Manager, and this author. Presentations were given to the other eight managers of the Plant Council in several meetings, asking for their support. The managers unanimously expressed support for the program, although one reservation was expressed by several managers: with so many changes going on in the plant, they were concerned that this training would be putting one too many burdens on the supervisors.

The plant was simultaneously undergoing several major upheavals. The company had announced a \$43 million modernization project which was being physically implemented since its start in January 1981. It meant new machinery, new processes, and new plant layout all of which occupied major new portions of all the managers' time. The plant manager and his Plant Council also were continuing to implement a joint, cooperative effort with their labor unions to reduce the conflictual bargaining practices that had characterized their relationship. The plant modernization had marked a significant milestone in convincing

the corporate and parent company management that a harmonious relationship had been established, but that also occupied significant portions of management time.

Finally, the plant was experiencing the manpower cutbacks and volatile schedule changes exacerbated by the depression in the automotive industry. Schedules were being dramatically changed on short notice; manpower had been cut several times until the plant was now operating with about forty percent of their peak employment; and they were continuing to operate at a loss, with increasing pressure from the corporate and parent management to cut those losses even further. In the context of all these pressures, the Plant Council felt it was important to provide the supervisors with a training program which allowed them to cope with their changing environment more effectively. The 4L managers agreed to cooperate to the best of their ability and time.

The initial round of presentations was followed with a detailed letter and proposal which outlined the process of the training program (see Table II-2). The proposal outlined the assessment phase, the training phase, and the evaluation phase. The role of the managers at all levels was explained and their support and pledges of cooperation were again received. At this stage the formal proposal was given the plant manager to prepare a budget authoriza-

tion for the professional costs and the overtime authorizations. A corporate directive occurred at this time to conserve cash because of the automotive depression, and this combined with vacations caused a three week delay in receiving approval to proceed.

The Plant Manager played a facilitative and supportive role in several respects. First, he placed full responsibility on his Personnel Manager to complete the program and authorized the resources to complete it. Secondly, he expressed his support to the managers on his plant staff in writing and in person at the appropriate stages of the program. He excluded one division from the training because of their involvement in other programs. Finally, he reviewed the learning test and answered each of the questions in a verbal interview with this author. The test was modified as a result of his input. He did not directly participate in the training, assessing, or evaluating, nor did his staff evaluate or assess him in any way.

The training team, consisting of the Manager of Organization Development, the Training Director and the author, prepared all the training manuals, selected the model films, and conducted the training programs which were led by trainers. The Manager of Organizational Development Manager was a former industrial engineer and a supervisor in another plant of the parent company. In

addition, he had served as a personnel manager for approximately one year in a 150 employee plant which had been closed temporarily. He had been appointed to his new position in February of 1981. He reported to the Plant Manager as a staff manager with no personnel reporting to him. The Training Director had been responsible for all training in the plant but had been unable to gain approval and fully implement a training proposal for all supervisors in the past five years. To his knowledge there had never been any program given to all the supervisors. He had made several proposals but they had never been implemented because of a lack of top and middle management support or economic conditions. He had been an industrial engineer at the local plants and was currently the manager of all security operations. He reported to the Personnel Manager with all hourly security employees reporting directly to him. The Personnel Director took an active role in the program by reviewing in detail the assessment instruments, approving and recommending to the Plant Manager the six modules to be used in the training, previewing two of them, and observing a practice training session conducted by the training team. He also requested to be, and was included in, the training program as an active participant.

Assessment Phase

During the assessment phase the training team worked with the Plant Council to determine which training modules would be most effective. Nine applied learning modules were obtained which had been used by Goldstein and Sorcher (1974). Modules for the training were selected by the training team after reviewing the films, developing a BOS measure which was based on the training modules, and receiving feedback from the plant staff.

The BOS measures were constructed with two to four questions for each of the specific learning points in the nine modules from Goldstein and Sorcher (1974). The BOS measures also included behavioral statements about supervisory responsibilities (Dowell and Wexley, 1978). The questions for each learning point were randomly distributed in the scale under five skill classifications: interpersonal, rule explanation and enforcement, organizing and planning, job/task directions, and managerial responsibility.

Nine managers of the Plant Council reporting to the plant manager were given copies of the BOS measures and asked to suggest changes which would make the measures relate more specifically to their plant operations. Several questions were eliminated which emphasized theft. Terminology for managers and equipment, tools, and proces-

ses were changed to make the measure more relevant to the local plant. The BOS measures are described in detail in a following section, and complete copies of the BOS measures are included in the Appendices. The BOS measures were completed by the participants prior to the start of the training.

It was not possible to determine which modules were most desirable from the BOS measures. A preliminary review of the data showed the modules were reported at approximately equal frequency. One major reason was that the learning points were common to several modules (e.g., ask for the employee's opinion; set a time for follow-up). Five of the Plant Council reporting to the Plant Manager also completed a questionnaire which indicated the areas of training needs they considered critical. The training team and the Plant Personnel Manager were responsible for analyzing these data and determining which modules would be presented.

Time and budget constraints dictated no more than six modules be used. The critical needs questionnaire indicated that Welcoming a New Employee to the Job and Giving Task Instructions were not high priorities throughout the plant. The module on "Controlling Absenteeism" was similar to "Discussing Poor Work Habits" so it was dropped. Consequently, the training contained the following six modules: (1) Motivating a Person to Problem Solve; (2)

Handling a Complaining Employee; (3) Discussing Poor Work Habits; (4) Discussing Potential Disciplinary Action; (5) Recognizing Employees; (6) Overcoming Resistance to Change. The modules are included in the Appendices.

The managers and supervisors were told there would be training sessions in the Fall and Spring, and that people had been assigned to them on a random basis.

Training Phase

Training Classes and Control Groups

Supervisory Groups

The research design called for analyzing the effectiveness of the training by using a control group design with pre-test and post-test measures. Plant management established two pre-conditions: (1) the training would be conducted with first shift supervisors to minimize disruptions in plant operations; and (2) the supervisors in one division would be excluded because of an unrelated training project already underway. With those pre-conditions, the remaining supervisors were randomly assigned, by a process described below, to one of three conditions: (1) trainers class; (2) managers class; or (3) pre-post control. A fourth post-test only control group was in-

cluded by testing the previously excluded personnel. (see Table II-3)

The assignments were made to the training groups and to the pre-post control group by alternating names from an organizational chart, with minor exceptions made to accommodate the plant operations. Thirteen supervisors were assigned to each class, and twenty-two to the pre-post control group. The two supervisory training classes were limited to the first shift supervisors because the training classes were scheduled at the end of the first shift so these supervisors could work their full operations. Minor deviations from the random assignment were made when two pairs of managers were shuffled between groups because one pair from an area could not be in training at the same time, and the other pair had a supervisor who had an after-hour conflict. The pre-post control group included random assignments from the remaining supervisor from the first shift, and the second and third shifts. Therefore the original design had 13 people in each training class. At the end of the first week one person missed two sessions of the managers' class and then resigned from the company before the third one. Consequently the managers' class ended up with only 12 supervisors completing the training. After the training was complete a second supervisor in the managers' class resigned so the post-tests only included 11 people for the management-trained class.

Middle Managers Groups

A Machining Division was excluded originally but the supervisors and 2-4L managers associated with it were included in the design as the post-test only control group. This group included managers from two departments and the Quality Control people who worked in those areas. Fourteen supervisors were classified in this group. This is, of course, a weaker design than random assignment, but it was decided to include them, because they could assist in providing some information about the effect on the supervisors of taking the pre-tests. Twelve 2-4L managers were selected for the 2-4L (middle) management training class, thirteen for the pre-post control group and 6 were assigned to the post-test only control group. (See Table II-3) Ten managers were selected from the eight operational areas by alternating names on the organizational chart. A replacement was necessary for an employee who was called out of town. The Plant Personnel Manager and the Corporate Career Planning Director were included to represent the personnel function. The Plant Personnel Manager represented the final decision maker for the company in the disciplinary process, so the supervisors would see him as a high power figure. The Corporate Career Planning Director was assigned to provide equal cell sizes and functional authority when half the class was desig-

nated trainers for the supervisors class. That selection process is described below. Six managers from Machining Division 1 and Quality Control were included during the follow-up evaluation stages as a post-only control group.

Six 2-4L managers were selected by a matching process to train the supervisors in the managers' class. They were chosen without regard to either their performance in, or support of, the training program. (See Table II-3). The matching process included balancing the number of trainees in both classes who reported to these managers. The balancing made it possible to more accurately test the hypothesis that the supervisors of the 2-4L managers who received the training were more effective than the supervisors of the 2-4L managers who did not receive the training. As a result, the 2-4L managers were chosen so they were matched by level and function and had an approximately equal number of supervisors participating in the training program. The result was that eleven supervisors had managers who participated as leaders in the training program, and eleven supervisor had managers who did not participate as leaders, but did participate in the middle managers training. One supervisor in each group did not have a manager participating in the 2-4L management training. Table II-4 has a detailed breakdown of these reporting relationships.

Table II-4

**Reporting Relationships of Supervisors and Managers
in the Training Classes**

	MIDDLE MANAGERS TRAINING CLASS		MIDDLE MANAGERS PRE-TEST POST-TEST CONTROL	
	<u>LEADERS</u>	<u>NOT LEADERS</u>		<u>TOTAL</u>
<u>SUBORDINATE SUPERVISORS WHO WERE IN TRAINING CLASSES</u>				
1. TRAINERS CLASS	6	6	1	13
2. MANAGERS CLASS	5 ¹	5 ²	1	11 ^{1,2}
	11	11	2	

¹Excludes one supervisor who left the company during the training program.

²Excludes one supervisor who left the company after the training program.

In summary, there were three groups of middle level managers. One group of 2-4L managers participated in the training (n=12); one group that served as a control group with pre- and post-measures (n=13); and a third group that received only the post-test measures (n=6).

Training Sessions

Middle Managers

The six modules were first given to twelve 2-4L managers in three four-hour sessions, with two modules given in each session. The format for each of the training sessions consisted of the following components: (1) introduction of the topic; (2) modeling of the behaviors and key learning points on the film; (3) handing out copies of the learning points and reviewing the film again; (4) group discussion of the effectiveness of the model and the film; (5) role playing in groups of three; (6) feedback from the trainees on the effectiveness of the module; (7) instructions to use the behaviors on at least one employee during the time before the next session; and (8) evaluation of the session. After the first training session, all training sessions were begun with a brief discussion on any feedback from the participants on the results of using the techniques or questions that they had concerning them. For example, one discussion covered when

to use the learning points since the incidents weren't as clear cut in the work place as they were in the training sessions. Another issue was that the learning points did not have to be used in the sequence they are given in the program, as long as all the points were covered.

The classes were all conducted with the author, the Training Director, and the Manager of Organizational Development who reported to the Plant Manager. The trainers would sit in on the role playing triads and make comments or answer questions when appropriate. Each triad would role play three versions of the same incident, so that each manager would be an employee one time, a supervisor one time, and an observer the other time. At the end of each role play, the observer would provide feedback to the person playing the supervisor. The trainers would make comments at that time if they were also observing. After each triad had role played three times, the class would reassemble and discuss any problems or issues which might have arisen, such as what to do with a particularly difficult employee or how to handle the situation if several members of the union bargaining committee were present.

Supervisors Training

At the conclusion of the middle management training sessions, one group of supervisors were trained in a class conducted by the same professional trainers who conducted the middle managers training. The training included the same modules and format as the middle managers training. The modules lasted two hours each and were held on Mondays and Wednesdays for a three week period. The supervisors were paid overtime to attend the training program which was held at the end of their shift.

The managers class included a second group of supervisors who were trained by six of the managers from the 2-4L manager training. The sessions conducted by the managers were identical to the ones conducted by the trainers, except there was no film shown. Instead, the material from the film was role-played by two of the managers conducting the training. The learning points were handed out as in the previous classes, and then the managers role played the film material again. The supervisors were told the training in their class was different than the other supervisors' training program in order to determine the best method for future training. The author was in the back of the room at each of the training modules conducted by the managers, but did not participate in the discussion and remained busy with paperwork so that people did not

look to him for guidance or suggestions. The managers were given an instructor's manual and the material for the module, including the details of the role play as adapted from the film. The material was usually handed out one day prior to the start of the training, but no separate training program was held to instruct the managers in training techniques. The managers' class was conducted on Tuesdays and Thursdays during the same weeks the trainers' class was held. A description of the training modules learning points is listed in the Appendices. The learning points for the module on improving poor work habits is included in Table II-5.

Evaluation Phase

Evaluation Introduction

The evaluation of the training's effectiveness was based on the trainees' reaction to the training, the trainees' learning as a result of the training, the trainees' behaviors as a result of the training, and the trainees' performances. (Kirkpatrick, 1976). Several variables were also measured to determine their affect on the results of the training. The self-esteem of the supervisors, the working relationship of the supervisor with his manager and the perceived power of the trainers were all expected to influence the training's effectiveness.

Table II-5

TRAINING MODULE EXAMPLE

Giving Recognition to the Average Employee

1. Specifically describe to the employee what he or she did which deserves recognition and why.
2. Thank him or her by saying how much you appreciate what he or she does.
3. Ask the employee if there is anything you can do to make it easier for him or her to do his or her work.
4. Time for a specific follow-up meeting, if necessary.

The measures were collected at various times during the training. (See Table II-6) Reaction measures were collected during the training modules and after 16 weeks. Pre-measures and post-measures were collected for learning, behaviors, and performance. The self-esteem, VDL, and power measures were collected after the training was completed and during the collection of the post-test measures. The measures and their collection schedules are summarized on Table II-6. Each type of measure is described in the following sections arranged in chronological sequence.

Behavior Measures

As described in the assessment phase, the BOS measures used two to four statements for each learning point. The questionnaires were administered at the end of a Rater's Training Workshop held two weeks prior to the training sessions for the 1-4L managers. The rater's training was limited to 20-30 people in each session but follow-up sessions were held for two smaller groups until 56 managers completed the training.

The workshop was based on the work of Latham, Wexley, and Pursell (1975). Videotapes of job candidates being evaluated were shown to the participants, after which the participants were asked to evaluate the candidates on a 9 point scale. The participants were then asked to explain

Table 11-6
MEASURES BY TIME PERIODS¹

PRE-MEASURES		GROUP		DEPENDENT VARIABLES										MODERATORS			
Time:		During Immed 1st after Class			During Immed after wks	12 wks	16 wks	20 wks	20 wks	22 wks							
Variable: BOS- BOS- Self Boss LEARN1 FORM1					Ave Module Reac- tion	Sum- mary Reac- tion	LEARNT low up Power	BOS- Self2	BOS- Boss2	Per- form Rat- ing							
SUPERVISORS																	
12	9	13	13	1. Trainers Class	13	12	11	11	11	9	12	11	11				
12	8	12	12	2. Managers Class	12	12	11	10	9	8	11	10	10				
20	13	15	20	3. Pre-Post Control	x	x	19	x	17	16	18	11	11				
x	x	x	x	4. Post Only Control	x	x	13	x	11	9	x	6	6				
MANAGERS																	
11	5	12	x	5. Middle Managers Class	12	11	9	12	10	4	x	x	x				
9	6	x	x	6. Pre-Post Control	x	x	8	x	7	8	x	x	x				
x	x	x	x	7. Post Only Control	x	x	4	x	6	4	x	x	x				

¹ Numbers in the boxes represent the n for that measure at that time.
x indicates no measures taken for this group at that time.

and support their ratings in a classroom discussion. The purpose of the workshop was to allow the managers to actually observe other managers making rating errors, experience their own tendency to make the errors, and to receive feedback on their own accuracy in rating (Latham and Wexley, 1981).

The exercises were designed to reduce four rating errors: (1) "similar to me effect," (2) "first impression," (3) "halo effect," and (4) "contrast effect." (For a full discussion on the content of the rater training and the effectiveness of this training in reducing rater errors, see Latham and Wexley, 1981, pp. 104-113.)

At the conclusion of the workshop the BOS measures were handed out and the instructions for completing them were given to the participants. All the 1-4L managers completed measures on themselves and their subordinates. For this research the supervisors completed self-report measures. The General Supervisors (2L) completed self-report measures and measures on the supervisors reporting to them. The superintendents (3L) completed self-report measures and measures on the general supervisor (2L) reporting to them. The divisional managers (4L) completed self-report measures and measures on the superintendents reporting to them.

A BOS measure was developed for each level of manager. For example, the statement of the supervisor's scale read: "Shows he understands problems from the worker's viewpoint," but was changed on the 2-4L manager's scale to read: "Shows understanding for subordinate's problems (meeting schedules, finding parts, filling out paperwork, etc.)." In addition there were statements on the 2-4L managers' scale which were not included on the supervisors' scale because they did not pertain to the supervisor. (e.g. Gives subordinate the authority to manage his own department.) The supervisor's BOS measure consisted of forty-seven statements and the 2-4L manager's scale consisted of forty-nine statements.

The measures were given out with the following instructions included in the scale (see Latham and Wexley, 1981).

"This check list contains key job behaviors that managers have reported as critical for their jobs and the effectiveness and efficiency for _____ Corporation. Please consider the above-named individual's behavior on the job for the past four months. Read each statement carefully, circle the number that indicates the extent to which you believe this person has demonstrated this behavior.

For each behavior, describe the number which represents the frequency with which the behavior is observed when it is appropriate.

For each behavior: 5 means almost always, or 95 to 100 percent of the time; 4 means frequently, or 85 to 94 percent of the time; 3 means sometimes, or 75 to 84 percent of the time; 2 means seldom, or 65 to 74 percent of the time; 1 means almost never, or 1 to 64 percent of the time; 0 means not able to observe at appropriate times.

An example of an item is shown below. If a manager drives his car to work 95 to 100 percent of the time, circle 5. If he drives it 50 percent of the time, circle the 1. If you don't know how he gets to work or do not observe him coming to work, circle 0.

1. Manager drives his car to work.

Almost never 1 2 3 4 5 0 Almost Always"

The second page, then, went into another description on seven common rating errors: contrast effects, first impression, halo effect, similar-to-me, central tendency, and negative and positive leniency.

Each measure required approximately ten minutes to complete once the instructions were understood. The measures were collected as soon as they were completed and reviewed by three researchers assisting in the workshops.

Where there were errors, the participants were requested to correct them (e.g., no code; page skipped).

During the follow-up evaluations stages, the BOS measures were collected twenty weeks after the training in a room set aside during all three shifts. The managers at all levels came in during time periods which were convenient for them and completed them. They completed them for those managers with whom they had the most contact during the past three and a half months, even though they may have changed bosses in the last month. The division which was originally excluded from the study was included in this administration. They were given the BOS measures and given particular instruction to read the section on types of rating errors. Seventeen additional managers were involved in this phase, including one superintendent (3L), five general supervisors (2L) and eleven supervisors. There was no opportunity to provide the rater training workshop for these participants, so their ratings may be more affected by rating errors.

The BOS measures consisted of five subscales focusing on (1) interpersonal skills; (2) rule explanation and enforcement; (3) organizing, planning, and follow-up; (4) job or task directions; and (5) handling regular managerial responsibilities. The five subscales are summarized

in the table below. The values represent the average value range for each classification.

The ranges were established by the personnel director and the author as approximately 20% ranges. The point value for each subscale was averaged so missing values would not affect the scores and would not require insertion of the mean for missing values or "no chance go observe" responses.

The total evaluations for the BOS were calculated two ways. The first total evaluation was computed by summing the scores received on each subscale according to the procedures identified in Latham and Wexley (1981). The points received for each subscale were summarized to calculate a value for each subscale. For each subscale,

BOS

<u>Scale</u>	<u>Below</u> <u>Adequate</u>	<u>Adequate</u>	<u>Average</u>	<u>Above</u> <u>Average</u>	<u>Superior</u>
Inter- personal	1-1.8	1.81-2.6	2.61-3.4	3.41-4.2	4.21-5.0
Rule Ex- planation	1-1.8	"	"	"	"
Organi- zation & Planning	1-1.8	"	"	"	"
Job/Task Directions	1-1.8	"	"	"	"
Managerial Responsi- bility	1-1.8	"	"	"	"

Below Adequate was given a 1, Adequate a 2, Average a 3, Above Average a 4, and Superior a 5. The five subscales were weighted equally even though they did not have the same number of items because weighting them equally seldom lowers the validity when compared to weighting each subscale and analyzing the weights with multiple regression (Latham and Wexley, 1981). The ranges for the total scores for both the supervisors and the 2-4L manager scales were set by the Personnel Manager and the author to be:

<u>Below Adequate</u>	<u>Adequate</u>	<u>Average</u>	<u>Above Average</u>	<u>Superior</u>
5-9	10-13	14-17	18-21	22-25

The BOS measures were further analyzed by computing an average score for all the items. This procedure has the affect of weighting each subscale equally, as does the procedure of summing the individual subscales and providing a value for each subscale. The data was analyzed using both the sum of the subscales and the average score methods, but there was no difference in the results. The final results are reported on the basis of the average scores.

Learning Test

A test was constructed to measure the learning of the participants in the training program. The author con-

tacted personnel from industrial engineering, safety, labor relations, and training to identify critical incidents to be used in the learning exam. The questions were drawn from particularly effective or ineffective managerial actions by supervisors or middle managers based on actual incidents in the plant over the past five years. Fifty-eight items were originally drawn up that were reviewed for accuracy by the same staff who had identified the critical incidents. They made corrections for meaning and accuracy by clarifying the incidents and correcting the terminology.

The test was then administered to four people who wrote out their answers and to the plant manager who gave his answers verbally to the author. Two of the people had been supervisors in the plant but now had different responsibilities, and two were industrial engineers who interacted frequently with the supervisors and middle managers. The first version of the test took approximately two and a half hours so it was reduced to twenty-four questions. After reviewing the answers from the five participants, twenty-four items were chosen for the final version. The items were chosen which best represented the learning points to be covered yet had variance between the answers of the five individuals. Each question was examined to see if there was divergence on the handling of the question based on the learning points associated with

each question. Where the five pre-test answers showed little difference in range, the questions were thrown out. Where there appeared to be a range from the "best" possible answer to the "worst" possible answer, the question was included.

The questions were coded on a five-point scale for effective answers, based on the learning modules which would be taught. An example of one of the questions is listed below and the rating coding (the full test is included in the Appendices):

1. You're the foreman. One of your employees has recently been using up too many tool bits on his Warner-Swayze. You suspect he's running too fast. He has three years seniority in this department and has been a satisfactory performer. How would you discuss it with him?

The coding included five points if the answer covered the learning points in the module which addressed this particular question, three points if two of the learning points were covered, and one point if none of the learning points was covered or if the approach was at odds with the focus of the learning points. In this particular example, five points would be awarded if the person kept in mind (1) the problem is the focus, not the employee, (2) asking the

employee for his ideas, (3) coming to agreement on what needs to be done, (4) time for a specific follow-up meeting. The points 4 and 2 were given for questions which appeared to use more than any two of the learning points, but didn't quite cover all four, or which didn't quite use two of the learning points. Each test was graded by two graders who did not know the names of the individuals who took the test.

The tests were administered to the managers and supervisors during the first hour of the respective training programs. A make-up session was held for those supervisors who did not attend the first session.

The control group represented a more difficult task. Rooms and dates were set aside to administer the test during the first week of the training program, but only eight of the supervisors participated at that time. A follow-up time was established one week later when another five supervisors completed the tests. In these instances, the tests were administered to the supervisors with the author in the room to answer any questions which might have occurred. Ten copies of the test were given to those people who did not participate in these two sessions with instructions to fill them out and return them. Two tests were returned, so a total of fifteen pre-tests were finally completed for the pre-post control group.

The same test was administered during a follow-up evaluation four months after the training was completed. A room was set aside for the supervisors and middle managers to come in during their work shift and complete the test administered by the author. At this time the test was administered to those division people who were not included in the original testing, but were included in the follow-up evaluation. Seventeen additional managers, including one superintendent, three general supervisors, and 13 supervisors were included in the post-only control group in this follow-up measure. The same instructions for completing the post-test were given to each individual as they were in the pre-test.

Performance Measures

The original design of the test for performance was to identify those particular variables which would fulfill measures of bottom-line performance as outlined in Macy and Mirvis, (1976). A series of individual and collective meetings were conducted with the plant staff, finance people, corporate data processing, and various support offices for the production operations, with the purpose in mind of identifying performance criteria. The heterogeneity of the operations supervised by the managers in the training program proved insurmountable. Finally, in a meeting with the chairman of the Dissertation Committee

and the chairman of the Industrial Engineering Department, it was determined that it was virtually impossible to compare meaningful bottom-line results from the two groups, so the following evaluation procedure was eventually worked out.

