1986

Behavior modeling : the evaluation of a program to develop conflict management skills

Charles Michael Grissom
College of William & Mary - School of Education

Grissom, Charles Michael

BEHAVIOR MODELING: THE EVALUATION OF A PROGRAM TO DEVELOP CONFLICT MANAGEMENT SKILLS

The College of William and Mary in Virginia Ed.D. 1986

BEHAVIOR MODELING: THE EVALUATION OF A PROGRAM TO DEVELOP CONFLICT MANAGEMENT SKILLS

A Dissertation Presented to the Faculty of the
School of Education
The College of William and Mary

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by

Charles Michael Grissom

October, 1986

BEHAVIOR MODELING: THE EVALUATION OF A PROGRAM TO DEVELOP CONFLICT MANAGEMENT SKILLS

by

Charles Michael Grissom

APPROVED: DATE

G. William Bullock, Jr., Ed.D. — 10.1.86

Armand J. Galfo, Ed.D. — 10.1.86

Robert Maidment, Ed.D.
Chairman of Doctoral
Committee — 10.1.86

TABLE OF CONTENTS

ACKNOWLEDGEMENT

Completing the requirements for the Doctor of Education has involved the direction, cooperation, and help of certain key individuals. To them, I wish to express my thanks and sincerest gratitude.

A particular debt of gratitude is owed to the members of the committee. Dr. Bullock, Dr. Galfo, and Dr. Maidment have been supportive and encouraging during this project.

Deep appreciation is extended to my colleagues who willingly gave their time and knowledge to support this research.

Finally, a special thanks to my wife who encouraged me throughout my studies and writing.

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Is behavior modeling an effective approach for training managers in conflict management skills? Although much time and money are invested on efforts to reduce the negative aspects and enhance the beneficial aspects of conflict in work settings, there is yet much to learn about how to do it effectively. The study was conducted to examine the suitability of behavior modeling training for developing managers' conflict management skills. This chapter introduces the present study and consists of six sections: Theoretical Background, Statement of the Problem, Hypotheses, Significance of the Study, Limitations of the Study, and Definition of Terms.

Theoretical Background

The behavior modeling approach to training has drawn much attention since the mid-1970's. This approach is based upon the social learning theory of Bandura (1971, 1977). His theory stresses three classes of personal expectations which are critically related to behavior change. First, individuals engage in a behavior if they expect it to lead to a desired outcome (outcome expectations). Secondly, differing values for any particular outcome (valence) exists for individuals. Third, if an outcome is highly valued (high positive valence), it provides a stronger incentive to act than one of low value. Although outcome expectations and valences are important determinants of behavior, they alone will not lead to a behavioral change. An individual may believe that a desired goal can be achieved using a specific behavior, but the individual may

feel capable or incapable of performing the particular behavior. The belief that the behaviors necessary to produce a particular outcome can be performed is termed efficacy expectation. Thus, the three critical components of this behavior change model are outcome expectations, efficacy expectation, and valences.

Social learning theory is distinct from general expectancy theories which have achieved significant status in the literature. These theories tend to focus totally on action-outcome expectations and valences. Nowhere are efficacy