Pre-test Performance

Personnel from timekeeping, technical plant engineering, production control, personnel offices, industrial engineering, and safety were asked to rate the supervisors according to the following three criteria: (1) keeping people productive and having the department organized, (2) performing work in the area to standard, (3) producing a quality product or service. Eighteen people were individually contacted from various departments and shown a list of forty-eight supervisors and asked to evaluate them on these three factors using a fifteen-point composite scale. The performance rating process is described below. (All scales are included in the Appendices.)

- (1) The rating interviews were conducted by the author in individual sessions with the raters. The one exception was a group of four timekeepers who completed the ratings in a group session. Each rater went through the procedure of reading a sheet

describing the six common errors in rating discussed earlier and job performance descriptions for two supervisors. The supervisors' descriptions were written to anchor them as opposite ends of the rating scale. When they finished reading the descriptions, they were given the copy of the rating scale and asked to rate the fictitious supervisors described on the sheets. The fifteen-item rating scale is included in Exhibit L.

- (2) The rating scale was anchored at the low end with the following description: "Could be expected to not have the department organized, frequently misses production bogies and may sacrifice cost and quality to get out as much service or product as possible." The high end of the scale was anchored with the following description: "Could be expected to keep people organized while producing a high-quality product or service at standard cost. Foresees unusual problems." After the observers rated the fictitious supervisors, the author showed them the recommended ratings based on the wording in the descriptions and in the

scale. The raters were always too lenient for the poor performer and/or too severe for the good performer. The author discussed their ratings with them in light of the recommended ratings.

- (3) After the observers agreed with the rating which was given by the author, or was within one point of the rating, a sheet was given to them naming the 48 supervisors which they were asked to help evaluate. The author pointed out that the people were to observe only those individuals whom they felt they could evaluate on a reasonable basis over the past four months, and who they could expect to evaluate over the next three to four months. After raters fully understood the process by which they were to rate the supervisors, they then circled those supervisors whom he felt they could comfortably rate based on their observations of the output of a particular supervisor's department. Raters circled between two and 23 people.
- (4) At that point the raters were asked to rate the highest individual in the entire group

that they had circled. When they picked the highest person to rate, they placed that person's rating on the 15-point scale. The author then asked them to explain why they had given the supervisor that particular rating. Explanations or examples were asked for to clarify ratings. If the raters were including extraneous factors for this rating, the author reexplained the criteria for this rating. The raters were encouraged to adjust their ratings. If they were satisfactory explanations based on only the observations that the author was looking for, the raters chose the next person to evaluate. Examples of inaccurate ratings were: "He really gets along with his people very well." The discussion would point out that that was not the item that they were to measure in this rating and that other items in other ratings would be looking at that variable.

- (5) After the persons indicated they understood the rating process, they chose the supervisor that they felt would be the least effective of all the supervisors remaining on the list. That supervisor was placed at

the lower end of the scale and another discussion was held to explain and clarify the rating.

- (6) After two supervisors were placed at opposite ends of the scale, the raters were asked to observe the difference between the two supervisors. The author then asked if that difference represented a reasonable range between the performances of the two supervisors. When the raters indicated that the range was not enough, they were encouraged to either raise the higher supervisor and/or lower the lower supervisor. No one narrowed the range.
- (7) The raters next chose the supervisor rated highest of those remaining on this list and placed him on the scale. Then they chose the supervisor rated lowest of the remaining on the list. This process was repeated until the list had been exhausted. This alternating process was designed to minimize central tendency rating errors. Raters were allowed to give supervisors equal ratings.
- (8) The raters were allowed to keep their

sheets which identified the supervisors they would rate, but were not allowed to keep their particular ratings of those supervisors.

The raters were informed that they would be asked to repeat the same process in three-four months. They were encouraged to observe those supervisors over this coming time period to note if there were any changes. The raters were generally not aware of which supervisors were participating in the training program. Only one individual was aware of a few supervisors who had participated, but did not know of others or who was in the control group. This performance rating was conducted two weeks after the training program for the supervisors had been completed. The raters were strongly encouraged to base their observations on the past three to four months' associations with the supervisors they were rating. They indicated that they had not been particularly focusing on them in the past two to four weeks and felt that their ratings were reflective of the past four to six months of performance.

Forty-six supervisors were appraised from one to nine times for an average of 3.85 ratings per supervisor. Two were not appraised.

Post-test Performance

The raters were contacted four months after the original evaluations and asked to rate the supervisors again. There had been numerous personnel changes as discussed earlier, so the raters were not able to rate the same supervisors. Several supervisors had been assigned different responsibilities and different shifts in areas where the raters could not evaluate them. Furthermore, the raters themselves had been affected by the changes. Four of them had different positions and one had left the company. The changes necessitated the following guidelines for the follow-up evaluation: (1) raters were instructed to review the list of supervisors again. They were also given the names of the supervisors they had originally evaluated; (2) they were asked to circle supervisors they could reasonably evaluate over the past four months. They were asked to cross off any supervisors from their original list whom they could not rate. If there were supervisors they had been able to observe over the past four months whom they did not originally evaluate, they were instructed to include them on their list at this time.

The results were that two of the four raters whose jobs changed evaluated no one at the second evaluation; one of the other two substantially reduced the ratings he

could make, and the other rated substantially different supervisors. The rater who left was not contacted. The other raters made minor revisions in the people they did rate.

It seemed advisable to add raters since there had been substantial change, so three additional raters were contacted. Two participated, but the third indicated he could not provide accurate enough feedback because of limited contact. As a result two new raters were added for a total of 17 raters for the follow-up evaluations. Forty-two of the forty-eight supervisors were rated for an average of 4.1 ratings per supervisor. The detailed list is included in the Appendices.

The post-test performance evaluations were expanded to include separate ratings for each of the three factors used in the rating: keeping people productive and having the department organized; performing work in the area to standard; and producing a quality product or service. It was felt three individual factors could give greater reliability in the performance measures than just the overall performance rating alone (Magnusson, 1976). The three factors each had a rating sheet describing the behavior which could be expected to be observed for each end of the scale. An example of the scale for quality is listed below:

(low) could be expected to run production or provide service if it is poor or even unacceptable quality. Does not check performance of subordinates to monitor quality production; (high) could be expected to establish quality as top priority and demands high quality performance from his people at all times; communicates the quality requirements and will not sacrifice quality.

The scales are included in the Appendices.

The raters first evaluated supervisors' performance on the scale used in the pre-test to minimize contamination of the scales in comparison to the pre-test. The identical procedure used earlier was repeated for the rating of the first scale, including reviewing the benchmark performances, discussing each of the first two ratings, and considering the range between them.

Reaction Measures

The reaction measures were given at three different times: after each module, after the class had been completed, and sixteen weeks after the training was completed. Eight measures were collected in all with one for each of the six modules, one for the class as a whole immediately after completing it (Summary Reaction) and one sixteen weeks later (Follow-up Reaction). The six reac-

tions after each of the modules were combined to produce the mean reaction for the six modules (Average Module Reaction).

Module Reactions

The module questionnaires had 23 statements which asked for participants' reactions to the training. Seventeen statements focused on both the process and content of the training program as well as the receptivity for the training in the departments where the participants worked. The participants were asked to evaluate the module according to the following instructions:

Thinking for a minute about the training, answer the statements based on the way the class was conducted. Circle the column which best describes your opinion. Be sure you read the statements carefully because some use negative terms. Circle 1 if you strongly agree, 2 if you agree, 3 if you ?, 4 if you disagree, and 5 if you strongly disagree.

Eleven of these 17 statements asked for reactions to the process and content of the training, such as: the leaders presented the learning points clearly and logically (1); the role modeling in the film (by the managers) was effective (7). The other six statements focused on the recep-

tivity of the work environment such as: If I used the steps on the job, my boss would back me up (12); If I used these steps on my job it would make it easier to deal with the stewards in the long run (14). In an effort to determine whether the live modeling by the managers was perceived as more important than viewing films, the participants were asked to rate the importance of six aspects of the training. The six aspects were: role modeling in the film (or "by the managers"); review of on-the-job experiences; discussion of the learning points; practice and feedback; hearing how other supervisors handle things; having the leaders conduct the class. In another section they were asked to: "think about all the parts of the training which were important to you." The participants were instructed to rank each item but they were provided with a five point scale from very important to not at all important, so it was calculated as a rating.

The reactions from the 11 statements on the process and content of the training and the six statements about the importance of the aspects were summed together to calculate a mean reaction for the training. The means for each module were summarized to provide a grand module mean.

Summary Reactions

At the conclusion of the six training modules five statements were added to the reaction measure which further assessed managers' reactions to the training. The statements were based on the assumption that the managers were able to use the behaviors in their jobs over the two to three week period of the class and could react to their effectiveness on an initial basis. The statements, which were taken from Latham and Saari (1979), are: (1) The training helped me do the job better, (2) the training helped me interact better with employees, (3) the training helped me interact more effectively with my fellow managers, (4) the training helped me interact more effectively with my bosses, (5) I would recommend this training for other managers. These five items used the five point Likert scale ranging from strongly agree to strongly disagree.

Follow-up Reactions

Sixteen weeks after the training, the participants were again given the 28 item reaction measure. The Follow-up Reaction Questionnaire allowed reactions to be compared between the two groups for the later period. It also allowed for comparison of the groups over time to see

if they still reacted the same after several months had passed.

Perceptions of the trainers' power were collected at the time of the follow-up reactions to determine if the perceived power for the managers was greater than the perceived power for the Professional Trainers. Power was a single sum scale measured with eight items on a five-point Likert scale. The statements were derived from work done by Holzbach and Weinstein, (1974) which measured French and Raven's (1965) sources of power. Statements included: (1) This leader would reward my good work, (3) I'd have to accept this leader's orders, and (6) I respect him as a person. It is included in the Appendices.

Power measures were given to the supervisors who participated in the two training classes. The supervisors rated the perceived power of the leaders of their respective classes. The supervisors in the class conducted by the trainers were asked to answer the statements concerning the trainers' power, while the supervisors in the managers class were asked to evaluate the power of the managers who conducted the class.

Moderator Variables

Moderator variables were taken in October and November to measure self-esteem and the relationship between the supervisors and their managers.

Self-esteem

Self-esteem was measured to determine if those supervisors with low self-esteem would imitate behaviors more than those participants with high self-esteem. As reviewed in the first chapter, research has shown low self-esteem people have a much greater likelihood of imitating models than high self-esteem people (Gelfand, 1962; deCharms and Rosenbaum, 1960; Gergen and Bauer, 1962; Weiss, 1977, 1978).

Self-esteem was collected from participants in all supervisors' groups. It was measured with Rosenberg's scale, using a five-point Likert format and treating it as an additive scale. The Rosenberg scale was used because of its widespread use with adults and because of its brevity, high reliability and validity (see Robinson and Shaver, 1973). Rosenberg used a four-point Likert scale, from Strongly Agree to Strongly Disagree, but a fifth response was included in this research to allow participants who were uncertain to answer "?". This allowed participants to avoid being forced to agree or disagree with a statement they found ambiguous or where they were unable to decide on the best answer. Sample statements are listed below (numbers in parentheses refer to high self-esteem responses):

I feel that I'm a person of worth, at least on an

equal basis with others (1,2).

I certainly feel useless at times (4,5).

VDL

The relationship between the supervisor and his manager was assessed to determine if the relationship itself was a significant moderator in the training. Research by Dansereau, Graen, and Haga, (1975) indicated that a strong relationship between the model and observer increases the tendency for the observer to imitate the behaviors. However, the work by Weiss (1977 and 1978) indicates that the relationship will be the determining factor only if the model has low self-esteem. Including the VDL measure and the self-esteem measure allows the opportunity to examine this discrepancy to see whether both or neither of the factors are significant.

The VDL is a 7 item scale with four possible responses for each question. Each response is based on the question. For example:

Do you usually feel you know where you stand . . . do you usually know how satisfied your manager is with what you do? (Circle one.)

- 4 always know where I stand.
- 3 usually know where I stand.
- 2 seldom know where I stand.
- 1 never know where I stand.

CHAPTER III

RESULTS

Introduction

The results of the analyses are outlined in the following chapter. The reliabilities for the different measures are presented first, followed by the results of the tests of the hypotheses for the supervisors. The tests for the hypotheses concerning the middle managers conclude the chapter.

Reliabilities

Reactions

Alpha reliabilities were calculated for each of the three reaction measures (i.e., Average Module, Summary, Follow-up) and the power measure. The alpha reliability for the average module reaction was .94. The reactions measures for the modules were analyzed for each class separately and they ranged from .67 to .86, with a median of .84 (see Table III-1 for the list of reliability scores.) The alpha reliability for the summary reaction

measure was .91, and .95 for the follow-up reaction measure. The power measure's alpha reliability was .86.

Learning

The learning measure was modified by dropping two questions. One question was based on a policy which was originally reported as having gone into effect, but was canceled shortly after it had been announced. The other question dealt with a policy which few supervisors had experienced so most left it blank or answered in terms which were unmeasurable. Therefore the final analysis was conducted on 22 items.

Two methods were used to calculate the inter-judge reliability for the learning measures. The scores for the first judge were entered followed by the scores for the second judge, and then the split half reliability was calculated. The split-half method gave a more conservative estimate than a parallel-forms reliability. The pre-measure learning score had a reliability of .72 and the post-measure learning score had a reliability of .88. The parallel-forms reliabilities were .89 for the pre-measure and .86 for the post measure.

Table III-1
SUPERVISOR RELIABILITIES

REACTIONS

MODULES	.94
SUMMARY	.91
FOLLOW-UP	.85
POWER	.86

LEARNING

LEARN1	.72	split-half
	.89	parallel-forms
LEARN2	.88	split-half
	.86	parallel-forms

BOS

BOS-Self1	.82
BOS-Self2	.91
BOS-Boss1	.95
BOS-Boss2	.95

PERFORMANCE

PERFORM1	.68
PERFORM2	.81

MODERATORS

SELF-ESTEEM	.82
VDL	.87

Behaviors

The BOS reliabilities were calculated for the self-report (BOS-Self) measures and the boss (BOS-Boss) measures separately for the pre and post time periods. Each measure was averaged over the entire BOS measure. The alpha reliabilities for the self-report measures (BOS-Self) were .82 for the pre-measure and .91 for the post-measure. The alphas for the Boss measures were .95 for both the pre-measure and the post-measure.

Performance

Performance measures were collected by having technical and support personnel (i.e., engineering, safety) rate supervisors performance on quality, standard cost and organization criteria. The measures for each supervisor were calculated by averaging the values from the raters on the 15-point overall scale. The means for each supervisor were summed to calculate an overall mean and variance for the supervisors' ratings. The variance for each supervisor was calculated and summarized with the other supervisors to calculate the mean variance and the variance of the variances. Using the variance of the means as an estimate of the true variance, (sd_m^2) and the mean variance as the error variance (sd_e^2), the single rater reliability was calculated according to the following formula:

$$\text{reliability} = \frac{sd_m^2}{sd_m^2 + sd_e^2} = \frac{\text{true variance}}{\text{true variance} + \text{error variance}} .$$

Ratings for supervisors with more than one rating were used to calculate the reliability. The reliability for the sample as a whole was calculated for all the supervisors based on the average number of ratings for each supervisor using the Spearman-Brown prophecy formula. The reliabilities were .68 for the pre-measure and .81 for the post-measure. The calculations are detailed in Appendix B.

As described in the methodology chapter, multiple criteria were taken during the post-measurement process to determine if the composite measure was reliable. The average of the three multiple criteria correlated .90 with the composite Perform2 measure. Consequently the Perform2 composite measure was used in the analysis because it was identical to the Perform1 measure.

The self-esteem scale was originally scored by Rosenberg (1965) as a GUTTMAN scale, but has been used in later research as an additive scale with high reliability (Robinson, et al., 1976). The present research used it as an additive scale and the alpha reliability was .82.

The VDL measure was used because of its ability to describe a close working relationship between supervisor

and his/her manager in the literature and its high reliability. (Graen, Dansereau, and Haga, 1975; Graen, 1976; Liden and Graen, 1980). The alpha reliability for this sample was found to be .87.

Middle Managers

The reliabilities for the middle managers were calculated in the same manner as the reliabilities for the supervisors. The reliabilities for the middle managers are shown in Table III-2. The reaction measures for the middle managers are lower than the supervisors but the parallel-forms learning measures are higher. The BOS measures are equivalent. Considered on the whole, the reliabilities for the middle managers are similar to the reliabilities for the supervisors.

Table III-2

MIDDLE MANAGER RELIABILITIES

Reactions:	
Module	.72
Summary	.66
Follow-up	.78
Power	.85
Learning:	
Pre-measure	.94
Post-measure	.95
BOS:	
Self1	.88
Self2	.83
Boss1	.92
Boss2	.92

Tests of Supervisor Hypotheses

Group Characteristics

Data from all the measures was collected on 63 supervisors, but seven supervisors did not return information on their background. The data for the remaining 56 are summarized in Table III-3. The supervisors were middle-aged males with considerable experience in both plant operations and supervision. The average age for the supervisors was 48.3, with ages ranging from 34 to 64. The supervisors had an average of 10.1 years experience as a supervisor, and they had accumulated an average of 19.5 years of plant seniority. Their average number of subordinates was 12.3, but they supervised from one up to 38 people. Thirty-one (55%) of the supervisors worked on the first shift, nineteen (34%) on the second shift, and the remainder on the third shift. They were predominantly white with three Spanish surname, two black, and one American Indian employed at the time. All of the supervisors were male. Their education conformed to a bell shaped curve with twenty-seven (49%) holding a high school degree or equivalent. The rest ranged from two with an eighth grade education or less (4%), to three supervisors who were college graduates (5%).

Table III-3
CHARACTERISTICS FOR SUPERVISORS

	<u>\bar{x}</u>	<u>RANGE</u>	<u>sd</u>
1. AGE	48.3	34 - 64	8.79
2. YEARS AS A SUPERVISOR	10.1	1 - 30	4.53
3. PLANT SENIORITY	19.5	1 - 30	9.99
4. NUMBER OF SUBORDINATES	12.3	1 - 38	7.45
5. SHIFT 1	31		
2	19		
3	6		
6. RACE White	50		
Spanish surname	3		
Black	2		
Indian	1		
7. EDUCATION ¹			
1. 8th grade or less	2		
2. Some high school	11		
3. High school or equivalent	27		
4. Some college	12		
5. College graduate	3		

n = 56

1. One person did not report education level.

Trained Supervisors vs Control Group Hypotheses

Pre-measures

The first set of hypotheses concerned the effect of the training on the trained groups of supervisors versus the control groups. Analysis of the data from the pre-measures showed that the random assignment did not work to distribute the groups on an equal basis for some of the measures shown in see Table III-4. The learning measures showed marginal significance ($F = 2.62, p < .09$), while the self-report BOS (BOS-self) were not significant ($F = .38, p \leq .69$). The BOS measures completed by the managers of the supervisors (BOS-Boss) were highly significant ($F = 5.50, p \leq .01$). The performance measures (Perform) ($F = 2.04; p \leq .14$) were not significant.

Table III-5 displays the data from the pre-measure and post-measure means and standard deviations in terms of gains scores. The results show significant gains for learning in both the trainers class ($t = 3.00, p < .02, 10$ d.f.) and the managers class ($t = 2.58, p < .05, 10$ d.f.). Their combined gain score is 4.03 ($t = 4.03, p < .002, 21$ d.f.). The results for behavioral changes and performance show no significant gain for either of the BOS measures or the performance measure. The pre-post control group mean gain score for learning did show a slight loss of -3.9 and

Table III-4

MEANS AND STANDARD DEVIATIONS OF SUPERVISORS

PRE-MEASURES

<u>GROUP</u>		<u>LEARNING</u>	<u>BOS-SELF</u>	<u>BOS-BOSS</u>	<u>PERFORM</u>
1. TRAINERS CLASS	\bar{x}	42.85	4.03	3.71	7.52
	n	13	12	9	13
	sd	7.3	.40	.55	3.14
2. MANAGERS CLASS	\bar{x}	46.75	4.10	4.08	9.50
	n	12	12	8	12
	sd	8.39	.44	.21	1.85
3. PRE-POST CONTROL	\bar{x}	50.43	3.96	3.43	8.01
	n	15	20	13	20
	sd	10.06	.43	.45	2.51

POST-MEASURES

1. TRAINERS CLASS	\bar{x}	49.64	3.91	3.71	7.81
	n	11	11	9	12
	sd	12.48	.37	.45	2.25
2. MANAGERS CLASS	\bar{x}	52.23	4.16	4.03	9.06
	n	11	9	8	11
	sd	8.88	.38	.39	2.36
3. PRE-POST CONTROL	\bar{x}	45.55	3.95	3.54	7.92
	n	19	17	16	18
	sd	10.59	.39	.35	2.91
4. POST ONLY CONTROL	\bar{x}	46.53	4.19	3.73	-
	n	13	11	9	
	sd	7.73	.38	.70	

Table III-5

GAIN SCORES AND STANDARD DEVIATIONS OF SUPERVISORS

	<u>LEARN</u>	<u>BOS- Self</u>	<u>BOS- Boss</u>	<u>PERFOR- MANCE</u>
TRAINERS CLASS (n = 11)				
\bar{X}	7.55	-.09	.00	-.17
sd	8.36	.33	.33	2.83
t	3.00	-.86	.00	-.55
x_1x_2	.76	.68	.85	.38
MANAGERS CLASS (n = 11)				
\bar{X}	6.27	-.07	-.01	-.02
sd	8.05	.44	.15	1.91
t	2.58	-.47	-.15	-.03
x_1x_2	.56	.39	.94	.59
PRE-POST CON- TROL (n = 13)				
\bar{X}	-3.9	-.02	-0.5	-0.9
sd	5.95	.53	.24	1.95
t	-2.36	-.15	-.66	-.20
x_1x_2	.83	.17	.81	.74
TRAINERS AND MANAGERS CLASS (n = 22)				
\bar{X}	6.91	-.08	.00	-.10
sd	8.04	.37	.26	2.38
t	4.03	-.94	.00	.20
x_1x_2	.66	.58	.85	.45

coupled with a smaller standard deviation than the trained groups, it was significant ($p < .05$, 12 d.f.).

It was originally planned to analyze the data using Multivariate Analysis of Variance (MANOVA), but in addition to the fact that there were significant differences in the pre-test measures, the problems with missing data made MANOVA impractical. As a consequence, the data were analyzed according to correlational analysis gain scores. This involves holding the pre-measures constant after first correcting for attenuation following procedures outlined in Cronbach and Furby (1970) and Lord (1962). Since no pre-measures were used in the Post-Only Control Group, this group could not be used in the residual gain score analysis. Control groups were dummy coded zero (0) and trained groups were coded one (1).

Correlation Matrix

The correlation matrix for the pre-post control group of supervisors (Group 3) and the Trained Supervisors (Groups 1 and 2) is shown in Table III-6. The supervisors in the pre-post control group were coded 0 (Group = 0) and the supervisors in the trained groups were combined and coded 1 (Group = 1). Several observations should be made about the table. First the correlation between the pre-measure for learning (Learn1) and Group membership is

Table III-6

CORRELATION MATRIX FOR LEARNING, BEHAVIORS, AND PERFORMANCE IN SUPERVISORY GROUPS¹

GROUP (G) ¹	G	Premeasures					Postmeasures					V.D.L	S.E.
		L1	BS1	BB1	P1	L2	BS2	BB2	P2				
LEARN1 (L1)	-31**	-											
BOS-SELF1 (BS1)	12	06	-										
BOS-BOSS1 (BB1)	46***	02	19	-									
PERFORM1 (P1)	09	11	19	35	-								
114													
LEARN2 (L2)	25	58**	07	21	-08	-							
BOS-SELF2 (BS2)	10	-07	41**	-02	09	-04	-						
BOS-BOSS2 (BB2)	38**	-30	-03	86**	38*	15	09	-					
PERFORM2 (P2)	10	16	14	13	60**	-06	09	12	-				
V.D.L	15	-10	25	01	24	14	26	-04	12	-			
SELF ESTEEM (SE)	22	-14	01	04	-06	02	06	-04	11	14	-		
n = (47 - 22)													

n = (47 - 22)

* p < .05

** p < .01

1. The Pre-post control group was coded zero (0) and the trained supervisory groups were coded one (1).

equal to .31 (sig at $p \leq .05$). The BOS-Boss1 correlates significantly with Group at .46 ($p \leq .01$). Neither BOS-Self1 (.12) nor Perform1 (.09) are significant at the pre-measure time period. The correlations between Group and Learn2, BOS-Self2, and Perform2 are not significant, but BOS-Boss2 is significant ($p < .05$). The correlations between group and BOS-Self2 and Perform2 are also not significant in the post-measures stage. These results indicate that the control group did significantly better than the trained groups in the learning pre-measure, but that there was no significant difference between the two groups in the learning post-measures test. None of the other correlations between group membership and the pre-measures or post-measures were found to be significant.

Second, none of the pre-measures correlated significantly with any of the other pre-measures, and none of the post-measures correlated significantly with the other post-measures. Further, the only significant correlation between the pre-measures and the post-measure is the correlation between Perform1 and BOS-Boss2 (.38, $p < .05$). Taken as a whole, it can be concluded that the pre-measures and post-measures do not intercorrelate highly either within time periods or across time periods.

Third, all four of the measures correlate very significantly ($p < .01$) with themselves over the two time periods. The lowest correlation in the range is the BOS-

Self (.41) while the highest is the BOS-Boss (.86). The intercorrelation for BOS-Self is lower than would normally be expected. However since the standard deviation of the intercorrelation is .171 ($1/\sqrt{34}$), the intercorrelation may simply represent the lower bounds of the 95% confidence interval for a test-retest reliability of .75. This is a reasonable test-retest reliability based on the reliability scores mentioned earlier.

Fourth, none of the pre-measures or post-measures were significantly correlated with either the VDL or the self-esteem measures. Finally, the VDL and self-esteem measures were not significantly correlated with each other.

Residual Gain Score Analysis

The residual gain score analysis indicates that the supervisors in the trained group increased their learning scores in comparison with the control group. These results are presented in Table III-7. The correlation between group and learning is .85 ($p < .01$) when the pre-measure learning scores were held constant. However, none of the other residual gain correlations are significant. These results indicate that the supervisors in the trained groups learned from the training when compared to the control group, but that this learning was not translated

Table III-7

RESIDUAL GAINS FOR LEARNING, BEHAVIORS AND
PERFORMANCE IN SUPERVISORY GROUPS¹

	PRE MEASURES	POST MEASURES	RESIDUAL GAINS
LEARNING	-.31*	.25	.85**
BOS-SELF	.12	.10	.04
BOS-BOSS	.46*	.38*	-.10
PERFORMANCE	.09	.10	.04

n = (47 - 22)

* p < .05

** p < .01

1. This table includes the correlations between groups where the pre-post control group is coded zero (0) and the trained supervisors groups are coded one (1).

into BOS reports by the supervisors themselves or their managers. The self-esteem or VDL variables were held constant to see if they were influencing these correlations, but there was no significant change in any of the variables (see Table III-8).

Moderator Variables

The moderator effects of self-esteem and VDL were to be tested by splitting the supervisors at the median scores and testing for significance between the correlations (Peters and Champoux, 1979 and Zedeck, 1971). The moderator effects were tested for the learning results only, since those were the only significant results found for the results of the training. The BOS measures had correlations close to zero ($r = .04$, BOS-Self and $r = -.10$, BOS-Boss) so there was no justification for testing for significance in those areas.

The residual gain scores for learning were not interpretable for either self-esteem or VDL subgroups. The residual gain scores for learning in both the high self-esteem group and the low self-esteem group were greater than 1.0 after correction for attenuation. The residual gain score for learning in the high VDL group was significantly different than zero ($r = .88$, $p < .01$), but the residual gain score for the low VDL group was greater than 1.0, so no further tests were possible. It is

Table III-8

PARTIAL CORRELATIONS FOR SUPERVISOR RESIDUAL GAINS¹

	RESIDUAL GAINS	<u>VARIABLES HELD CONSTANT</u>		
		VDL	SELF- ESTEEM	VDL & SELF ESTEEM
LEARNING	.85***	.88***	.84***	.88***
BOS-SELF	.04	.02	.02	.01
BOS-BOSS	-.10	-.08	-.05	-.03
PERFORMANCE	.04	.07	-.05	-.02

n = (47 - 22)

*** p < .001

1. This table includes the correlations between groups where the pre-post control group is coded zero (0) and the trained supervisors groups are coded one (1).

apparent that the training was effective in increasing the learning for all subgroups, and while it was not possible to test for any significant differences on learning due to the moderator variables, it does not appear there were any differences. All subgroups increased their learning significantly.

Trainers Class vs Managers Class

The second set of hypotheses concerned the effect of the training on the supervisors who were trained by managers as compared with those supervisors who were trained by professional trainers. It was predicted that the training by the managers would be more effective than the training by the trainers. Consequently, this section will review the relationships between the trainers' class versus the managers' class on the learning measures.

Correlation Matrix

The correlation matrix for the trainers' class and the managers' class is given in Table III-9. Before analyzing the variables mentioned above, there are several observations which should be made about this matrix. First, the reaction measures are highly correlated with each other as would be expected. Second, the VDL, Power, and Self-esteem measures are not significantly correlated

Table III-9

CORRELATION MATRIX FOR LEARNING AND REACTIONS IN TRAINED SUPERVISORS GROUPS¹

GROUP (G)	G	L1	L2	MR	SR	FR	VDL	SE	P
LEARN1 (L1)	25	-							
LEARN2 (L2)	12	66**	-						
MODULE REACTIONS (MR)	25	-03	01	-					
SUMMARY REACTIONS (SR)	-01	-15	01	77**	-				
FOLLOW UP REACTIONS (FR)	10	24	25	72**	63**	-			
VDL	40*	01	04	43*	66**	49*	-		
SELF ESTEEM (SE)	16	-25	-12	-07	-18	05	-13	-	
POWER (P)	15	06	07	44*	50*	47*	15	-06	-

n = 25 -12

* p < .05

** p < .01

1. This table includes the correlations between groups where the trainers class was coded (0) and the managers class was coded (1).

with each other so they appear to be measuring different constructs. Third, VDL is significantly correlated with the managers' class, so random assignment did not distribute high VDL supervisors evenly among the two classes. Finally, and somewhat surprisingly, the Power measure for the two classes is not significantly different. It had been expected that the middle level managers who were either the trainees' direct line managers or the personnel manager would be perceived as high in power by the trainees. They should have been seen as possessing several sources of power which trainees did not possess (i.e., legitimate, coercive, reward). This would have led to a higher perceived power measure for the class taught by the managers.

Reactions

The reactions of the supervisors in the two training classes were not significantly different. The three measures of the supervisors' reactions to the training program are shown in Table III-10. They ranged from 1.30 to 2.02 (1 = Strongly Agree, 3 = ?, 5 = Strongly Disagree). There is no significant difference between the classes on any of the three measures (Average Module $F = 1.47$, $p = .24$; Summary Reaction $F = .002$, $p = .97$; Follow-up Reaction, $F = .20$, $p = .66$). It can be seen by examining the confidence intervals there is also no significant difference

Table III-10

MEANS AND STANDARD DEVIATIONS FOR REACTIONS
OF TRAINED SUPERVISORY GROUPS

<u>CLASS</u>	<u>AVERAGE MODULE REACTION</u>	<u>SUMMARY REACTION</u>	<u>FOLLOW-UP REACTION</u>
1. TRAINERS \bar{x}	1.86	1.64	2.02
n	13	12	11
sd	.28	.29	.34
Conf. Interval (95%)	2.41-1.31	2.21-1.07	2.69-1.35
2. MANAGERS \bar{x}	1.71	1.71	1.96
n	12	12	10
sd	.31	.26	.28
Conf. Interval (95%)	2.32-1.10	2.22-1.20	2.51-1.41

between any of the three reactions over time. As was noted in Table III-9 the intercorrelations between the measures were significant and ranged from .63 to .77 which indicates the within subjects reactions also remained positive. It is evident the supervisors liked the training as much 16 weeks afterwards as well as they did while they were participating in it or had just completed it.

All correlations for the three reactions and the VDL were significant (see Table III-11). Thus, supervisors who had a supportive relationship with their bosses were more likely to react favorably to the training. The analyses using the power measure also demonstrated that the supervisors were more likely to react favorably to the training if they perceived the trainers to have high

power, although they may have perceived the trainers to have high power because they reacted favorably to the training. Self-esteem did not correlate significantly with any of the reaction measures.

In summary, the supervisors reacted favorably to the training. The higher the perceived power of the trainers and the better the working relationship of the supervisors with their managers, the more favorable the reaction.

Table III-11

SUPERVISOR TRAINERS CLASS (1) AND MANAGERS CLASS (2)
CORRELATIONS OF REACTIONS WITH VDL, SELF ESTEEM AND POWER

	<u>REACTION MEASURES</u>		
	<u>AVERAGE MODULE REACTION</u>	<u>TOTAL REACTION</u>	<u>FOLLOW-UP REACTION</u>
CLASS ¹	+.25	-.01	+.10
VDL ¹	+.43*	+.66*	+.49*
SELF-ESTEEM	-.07	-.18	+.05
POWER	.44*	.50*	.47*

n = (25 - 21)

1. Signs reversed to clarify relationships of reactions.

* $p \leq .05$

Learning

The mean residual gain scores for the learning were not significantly different for the managers class and the trainers class ($r = .21$) when the effects of the learning pre-measure ($r = .25$) are partialled out of the post-measure ($r = .12$). So, contrary to the hypothesis that the training would be more effective for supervisors trained by managers, there was no significant difference in learning for the class trained by the managers versus the trainers. When the VDL, self-esteem, and power measures were held constant both individually and in combinations, all of the correlations remained non-significant. In other words the learning results were equally effective for training classes, and were not influenced by either the VDL, self-esteem, and/or the power measures.

Summary

The supervisors in both the training classes reacted favorably to the training and their reactions were maintained over a 16 week period. There were no significant differences between their reactions. The learning was also not significantly different between the classes, nor was there any significant difference between the supervisors with high versus low supportive relationships with their managers. The hypothesis that the training by the

managers would be more effective than the training by the trainers has to be rejected.

Middle Managers

Group Characteristics

The means and standard deviations of the middle managers group are listed in Table III-12. Data was collected on 31 middle managers but three did not report background data. The average age of the managers was 42.06 years with 12.23 years experience as a manager, and 14.59 years plant seniority. All the managers were white males, and all but two worked on the first shift. Nineteen (68%) either had a college degree or some college.

The results for the middle manager training indicate that the training was effective in increasing the knowledge of the managers, but not in changing their behaviors. There were no significant pre-measure differences between the class and the pre-post control group for either BOS-Self ($F = 1.54$, $p \leq .23$, 10 d.f.) or the BOS-Boss ($F = 1.30$, $p \leq .28$, 9 d.f.). (see Table III-13). The middle manager group means and the pre-post control group means for the BOS-Boss measures were higher in the post-measures than the pre-measures although there was no significant difference between them. The post-only control group mean was equivalent to the other two post-measures,

Table III-12

GROUP CHARACTERISTICS FOR MIDDLE MANAGEMENT GROUPS

	<u>X</u>	<u>SD</u>	<u>RANGE</u>
1. AGE	42.06	8.39	33-61
2. YEARS AS A MANAGER	12.23	5.09	3-32
3. PLANT SENIORITY	14.59	9.61	2-30
4. SHIFT 1	26		
2	2		
5. RACE white	28		
6. EDUCATION			
1 8th grade or less	1		
2 Some High School	4		
3 High School or			
equivalent	4		
4 Some College	12		
5 College Graduate	7		

Table III-13

MEANS AND STANDARD DEVIATIONS FOR THE MIDDLE MANAGER GROUP

PRE-MEASURES

<u>GROUP</u>		<u>LEARN1</u>	<u>BOS-Self</u>	<u>BOS-Boss</u>
MIDDLE MANAGERS	\bar{x}	55.5	3.74	2.79
	n	12	11	5
	sd	12.6	.22	.36
PRE-POST CONTROL	\bar{x}	-	3.92	2.55
	n	-	11	6
	sd	-	.41	.35

POST-MEASURES

MIDDLE MANAGER	\bar{x}	72.56	3.34	3.72
	n	9	10	4
	sd	14.91	.38	.23
PRE-POST CONTROL	\bar{x}	61.69	3.50	3.89
	n	8	8	8
	sd	15.11	.30	.53
POST ONLY CONTROL	\bar{x}	59.79	3.60	3.77
	n	7	1	7
	sd	10.93	0	.48

so the increase over time for the middle managers and the pre-post control was probably due to small sample size. The learning measure was given only to the middle managers class during the pre-measures.

Reaction Measures

The Summary Reaction and the Follow-up Reaction measures indicated that they reacted favorably to the training and that these reactions were sustained over time although the Average Module Reaction indicated a neutral reaction to the training (see Table III-14). The Average Module Reaction was 2.96 on a five point scale (1 = Strongly agree, 3 = ?, 5 = Strongly disagree) (95% C.I. = 4.04-1.88). However, their Summary Reactions were 1.91 (95% C.I. = 2.57-1.24) and the follow-up sixteen weeks later was 2.03 (95% C.I. = 2.64-1.42). The summary reaction measures just included the five statements about use of the training on the job as taken from Latham and Saari (1979), so they are not comparable to the average module measures. The follow-up includes all the statements from both the modules and the summary. Since the confidence intervals for both the Summary Reactions and the Follow-up Reaction are above the midpoint, they are significantly more positive than a neutral reaction. However, the overlap of the two confidence intervals with the Average Module Reaction confidence interval indicates they are not

Table III-14

MEANS, STANDARD DEVIATIONS, AND CONFIDENCE INTERVALS
FOR REACTION AND POWER DATA FROM MIDDLE MANAGERS

	<u>AVERAGE MODULE REACTION</u>	<u>SUMMARY REACTION</u>	<u>FOLLOW-UP REACTION</u>	<u>POWER</u>
\bar{X}	2.96	1.91	2.03	2.13
N	12	11	12	7
SD	.55	.34	.31	.45
C.I.	4.04 1.88	2.57-1.24	2.64-1.42	3.01-1.25

not significantly different than the Average Module Reaction.

The intercorrelations between the reaction measures were not significant (Average Module Reaction with Total Reaction, $r = -.18$; Average Module Reaction with Follow-up Reaction, $r = -.01$; Total Reaction with Follow-up Reaction $r = -.40$). The results are somewhat surprising but probably related to the fact that the managers may have been reacting to the training as they perceived its effectiveness for the supervisors in the Average Module Reactions, while the Total Reaction measure assessed how valuable the training had been for their own jobs. The correlation for the leaders and trained managers was not significant ($r = .13$), so the leaders' Follow-up Reactions were not significantly higher than the trained only managers and cannot explain the correlation of $r = -.40$). Taken as a

whole, the results indicate they reacted favorably to the training and their reactions were sustained over time.

Trained Middle Managers vs Control Group Hypotheses

Correlation Matrix

The correlational data for the trained managers and the control group is listed in Table III-15. It reveals the same pattern of correlations that the supervisory data revealed. The items generally do not relate highly within the time periods nor do they correlate highly with each other across time periods. The very high and significant correlation of the learning test and the BOS-Boss pre-measures with the learning test and BOS-Boss in the post-measures is consistent with earlier results also. The BOS-Self was not significantly correlated with itself across the time periods and was the lowest of the intercorrelations of the measures. The intercorrelations for the BOS-Boss measures in the pre-measure and post-measure were based on only three middle managers. The n size makes the intercorrelations for the BOS-Boss residual gain score suspect, but it was not a significant finding so it is not a major factor. The overall pattern is that the measures are based on different criteria and that they are highly intercorrelated over time.

Table III-15
CORRELATION MATRIX OF LEARNING AND BEHAVIORS FOR MIDDLE LEVEL MANAGERS¹

GROUP ¹	G	PRE-MEASURES			POST-MEASURES		
		L1	BS1	BB1	L2	BS2	BB2
-	-						
LEARN1 (L1)	-2	-					
BOS-SELF1 (BS1)	-27	-30	-				
BOS-BOSS1 (BB1)	35	30	-32	-			
LEARN2 (L2)	36*	82*	01	-22	-		
BOS-SELF2 (BS2)	-24	07	27	-03	18	-	
BOS-BOSS2 (BB2)	14	-11	37*	49*	30	67*	-

1 the trained middle managers were coded one (Group = 1) while the control group was coded zero (Group = 0)

2 no pre-measures were taken for the control group

* p < .05

n = (20 - 3)

Post-Measurement Results

The residual gain scores show no significant increase for either the BOS-Self ($r = -.18$) or BOS-Boss ($r = -.06$) measures (see Table III-16). The post-test learning measure was significant ($r = .36$, $p < .05$, one tailed test, 15 d.f.), but with no pre-measures for the control group there is no possibility of testing for residual gains.

Table III-16

MIDDLE MANAGERS LEARNING AND BEHAVIORS RESIDUAL GAIN SCORE ANALYSIS¹

	<u>PRE-MEASURE</u>	<u>POST-MEASURE</u>	<u>RESIDUAL GAINS SCORES</u>
LEARNING	-	.36*	-
BOS-SELF	-.27	-.24	-.18
BOS-BOSS	.35	.14	-.06

n = (20 - 3)

1. The trained middle managers were coded one (Group = 1) and the control group was coded zero (Group = 0).

* $p = .05$

The hypothesis that the training was effective for the middle managers must be rejected.

Middle Manager Trainers vs Trained Only

The managers who were also trainers in the managers' class were hypothesized to be more effective than the managers who were in the training but were not trainers in the supervisors' class. The follow-up reactions of the

two groups were not significant ($r = -.04$). The correlations between the pre-measures and post-measures for learning was greater than 1.00 after correcting for attenuation, so the residual gain for the learning could not be calculated. The BOS measures were not significant (see Table III-17). The hypothesis that the managers who conducted the training would be more effective must be rejected.

Table III-17

LEADERS AND MANAGERS RESIDUAL GAIN SCORES FOR
LEARNING AND BEHAVIORS¹

	<u>PRE- MEASURES</u>	<u>POST- MEASURES</u>	<u>RESIDUAL GAIN SCORES</u>
FOLLOW-UP REACTION	-	-.04	-
LEARNING r	.15	-.20	note 1
BOS-SELF r	.02	.10	.10
BOS-BOSS r	.22	.26	.31

N = (12 - 3)

1. Leaders were coded one (Group = 1) and trained only were coded zero (Group = 0).

note 1: $r_{L2.1}$ not calculated because $r_{L1} > 1.00$
when corrected for attenuation.

Supervisors of the Trained Managers vs
Supervisors of the Control Group Managers

Since the learning results were significant for the managers, the supervisors of the managers were examined to

see if they had imparted any of their knowledge to the supervisors. The supervisors whose immediate managers were trained were compared to the supervisors whose managers were in the pre-post control group. No significance was found in the residual gain scores for learning.

Summary

The middle managers apparently learned from the training, but there was no evidence from the BOS measures that the results were translated into overt behaviors. The managers who served as leaders of the managers' class for the supervisors also did not show any significant difference in learning of behaviors, contrary to the hypothesis. Furthermore, there is no evidence that the training for the middle managers was effective for the supervisors of the managers who received the training.

CHAPTER IV

DISCUSSION

Introduction

The purpose of the research was to test several hypotheses concerning variables which could improve the effectiveness of applied learning training in an industrial setting. The hypotheses were tested by having professional trainers first train middle (2-4L) managers. Then the professional trainers trained one supervisory class (trainers' class) and six of the trained 2-4L managers trained another class (the managers' class). Control groups were established to allow comparisons for the tests of the hypotheses.

The first set of hypotheses concerned the supervisors. It was hypothesized that the training would be effective for the trained supervisors versus control groups and the results partially supported this hypothesis. The second hypothesis was that the training would be more effective if it was conducted by managers of the organization compared to training conducted by professional trainers. The hypothesis was not supported. It was also hypothesized that the supportive relationship between

the supervisors and their managers and the self-esteem of the supervisors would effect the results of the training, but neither moderator variable predicted more effective training results.

Several hypotheses concerning the middle managers were also tested, but the hypotheses were generally not supported. The training was not found to be effective when trained 2-4L managers were compared with a control group. Neither was the training effective for the 2-4L managers who were also trainers for the managers' class when they were compared with the 2-4L managers who were trained but did not conduct any training.

The hypotheses were tested by the four results of training identified by Kirkpatrick (1976): (1) the personal reaction of the trainees to the training; (2) the increased knowledge of the trainees; (3) the change in the behaviors of the trainees while on the job; and (4) the change in performance of the trainees on the job. Measuring the four types of results made it possible to examine different aspects of the effectiveness of the training which will be discussed in the following section. The four types of results provide the outline for the following discussion of the findings as they relate to applied learning training. Since applied learning training is based on social learning theory, the findings are next discussed as they relate to social learning theory. The

chapter will conclude with the practical and theoretical implications of the study.

Training Discussion

Reactions

There were several interesting findings related to the trainees' reaction to the training. First, the measures indicated that trainees in both classes liked the training with no significant difference between the classes. Second, the trainees' reactions did not significantly change over time. The supervisors and middle managers reacted positively to the training on measures taken during the modules themselves, at the conclusion of the training, and 16 weeks after the training. The consistent reaction is similar to the findings in the Latham and Saari study (1979). The supervisors in their study also reacted favorably immediately following the training and their reactions were not significantly different four months later.¹ The material in applied learning programs

1. In fact the results are highly similar. Latham and Saari had responses averaging 1.85 immediately afterwards vs an average of 1.68 in this study. Latham and Saari had responses of 1.69 in the four month follow-up while this study had responses of 1.99. Latham and Saari's numbers were reversed for comparison.

is apparently appreciated by trainees as much during the training as it is after several months back on the job.

There is nothing in the literature or in the definition of reactions that suggests that the reactions should have increased or decreased over time. One can surmise that if the supervisors used the training and found it didn't work, they would be less inclined to react favorably at a later date. On the other hand if they did use it and it was successful they would be inclined to react more favorably. Or it may be that the training was presented in such a straightforward manner that the trainees reacted favorably because they could see its potential use without having to wait and "try it out on the job." Still another explanation why the reactions remained constant is that the trainees may have reacted to the training program by itself and not its practical use on the job. In other words, they reacted to the training separately from its practical value to them. The trainees may have reacted positively regardless of its practical value to them in their jobs because they found it entertaining, or they had a chance to get away from their work, or they were meeting with other supervisors, or they simply viewed it as a reward for their position as a manager. So it is not clear why their reactions to the training remained consistent over time but the results are consistent with the earlier findings of Latham and Saari (1979).

Another interesting finding concerns the importance of the reaction measures. There is an assumption based on intuitive logic that the more favorable the reaction of the trainees the more the trainees will learn (Wexley and Latham, 1982). However, the correlations between the three reaction measures and the post-measure of learning (Learn2) are not significant (Average Module Reaction: $r = .01$; Summary Reaction: $r = .01$; and Follow-up Reaction: $r = .25$). The findings raise the question of how important reaction measures are and what role they play in determining the effectiveness of training.

The value of reaction measures has been questioned for some time (Andrews, 1967a). He reviewed reactions from training and executive development programs and found they were almost always well liked. Andrews therefore concluded that they provided no real test of the value of a training program. Furthermore, Kirkpatrick indicates that the reactions are not indicators of whether any learning occurs or whether the training is used on the job. In fact there is no theoretical base connecting any of the four measures of training including reactions. Is it possible that trainees can react negatively to training and still learn from it or react positively and learn nothing? There is no theory which helps answer these questions. So, the findings are consistent with Andrews

findings which suggest that reaction measures usually do not differentiate effective from ineffective executive training programs. Furthermore, reaction measures do not indicate whether the trainees learned, or whether they changed their behaviors and performance on the job.

Even with these criticisms of reaction measures, there are still a number of reasons why they provide useful information. Wexley and Latham (1982) cite several reasons. For example, they can maintain organizational support for training; the training staff can assess their efforts; and the training staff can evaluate the reactions of different groups of trainees. In fact, the Plant Manager and Corporate Personnel Director both reported they considered the training successful based on the actual and informal feed back they received on the trainees' reactions.

Reactions are also valuable because they can measure other useful dimensions such as those found by Andrews.

He indicates that executives regard training programs as worthwhile because they widen the manager's perspective, increase their tolerance for disagreement, and enhance their respect for the function of management. Another significant point that he raises is that the training can provide an unmistakable signal that the style of management is changing. One of the trained 2L managers made that very point when he indicated that he felt the

training was worthwhile and should be continued for the rest of the supervisors. He said "it's clear to me that this company is changing the way it handles people, and the supervisors are just going to have to learn the new ways." That is also one of the reasons the company initiated the training.

All of the above implies that reaction measures should be designed to consider much broader questions in addition to whether the training was worthwhile on the job or that the trainees reacted favorably. If one of the purposes of the training is to signal a change in policy, the follow-up evaluations should include the idea of testing that finding empirically. If the management styles are the results of long standing practices it may take some time before the changes are observed, but communicating a clear intent to change that policy is definitely the first step. The reaction measures should be designed in recognition of those factors to determine the overall effectiveness of the training.

Learning

The increase in learning was measured by determining what principles, facts, and skills were understood and absorbed by the trainees (Kirkpatrick, 1976). The tests should be based directly on the learning objectives of the

training (Wexley and Latham, 1982). The learning objectives in this training program were to teach supervisors and middle managers the learning points covered in the behavior modeling modules. The test consisted of incidents which called for responses that used the specific learning points from the modules. The incidents were written so that the responses were open ended--i.e., they asked the supervisors and 2-4L managers to respond in their own words. The incidents were not discussed during the class so the test was an external test (i.e., it tested the ability of the trainees to generalize the training to other situations). The results were significant when the pre-measures were taken into consideration.

The responses were rated by two raters working independently, determining whether open ended responses represented the appropriate learning points. The use of open ended responses made it difficult to rate the training effectiveness because the supervisors frequently used succinct statements to describe how they would handle a situation. It was difficult to tell whether they would have used other learning points in an extended conversation. Further, it was apparent that some answers reflected the learning points from a different module (e.g., a supervisor would react with responses appropriate for "DISCUSSING POOR WORK HABITS" when the incident was based on "MOTIVATING A PERSON TO PROBLEM SOLVE."). The inci-

dents were reviewed with the Manager of Organizational Development to identify ambiguous incidents. Allowances were made in the ratings for ambiguous incidents by giving partial credit for responses which were still effective approaches and which reflected learning points from one of the other modules. If the incidents had been role played with responses recorded on audio tape, most of the difficulties of succinct responses and ambiguous incidents would have been avoided.

The other learning tests in the literature did use recorded role playing, although one paper and pencil multiple choice test was also used (see Table IV-1). The multiple choice test (Latham and Saari, 1979) was also an external test because it measured incidents which were not specifically covered in the training. The other tests were role plays between the trainees and a role player either immediately after the training or up to seven months later. The literature frequently observes (i.e., Latham and Saari, 1974; Moses and Ritchie, 1976; and Burnaska, 1976) that the supervisors were judged by whether they covered the learning points, not whether they were in sequence or whether there were misinterpretations in the beginning of the role plays. Role playing appears to be more flexible than open ended paper and pencil exams for testing the learning results for applied learning

Table IV-1

LEARNING AND BEHAVIOR MEASURES OF APPLIED LEARNING TRAINING

<u>AUTHOR</u>	<u>MEASURE</u>	<u>EVALUATOR</u>	<u>TIME</u>	<u>RESULTS</u>
Burnaska, 1976	(1) Taped Role Plays	Judges	4-5 mo.	Significance
	(2) Perceptual Items	Employees	4 mo.	No signifi- cance
Byham, Adams, Kiggins, 1976	Employee Interviews	Judges	7 months	Positive but sig not reported
Decker, 1981	Taped Role Plays	Judges	1 week	Significance
Decker, 1980	(1) Taped Role Play	Judges	Immediately after	Significance
	(2) Taped Role Play	Judges	1 week	Significance
Latham and Saari 1979	Paper and Pencil	Judges	6 months	Significance
	Taped Role Plays	Judges	30 months	Significance
	BOS	Managers	1 year	Significance
Moses and Ritchie 1976	Assessment Center Role Play	Assessment Staff	2 months	Significance

training. The numbers of supervisors and 2-4L managers in this effort made role playing impractical to use, but wherever possible role playing is probably a better test of the learning.

Another observation should be made. Frequently role playing is reported in the literature as testing behavioral changes, but it should rightfully be conceptualized as a learning measure because the behaviors are not evaluated on the job. Kirkpatrick's definition of behavioral changes refers to evaluating training by measuring the changes of trainees behavior on the job, not in a controlled setting.

In summary, the findings for learning in this training program are consistent with the scientific literature. All of the studies in the scientific literature report positive results for the learning phases of the training. The behavior modeling training used in this training program was effective in imparting knowledge of verbal skills in interpersonal relations. The training was effective in helping supervisors acquire the knowledge of the learning principles and relate them to different situations which could occur on the job.

Behaviors

On-the-job behaviors were observed by using BOS measures which were based on the learning points as well as

eleven other external items. The results indicate that there were no behavioral changes on the job, even where there were supportive (high) VDL relationships between the supervisors and their managers. The findings were not interpretable for the moderating effects of self-esteem either.

These results were disappointing but it should be kept in mind that not all of the results in the scientific literature found significance for behaviors back on the job. In fact only three attempted to measure changes in behavior on the job. Burnaska (1976) used employee perceptions but found no significance. Byham, Adams, and Kiggins (1976) used employee interviews and their results were positive, although they did not report significance. Latham and Saari (1974) did find significant differences after one year.

It could be argued that the results were confounded by what is labeled "beta change" (Golembiewski, Billingsly, and Yeager, 1976). This would have occurred if the supervisors and 2-4L managers interpreted the BOS measures differently when they completed the post-measures than when they completed the pre-measures. For example, suppose that the supervisors and 2-4L managers were more sensitized to their behaviors as a result of the training. The sensitization would have meant that they paid more

attention to the percentage of time they used the behaviors. Now suppose that they noticed they used the behaviors less than they thought they did, but had been working to increase their frequency. When they completed the BOS measures during the post-measure time period they would have reported their estimated frequency based on a different internal scale. If they felt they had increased their behaviors to the same frequency that they reported in the pre-measures, the statistical analysis would not show any significant change. The results would look like the supervisors' and manager's behaviors were not significantly different even though the supervisors would actually have increased their usage of the behaviors.

However, there are several reasons why it seems more logical to conclude that the supervisors did not increase their behaviors. First, their managers did not report change in the supervisors behaviors either. It could still be argued that the middle managers had changed their perceptions equally, but that is highly unlikely. Second, both supervisors and middle managers either attended the training programs or were placed in control groups. Yet the overall F tests for all the two trained and two control groups were not significant for the BOS-Self measures ($F = 1.63$, $p = .19$) or the BOS-Boss measures ($F = 1.92$, $p = .14$). For a "beta change" to have occurred, it would be more likely that it occurred in the training groups.

Third, the means between the pre-post control group are not significantly different than the post-only control group for either the BOS-Self measures ($t = 1.62$, n.s.) or the BOS-Boss measures ($t = .914$, n.s.).

Another explanation could be that the supervisors did experience the "beta change" and their managers did not have enough opportunities to observe the change. The persons who would have had the best opportunities to observe the changes would be the employees, so employee observations would point out whether the employees observed the changes. Their observations could have provided additional confidence about a possible "beta change." However, in light of all the above tests, it seems more plausible to assume that the behaviors did not occur on the job.

The question remains: why were there no significant changes in behaviors on the job as a result of the training in this study? There are several possible explanations related to the training itself, the trainers, the trainees, the job setting and the BOS measures. Each of these will be examined as possible explanations.

First, the training may have been ineffective because of the way the training was conducted. There were several factors in the way this training program was conducted which were different from other programs which provided

changes on the job (Byham, et al., 1976; and Latham and Saari, 1979). The training classes were held twice a week instead of once a week (Latham and Saari, 1979), so more spacing between the modules may be important in transferring the training to the job. The Byham, et al. and Latham and Saari studies were also conducted over a nine week period with nine modules instead of a three week period with six modules, so the amount of training and the length of the training may be important. Also, this program had all the supervisors rehearsing in triads of three supervisors. The triads of supervisors worked independently instead of having all the supervisors observing a pair of supervisors role playing in front of the class. Role playing in front of the class permits the trainers to positively reinforce the behaviors and might facilitate transfer of training. Furthermore, the trainees in this training program may have spent time talking with each other in the triads and not practicing when the trainers were not observing the triads.

Still another explanation could be that the trainers in this study were simply not as effective at training as other trainers. It may be that more experienced trainers could have developed examples of how to transfer the training to the job and taught positive reinforcement to the middle managers. However, it seemed that the management trainers were able to cite instances during the

training where the training could be used. It is also important to keep in mind that the trainees liked the training and learned from it, so perhaps the answer lies with the trainees and/or the job setting.

The trainees had several characteristics which suggest why the training content was not observed on the job. The first is based on the fact that the majority of the trainees (four in each class) came from engineering where the supervisors have stable, long term relationships with a relatively small number of highly skilled employees. As one supervisor said in a follow-up interview, "My employees and I know each other and we get along pretty well. It's true of all of us in the tool room." Coupled with the fact that the supervisors had high seniority and extensive management experience, it may not be surprising that there were no significant behavioral changes on the job.

Still another reason for not finding significant results on the job may be that the BOS measurement was inappropriate or inadequate, even though there was probably no beta change as was discussed earlier. However, Latham and Saari (1979) used a BOS measure and they did find significant results. Burnaska (1976) was unsuccessful using a questionnaire testing employee perceptions, but Burnaska criticized his measure because it wasn't

specifically related to the learning points. The BOS measure in this study was specifically based on the learning points, and yet the supervisors and middle managers still did not self-report an increase even after 20 weeks. That would tend to indicate there was no change in behaviors, not that the measures were inadequate.

In summary, there are several possible explanations for not finding the training effective in changing behaviors on the job, but the most plausible explanations seem related to the lack of potential for reinforcement on the job due to the supervisors' bosses, their subordinates, and their ages and managerial experience.

The behavioral results of this study show mixed findings with respect to appraisal literature. Past research has found that self-ratings are more lenient and have a low to moderate relationship with supervisors' ratings (Landy and Farr, 1980; Thornton, 1980). The present research indicates that the supervisors' ratings were higher than their bosses in the pre-measures ($t = 3.37$, $p < .001$). However, the post-measures were not significantly different ($t = .67$, n.s.). The relationships between the supervisors and the bosses' ratings are consistent with past research because there is a low to moderate relationship between the self-ratings and the bosses' ratings ($r = .19$ on the pre-measures and $r = .09$ on the post-measures). The correlations for the high and low VDL

subgroups and the high and low self-esteem subgroups were also examined but none of the pre-measures or post-measures were significant (median intercorrelation $r = .20$)

The friendliness of the interchange between the rater and the ratee has been studied previously. The friendship between the rater and the ratee has consistently not impacted the ratings (Amir, Kovarsky, and Sharan, 1970; Suci, Vallance, and Glickman, 1956; and Waters and Waters, 1970). The interesting point is that all these ratings investigated in previous research were given by peers, so the friendship between the boss and his/her subordinate has not been studied. This would appear to be an important area for future research which will be discussed in a later section.

Performance

The performance measure developed for this research was a composite measure by peers of the supervisor's ability to organize his department and achieve quality production at standard cost. The same problems that plague most efforts to establish quantifiable measures of performance plagued this effort (Latham and Wexley, 1981). It simply was not possible to develop a universal measure across the different kinds of supervisory responsibility.

The only study which did develop quantifiable results used plant results rather than supervisor results (Porras and Anderson, 1981; Porras, et al., 1980). These problems lead Kirkpatrick to report that there are ". . . so many complicating factors that it is extremely difficult to evaluate certain kinds of programs in terms of results. Therefore it is recommended that training directors evaluate in terms of reaction, learning, and behaviors." (1976, p. 18-21). The same conclusions are drawn by Latham and Wexley (1981) and Latham, Cummings, and Mitchell, (1981). Nevertheless, economic measures should be used whenever they can be reliably obtained.

The low intercorrelations between the BOS measures and the performance ratings in the pre-measures are disappointing, but not particularly surprising. The raters for performance were carefully guided in the rating process to make sure that they were not including any behavioral factors in their performance ratings, because those factors would be measured by the BOS measures. The literature on leadership would also suggest that there would not necessarily be a strong relationship between the two measures. Leadership research has indicated that both consideration and task orientation are necessary for effective performance (House and Baetz, 1979). Leadership research has also shown that there are many factors which

affect the supervisor's performance as a leader (Kerr and Jermier, 1978; Steers, 1977).

However, one of the purposes of the research was to demonstrate training effects on all the measures of training effectiveness. It was expected that training would improve supervisor effectiveness by modeling considerate ways for supervisors to work with employees on the job (e.g., problem solving, discussing poor work habits with an employee, reducing resistance to change). The training was designed to convince the supervisors that the techniques would be likely to succeed and that they should be used on the job. Social learning theory predicts that the supervisor will be likely to attempt the behavior if the probability of success is high (Bandura, 1977). However, in the present research, the supervisors did not report an increase in use, so there would not be any reason to expect high correlations in the post-measure period either.

The other training programs which attempted to measure direct performance met with equivocal success. Two studies to actually measure performance statistics were both reported by Smith (1976). He was able to show performance gains in sales and employee satisfaction, although a measure of customer satisfaction did not show significant results. While those results need to be treated cautiously as was discussed earlier, they do rep-

resent successful attempts to tie the training to specific performance results. The organizational development effort by Porras and his associates (1980, 1981, 1982) was also successful, but that included goal setting and extensive training with senior level managers in each plant. Their results and the results of the present training suggest that training should be linked with goal setting and a major organizational development intervention.

Trainers, Managers, and Films

The present results indicate that the training is equally effective when conducted by the managers of the organization using live modeling or professional trainers with film models. As a result of the design, it is not possible to analyze whether the training would have been more effective if the managers had used the films, but prior research in social learning theory would indicate that live modeling would be equally effective as films (Bandura, 1977; Bandura, Ross, and Ross, 1963; Hill and Liebert, 1967). One point to consider, however, is that the role modeling in the film will be perfectly reliable, while the role modeling by the managers may vary from training class to training class. This is of course one of the reasons organizations frequently use films, but a

well written script for the managers can lead to greater consistency and may not present any problem.

The interesting question is why the power measures were not significantly different between the two training classes. One answer is that the power measure used did not place enough emphasis on legitimate, reward, or coercive power, which are the three key power sources that the professional trainers did not possess. Follow-up interviews suggest that the supervisors felt that the expert and referent power of the trainers was important. During follow-up interviews in the plant after all data had been collected, one 2L manager indicated he preferred the professional trainers. In a group interview with three supervisors and the 2L manager, the 2L manager said he felt that the professional trainers were the "people experts" and he wanted to hear what they had to say, not some manager that he had to work with every day. The point being made is that the professional trainers may have been viewed as high in expert power, and therefore received an equal power score. These equal perceptions of power may have contributed to the lack of significant differences in training results between the two classes.

It would have been possible to select high power managers as trainers but there were two reasons which dictated the matching assignment of management trainers. One reason was to test whether selecting managers by the

matching process would result in trainers who were seen as having high authority, power, and "success"--i.e., powerful models who would be imitated by the trainees. The difference in their positions as staff vs line managers would indicate that there would be power differences. In fact the differences between the professional trainers and the line managers fit the typical description of the differences in education, age and experience between line and staff personnel based on the research conducted by Dalton (1966). The three professional trainers had two four-year college degrees and one two-year degree compared to the two management trainers who had four-year college degrees, two who had some college, and two who had a high school degree. The professional trainers were younger than all but two of the management trainees, while the management trainees had more managerial experience than the professional trainers. So, the professional trainers had more education, were younger, and possessed less managerial experience. It was expected that trainees would perceive such differences in terms of greater sources of expert, legitimate, reward and coercive power for the management trainers compared to the professional trainers. It was expected that even a matching selection of management trainers would provide more powerful models than professional trainers.

The second reason for the selection of management trainers was to determine the impact of being a trainer in comparison with managers who also received the training but did not serve as trainers. While no significant differences were found, it is clear from the follow-up interviews that the management trainers recognized there was an impact on them of being a trainer. One 2L manager indicated that he had problems with being a trainer. He did not get along well with some of his people, he said, because he had to "step on their toes." The fact was that he felt some pressure to change his behavior, even though it did not fit his personal style of leadership. It appears that managers who serve as trainers will be impacted by their training, but it remains for future research to determine the full extent.

One other factor for consideration is which set of trainers the trainees preferred. Follow-up interviews suggest that the managers were preferred. One supervisor said he appreciated the chance to see the Personnel Manager in the training so he could get a chance to see how the Personnel Manager "handled things." Three other supervisors and one management trainer also expressed a preference for managers to serve as leaders. However, two of the supervisors and the management trainer said they felt only leaders who were committed to the principles of the training should participate. One said that one of the

managers who did the training ". . . was only 'surface!' He didn't really practice it." Still another supervisor expressed concern that some of the managers who did the training did not really believe in it, but still felt managers should conduct the training. Three of them also indicated that a mixture of managers and trainers would be effective also. However, the author conducted all the interviews, so the frequent reference to a mixture may have been in deference to the interviewer. Of the seven 1L-4L managers who discussed the question of who should conduct the classes, five preferred the managers, one preferred the professional trainers, and one indicated no preference. It would appear the use of managers as trainers deserves further consideration.

Moderator Variables

None of the training programs in behavior modeling have examined the impact of moderator variables on the effectiveness of the training. Yet there is evidence that training is impacted by the characteristics of the trainees and the method of training (Wexley and Latham, 1982). One example is the Aptitude Treatment Interaction (ATI) where the training provided to an individual is based on the most appropriate techniques for each individual (Cronbach and Snow, 1969). The ATI refers to those variables of the individual which affect his/her capabilities

to learn. However, there is still another kind of situation which can impact the effectiveness of the training. What are the characteristics of the individual and his/her environment that will make the training effective after it has been learned? The present research indicates there was probably no differential ability to learn the material, but it was not possible to test the effects of changes in behaviors on the job.

The degree of support from the trainee's boss as measured by the VDL model was expected to be an important factor in determining training effectiveness. The supportive (high) VDL relationship is indicative of closer interchange between the supervisor and his manager than with a less supportive (low) VDL relationship (Danserau, Graen, and Haga, 1975; Graen, 1976; Liden and Graen, 1980).

It was hypothesized that training would be more effective in this kind of work environment than in one where there was less interaction and trust. The highly supportive and trusting relationship that is implied by the high VDL score would suggest that the training was discussed more, there was a better opportunity to experiment with the training, and that there was more interchange about how to use it and under what circumstances.

A high VDL relationship also predicts that the supervisor places higher value on rewards from his boss than a

supervisor with a low VDL relationship. This would indicate that the supervisor has a history of more past reinforcement on the job than a low VDL supervisor. It does not mean that the particular behaviors in the training program had previously been reinforced, just that the supervisor has received more reinforcement from his boss in the past than the low VDL supervisor. The important fact is that a history of past reinforcement for an observer (trainee) has been shown to be a significant predictor of imitated behaviors (Mausner, 1953, 1954a, 1954b, Mausner and Bloch, 1957; Scheir, 1954). This also indicates that low VDL supervisors would not even report attempting the behaviors because they have not had the history of job rewards which would encourage such changes in behavior. Since the results from the present study show no improvements, it casts doubt on the potential of the variable to predict effectiveness of the training. Future training studies should continue to examine this relationship to determine if it is a moderator.

Social Learning Theory Discussion

The training program results cast doubt on the ability of social learning theory to predict behavioral changes on the job. The training is based on social learning theory and the results were positive for learning the behaviors but not in using them on the job. Social

learning theory predicted the training would be learned and used on the job. It also predicted that the behaviors would have been modeled back on the job even more by supervisors with a history of past reinforcement (interpreted in this study to be high VDL) and for those supervisors with low self-esteem (Bandura, 1977, 1969). However, VDL and self-esteem moderators were not effective in improving results for high VDL or low self-esteem supervisors as evidenced by the fact that the training did not produce significant effects for the trained groups as a whole.

The role that reinforcement plays in the learning and modeling process is an important one and deserves further clarification. Bandura argues that reinforcement is a facilitative factor in learning, but not a necessary factor. Modeling which commands attention such as that available in a mandatory training class will enable learning to occur even without prior notice that the modeling behaviors will be reinforced. Further the learning may or may not result in modeling the behaviors at a later time. In the present research, the supervisors who received the training demonstrated increased learning but did not use the behaviors. The trainees acquired a set of skills and demonstrated them in test situations, but that represents no assurance that the learning will be used.

Bandura (1977, 1969) uses a model of the observational learning process which has four components that predict effective modeling. The first is the attentional component which predicts that characteristics of the model and characteristics of the observer (trainee) will influence the effectiveness of the modeling. Bandura argues that this process deals with the acquisition of the modeled behaviors. The literature indicates that the past history of the trainee will be an important characteristic in the acquisition of the skills. The results of this research indicate that the history of past reinforcement played no role in the acquisition of the the skills. Learning was significant for both high and low VDL supervisors. The past reinforcement appears to have greater influence in the motivational component of the observational learning process, but that is in the usage phase of the process, not the acquisition phase. It appears that the past reinforcement of the observer (trainee) is not an effective predictor of acquisition, and this study casts doubt on its ability to predict usage of the modeled behaviors.

Social learning theory predicted that usage of the behaviors would increase if there was a vicarious, self-, and/or direct reinforcement for using the behaviors on the job. The question remains why there were no behavioral changes when social learning theory predicted there would

be. The answer may be that social learning theory is limited in its ability to predict behavioral changes on the job for adult supervisors as a result of a twelve hour training program. McGehee and Tullor (1980) have cautioned that behavioral modeling has primarily been used with children who are more impressionable than adults and with those adults who desire a behavioral change (e.g., to overcome a phobia regarding snakes). For those adults with high seniority or supervisory experience there may be several factors which cast doubt on social learning theory's ability to predict changes in behavior.

Supervisors may have established deeply rooted self-perceptions based on the behavioral styles of leadership which they are using (Bem, 1972). A change in behaviors may first require a new self-perception which adults are resistant to make. Second, behavioral changes are often deeply imbedded over thousands of hours of experience and already provide reinforcement to the supervisor through confirmation of their self-perception or in success on the job. The established patterns of reinforcement are difficult to overcome, particularly if there are no established patterns of reinforcement for the new behaviors. The present reinforcement patterns in an ongoing plant with high seniority supervisors make it difficult to change

behaviors in return for on unestablished pattern of social reinforcement.

These factors suggest that the role of rehearsal in the observational learning process needs to be expanded when it is applied with adults. More rehearsal outside the training may be required to encourage and sustain supervisors' efforts to change their behaviors on the job. For example, Wexley and Nemeroff (1975) used a combination of checklists and coaching techniques on the job to enhance the effectiveness of a training program. The implications section discusses the suggestions for future training research which emanate from this study. The purpose of this discussion is to indicate that social learning theory may require further elaboration to increase its ability to predict changes in behavior on the job.

The ability to test the effectiveness of the line managers as higher power figures was thwarted by the fact that the trainers of the two classes did not differ in perceived power, and that the results for the trained versus control groups did not show any significant difference for any variable except learning. Power was held constant to see if the learning results were influenced by the power of the trainees, but there was no change in significance.

As far as the relationship of power with other measures of training effectiveness are concerned, power was significantly correlated with reactions, but not with behaviors or performance. The more powerful the trainees were perceived, the more positive the reaction of the trainees although it is also possible that the positive reactions led to the perception of high power of the trainers. One could presume that trainers who had power over supervisors behaviors and performance on the job could also increase the effectiveness of the training. Power may well be an effective factor for training but probably only in the area of usage and not learning. It remains for a future research effort to clarify its importance.

Limitations

The primary limitation of the present study is the method for statistically analyzing the results. Under normal circumstances the use of multivariate analysis of variance or covariance would have been recommended (Huck and Maclean, 1975 and Maxwell and Howard, 1981). However, there were several problems which led to the use of correlational analysis instead. First, there were pre-test differences in the groups on variables which were to be effected by the treatments, which precludes the use of analysis of covariance (Lord, 1963, 1967, Cook and

Campbell, 1979), even under the less restrictive assumptions proposed by Overall and Woodward (1977). Frankly, it was not possible to run MANOVA or MANCOVA because the missing data was treated with list-wise deletion which made the calculations impractical. List-wise deletion meant that any supervisor or manager with missing data was completely dropped from the analysis. That resulted in too few observations for analysis. The only alternative to using MANOVA would be to include missing data but the results would have been of little value.

The procedures used were outlined in Lord (1963) and confirmed by Cronbach and Furby (1970). Lord states that the use of change scores by correlational analysis avoids computing true gain scores for each individual. He provides the formulas for the use of partial correlations where all correlations have been corrected for attenuation. The partial correlation between a perfectly measured covariate (e.g., group) and the post-measure with the pre-measure held constant is equivalent to a gain score correlation with the pre-measure held constant. He recommends that the correlations be corrected for attenuation so the signs of the partial correlations are accurate. The nature of the formula for the partial correlation means the sign of the partial correlation will be critically affected by the size of the inter-correlations.

Therefore, the correction for attenuation must be made so that the partial correlation reflects the relationship of the correlations without measurement error. This will produce partial correlations with the proper signs and although there may be spurious correlations as a result of sampling errors, the results are superior to partial correlation without correction for attenuation. Fortunately, the reliabilities were fairly high for most of the variables, and the results are equivalent to gain score analysis.

The other limitations in the study relate to various threats to the validity of the study (Cook and Campbell, 1979). The assignment of the post-only control group was not done randomly, although the group did not figure in the results because they were not included in the correlational analysis because of no pre-measures. Mortality is a problem which can affect any field experiment and did, in fact, affect the present study. Another threat to the validity of the study was the problem of missing data. The author worked with top management to obtain measures which were not turned in immediately and received support from two of the managers in particular, but missing data still limits the validity of the study, because the inter-correlations may represent a subset of the data which is not equivalent to the entire sample.

There were also various threats to internal, external, and statistical validity. Internal validity is strengthened by giving all measures in controlled surroundings so participants do not share answers and the same amount of thought is put into the answers. The managers and supervisors completed the information in controlled situations for the most part, but there were some people who took the measures home or back to their work stations to fill them out. Fortunately, all the pre-measures for learning, behaviors, and performance were completed in the presence of the author except for five of the learning measures in the pre-post control group. The module and summary reaction measures were completed in the controlled environment of the classes. The post-measures were the most difficult problem, but 76 percent of the post-measures for BOS and the Follow-up Reactions were completed in controlled conditions.

Assigning supervisors and managers by alternating names from the organizational chart served to distribute the participants evenly among the divisions. Analyses revealed no significant differences in age, seniority, or years of supervision between the groups. Generalizability may be affected by the fact that the company was working with high seniority personnel and that all the supervisors and managers were males. Nevertheless, the overall results indicate that the training was learned, but that the

training was not translated back to the job. This indicates that further research is necessary to determine the effectiveness of behavior modeling and the ability of social learning theory to predict imitation of behaviors.

Implications for Research and Practice

The implications for training will be discussed in the context of the three phases of training identified by Goldstein (1974): assessment phase, training and development phase, and evaluation phase. The implications for the assessment phase are based on the work by McGehee and Thayer (1961) and elaborated on by Moore and Dutton (1978) and Wexley and Latham (1982). A needs analysis should include the characteristics of the organization and the person as well as the job. Goldstein (1980) reviewed the training literature and indicated there has been no research on improving the effectiveness of training by analyzing these variables. The present research hypothesized that the analysis of the relationship between the supervisors and his/her employees would improve the effectiveness of future supervisory training programs. Two previous training programs have demonstrated that the managerial climate will affect the transfer of training to the job (Baumgartel and Jeanpierre, 1972, Fleishman, et al., 1955; and Harris and Fleishman, 1955), but have not

identified the measure or relationship which can predict whether the training will be effective. While no significant results were found in this study, management development programs should still consider measuring the level of support between the potential trainee and his/her manager before implementing the training, since past results have found it important.

Perhaps there may be other relationships which could moderate the effectiveness of training. One type of relationship is the "subordinate's perceptual congruence" in the work done by Wexley (e.g., Wexley, Alexander, Greenawalt, and Couch, 1980). There are several reasons why subordinate congruency may affect training results similar to those hypothesized for the VDL relationship. First, both focus on the dyadic relationship between the subordinate and manager. Second, both measures indicate a high degree of interaction between the subordinate and manager which is based on role modeling. The communication of behavioral expectations is thought to be greater between a subordinate and manager with both high congruence dyads and high VDL dyads. Third, high subordinate perceptual congruence is significantly correlated with the subordinate's satisfaction with the manager, while the VDL is a measure of the strength of the supportive relationship of the subordinate/manager dyad. Furthermore, Wexley notes that his current research indicates the VDL is

highly correlated with trusting and liking the manager (note 1). Therefore, the high VDL and the subordinate perceptual congruence would predict a close working relationship exists which would allow the use of new, learned behaviors on the job and provide reinforcement of those behaviors. Thus, both would predict that trainees with a strong relationship would be more likely to benefit from the training.

Another concept which emphasizes the need to examine the trainee's environment is interactional psychology (Terborg, 1981). Interactional psychology recognizes that the situation and the person interact to create a complex relationship which must be measured as a whole to increase the validity of social science research. The VDL describes a role making process between the supervisor and his/her manager which is an interaction in the social context. The facet design suggested by Terborg for analysis of the person, physical-technological, social, and time contexts may be an appropriate way to conduct the assessment and evaluation of training programs.

The implications for the training and development phase are that line managers can be as effective in training as professional trainers. In the Porras, et al. organizational development program the line managers were found to be effective in improving training results, but

they were not compared with a group that was trained by trainers (1980,1981,1982). The line managers in that organizational development program were directly responsible for the supervisors and had received intensive training in modeling and leadership. The line managers and the personnel managers in the present study simply participated in the same training for a period of twelve hours and were not necessarily directly responsible for the supervisors. The results indicate that the use of line managers produces equal results when compared with the professional trainers. More research is needed to determine the criteria for the selection of managers to do the training and whether there are any long range benefits to the organization of involving carefully selected line managers as trainers.

There is also an impact on the managers who do the training themselves. The present research found no significant results, but the follow-up interviews indicated that there was pressure on managers who were not deeply committed to the concepts of the training. There may be other results from involving the managers in the training. They may support the training function more; they may work harder to ensure that the training results are brought back to the job; they may develop better relationships with other supervisors in the plants which can lead to better selection of personnel for promotions. The train-

ing process itself offers opportunities for the organization to impact both the trainee and the trainer. This area certainly seems to deserve future research effort.

Still another implication for training and development is the need to design coaching, counseling, and reinforcement strategies to enhance the training program. Checklists and coaching were used by Wexley and Nemeroff (1975) in a training program for supervisors in a hospital. One of the trainers met with the supervisors one week and three weeks after the training was over to review the principles which had been taught and their usage on the job. Training programs should include the use of assistance on the job by trainers or supervisors as an integral part of the training process. The difficulty of overcoming well entrenched behaviors indicates training programs need to extend their domain to such assistance.

The last implication of the research for training and development phase is the need to establish applied learning modules for the middle managers in the scientific literature. There have been no studies to date which have reported on effective training for middle level managers.

The disappointing results of this study should not discourage the search for possible moderators to the effectiveness of training for on the job behavior results nor the use of BOS measures for measuring on the job

behaviors. Goldstein's review cited the lack of methodologies for systematically studying behaviors as a serious problem within evaluation research (1980). The BOS instrument used in the present study was easy to complete and provided the opportunity to identify the modules of the training program in terms of its learning points. Even though the findings for behaviors on the job were not significant, the BOS instrument appears to be a valuable tool for measuring training behavioral changes on the job.

Further research should also continue to examine the VDL model along with other models to determine their impact on training for supervisors' on the job behavior. Research should continue to try to identify circumstances which will moderate the effectiveness of training. The perceptual congruency of subordinates and interactional psychology were two such factors discussed earlier. There may also be other measures of self-esteem (see Jackson and Paunonen, 1980) which would clarify the importance of self-esteem as a moderator, or alternatives to self-esteem, such as ability (Terborg, Richardson, and Pritchard, 1980).

The implications for performance appraisal are that there may be interesting research questions concerning the impact of the close working relationship of the rater and the ratee. The research on friendship suggests there is no effect on peer ratings (Amir, Kovarsky, and Sharan,

1970; Suci, Vallance, and Glickman, 1956). There is currently no research on the accuracy of ratings for boss-subordinate relationships where there is a strong, friendly, supportive relationship. The relationship between accuracy of ratings and VDL models (or subordinate perceptual congruency and/or interactional psychology) may be a fruitful area of research. For example, does the close relationship increase the accuracy of the rating or does it inflate halo error? Are the subordinate and manager ratings more convergent for high congruency relationships as the theories would seem to suggest? Is this the reason subordinate and managerial ratings have not been found to converge across all managers?

The final implication for ratings comes from the author's experience with the peer raters of supervisory performance. Research has shown that peer evaluations have a low to moderate relationship with other evaluations, but they are useful for predicting promotions (Landy and Farr, 1980; and Waters and Waters, 1970). The experience in this effort demonstrated that there may be a practical way for organizations to establish peer evaluations with reasonable reliabilities. The raters reported learning a great deal from evaluating the supervisors and the process was effective in limiting them to the spheres of interaction which they had with the supervisors. The

higher reliability for the post-measures may well have come from their increased attention to the supervisors' performances after they were informed they would be evaluating them again.

Several implications come to mind here. It seems that there is fruitful research in knowing whether a person is more effective as an observer once it is established that he/she has to evaluate performance. Further, it was clear that certain types of jobs were highly visible as opposed to others which were not even observed, so peer evaluations would serve to draw attention to the performances of individuals who are not visible in organizations. Non-visibility can have serious ramifications on the performance and careers of individuals as well as organizations.

The present research suggests that social learning theory is limited in predicting behavioral change for adults in non-counseling settings or general training programs. Further research should be directed at establishing where social learning theory is effective in predicting behavioral changes. Research could be directed at exploring the role of an individual's self-concept, the impact of past models, and the need to recognize the present reinforcement received by the observers. The contribution that past reinforcement makes to each of the results is not clear, but it appears to make no signifi-

cant contribution to the acquisition of skills and no evidence was found that it produced behaviors as a result of the training. Future research should clarify the relative contributions.

Conclusion

Training in an organizational context has to be evaluated for reactions and learning as well as usage on the job, but that analysis must be based on both characteristics of the individual and the context of the job. The actual delivery of the training programs should be studied to include line managers because they are equally effective and a controlled selection of line managers may make them even more effective. Further work needs to be done to determine what individual characteristics of the trainee limit the use of that training on the job as well as developing techniques to increase the use of the training on the job. Finally, the results cast doubt on the ability of social learning theory to predict changes in behavior or the job where there have been long standing reinforcement patterns.

APPENDICES

APPENDIX A

APPENDIX A

CONSENT FORM

I have freely consented to completing these forms which I understand is for the purpose of determining training topics and assessing the impact of training for managers and foremen. I am further aware that James S. Russell is collecting this data and my responses will be kept in strict confidence, and my identity anonymous. I understand that results of this study at an aggregate level of analysis will be made available to me upon request. Further, I understand that completion of these forms is voluntary, will not have an effect on my employment status, and that I may withdraw my participation at any time.

Date _____

Name _____

Signature _____

APPENDIX B

APPENDIX B

RELIABILITY CALCULATIONS FOR SUPERVISORS
PERFORMANCE RATINGSPRE-MEASURES

Average number of ratings per supervisor	3.85
Variance of the mean of the individual supervisors' means	4.64
Mean of the variances of the individual supervisors' means	8.26

$$\text{Single rater reliability} = \frac{4.64}{4.64 + 8.26} = .36$$

$$\text{Reliability of the pre-measure} = \frac{(3.85)(.36)}{1 + (2.85)(.36)} = .68$$

POST-MEASURES

Average number of ratings per supervisor	4.1
Variance of the mean of the individual supervisors' means	6.90
Mean of the variances of the individual supervisors' means	6.51

$$\text{Single rater reliability} = \frac{6.90}{6.90 + 6.51} = .51$$

$$\text{Reliability of the post-measure} = \frac{(4.1)(.51)}{1 + (3.1)(.51)} = .81$$

APPENDIX C

APPENDIX C NAME _____

BACKGROUND INFORMATION

SEX: (1) Female (2) Male

AGE: _____

RACE: (1) American Indian (4) Oriental
(2) Black (5) Spanish Surnamed American
(3) Caucasian (6) Other _____

Time in this position (department): _____ years _____ months

Years as a foreman _____ Department _____

Division _____

Years seniority in the Plant _____

Education: Circle highest level achieved in school:

- (1) 8th grade or less (4) Some college
(2) Some high school (5) College graduate
(3) High school graduate
or equivalent

Training received for management position (circle all that apply):

- (1) No training.
(2) On-the-job training before promotion.
(3) In-plant classroom training before promotion.
(4) Off-site classroom training before promotion
(Professional, AMA, etc.).
(5) On-the-job training after promotion.
(6) In-plant classroom training after promotion.
(7) Off-site classroom training after promotion
(Professional, AMA, etc.).

How many subordinates report directly to you? _____

APPENDIX D

APPENDIX D

CODE _____

SESSION _____

EVALUATION OF TODAY'S TRAINING

Thinking for a minute about the training, answer the questions based on the way the class was conducted today. Circle the column which best describes your opinion. Be sure to read the questions carefully because some are reversed. Check (1) if you strongly agree; (2) if you agree; (3) if you ? ; (4) if you disagree; (5) if you strongly disagree. They

The Leaders:

	<u>Strongly Agree</u>		<u>? </u>		<u>Strongly Disagree</u>
--	-----------------------	--	-----------	--	--------------------------

1. Presented the learning points clearly and logically.	1	2	3	4	5
---	---	---	---	---	---

2. Got everybody's ideas	1	2	3	4	5
--------------------------	---	---	---	---	---

3. Gave too many of their own opinions	1	2	3	4	5
--	---	---	---	---	---

4. Wrote ideas on the boards or paper	1	2	3	4	5
---------------------------------------	---	---	---	---	---

5. Worked out ways to use the ideas on the job	1	2	3	4	5
--	---	---	---	---	---

Summarizing the training as a whole:

6. The training was unrealistic	1	2	3	4	5
---------------------------------	---	---	---	---	---

7. The role modeling in the film was effective	1	2	3	4	5
--	---	---	---	---	---

8. I was given specific feedback about the way I practiced	1	2	3	4	5
--	---	---	---	---	---

9. I was given enough practice to learn the steps	1	2	3	4	5
---	---	---	---	---	---

10. I plan to use the steps on my job	1	2	3	4	5
---------------------------------------	---	---	---	---	---

11. My boss uses these steps	1	2	3	4	5
------------------------------	---	---	---	---	---

If I were to use the steps on my job:

12. My boss would back me up	1	2	3	4	5
------------------------------	---	---	---	---	---

13. Personnel would not back me up	1	2	3	4	5
------------------------------------	---	---	---	---	---

14. It would make it easier to deal with the stewards in the long run	1	2	3	4	5
---	---	---	---	---	---

15. I'd be a better manager	1	2	3	4	5
-----------------------------	---	---	---	---	---

16. My employees would see me as a better manager	1	2	3	4	5
---	---	---	---	---	---

17. Think about all the parts of the training which were important to you in today's session.

Place a rank for each item:

<u>Very Important</u>	<u>Important</u>	<u>? </u>	<u>Of Some Importance</u>	<u>Not at all Important</u>
-----------------------	------------------	-----------	---------------------------	-----------------------------

a. Role modeling in the film _____

b. Discussion of the learning points _____

c. Practice and feedback _____

d. Review of on-the-job experiences _____

e. Hearing how other supervisors handle things _____

f. Having the leaders conduct the class _____

18. Overall, today's workshop was: (circle one)

1. very useful; 2. useful; 3. somewhat useful;

4. of little use; 5. of no use

CODE _____

SESSION _____

EVALUATION OF TODAY'S TRAINING

Thinking for a minute about the training, answer the questions based on the way the class was conducted today. Circle the column which best describes your opinion. Be sure to read the questions carefully because some are reversed. Check (1) if you strongly agree; (2) if you agree; (3) if you ?; (4) if you disagree; (5) if you strongly disagree. They

<u>The Leaders:</u>	<u>Strongly Agree</u>		<u>?</u>		<u>Strongly Disagree</u>
	1	2	3	4	5
1. Presented the learning points clearly and logically.	1	2	3	4	5
2. Got everybody's ideas	1	2	3	4	5
3. Gave too many of their own opinions	1	2	3	4	5
4. Wrote ideas on the boards or paper	1	2	3	4	5
5. Worked out ways to use the ideas on the job	1	2	3	4	5
<u>Summarizing the training as a whole:</u>					
6. The training was unrealistic	1	2	3	4	5
7. The role modeling played by the managers was effective	1	2	3	4	5
8. I was given specific feedback about the way I practiced	1	2	3	4	5
9. I was given enough practice to learn the steps	1	2	3	4	5
10. I plan to use the steps on my job	1	2	3	4	5
11. My boss uses these steps	1	2	3	4	5
<u>If I were to use the steps on my job:</u>					
12. My boss would back me up	1	2	3	4	5
13. Personnel would not back me up	1	2	3	4	5
14. It would make it easier to deal with the stewards in the long run	1	2	3	4	5
15. I'd be a better manager	1	2	3	4	5
16. My employees would see me as a better manager	1	2	3	4	5
17. Think about all the parts of the training which were important to you in today's session.					

Place a rank for each item:

Very Of Some Not at all
Important Important ? Importance Important

- a. Role playing by managers _____
- b. Discussion of learning points _____
- c. Practice and feedback _____
- d. Review of on-the-job experiences _____
- e. Hearing how other supervisors handle things _____
- f. Having the managers conduct the class _____

18. Overall, today's workshop was: (circle one)

1. very useful; 2. useful; 3. somewhat useful;

4. of little use; 5. of no use

CODE _____

SESSION _____ OVERALL _____

EVALUATION OF OVERALL TRAINING

Thinking for a minute about the training, answer the questions based on the way the class was conducted. Circle the column which best describes your opinion. Be sure to read the questions carefully because some are reversed. Check (1) if you strongly agree; (2) if you agree; (3) if you ?; (4) if you disagree; (5) if you strongly disagree.

<u>The Leaders:</u>	<u>Strongly Agree</u>		<u>?</u>		<u>Strongly Disagree</u>
1. Presented the learning points clearly and logically.	1	2	3	4	5
2. Got everybody's ideas	1	2	3	4	5
3. Gave too many of their own opinions	1	2	3	4	5
4. Wrote ideas on the boards or paper	1	2	3	4	5
5. Worked out ways to use the ideas on the job	1	2	3	4	5
<u>Summarizing the training as a whole:</u>					
6. The training was unrealistic	1	2	3	4	5
7. The role modeling in the film was effective	1	2	3	4	5
8. I was given specific feedback about the way I practiced	1	2	3	4	5
9. I was given enough practice to learn the steps	1	2	3	4	5
10. I plan to use the steps on my job	1	2	3	4	5
11. My boss uses these steps	1	2	3	4	5
<u>If I were to use the steps on my job:</u>					
12. My boss would back me up	1	2	3	4	5
13. Personnel would not back me up	1	2	3	4	5
14. It would make it easier to deal with the stewards in the long run	1	2	3	4	5
15. I'd be a better manager	1	2	3	4	5
16. My employees would see me as a better manager	1	2	3	4	5
17. Think about all the parts of the training which were important to you.					

Place a rank for each item:

Very Important Important ? Of Some Importance Not at all Important

- a. Role modeling in the film _____
- b. Discussion of the learning points _____
- c. Practice and feedback _____
- d. Review of on-the-job experiences _____
- e. Hearing how other supervisors handle things _____
- f. Having the leaders conduct the class _____

18. Overall, the workshops were: (circle one)

1. very useful; 2. useful; 3. somewhat useful;

4. of little use; 5. of no use

FINAL TRAINING EVALUATION

Please consider the training program as a whole, and rate the value below based on your feelings at this moment. Rate the answer (1) if you strongly agree; (2) if you agree; (3) if you're not sure (?); (4) if you disagree; and, (5) if you strongly disagree:

- | | | | | | |
|--|---|---|---|---|---|
| 1. The training helped me do the job better. | 1 | 2 | 3 | 4 | 5 |
| 2. The training helped me interact better with employees. | 1 | 2 | 3 | 4 | 5 |
| 3. The training helped me interact more effectively with my fellow managers. | 1 | 2 | 3 | 4 | 5 |
| 4. The training helped me interact more effectively with my bosses. | 1 | 2 | 3 | 4 | 5 |
| 5. I would recommend this training for other managers. | 1 | 2 | 3 | 4 | 5 |

CODE _____
 SESSION _____ OVERALL _____

EVALUATION OF OVERALL TRAINING.

Thinking for a minute about the training, answer the questions based on the way the class was conducted. Circle the column which best describes your opinion. Be sure to read the questions carefully because some are reversed. Check (1) if you strongly agree; (2) if you agree; (3) if you ?; (4) if you disagree; (5) if you strongly disagree.

<u>The Leaders:</u>	<u>Strongly Agree</u>		<u>?</u>		<u>Strongly Disagree</u>
1. Presented the learning points clearly and logically.	1	2	3	4	5
2. Got everybody's ideas	1	2	3	4	5
3. Gave too many of their own opinions	1	2	3	4	5
4. Wrote ideas on the boards or paper	1	2	3	4	5
5. Worked out ways to use the ideas on the job	1	2	3	4	5

Summarizing the training as a whole:

6. The training was unrealistic	1	2	3	4	5
7. The role modeling played by the managers was effective	1	2	3	4	5
8. I was given specific feedback about the way I practiced	1	2	3	4	5
9. I was given enough practice to learn the steps	1	2	3	4	5
10. I plan to use the steps on my job	1	2	3	4	5
11. My boss uses these steps	1	2	3	4	5

If I were to use the steps on my job:

12. My boss would back me up	1	2	3	4	5
13. Personnel would not back me up	1	2	3	4	5
14. It would make it easier to deal with the stewards in the long run	1	2	3	4	5
15. I'd be a better manager	1	2	3	4	5
16. My employees would see me as a better manager	1	2	3	4	5

17. Think about all the parts of the training which were important to you.

Place a rank for each item:

Very Of Some Not at all
Important Important ? Importance Important

- a. Role playing by managers _____
- b. Discussion of learning points _____
- c. Practice and feedback _____
- d. Review of on-the-job experiences _____
- e. Hearing how other supervisors handle things _____
- f. Having the managers conduct the class _____

18. Overall, the workshops were: (circle one)

1. very useful; 2. useful; 3. somewhat useful;
4. of little use; 5. of no use

FINAL TRAINING EVALUATION

Please consider the training program as a whole, and rate the value below based on your feelings at this moment. Rate the answer (1) if you strongly agree; (2) if you agree; (3) if you're not sure (?); (4) if you disagree; and (5) if you strongly disagree.

- | | | | | | |
|--|---|---|---|---|---|
| 1. The training helped me do the job better | 1 | 2 | 3 | 4 | 5 |
| 2. The training helped me interact better with employees. | 1 | 2 | 3 | 4 | 5 |
| 3. The training helped me interact more effectively with my fellow managers. | 1 | 2 | 3 | 4 | 5 |
| 4. The training helped me interact more effectively with my bosses. | 1 | 2 | 3 | 4 | 5 |
| 5. I would recommend this training for other managers. | 1 | 2 | 3 | 4 | 5 |

Thinking for a minute about the training in the spring, answer the statements based on the way the class was conducted. Circle the column which best describes your opinion. Be sure to read the statements carefully because some use negative terms. Circle (SA) if you strongly agree; (A) if you agree; (?) if you neither agree nor disagree; (D) if you disagree; (SD) if you strongly disagree.

	Strongly Agree		Neither Agree or Disagree		Strongly Disagree
<u>The Leaders:</u>					
1. Presented the learning points clearly and logically.	SA	A	?	D	SD
2. Got everybody's ideas	SA	A	?	D	SD
3. Gave too many of their own opinions	SA	A	?	D	SD
4. Wrote ideas on the boards or paper	SA	A	?	D	SD
5. Worked out ways to use the ideas on the job	SA	A	?	D	SD
<u>Summarizing the training as a whole:</u>					
6. The training was unrealistic	SA	A	?	D	SD
7. The role modeling played by the managers was effective	SA	A	?	D	SD
8. I was given specific feedback about the way	SA	S	?	D	SD
9. I was given enough practice to learn the steps	SA	S	?	D	SD

	Very Important	Important	?	Of Some Importance	Not at all Important
10. a. Role playing by managers					
b. Discussion of learning points					
c. Practicing the behavior					
d. Feedback on my practice					
e. Review of on-the-job experiences					
f. Hearing how other supervisors handle things					
g. Having the managers conduct the class					

1. Very Useful; 2. Useful; 3. Somewhat Useful;

4. Of Little Use; 5. Of No Use

FINAL TRAINING REVIEW

Please consider the training program as a whole, and rate the value below based on your feelings at this moment. Rate the answer (SA) if you strongly agree; (A) if you agree; (?) if you're not sure; (D) if you disagree; (SD) if you strongly disagree.

	<u>Strongly Agree</u>	<u> </u>	<u>Not Sure</u>	<u> </u>	<u>Strongly Disagree</u>
12. The training helped me do the job better	SA	A	?	D	SD
13. The training helped me interact better with employees	SA	A	?	D	SD
14. The training helped me interact more effectively with my fellow managers	SA	A	?	D	SD
15. The training helped me interact more effectively with my bosses	SA	A	?	D	SD
16. I would recommend this training for other managers	SA	A	?	D	SD

The next set of questions are designed to measure your recollection and evaluation of the training. Each module will be listed in turn. The first three (3) questions in each module ask which step is the correct step according to the module. All answers are acceptable management answers, but please give the answer specified by the module.

The last three (3) questions in each module ask for your opinion. Please circle (SA) if you strongly agree; (A) if you agree; (?) if you're not sure; (D) if you disagree; (SD) if you strongly disagree. Please circle the letter which best describes your opinion.

Module 1. Motivating a Person to Problem Solve

17. I remember the learning points (or steps) for this module:
 - a. clearly and completely I can name the code word which is: _____
 - b. well enough to use
 - c. only partially
 - d. not at all
18. The step after you describe a problem to an employee is to:
 - a. ask for his ideas
 - b. tell him why it can't continue
 - c. tell him what will happen if it does continue
 - d. tell him you expect him to correct it
19. The learning point after you agree on the actions each of you should take to correct the problem is:
 - a. tell him what happens if he doesn't get it done
 - b. set a specific time for follow-up
 - c. assure him of your interest
 - d. say nothing; it's clear what both should do
20. I felt I performed these learning steps well in the training

SA

A

?

D

SD

21. The feedback from the other first line managers helped me learn the steps

SA A ? D SD

22. The feedback from the leaders for this module helped me learn the steps

SA A ? D SD

Module 2. Handling a Complaining Employee

23. I remember the learning points (or steps) for this module:

- a. clearly and completely; I can name the code word which is: _____
- b. well enough to use
- c. only partially
- d. not at all

24. The next step after you have asked for a full description of the complaint and listened openly is to:

- a. ask the employee if he has any suggestions
- b. explain why the situation is the way it is
- c. Remind him that complaining doesn't solve problems.
- d. thoroughly understand the complaint by restating it

25. When an employee complains about something, the first thing to remember is to:

- a. ask for a full description of his complaint
- b. respond thoughtfully without hostility or defensiveness
- c. focus on the problem, not the employee
- d. come to agreement on steps to be taken by each of you.

26. I felt I performed these learning points well in the training

SA A ? D SD

27. The feedback from the other first line managers helped me learn the steps

SA A ? D SD

28. The feedback from the leaders for this module helped me learn the steps

SA A ? D SD

Module 3. Discussing Poor Work Habits

29. I remember the learning points (or steps) for this module:

- a. clearly and completely; I can name the code word, which is: _____
- b. well enough to use
- c. only partially
- d. not at all

30. After describing the behaviors which are poor work habits, the manager should:

- a. explain what will happen if they continue
- b. set a timetable for when they should be reviewed

30. (continued)

- c. explain why the behaviors cannot continue
- d. assure the employee of your interest in helping him succeed

31. Before setting a time for follow-up, the last thing the manager and employee should do is:

- a. review the penalty if it happens again
- b. come to agreement on steps to be taken by each of you
- c. explain why the behaviors cannot continue
- d. review prior cases which have been similar

32. I felt I performed these learning points well in the training

SA	A	?	D	SD
----	---	---	---	----

33. The feedback from the other first line managers helped me learn the steps

SA	A	?	D	SD
----	---	---	---	----

34. The feedback from the leaders for this module helped learn the steps

SA	A	?	D	SD
----	---	---	---	----

Module 4. Discussing a Potential Disciplinary Action

35. I remember the learning points (or steps) for this module:

- a. clearly and completely; I can name the code word, which is: _____
- b. well enough to use
- c. only partially
- d. not at all

36. The first thing to focus on in the discussion is:

- a. Warn him that if it happens again, it could be discipline.
- b. what disciplinary action is called for
- c. describing the behavior which cannot be allowed to continue
- d. the lack of improvement since the previous discussion

37. After assuring the employee of your interest in helping him succeed on the job, the manager should:

- a. come to an agreement on the employee's responsibility to solve the problem
- b. describe what disciplinary action is called for
- c. set a date for review
- d. let the employee go back to his job

38. I felt I performed these learning points well in the training

SA	A	?	D	SD
----	---	---	---	----

39. The feedback from the other first line managers helped me learn the steps

SA	A	?	D	SD
----	---	---	---	----

The feedback from the leaders for this module helped me learn the steps

SA A ? D SD

ule 5. Recognizing the Average Employee

I remember the learning points (or steps) for this module:

- a. clearly and completely; I can name the code word, which is: _____
- b. well enough to use
- c. only partially
- d. not at all

This module stressed that when a manager was thanking an average employee, he should:

- a. Describe areas where he could improve.
- b. avoid talking to the employee while he is working
- c. tell the employee how much you appreciate what he does
- d. describe the specific behavior or work habit which is appreciated

After thanking the employee, the module stressed that the manager should:

- a. ask the employee to let him know if there is ever anything he could do to make the job easier
- b. Ask the employee to improve his performance in other areas.
- c. explain why the behavior is appreciated
- d. encourage him to ask questions about work

I felt I performed these learning steps well in the training

SA A ? D SD

The feedback from the other first line managers helped me learn the steps

SA A ? D SD

The feedback from the leaders for this module helped me learn the steps

SA A ? D SD

ule 6. Overcoming Resistance to Change

I remember the learning points (or steps) for this module:

- a. clearly and completely; I can name the code word which is: _____
- b. well enough to use
- c. only partially
- d. not at all

The second step after the details of the change are described is:

- a. describe the effect of the change on the employee
- b. ask the employee for questions or suggestions
- c. explain why the change is necessary
- d. ask the employee to come to you if there are any problems

49. After the manager gets the reaction of the employee about the change, the next step is to:

- a. set a date for follow-up
- b. ask for help to make the change work
- c. explain why the change is necessary
- d. assure the employees of your interest in helping them succeed

The following statements are about your experiences since the training. Please answer as honestly as possible, based on your own experience and feelings since the training program in the spring.

	<u>Strongly Agree</u>	<u> </u>	<u>Not Sure</u>	<u> </u>	<u>Strongly Disagree</u>
50. My boss uses these steps	SA	A	?	D	SD
51. I used the steps on my job	SA	A	?	D	SD
If you answered SA or A on the last question (question #51), please answer the questions below. If you answered ?, D, or SD, please skip to question # 59.					
52. My boss backed me up	SA	A	?	D	SD
53. Personnel backed me up	SA	A	?	D	SD
54. It has made it easier to deal with the stewards in the long run	SA	A	?	D	SD
55. When I used the training, it made matters worse	SA	A	?	D	SD
56. I'm a better manager	SA	A	?	D	SD
57. When I used the training I controlled the conversation better	SA	A	?	D	SD
58. My employees see me as a better manager	SA	A	?	D	SD

The next questions ask about your opinion of how the training was used by other managers.

59. Those managers who used these steps were supported by their managers	SA	A	?	D	SD
60. The Personnel Department has backed those managers who used the training	SA	A	?	D	SD
61. The training didn't work for other managers who tried it	SA	A	?	D	SD

APPENDIX E

APPENDIX E

CODE _____

TRAINER CHARACTERISTICS

The following adjectives, or phrases, identify qualities a manager may have, actions he might take, or your personal feelings toward him, based on your experience with him. Please circle the response after each item which best describes each of your training leaders.

Circle SA if you strongly agree; A if you agree; ? if you're not sure; D if you disagree; SD if you strongly disagree.

Leader: _____

- | | | | | | |
|---|----|---|---|---|----|
| 1. This leader would reward my good work. | SA | A | ? | D | SD |
| 2. This leader is important to me on my job. | SA | A | ? | D | SD |
| 3. I'd have to accept this leader's orders. | SA | A | ? | D | SD |
| 4. He could be very critical of my actions. | SA | A | ? | D | SD |
| 5. I identify with him as a manager. | SA | A | ? | D | SD |
| 6. I respect him as a person. | SA | A | ? | D | SD |
| 7. I admire the way he handles his people. | SA | A | ? | D | SD |
| 8. I think he gets his way with upper management. | SA | A | ? | D | SD |

APPENDIX F

APPENDIX F

INSTRUCTIONS

CODE _____

The incidents listed below were collected to use as a pre-test and a post-test for the plant management training program. Please read each question and then answer by writing the words that you would use below each question. Write the words you would say if you were in the position described whether it's foreman, general foreman, superintendent or divisional manager. If there are any questions, please feel free to ask the instructor. Your answers should just be words and not any background description. Don't worry about spelling. Remember, put yourself in the shoes of the manager and write the words you'd use.

1. You're the foreman. The decision has been made to enforce the rule about the plant manager's signature on any equipment which may be leaving the plant. You have to tell your maintenance people it means personal tools also. How would you describe it to them?

2. You're the foreman. Your employee just missed a day this week (early September) which is his 10th day absent this year. You counselled him on the 8th day in late May and then he missed 1 day in June. He missed a day yesterday. How would you handle it today?

3. You're the foreman. As you walk by the presses, you notice Charley is steadily working on salvage inspection with just 5 minutes until wash-up time, just like he always is. You would say:

4. You talked with a steward about his horseplay on the line and now you've just seen him doing it again. You asked him to come to your office. You told him next time he'd be disciplined. He just walked in. You say:

5. You're the foreman. One of your employees has recently been using up too many tool bits on his Warner-Swasey. You suspect he's running too fast. He has three years seniority in this department and has been a satisfactory performer. How would you discuss it with him?
6. You're the general foreman/superintendent. When you are talking with a foreman whose area is too dirty, he says he doesn't have enough men to keep it clean. You would say:
7. You're the foreman. Production men are standing in water and complaining that every year there's a new leak in the roof and water comes in during a summer rainstorm and why the hell can't you guys in maintenance ever fix the roof right for once? You said, "You want to know why it always leaks in a new place, right?" He said, "You're goddamn right I do." You say:
8. An employee who gets transferred to your area regularly takes 15 minutes longer to show up than other workers. You talked to him about it once and now he's showing up late again. He seems surprised when you suggest he hasn't improved since last discussion because he still was 15 minutes late. What would you say now?

9. You're the general foreman. Your foreman can't get production on the wheel line because of the poor penetration on the 4" weld. Either he produces too much scrap or not enough pieces. What would you say to him?
10. One of your steady employees caught your eye and asked a basic question which you easily answered. What would you say now?
11. The steward has just come up and said the men shouldn't be putting the 120 pound ordnance wheels in the baskets. They should be on pallets. You were told at the beginning of the shift there were no more pallets. You would:
12. You're the general foreman/superintendent. Your foreman has continued to set temporary rates from files he has and the Industrial Engineering department is refusing to authorize them. You've just explained that problem to the foreman and told him why it can't continue. What would you do now?

13. You're the foreman. Your electrical repairman frequently seems to have trouble fixing something. Since you're a plumber by trade he may be fooling you. He has four years in this division and his previous foreman had no trouble with him. What would you say when you talk to him about it?

14. You're the general foreman/superintendent. Foreman talking says: "Sometimes I wonder if it's worth it. I feel like walking out and seeing what the rest of the world is talking about. It seems like since I've been here there's been a big dark cloud over the plant." You would say:

15. You're the foreman. The storeroom is being closed off so your men won't be able to get in and pull the parts they need any time they want to. How would you tell your men?

16. You're the foreman. When counseling a man for not wearing his ear-plugs, he says, "I can't wear them, they cause too many problems." You would say:

17. You're the foreman. After giving a yellow card to an average employee for a free Coke or coffee for a near accident-free month, you would say:
18. You're the foreman. One of your new truck drivers has been leaving too much incoming freight stacked up on the receiving docks. How would you talk with him about it?
19. You're the division manager. Restricted men aren't able to return even if they have seniority because of their restrictions. Two who have asked to come back have apparently minor restrictions. The plant manager has asked you if you could find some place for them to work. How will you approach your men?
20. You're the general foreman. Your foreman's men have been standing around a lot tonight. When you checked into it, he admitted he made a deal. If the men would run 2,000 parts a customer really needed, he'd let them quit. He figured it would take 6-7 hours, but they got done in 3 hours. So many deals are getting cut it screws up production. You would say:

21. You're the foreman. A steward working on the end of the line asked to be relieved half an hour ago to settle a grievance. You need production badly, relief is on the way but will probably take 15 minutes to get there and you'd have to shut down if he leaves. He tells you he's going to leave. What would you say?
22. You're the foreman. The decision has been made to run hoops and store them. You're explaining the change to your people. They're obviously not listening closely. What would you do and say for the rest of the meeting?
23. You're the foreman. When an employee agrees he has a problem getting to work on time, you would say:
24. You're the foreman. You were talking with one of your people working the cupola who always seems to be there but is not a spectacular performer and thanking him for being so reliable. What would you say now?

APPENDIX G

APPENDIX G

MANAGERS RATE SUBORDINATES

Name of person being observed _____
 Department _____
 Observer's Code _____
 Date _____

This checklist contains key job behaviors that managers have reported as critical for their jobs and the effectiveness and efficiency for Motor Wheel Corporation.

Please consider the above named individual's behavior on the job for the past 4 months. Read each statement carefully. Circle the number that indicates the extent to which you believe this person has demonstrated this behavior.

For each behavior describe the number which represents the frequency with which the behavior is observed when it is appropriate. For each behavior a:

- 5 means almost always or 95-100% of the time.
- 4 means frequently or 85- 94% of the time.
- 3 means sometimes or 75- 84% of the time.
- 2 means seldom or 65- 74% of the time.
- 1 means almost never or 0- 64% of the time.
- 0 means not able to observe at appropriate times.

An example of an item is shown below. If a manager drives his car to work 95-100% of the time, circle 5. If he drives it 50% of the time, circle the 1. If you don't know how he gets to work or do not observe him coming to work, circle 0.

	Almost Never				Almost Always	
Manager drives his car to work	<u>1</u>	2	3	4	<u>5</u>	0

RATING ERRORS

As a rater, you should keep in mind the need to avoid the six common rating errors people make when using human judgment to rate people. Rating errors may be defined technically as a difference between the output of a human judgment process and that of an objective accurate assessment uncolored by bias, prejudice, or other subjective extraneous influences. Among the most common rating errors are contrast effects, first impressions, halo, similar-to-me, central tendency, and positive and negative leniency.

Contrast effects is the tendency for a rater to evaluate relative to other individuals rather than on the extent to which the individual is fulfilling the requirements of the job.

First-impression error refers to the tendency of a rater to make an initial favorable/unfavorable judgment about an employee that is not justified by the employee's subsequent job behavior.

The halo effect refers to inappropriate generalization from one aspect of a person's performance to all aspects of the person's job performance.

The similar-to-me effect is a tendency for people to be judged more favorably who are similar rather than dissimilar to the rater in attitudes and background even if the latter are not job related.

Central tendency refers to consistently rating people at the midpoint of a scale.

Negative and positive leniency refers to consistently rating people at the low or high end of the scale.

MANAGERS RATE SUBORDINATES

(circle appropriate number for each question)

Instructions: 5 Almost always
4 Frequently
3 Sometimes
2 Seldom
1 Almost Never
0 Not able to observe

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

		Almost Never					Almost Always					Not Observe	
<u>Interpersonal Skills</u>													
1.	Gives employees a friendly welcome to the area	1	2	3	4	5							0
2.	Makes casual conversation about employee's background, interests, etc.	1	2	3	4	5							0
3.	Gives the employee the feeling that he or she will do a good job	1	2	3	4	5							0
4.	Asks for the employee's help and discusses his or her ideas on how to solve a problem	1	2	3	4	5							0
5.	Responds with hostility or defensiveness to a complaint	1	2	3	4	5							0
6.	Requests a full description of employee complaints and listens carefully	1	2	3	4	5							0
7.	Restates the complaint for thorough understanding	1	2	3	4	5							0
8.	Assures employees of his interest in helping him or her succeed on the job	1	2	3	4	5							0
9.	Doesn't say anything to the employee who improves his or her behavior	1	2	3	4	5							0
10.	Shows he understands problems from the worker's viewpoint	1	2	3	4	5							0
11.	Makes it clear he is eager and available to help with employee's problems	1	2	3	4	5							0
12.	Gives recognition for good performance	1	2	3	4	5							0
13.	Expresses personal appreciation to the employee	1	2	3	4	5							0
14.	Shows understanding and empathy for the employee's feelings	1	2	3	4	5							0
15.	Doesn't pass on information from superiors to subordinates	1	2	3	4	5							0

MANAGERS RATE SUBORDINATES

Instructions: 5 Almost always
4 Frequently
3 Sometimes
2 Seldom
1 Almost never
0 Not able to observe

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

(circle appropriate number for each question)

Rule Explanation and Enforcement	Almost Never	1	2	3	4	5	Almost Always	Not Observe
16. Stresses the importance of safety	1	2	3	4	5	0		
17. Recognizes and acknowledges the viewpoint of the employee	1	2	3	4	5	0		
18. Says the rules have to be observed without saying why	1	2	3	4	5	0		
19. Explains what the employee should do to obey the rules and policies	1	2	3	4	5	0		
20. Ignores times when the employee's behavior does not conform to the rules	1	2	3	4	5	0		
21. Indicates what disciplinary action is called for, what the action will be, and the reasons for doing so	1	2	3	4	5	0		
22. Stresses with employee that the employee is responsible for solving poor work habits	1	2	3	4	5	0		
Organizes, Plans and Follows-up on work of Subordinates								
23. Ends discussion without specific follow-up times	1	2	3	4	5	0		
24. Focuses on one specific problem or assignment	1	2	3	4	5	0		
25. Asks the employee if there is anything foreman can do to make it easier for employee to do his or her work	1	2	3	4	5	0		
26. Clearly describes the details of a change in the job or task	1	2	3	4	5	0		
27. Fails to explain why changes are necessary	1	2	3	4	5	0		
28. Discusses how the change will affect the employee, stressing the positive aspects of the change	1	2	3	4	5	0		

MANAGERS RATE SUBORDINATES

(circle appropriate number for each question)

Instructions: 5 Almost always
4 Frequently
3 Sometimes
2 Seldom
1 Almost never
0 Not able to observe

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

Job or Task Directions	Almost Never	1	2	3	4	5	Almost Always	Not Observe
29. Comes to agreement on specific steps to be taken by the employee and the supervisor	1	2	3	4	5	0		
30. Focuses on the employee, not the job, problem or behavior	1	2	3	4	5	0		
31. Clearly describes to the employee specifically what he or she is to do	1	2	3	4	5	0		
32. Explains why jobs, tasks, or behaviors have to be done	1	2	3	4	5	0		
33. Asks the employee for his or her help to make changes work	1	2	3	4	5	0		
34. Does not provide feedback to the employees on their performance	1	2	3	4	5	0		
35. Clearly informs employees of the level of performance the foreman expects	1	2	3	4	5	0		
36. Instructs employees in the use of materials in clear, simple terms	1	2	3	4	5	0		
<u>Handling Regular Supervisory Responsibilities</u>								
37. Completes and maintains paperwork (hours, counts, downtime, etc.)	1	2	3	4	5	0		
38. Inspects work area for cleanliness	1	2	3	4	5	0		
39. Lets accidents go without investigation	1	2	3	4	5	0		
40. Completes, but is late turning in personnel information (except payroll)	1	2	3	4	5	0		
41. Makes promises to clear up questions on work records of employees but doesn't keep promises (pay, incentive time, etc.)	1	2	3	4	5	0		

MANAGERS RATE SUBORDINATES

Instructions: 5 Almost always 95-100%
 4 Frequently 85-94%
 3 Sometimes 75-84%
 2 Seldom 65-74%
 1 Almost never 0-64%
 0 Not able to observe

(circle appropriate number for each question)

	Almost Never	1	2	3	4	5	Almost Always	Not Observe
42. Controls use of supplies and materials		1	2	3	4	5		0
43. Doesn't know what employees are doing		1	2	3	4	5		0
44. Examines job status		1	2	3	4	5		0
45. Takes corrective action to see production levels are maintained		1	2	3	4	5		0
46. Determines amounts of scrap and quality of the job		1	2	3	4	5		0
47. Makes changes to achieve quality		1	2	3	4	5		0

MANAGER RATES SUPERIORS

Name of person being observed _____
 Department _____
 Observer's Code _____
 Date _____

This checklist contains key job behaviors that managers have reported as critical for their jobs and the effectiveness and efficiency for _____ Corporation.

Please consider the above named individual's behavior on the job for the past 4 months. Read each statement carefully. Circle the number that indicates the extent to which you believe this person has demonstrated this behavior.

For each behavior describe the number which represents the frequency with which the behavior is observed when it is appropriate. For each behavior a:

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- 4 means frequently or 85- 94% of the time.
- 3 means sometimes or 75- 84% of the time.
- 2 means seldom or 65- '74% of the time.
- 1 means almost never or 0- 64% of the time.
- 0 means not able to observe at appropriate times.

An example of an item is shown below. If a manager drives his car to work 95-100% of the time, circle 5. If he drives it 50% of the time, circle the 1. If you don't know how he gets to work or do not observe him coming to work, circle 0.

	Almost Never <u>1</u>					Almost Always <u>5</u>	
Manager drives his car to work		2	3	4			0

RATING ERRORS

As a rater, you should keep in mind the need to avoid the six common rating errors people make when using human judgment to rate people. Rating errors may be defined technically as a difference between the output of a human judgment process and that of an objective accurate assessment uncolored by bias, prejudice, or other subjective extraneous influences. Among the most common rating errors are contrast effects, first impressions, halo, similar-to-me, central tendency, and positive and negative leniency.

Contrast effects is the tendency for a rater to evaluate relative to other individuals rather than on the extent to which the individual is fulfilling the requirements of the job.

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The halo effect refers to inappropriate generalization from one aspect of a person's performance to all aspects of the person's job performance.

The similar-to-me effect is a tendency for people to be judged more favorably who are similar rather than dissimilar to the rater in attitudes and background even if the latter are not job related.

Central tendency refers to consistently rating people at the midpoint of a scale.

Negative and positive leniency refers to consistently rating people at the low or high end of the scale.

MANAGER RATES SUPERIORS

(circle appropriate number for each question)

4 Not always
3 Frequently
2 Sometimes
1 Seldom
0 Almost never
0 Not able to observe

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

Interpersonal Skills		Almost Never					Almost Always					Not Observe				
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1.	Makes casual conversation about subordinate's background, interests, on an eyeball to eyeball basis	1	2	3	4	5										0
2.	Gives subordinates the feeling they will do a good job	1	2	3	4	5										0
3.	Asks for subordinate's help and discusses his or her ideas on how to solve a problem	1	2	3	4	5										0
4.	Makes a promise before asking subordinates how long it will take to get a job done	1	2	3	4	5										0
5.	Responds with anger or defensiveness to a suggestion or a complaint	1	2	3	4	5										0
6.	Requests a full description of a suggestion or a complaint and listens carefully	1	2	3	4	5										0
7.	Restates suggestions or complaints for a thorough understanding	1	2	3	4	5										0
8.	Assures subordinates of his interest in helping subordinates succeed on the job	1	2	3	4	5										0
9.	Doesn't say anything to the subordinate who improves his or her behavior	1	2	3	4	5										0
10.	Shows understanding for subordinate's problems (meeting schedules, finding parts, filling out paperwork, etc.)	1	2	3	4	5										0
11.	Gives recognition for good performance	1	2	3	4	5										0
12.	Thanks the subordinate personally	1	2	3	4	5										0
13.	Shows understanding and empathy for the subordinate's feelings	1	2	3	4	5										0
14.	Doesn't pass on information from superiors to subordinates	1	2	3	4	5										0

MANAGER RATES SUPERIORS

Instructions: 5 Almost always
4 Frequently
3 Sometimes
2 Seldom
1 Almost never
0 Not able to observe

(circle appropriate number for each question)

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

	Almost Never	Almost Always	Not Observe
15. Gets back to subordinates about suggestions and requests and explains why or why not things can be done that way	1	2 3 4 5	0
16. Treats subordinates as managers of their own areas	1	2 3 4 5	0
17. Gives quick answers that don't really solve the problem ("add a man", "run it anyway--we need whatever good pieces you get", etc.)	1	2 3 4 5	0
18. Takes advantage of subordinates (work overtime without pay, special favors, etc.)	1	2 3 4 5	0
<u>Rule and Policy Explanation and Enforcement</u>			
19. Stresses the importance of safety	1	2 3 4 5	0
20. Recognizes and acknowledges the viewpoint of the subordinate	1	2 3 4 5	0
21. Says rules have to be obeyed without explaining why	1	2 3 4 5	0
22. Explains what the employee should do to obey the rules and policies	1	2 3 4 5	0
23. Ignores times when the subordinate's behavior does not conform to rules and policies	1	2 3 4 5	0
24. Stresses with the subordinate that the subordinate is responsible for solving poor work habits	1	2 3 4 5	0
25. Makes promises about implementation and enforcing policies for subordinates (layoffs, promotions, title changes, pay for overtime, etc.) but doesn't keep them	1	2 3 4 5	0
26. Backs up subordinates on disciplinary action	1	2 3 4 5	0
27. Talks with steward even though steward hasn't discussed problem with foreman first	1	2 3 4 5	0

MANAGER RATES SUPERIORS

Instructions: 5 Almost always
4 Frequently
3 Sometimes
2 Seldom
1 Almost never
0 Not able to observe

(circle appropriate number for each question)

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

Organizes, Plans and Follows-up on Work		Almost Never					Almost Always					Not Observe	
		1	2	3	4	5	1	2	3	4	5	1	0
28.	Ends discussion without specific follow-up times and meetings	1	2	3	4	5	1	2	3	4	5	1	0
29.	Focuses on one specific problem or assignment	1	2	3	4	5	1	2	3	4	5	1	0
30.	Asks the subordinate if there is anything the manager can do to make the job easier for the subordinate to do	1	2	3	4	5	1	2	3	4	5	1	0
31.	Clearly describes the details of a change in the jobs or projects	1	2	3	4	5	1	2	3	4	5	1	0
32.	Fails to explain why changes are necessary	1	2	3	4	5	1	2	3	4	5	1	0
33.	Discusses how the change will effect the subordinate, and his people, stressing the positive aspects of the change	1	2	3	4	5	1	2	3	4	5	1	0
34.	Makes decisions as early as possible so you can work toward them	1	2	3	4	5	1	2	3	4	5	1	0
35.	Lets meetings drag on without controlling them	1	2	3	4	5	1	2	3	4	5	1	0
36.	Holds meetings with staff to let them know what's going on	1	2	3	4	5	1	2	3	4	5	1	0
Job or Task Directions													
37.	Comes to agreement on specific steps to be taken by the subordinate and the manager	1	2	3	4	5	1	2	3	4	5	1	0
38.	Focuses on the employee, not the behavior, job, or problem	1	2	3	4	5	1	2	3	4	5	1	0
39.	Clearly describes in simple terms to the subordinate specifically what is to be done	1	2	3	4	5	1	2	3	4	5	1	0
40.	Asks the subordinate for his or her help in making changes work	1	2	3	4	5	1	2	3	4	5	1	0

MANAGER RATES SUPERIORS

(circle appropriate number for each question)

Instructions: 5 Almost always
4 Frequently
3 Sometimes
2 Seldom
1 Almost never
0 Not able to observe

95-100%
85- 94%
75- 84%
65- 74%
0- 64%

	Almost Never	1	2	3	4	5	Almost Always	Not Observe
41. Doesn't provide feedback to the employees on their performance	1		2	3	4	5		0
42. Assists subordinates in improving performance of self and department	1		2	3	4	5		0
43. Criticizes subordinates when they make the wrong decision	1		2	3	4	5		0
44. Gives subordinate the authority to manage his own department	1		2	3	4	5		0
<u>Handling Regular Managerial Responsibilities</u>								
45. Complete and maintains paperwork (hours, count, downtime, etc.)	1		2	3	4	5		0
46. Lets accidents go without investigation	1		2	3	4	5		0
47. Completes, but is late turning in personnel records	1		2	3	4	5		0
48. Controls the use of materials and supplies	1		2	3	4	5		0
49. Doesn't know what subordinates or departments are doing	1		2	3	4	5		0

APPENDIX H

APPENDIX H

We are asking a number of people to evaluate the performance of the first line managers in the management training program. You are being asked to participate in this research project to aid us in the fair and objective evaluation of the managers and the training program.

Please review the list of managers which will be given to you and circle those managers you feel you could evaluate. We are asking you to consider their performance over the last 2-3 months.

The ratings will be used for research purposes only, and will not be placed in anyone's personnel file. The ratings will not affect the person's performance in any way.

Before we begin, we would like to establish a common frame of reference by rating two hypothetical managers.

Take a few minutes to read the descriptions of the job performances of "Howdy" and "Tank" which appear on the following pages.

As you complete your ratings, remember that distorted ratings may result if you do not consider the following possibilities for error:

1. The so-called "Halo Effect"

This is a tendency to rate a person either high or low in several areas because he/she rates high or low in one outstanding area.

2. Consistent Leniency

Some raters tend to "go easy" because they believe in being generous toward their fellows. They rate almost everybody high in almost everything.

3. Consistent Severity

Some raters tend to be "too tough" on people because they believe in upholding extremely high standards. They rate people low and feel that few can reach the standards.

4. Central Tendency

Another type of rater refuses to "stick his neck out" and so rates everybody right down the middle.

5. Prejudice

Sometimes strong personal feelings toward the person being rated influence the rater's judgment.

6. Day-to-Day Variation in Point of View

Just as a rater's outlook on things in general may vary over a period of time from optimistic to pessimistic, so also may his attitude fluctuate toward a given individual at a given time.

If you can avoid making these errors, you will improve the quality of our study.

Description of Job Performance for Howdy

Howdy is very well liked by his employees. He knows them by first names and frequently talks with each one during the shift. He feels his men have worked at for a long time and have the experience and skill to do the job well. He feels this is important and spends time doing that instead of organizing the work load and following up. As a result, his department is frequently behind on work and has shortages and breakdowns which require scrambling to get the work done. His department shut down a plant once this year.

He knows his equipment well and makes sure the job is set up right and that the equipment is maintained well. He may spend so much time with other matters that he'll cut corners on quality and add too many people, and do the best he can. He has almost no turnover and few labor problems.

Description of Job Performance for Tank

Tank is feared by his employees. He is usually well prepared for any problem of difficulty which may come up during the shift, and lets his people know exactly what the targets and bogies are for the shift, and he almost always hits them. If any problem develops, he can usually handle it quickly and efficiently, and if anything gets in his way, he'll personally handle it. He insists on rigid standards and quality, and jumps on anyone who makes an error or is being idle.

His department is almost always better than standard. His men call him "Sherman the Tank" because he'ss burn anything down which gets in his way. He has high turnover in his area and a lot of trouble with the union stewards.

We will rate each person in this study with one overall performance or production rating, based on the following factors:

- (1) keeping people productive and having the department organized;
- (2) performing work in his area to standard;
- (3) producing a quality product or service.

For practice, give "Howdy" and "Tank" an overall rating on performance or production. Read the scale descriptions of the factors which appear below. Then, place an "H" on the position you think best describes the rating for Howdy, and a "T" for the position which you think best describes Tank on the factors above. After that, turn the page and see where we rated them -- and why.

LOW	BELOW AVERAGE	AVERAGE	ABOVE AVERAGE	HIGH
<p>Could be expected to not have the department organized, frequently misses production boggles and may sacrifice cost and quality to get out as much service or product as possible.</p>	<p>Could be expected to know the goals and bogies and standards, but constantly handles problems as they come up and never gets ahead, requiring him to sacrifice cost or quality.</p>	<p>Could be expected to achieve what is required in most situations as long as everything goes smoothly, but may sacrifice either quality or standard cost if needed.</p>	<p>Could be expected to plan and be organized enough to meet most goals including quality and standard production or service.</p>	<p>Could be expected to keep people organized while producing a high quality product or service at standard cost. Foresees unusual problems.</p>

We rated Tank and Howdy with one overall performance or production rating based on the following three factors:

- (1) keeping people productive and having the department organized;
- (2) performing work in his area to standard;
- (3) producing a quality product or service.

Howdy may be very effective with the people, but he doesn't produce the requirements on time, or with the proper quality, or at cost. He even shut down a line. Tank produces even though his men report he's hard on them. We are focusing on performance measures because we have other measures to measure the personal, people handling skills.

LOW	BELOW AVERAGE	AVERAGE	ABOVE AVERAGE	HIGH
<p>Could be expected to not have the department organized, frequently misses production boggles and may sacrifice cost and quality to get out as much service or product as possible</p> <p>H</p>	<p>Could be expected to know the goals and bogies and standards, but constantly handles problems as they come up and never gets ahead, requiring him to sacrifice cost or quality.</p>	<p>Could be expected to achieve what is required in most situations as long as everything goes smoothly, but may sacrifice either quality or standard cost if needed.</p>	<p>Could be expected to plan and be organized enough to meet most goals including quality production or standard service.</p>	<p>Could be expected to keep people organized while producing a high quality product or service at standard cost. Foresees unusual problems.</p> <p>T</p>

The list of managers below contains managers who attended the training sessions and those who did not, but all of them will be attending the program in the future phases. For the purposes of the present research, we want you to circle those managers whom you feel you can evaluate on a reasonable basis, particularly over the last 2-3 months. You should rate them on their ability to keep people productive and having the department organized, performing work to standard, and producing a quality product or service. Please rate the managers on the scale provided according to your best estimate at the present time. To rate the manager, place the number by the manager's name in the place on the scale which you think best describes his behavior. There may be more than one manager who gets a particular rating.

When you have completed all the ratings of the managers you have circles, please go to the next page and rank the managers according to the procedure described on that page.

Keep this sheet because you will be asked to rate the same managers again 3 months from now.

We will rate each person in this study with one overall performance or production rating based on the following three factors:

- (1) keeping people productive and having the department organized;
- (2) performing work in his area to standard;
- (3) producing a quality product or service.

LOW	BELOW AVERAGE	AVERAGE	ABOVE AVERAGE	HIGH
Could be expected to not have the department organized, frequently misses production bogies and may sacrifice cost and quality to get out as much service or product as possible.	Could be expected to know the goals and bogies and constantly handles problems as they come up and never gets ahead, requiring him to sacrifice cost or quality.	Could be expected to achieve what is required in most situations as long as everything goes smoothly, but may sacrifice either quality or standard cost if needed.	Could be expected to plan and be organized enough to meet most goals including quality and standard production or service.	Could be expected to keep people organized while producing a high quality product or service at standard cost. Foresees unusual problems.

APPENDIX I

APPENDIX I

Motivating A Person to Problem Solve (Session No. 1)

Introduction:

This session lays the groundwork for several other sessions by stressing the need to focus on the problem and getting the employee to come up with ideas. To help the managers remember the key points, stress the acronym, "FACT" for:

Problem is the focus, not the employee

Ask the employee

Come to agreement

Time for a specific follow-up

The managers should be able to recall "FACT" by the end of the class and recite the steps to the process. It's helpful to compare FACT to the process of reaching a pact with the employee to try to solve the problem.

When the class chooses an incident to role play, the group leaders should:

1. Put the essential facts on the board or flip chart paper.
2. Provide a profile of the employee.
3. Ask the class if they want any more information.
4. When they are satisfied they know enough, break them up into groups of three each.

Role Modeling

The participants should work on three levels of difficulty: easy, medium and tough. The leaders should circulate to each group and make sure the feedback provided is specific, positive, descriptive and something the employee can do something about. (See feedback sheets)

MOTIVATING A PERSON TO PROBLEM SOLVE
FORMAT FOR TRAINING SESSION

- | | |
|--|----------|
| 1. Introduction of topic | Manager |
| 2. Modeling of behaviors and key learning points | Managers |
| 3. Handing out copies of the learning points and modeling the behaviors again | Managers |
| 4. Group discussion of the effectiveness of the model | Managers |
| 5. Practice in role playing in groups of three | Managers |
| 6. Feedback in general class discussion on effectiveness of the module | Managers |
| 7. Instructions to use the behaviors on at least one employee during the time before the next session. | Managers |
| 8. Evaluate the session | Russell |

Materials

1. Learning points
2. Role play incident
3. Evaluation sheets

MOTIVATING A PERSON TO PROBLEM SOLVE

Attempting to coerce or threaten an employee to do a better job can put them on the defensive, and require increasing amounts of surveillance from you. Therefore, the first discussion about inadequate job performance should not be a disciplinary session, but rather a problem solving session in which the employee is made aware that you are concerned about a specific problem. You should not attempt to personalize the problem, to get a confession from the employee, or even suggest that the employee is causing the problem. For example, rather than saying, "Joe, why are you slowing up production?" you might say, "Joe, we have a problem that needs to be solved and I'd appreciate your ideas on it. Production has been somewhat slower in the warehouse in the past two weeks. You've worked in that area for some time and I consider you an expert on the warehouse operations. I'd like your ideas on how we might solve this problem." Write down his ideas and arrange to have him follow up on as many of the suggestions as possible (in other words, don't end up with a long list of ideas for only you to check on). Set a specific follow-up meeting to discuss progress on solving the problem. This will assure the employee of your commitment to getting the problem solved.

THE LEARNING POINTS FOR THIS EXERCISE ARE:

1. FOCUS ON THE PROBLEM, NOT THE EMPLOYEE.
2. ASK FOR THE EMPLOYEE'S HELP AND DISCUSS HIS OR HER IDEAS ON HOW TO SOLVE THE PROBLEM.
3. COME TO AGREEMENT ON STEPS TO BE TAKEN BY EACH OF YOU AND SUMMARIZE THEM.
4. PLAN A SPECIFIC FOLLOW-UP MEETING.

MOTIVATING A PERSON TO PROBLEM SOLVEROLE MODELINGIncident:

The employee is on a line where there is a production problem with the parts coming by his station. The problem is the seals aren't holding and the part is leaking. The foreman is about to talk with his employee about the problem in his office.

The employee has a good work record. He has been on the line for 3 years with no previous trouble. The parts he has been producing have not been a problem before.

As foreman, you have checked into the problem and the line speed is the same as it's always been.

Employee:

The employee is naturally a little defensive at first. He's not sure why he's been called into the office. He feels the foreman may be blaming him for some problems with a part he's been working on.

Employee feels the line is moving too fast. He also is bothered by the fact the parts from station C are not bolted on as they should be. Finally, the adhesive seems too watery to him and he feels it may not be able to do the job.

If the manager shows interest in solving the problem, the employee should drop his defensiveness and respond with ideas.

MOTIVATING A PERSON TO PROBLEM SOLVE

The discussion of the rol models should accomplish several purposes.

1. The participants should review whether the manager actually covered all the points.
2. The participants should understand why the learning points were essential and whether they should be improved to fit plant situations.
3. The participants should begin to get the feeling that they could model the points as effectively and possibly better.
4. The participants should be developing an acceptance of the learning points as legitimate steps to follow.

Comments should be posted in front of the class for everyone to see.

MOTIVATING A PERSON TO PROBLEM SOLVE

Below are some comments made from the earlier session:

Comments from managers:

Foreman made sure employee knew it was running same speed.
Office is a little unrealistic.
Employee defensive at first.
Supervisor was taking notes.
Distractions were removed.
No steward was present.
Laid groundwork for future problems.

Our group of middle and upper managers used the following incident:

1. Unwelded wheels were found in the production cycle:
one was chalked, one was painted with no weld.
Should be 100% check.

Employee was defined as working 5-6 years with no problems before.

Learning Points: We added "and summarize them" after "Coming to agreement on steps to be taken by each of you.".

The acronym for learning points is:

Problem
Ask for ideas
Come to agreement
Timetable

HANDLING A COMPLAINING EMPLOYEEIntroduction:

This session should begin with a review of someone's incident where they tried the actual learning points. This is a crucial time because they will be reluctant, but someone will eventually offer an incident which occurred recently.

After this feedback session, the standard format will be followed as in the first session. This session is important because people have a tendency to want to jump to a response on a complaint before fully understanding it, particularly if the employee has complained before. The key emphasis here is to concentrate on really listening to the complaint by asking for a full description, restating the complaint, and acknowledging that the person has a valid viewpoint (even though you may not agree, and may not be able to resolve it).

HANDLING A COMPLAINING EMPLOYEE

FORMAT FOR TRAINING SESSION

- | | |
|---|----------|
| 1. Feedback from participants on the results of using the technique. | Manager |
| 2. Introduction of topic | Manager |
| 3. Modeling of behaviors and key learning points | Managers |
| 4. Handing out copies of the learning points and reviewing the film again | Manager |
| 5. Group discussion of the effectiveness of the model | Managers |
| 6. Practice in role playing in groups of three | Managers |
| 7. Feedback in general class discussion on effectiveness of the module | Managers |
| 8. Instructions to use the behaviors on at least one employee during the time before the next session | Managers |
| 9. Evaluate the session | Russell |

Materials

1. Learning points
2. Role play incident
3. Evaluation sheets

HANDLING A COMPLAINING EMPLOYEE (Session No. 2)

Reviewing someone who has tried the points.

This session is the first time the participants will return to the class from a previous session where they were asked to try the learning points on an employee. They should be asked to discuss whether they tried the points and if so, whether they would like to talk about it. If it worked well, the participants should discuss why it worked, unless it's obvious. If the attempt was unsuccessful, the managers should ask the person to play the employee and get a volunteer from the class. (This will take a long time, but the leader should be patient; someone will eventually volunteer.) Get the essential points as in session 1.

Role play in front of the class with the learning points in front of the person playing the supervisor. After completing the role playing, ask the class for specific feedback and for any suggestions they may have. Phrase all suggestions in a positive manner if they are stated negatively.

HANDLING A COMPLAINING EMPLOYEE (Session No. 2)

Reviewing someone who has tried the points.

This session is the first time the participants will return to the class from a previous session where they were asked to try the learning points on an employee. They should be asked to discuss whether they tried the points and if so, whether they would like to talk about it. If it worked well, the participants should discuss why it worked, unless it's obvious. If the attempt was unsuccessful, the managers should ask the person to play the employee and get a volunteer from the class. (This will take a long time, but the leader should be patient; someone will eventually volunteer.) Get the essential points as in session 1.

Role play in front of the class with the learning points in front of the person playing the supervisor. After completing the role playing, ask the class for specific feedback and for any suggestions they may have. Phrase all suggestions in a positive manner if they are stated negatively.

HANDLING A COMPLAINING EMPLOYEE

Many employees like to complain about their job. Although their complaints may seem unimportant to you, they may, in fact, be important to the employee.

It is easy to react to the employee's complaints by refusing to listen to them, or by getting in a debate with them. Often the employee is just "letting off steam". If you remain calm and express a willingness to listen, it increases the likelihood that they, too, will remain calm (or calm down). It is a good idea to write down each of the employee's complaints, and restate them to the employee to ensure your understanding of the issues. This will help slow the employee down, especially if he or she has a barrage of complaints. Go over each complaint, one at a time, discussing the employee's suggestions for solutions. If any of the complaints involve issues for which you have no control (e.g., pay raises), state your position non-defensively and without hostility. To make certain the complaints are adequately resolved, plan a specific follow-up meeting to talk with the employee again.

THE LEARNING POINTS FOR THIS EXERCISE ARE:

1. RESPOND THOUGHTFULLY WITHOUT HOSTILITY OR DEFENSIVENESS. (REST)
2. ASK FOR A FULL DESCRIPTION OF HIS OR HER COMPLAINT AND LISTEN OPENLY. (A)
3. THOROUGHLY UNDERSTAND THE COMPLAINT BY RESTATING IT. (T)
4. EMPLOYEE'S VIEWPOINT RECOGNIZED AND ACKNOWLEDGED. (E)
5. POSITION SHOULD BE STATED NON-DEFENSIVELY, IF NECESSARY. (P)
6. ASK THE EMPLOYEE TO SEE IF HE/SHE HAS ANY SUGGESTIONS, IF POSSIBLE. (A)
7. COME TO AGREEMENT ON SPECIFIC STEPS TO BE TAKEN BY EACH OF YOU AND SUMMARIZE THEM. (C)
8. TIME FOR A SPECIFIC FOLLOW-UP MEETING. (T)

ACRONYM: RESTATE PACT

HANDLING A COMPLAINING EMPLOYEEIncident:

The employee interrupts the foreman who is writing at his desk. The employee is upset that the line is moving too fast to handle the smaller units. The units were recently begun and the employee feels they are still too hard to handle. The smaller units were supposed to be easier, but he feels they are harder.

The foreman is surprised. He knows the parts were time studied and should be no problem to the employees. The worker has had a good work record, although recently he was working on a line where the foreman was having problems with some parts.

Employee:

The employee is nervous when he comes up because he's pretty worked up. If the foreman tries to brush him off, he'll get even more upset. As the foreman gets a full understanding of the complaint, he should calm down.

HANDLING A COMPLAINING EMPLOYEE

Comments From Managers

"There's an implicit understanding that if I agree he has a legitimate gripe, I may have to solve it."

"It's not the kind of complaint we usually get."

"There's no steward."

"He's not irate enough."

Our group of middle and upper managers used the following incident:

Example: "Dirty S _ _ Houses"

Learning Points:

Added: #6 If possible, ask the employee to see if he/she has any suggestions.

NOTE: At this point, foreman could use the PACT step in module number 1.

DISCUSSING POOR WORK HABITS

Introduction

This session focuses on a person's work habits, not his/her performance. For example, the employee may be coming to work late, leaving early, absent too much, or not filling out records or time cards accurately. The focus here should stay on the work habits or behaviors, not the employee personally. This session is literally a counseling session where the person is informed about behaviors or work habits that should be changed. It is assumed this is the first time the work habits have been discussed.

The acronym for this session is the BeWARE PACT, where the first level managers are establishing a point which makes the employee aware he/she should change his/her behavior. BeWARE PACT stands for:

- Be Behaviors which are poor work habits and which are of concern to the manager.
- W Why the behaviors cannot continued.
- Are Ask for, and listen openly to the Reasons the Employee does what he/she does.
- P Problem is the focus, not the employee.
- A Ask for the employee's help and discuss his or her ideas on how to solve the problem.
- C Come to agreement on steps to be taken by each of you.
- T Time is set up for a follow-up.

The only additional point here is to stress the point that you should offer your help in solving the problem if it's appropriate, so the employee specifically knows you do want to help.

The participants will probably want to bring in a union steward during the discussions, which an employee would have the right to do. The supervisor can advise the employee he/she has the right to call his/her steward, but the supervisor should reiterate this is not a disciplinary action. Even if the steward is present, the steps should still be valid and can be followed.

DISCUSSING POOR WORK HABITS

FORMAT FOR TRAINING SESSION

- | | |
|---|----------|
| 1. Feedback from the participants on the results of using the previous technique | Managers |
| 2. Introduction of topic | Manager |
| 3. Modeling of behaviors and key learning points | Managers |
| 4. Handing out copies of the learning points and reviewing the film again | Managers |
| 5. Group discussion of the effectiveness of the model | Managers |
| 6. Practice in role playing in groups of three | Managers |
| 7. Feedback in general class discussion on effectiveness of the module | Managers |
| 8. Instructions to use the behaviors on at least one employee during the time before the next session | Manager |
| 9. Evaluation | Russell |

MATERIALS:

1. Learning Points and pads.
2. Role Play incident
3. Evaluation forms

DISCUSSING POOR WORK HABITS WITH AN EMPLOYEE

Poor work habits include such things as: tardiness, poor attendance, refusing to follow proper safety procedures, leaving work early, etc.

Discussing poor work habits with an employee can arouse feelings of defensiveness on the part of the employee.

The initial discussion with the employee should not be a disciplinary session, but rather a problem-solving session in which you and the employee get together to solve a specific problem. If you express your sincerity in trying to help the employee rather than trying to punish him/her, it is likely that the employee will try to solve the problem.

THE LEARNING POINTS FOR THIS EXERCISE ARE:

1. BEHAVIOR IS DESCRIBED WITHOUT HOSTILITY, WHICH YOU HAVE SEEN AND WHY IT CONCERNS YOU. (BE)
2. WHY THE BEHAVIOR CANNOT CONTINUE IS EXPLAINED. (W)
3. ASK FOR AND LISTEN OPENLY TO THE REASONS THE EMPLOYEE DOES WHAT HE OR SHE DOES. (ARE)
4. PROBLEM IS THE ONE SPECIFIC FOCUS (AVOID DISCUSSING OTHER ISSUES). (P)
5. ASK THE EMPLOYEE FOR HIS OR HER IDEAS ON HOW TO SOLVE THE PROBLEM. (A)
- (6. OFFER YOUR HELP IN SOLVING THE PROBLEM.)
7. COME TO AGREEMENT ON STEPS TO BE TAKEN BY EACH OF YOU. (C)
8. TIME FOR A SPECIFIC FOLLOW-UP MEETING. (T)

ACRONYM: "BEWARE PACT"

DISCUSSING POOR WORK HABITSIncident:

The employee has recently begun leaving his work station five minutes early to get in line to clock out first. The employee is a steady worker who has not had a discussion with the manager earlier. The manager is afraid this will cause other employees to do the same thing, so he has called the employee in to his office to talk about the behavior. This is the first time he has talked to the employee about this practice.

The foreman is willing to help the employee and has a friend in personnel at a plant nearby whom he could call on to ask a favor if necessary.

Employee:

The employee is a steady worker who gets the job done, doesn't take extra time on breaks, and has not been in any disciplinary action before. He considers himself an above average worker. He has been leaving his station a little early so he can get ready to clock out first in line because he now rides with a friend from his home town 30 miles away. His friend has to leave right away, because of a job he has to do at night. If the employee misses the ride with his friend, he has to wait to catch a pool van which arrives home an hour and a half later. He figures five minutes makes an hour and a half difference, and since he gets his work done better than most, he can leave his station a little early.

The employee should explain his reasons to the supervisor after some discussion about why the issue is a problem since he gets his work done. If asked for ideas, he should suggest he could post a notice on the bulletin board about needing a ride. There could be a local newspaper which he could place an ad in. If the manager listens openly and offers his help, the employee should reluctantly agree to look into ways to solve the problem.

DISCUSSING POOR WORK HABITS

The discussion of the role models should accomplish several purposes:

1. The participants should review whether the manager actually covered all the points.
2. The participants should understand why the learning points were essential and whether they should be improved to fit plant situations.
3. The participants should begin to get the feeling that they could model the points as effectively and possibly better.
4. The participants should be developing an acceptance of the learning points as legitimate steps to follow.

Comments should be posted in front of the class for everyone to see.

CORRECTING POOR WORK HABITS

Comments:

"Doesn't look like my people."
 "Would have had the steward."
 "Would work with one-on-one."
 "Might work with group."
 "Won't work with some people."
 "Some people really don't know their record is bad, and need to have it pointed out."
 "Some stewards who've been thru QWL can be helpful at this step of counseling. The off-shift steward less willing to discuss."

Incident:

Die job not shipped correctly from tool room to the third shift. Bolts missing and the die dropped out when the part was turned over. 3rd shift communicating to 1st shift was a factor also.

Employee had 16-17 years, good record; 5 years in die room.

Note: Not a good example here, because it's really a performance problem.

Reactions:

Comfortable process.
 Hard to hold the sequence, but if all the points are covered, it's O.K.
 Jotting down notes was important.
 Summarize conclusions.

Learning Points:

The supervisors may remark that the first session or "PACT" dealt with performance, but also included in it the offer of help by the supervisor. The supervisor agreed to check into station "C"

Learning Points (continued):

and the adhesive if the employee would continue to check on station "C". It's not always important to say you want to offer your help if you demonstrate it.

The acronym is: "BeWAre PACT"

- Be Behavior which is a poor work habit and which is of concern to the manager.
- W Why the behavior cannot continue.
- Are Ask for and listen openly to the Reasons the Employee does what he/she does.
- P Problem is the focus, not the employee.
- A Ask for the employee's help and discuss his or her ideas on how to solve the problem.
- C Come to agreement on steps to be taken by each of you.
- T Time is set for a follow-up.

(The only additional point is the manager offers his/her help or demonstrates it.)

DISCUSSING A POTENTIAL DISCIPLINARY ACTION

This is the second session following up with an employee whose poor work habits have not improved. The focus shifts from the poor work habits to the lack of correction for the poor work habits, so that a potential disciplinary action is now called for. It's important for the participants to recognize that this session is a follow up with the same employee who was counseled about leaving the work station earlier.

The acronym for this module is the LAW PACT. This follows the BeWARE PACT where the employee was told about the behavior, why it couldn't continue, and asked for the reasons it was happening. Now the law is being laid down. The steps are:

- L Lack of improvement since the previous discussion is the problem now.
- A Ask for and listen openly to the reasons for the continued behavior.
- W What disciplinary action is called for, and your reasons for doing so.
- P Problem being discussed is the only issue to focus on. Avoid distractions.
- A Assure the employee of your interest in helping him succeed on the job.
- C Come to an agreement on the employee's responsibility to solve the problem.
- T Time should be set to review and to praise the employee for changed behavior.

This session would almost never be conducted without a union steward present, but the learning points should be still valid with the steward also. In particular, the steward will often try to get the manager into some other discussion and not focus on the problem being discussed.

DISCUSSING POTENTIAL DISCIPLINARY ACTION

FORMAT FOR TRAINING SESSION

- | | |
|--|----------|
| 1. Feedback from the participants on the results of using the previous technique. | Managers |
| 2. Introduction of topic. | Manager |
| 3. Modeling of behaviors and key learning points. | Managers |
| 4. Handing out copies of the learning points and reviewing the film again. | Managers |
| 5. Group discussion of the effectiveness of the model. | Managers |
| 6. Practice in role playing in groups of three. | Managers |
| 7. Feedback in general class discussion on effectiveness of the module. | Managers |
| 8. Instructions to use the behaviors on at least one employee during the time before the next session. | Managers |
| 9. Evaluation. | Russell |

DISCUSSING POTENTIAL DISCIPLINARY ACTION

This session serves as a follow-up to previous discussion with the employee on poor performance or unfavorable work habits. At this time you have already given the employee the opportunity to solve his problem, yet he has not solved it. If you have given the employee ample opportunity to correct the problem, you have the discretion to take disciplinary action: verbal-written warning, written warning, suspension or termination.

If the employee is not terminated, it is important that you assure him of your continued interest in helping him succeed on the job, but to succeed and do well, the problem must be corrected. Give the employee specific praise for correcting the problem, when the problem is, in fact, resolved.

THE LEARNING POINTS FOR THIS EXERCISE ARE:

1. LACK OF IMPROVEMENT SINCE THE PREVIOUS DISCUSSION IS THE PROBLEM NOW. (L)
2. ASK FOR AND LISTEN OPENLY FOR HIS OR HER REASONS FOR THE CONTINUED BEHAVIOR. (A)
3. WHAT DISCIPLINARY ACTION IS CALLED FOR, AND YOUR REASONS FOR DOING SO. (W)
4. PROBLEM BEING DISCUSSED IS THE ISSUE, SO THE MANAGER SHOULD AVOID DISTRACTIONS. (P)
5. ASSURE THE EMPLOYEE OF YOUR INTEREST IN HELPING HIM OR HER SUCCEED ON THE JOB. (A)
6. COME TO AN AGREEMENT ON THE EMPLOYEE'S RESPONSIBILITY TO SOLVE THE PROBLEM. (C)
7. TIME SHOULD BE SET FOR A SPECIFIC FOLLOW-UP AND TO PRAISE THE EMPLOYEE FOR CHANGED BEHAVIOR. (T)

ACRONYM: LAW PACT

DISCUSSING A POTENTIAL DISCIPLINARY ACTIONIncident:

The employee has continued to leave his station 5 minutes early so the foreman has called him back into his office to discuss the lack of improvement since the last discussion. The employee explains that he's had no response from the ad in the paper and no response from the posting on the bulletin board. The foreman did contact the Personnel Manager at the other plant and hasn't heard about any results, so he asks the foreman if anything came from that contact.

After asking for any reasons for the lack of improvement, the foreman should indicate a half day suspension is required by company policy. If it's not resolved, it could lead to dismissal. It's not an arbitrary decision and rules are for the improvement of the company.

The foreman has tried to help and wants to help figure something out, but it's the employee's responsibility.

Employee:

The employee still has the problem and none of the foreman's ideas worked; only one person called about his ad in the paper and on the bulletin board, but that fell through. He's still in a bind because his ride has to be back right away for another job. He hopes the foreman has heard about somebody from the other plant. It still doesn't seem to be a big deal because he gets his work done and doesn't take too long on breaks. If the foreman's serious about it, he'll figure out something.

NOTE: The role players should explain that a time lapse occurs right after the first meeting. The two should role play a brief incident where the foreman tells the employee he's noticed him leaving on time, so he appreciates the change and congratulates him on getting it solved.

DISCUSSING A POTENTIAL DISCIPLINARY ACTION

The discussion of the role models should accomplish several purposes:

1. The participants should review whether the manager actually covered all the points.
2. The participants should understand why the learning points were essential and whether they should be improved to fit plant situations.
3. The participants should begin to get the feeling that they could model the points as effectively and possibly better.
4. The participants should be developing an acceptance of the learning points as legitimate steps to follow.

Comments should be posted in front of the class for everyone to see.

DISCUSSING POTENTIAL DISCIPLINARY ACTION

Comments:

"Against policy is a stupid reason." Better to say: Manning a problem, line won't work, others will leave early, etc. Explain intent of policy.

"Foreman knows he may get his A _ _ kicked if he doesn't enforce it."

"Was the first module really a warning?"

"Does he actually discipline?"

"Does not mention when discipline takes effect."

"Grant" you a discipline was a poor word.

"Penalty was because of not solving the problem, not because of policy."

"Seems false to offer help. May be better to say:

'We need you as a good employee.'

'We need employees here all the time.'

'We don't want to discipline.'"

Example:

3 unauthorized absences in 60 days. Last discipline was 1 week, next one is 30 days.

Employee: 49; single; likes to drink; 26 years seniority; hard worker; willing worker; careless worker. Fired 3-4 times for absenteeism and brought back for alcoholism.

Note: The impact of the steward on foreman:

Steward: tries to distract: policies; personal attach on the foreman; foreman's performance; other people; etc.

Steward: represents the committee being a phone call away with better policy and consistency.

Steward: causes foreman to have no confidence discipline will stick.

Foremen need to know how to avoid distractions, such as:
 : "I'm not finished, and direct question at employee."
 : to steward: "I'm talking about his performance or work
 habits. That's the issue."

They need backing up through the first step of counseling, especially
 through 13 days of the absenteeism policy.

Acronym

Again, the acronym for the sessions is LAW PACT.

- L Lack of improvement since the pervious discussion
is the problem now.
- A Ask for and listen openly for his/her reasons for
the continued behavior.
- W What disciplinary action is called for, and the
reasons for doing so.
- P Problem being discussed is the issue, so the manager
should avoid distractions.
- A Assure the employee of your interest in helping him
or her succeed on the job.
- C Come to an agreement on the employee's responsibility
to solve the problem.
- T Time should be set for a specific follow-up and to
praise the employee for changed behavior.

RECOGNIZING THE AVERAGE EMPLOYEE

(Session 5)

Introduction:

This session focuses on the need to recognize a job, task, or work habits of an employee which are an improvement over typical performance. The person may be a steady performer, but always on time and without an absence for the past two years. The person could be a performer who frequently does poor work or fools around a lot, but who has done a nice job (even an average job, if he/she typically does a poor job). Of course, if the person is a good performer who does an exceptionally nice job, this technique is useful also.

To help the managers remember the key points, stress the acronym "STAT" which stands for:

- S "Specific" behavior or work habit clearly described.
- T "Thanks" or tell him/her how much you appreciate why he/she does.
- A "Ask" the employee to let you know if there's ever anything you can do to make it easier to do the work.
- T "Time" for a follow-up if that is needed.

The way the managers may be able to remember it is that the employee is not just another "STAT" or statistic, but deserves some recognition for his/her performance.

Also, you should emphasize that these principles are the same ones used in the constructive positive feedback which have been stressed throughout the training. We should recognize what people do well, besides correcting problems with performance or with work habits.

RECOGNIZING THE "AVERAGE" EMPLOYEE

FORMAT FOR TRAINING SESSION

- | | |
|---|----------|
| 1. Feedback from participants on the results of using the previous technique. | Leader |
| 2. Introduction of topic. | Manager |
| 3. Modeling of behaviors and key learning points.
A) Learning points on flip chart paper
B) Role play
C) Learning points on flip chart paper | Managers |
| 4. Handing out copies of the learning points and reviewing the film again. | Managers |
| 5. Group discussion of the effectiveness of the model. | Managers |
| 6. Practice in role playing in groups of three | Managers |
| 7. Feedback in general class discussion on effectiveness of the module. | Managers |
| 8. Instructions to use the behaviors on at least one employee during the time before the next session. | Managers |
| 9. Evaluate the session. | Russell |

MATERIALS:

1. Learning Points and pads.
2. Role play incident.
3. Evaluation sheets.

GIVING RECOGNITION TO THE "AVERAGE" EMPLOYEE

Employees who receive recognition for their work are generally either the outstanding employees and/or the problem employees. The problem employees get recognition in terms of disciplinary action or other types of negative feedback from their supervisors. The outstanding performer often receives recognition for being the "best in the crew". However, the vast majority of employees are average. They do a good job, they can be depended upon to be there every day, and yet they are not outstanding performers. Typically, no recognition is given to these employees for the job that they are doing. Yet, your job would be much more difficult if these "average" workers became problem employees. It is important that the performance of these employees does not slip. Therefore provide them with specific positive feedback and express your appreciation to them for doing a good job. It is even possible that by showing these employees that you appreciate their efforts, they will be willing to do more or put forth an extra effort when you need their help.

THE LEARNING POINTS FOR THIS EXERCISE ARE:

1. SPECIFICALLY DESCRIBE TO THE EMPLOYEE WHAT HE OR SHE DID WHICH DESERVES RECOGNITION AND WHY. (S)
2. THANK HIM OR HER BY SAYING HOW MUCH YOU APPRECIATE WHAT HE OR SHE DOES. (T)
3. ASK THE EMPLOYEE IF THERE IS ANYTHING YOU CAN DO TO MAKE IT EASIER FOR HIM OR HER TO DO HIS OR HER WORK. (A)
4. TIME FOR A SPECIFIC FOLLOW-UP MEETING, IF NECESSARY. (T)

ACRONYM: "STAT"

Incident:

The employee has been called in to the office of the first level manager. He explains to him that he has noticed the employee has done a steady job over the years and he wanted to take the time to tell him how much he appreciates the performer. The items which the supervisor should comment on are:

1. "Gets along well with other workers"
2. "Always in attendance"
3. "Good attitude"
4. "Dependable"
5. "On time"

The supervisor then should indicate that he has placed a letter of recommendation in the employee's personnel file.

The supervisor then asks the employee if there is anything he can do to make the work easier. The supervisor should write down whatever suggestions are made.

Employee:

The employee should be a little worried at first because of being called into the office. When the supervisor explains the purpose is for doing a good job, the employee should relax. Whatever the supervisor says about the employee's performance should just be accepted without any questions to clarify what is specifically being done well.

If the supervisor asks if there is anything that is bugging you, you should hesitate and then mention about your work area being dirty when you first come in, and that you thought that was the cleanup man's responsibility. Also, if it seems like the supervisor is listening, you might also add that the coffee machine never has change for a quarter at the afternoon break.

RECOGNIZING THE AVERAGE EMPLOYEE

The discussion of the role models should accomplish several purposes:

1. The participants should review whether the manager actually covered all the points.
2. The participants should understand why the learning points were essential and whether they should be improved to fit the plant situations.
3. The participants should begin to get the feeling that they could model the points as effectively if not better.
4. The participants should be developing an acceptance of the learning points as legitimate steps to follow.

Comments should be posted in front of the class for everyone to see.

RECOGNIZING THE AVERAGE EMPLOYEE

Comments from participants:

"The feedback wasn't specific except that she "was always in attendance". The other comments about "good attitude", "dependable", "on time", "gets along with others", were too general.

"Some employees may think he's asking for more."

"Good idea for foreman to put the phone down."

"Some employees may feel 'it's my job'".

"Question whether the person is an above average employee."

"Flip it in at a natural time."

"Office atmosphere was not realistic."

"Do it one on one."

"No specific follow-up."

"A meeting on the line is possible under these same learning points."

"Unheard of to be brought into an office at Motor Wheel."

"Would be better to focus on specific task just completed."

"Terrific" comment at the end is inappropriate."

"Having personnel file is unrealistic."

The group recommended the module to be used as follows:

1. Emphasize the first 2 points of positive feedback.
2. Leave 3 & 4 in for awareness.
3. Aim at the person who does a good job, but you noticed they did something specific just recently.
4. Make the comments in the work area of the person.
5. Emphasize the need to say positive things about people's performance.
6. Timing for each employee is important. Don't just say it to everyone right away.

Example of things to recognize are:

- no missed days
- orders processed
- setups done when it was important to get it done right
- cleaning up of work area

The middle-upper managerial group did not use an incident because there was so much discussion about whether the learning points should be used on average employees or all good performance. It would be much better to role play an incident as in earlier training sessions.

The acronym for learning points is:

S	Specific
T	"Thanks"
A	"Ask" if you can help with job
T	"Time" if necessary

OVERCOMING RESISTANCE TO CHANGE

Introduction:

This session focuses on the need to let people know a change is coming, why it will occur and how it will affect the employees. This technique is used where there is a decision from above because of customer demands, legal requirements, safety precautions or whatever. The issue may have been discussed before to get input from the employees, or it may not, but the situation is now clear: this is how things are to be changed. (If there is no final decision yet made, the PACT or "problem solving" session would be the module to use.) Here, the manager is to fully explain a change and ask for the people's help, or the individual's help in making the change work.

Most change is resisted by people for natural reasons: habits, relationship with other employees, fear of not being able to handle the change, no feeling of needing the change, or whatever. This process is to let people talk about those fears, or just ask questions about how the change will work. Frequently, people will know about a change before it's official, but they don't have the full story or have questions about it. This session sets up the learning points which can guide a manager through that process.

The acronym for this session is "SpEAR HeAd" because the manager will want people to "spear head" for the change. "Spear-head" stands for:

Spe	<u>Specific</u> details of the change.
E	<u>Explain why</u> the change is necessary.
A	<u>Affect</u> of the change on the employee.
R	<u>Reaction</u> of the employee(s) should be listened to openly, because they may be worth considering.
He	<u>Help</u> is asked for from the employee(s) to make the change work.
Ad	<u>A date</u> is set for a specific follow-up meeting if required.

The managers should be able to recall SpEAR HeAd at the end of the training session and recall what the letters stand for.

Since this is the last session, the managers should be familiar with the process by now.

It's still important to go through the format in part because they're used to it by now, and should follow it easily, but also because each section of the format has a specific purpose. Note that the only change here from earlier sessions is that the managers are asked to use the techniques on an employee during the next week.

OVERCOMING RESISTANCE TO CHANGE

FORMAT FOR TRAINING SESSION

- | | |
|---|----------|
| 1. Feedback from the participants on the results of using the previous technique. | Manager |
| 2. Introduction of topic. | Manager |
| 3. Modeling of behaviors and key learning points. | Managers |
| A) Learning points on the chart paper | |
| B) Role play | |
| C) Learning points on flip chart paper | |
| 4. Handing out copies of the learning points and reviewing the film again. | Managers |
| 5. Group discussion of the effectiveness of the model. | Manager |
| 6. Practice in role playing in groups of three. | Managers |
| 7. Feedback in general class discussion on effectiveness of the module. | Managers |
| 8. Instructions to use the behaviors on at least employee during the next week. | Managers |
| 9. Evaluation. | Russell |
| 10. Final Evaluation | Russell |

MATERIALS:

1. Learning Points and pads.
2. Role Play incident.
3. Evaluation forms.

OVERCOMING RESISTANCE TO CHANGE

It is important that you inform your employees of a change as soon as you are told about it. When describing the change, explain why it is occurring (if you do not have this information, contact your manager). Explain the reasons for the change in terms the employee can understand, for example, the need to meet the market demands, the need to produce a product that is currently being requested, etc. The employee is likely to oppose the change. It is important that you listen openly and without hostility to his or her concerns. Point out the positive aspects of the change that may be beneficial to the employee (this may take some thinking). Express your confidence that you feel he or she can handle the change and that you would appreciate his or her help in making the change work. Ask him or her to think of ideas on how to make the change go smoothly. These could be discussed at a follow-up meeting. A follow-up meeting may also be necessary to "touch base" with an employee who is extremely anxious or defensive about the change.

THE LEARNING POINTS FOR THIS EXERCISE ARE:

1. SPECIFICALLY DESCRIBE THE DETAILS OF THE CHANGE. (Sp)
2. EXPLAIN WHY THE CHANGE IS NECESSARY. (E)
3. DISCUSS HOW THE CHANGE WILL AFFECT THE EMPLOYEE, STRESSING THE POSITIVE ASPECTS OF THE CHANGE. (A)
4. LISTEN OPENLY TO THE EMPLOYEE'S REACTIONS ABOUT THE CHANGE. THE REACTIONS MAY BE WORTHY OF MANAGEMENT'S ATTENTION. (R)
5. ASK THE EMPLOYEE FOR HIS OR HER HELP TO MAKE THE CHANGE WORK. (He)
6. IF NECESSARY, PLAN A DATE FOR A SPECIFIC FOLLOW-UP MEETING. (Ad)

ACRONYM: "SpEAR HeAd"

OVERCOMING RESISTANCE TO CHANGEIncident:

The first level manager has asked one of his/her employees into his office to explain the specific details of a change from a wooden production part to a plastic production part. The process change will mean the employee is required to walk from the beginning of the job to the completion of it, and then repeat the cycle again. He/she stays at the same station and works with the same employees, but in the future won't be working with anyone in particular.

The change to the plastic part was called for by marketing, who felt the part was needed to meet customer demands and stay competitive.

The employee went through another major change 3-4 years ago, and handled it very well. He/she is an average to good employee, who gets along well with the other employees.

Employee

He/she likes working with the other people at his/her station, so would not like the idea of moving along with the job. Marketing also always seems to be making changes, and sometimes it seems like they're just for the sake of change.

If the manager seems to be giving sincere reasons for the change, the employee should not question it too much. Also, if the manager seems to acknowledge the employee's problems with the change, the employee should agree to help with the change, but not be enthusiastic about it.

OVERCOMING RESISTANCE TO CHANGE

The discussion of the role models should accomplish several purposes:

1. The participants should review whether the manager actually covered all the points.
2. The participants should understand why the learning points were essential and whether they should be improved to fit plant situations.
3. The participants should begin to get the feeling that they could model the points as effectively and possibly better.
4. The participants should be developing an acceptance of the learning points as legitimate steps to follow.

Comments should be posted in front of the class for everyone to see.

OVERCOMING RESISTANCE TO CHANGE

Comments:

- "Reasonable explanation of why change necessary."
- "No explanation of why plastic causes a process change."
- "Described affects on the employee."
- "Positive aspects not stressed."
- "Assured her about how she handled the change last time."
- "Asked her for her help."
- "Tieing in with Employee Involvement means you should get them involved in the change."
- "One-to-one not realistic. More like one group."
- "Motor Wheel employees would already have lots of questions so foreman should be armed with facts by their managers."
- "It is not just for modernization, but rather it happens every day: job combinations, piecework rates (foremen not involved), rearrange lines, policy changes)."

Example: We practiced in groups of 5: 1 foreman, 3 employees, and an observer.

Used: Shutdown of Q.C. inspection area for breaks. Lunch buckets, coffee pots, magazines and cigarette smoking were all off limits unless on Q.C. business. The groups were production employees on the second shift and the supervisor was a production manager who had to explain the change to his/her employees.

Learning Points: It's important to make sure the manager actually "asks" for the employee's help in making the change work.

The acronym for the learning points is:

- Sp Specific details of the change.
- E Explain why the change is necessary.
- A Affect of the change on the employee.
- R Reactions to change should be listened to openly, because they may be worth considering.
- He Help is asked for from the employee.
- Ad A date is set for follow-up if necessary.

APPENDIX J

APPENDIX J

Before answering the following questions, please think about your working relationship with your immediate supervisor.

All of the following questions ask about this particular working relationship.

1. Do you usually feel that you know where you stand . . . do you usually know how satisfied your immediate supervisor is with what you do? (circle one)
 - 4 = Always know where I stand
 - 3 = Usually know where I stand
 - 2 = Seldom know where I stand
 - 1 = Never know where I stand
2. How well do you feel that your immediate supervisor understands your problems and needs? (circle one)
 - 1 = Not at all
 - 2 = Some but not enough
 - 3 = Well enough
 - 4 = Completely
3. How well do you feel that your immediate supervisor recognizes your potential? (circle one)
 - 4 = Fully
 - 3 = As much as the next person
 - 2 = Some but not enough
 - 1 = Not at all
4. Regardless of how much formal authority your immediate supervisor has built into his or her position, what are the chances that he or she would be personally inclined to use power to help you solve problems in your work? (circle one)
 - 1 = No chance
 - 2 = Might or might not
 - 3 = Probably would
 - 4 = Certainly would

5. Again, regardless of the amount of formal authority your immediate supervisor has, to what extent can you count on him/her to "bail you out" at his/her expense when you really need it? (circle one)

4 = Certainly would
 3 = Probably would
 2 = Might or might not
 1 = No chance

6. I have enough confidence in my immediate supervisor that I would defend and justify his/her decisions if he/she were not present to do so. (circle one)

1 = Probably not
 2 = Maybe
 3 = Probably would
 4 = Certainly would

7. How would you characterize your working relationship with your immediate supervisor? (circle one)

4 = Extremely effective
 3 = Better than average
 2 = About average
 1 = Less than average

APPENDIX K

APPENDIX K

Please indicate how much you agree with the statements below about your own feelings of worth and self competence. Answer (1) if you strongly agree; (2) if you agree; (3) if you're not sure; (4) if you disagree; (5) if you strongly disagree.

	<u>Strongly Agree</u>		<u>?</u>		<u>Strongly Disagree</u>
1. I feel i'm a person of worth, at least on an equal basis with others.	1	2	3	4	5
2. I feel that I have a number of good qualities.	1	2	3	4	5
3. All in all, I am inclined to feel that I am a failure.	1	2	3	4	5
4. I am able to do things as well as most people.	1	2	3	4	5
5. I feel I do not have much to be proud of.	1	2	3	4	5
6. I take a positive attitude toward myself.	1	2	3	4	5
7. On the whole, I am satisfied with myself.	1	2	3	4	5
8. I wish I could have more respect for myself.	1	2	3	4	5
9. I certainly feel useless at times	1	2	3	4	5
10. At times I think I am no good at all.	1	2	3	4	5

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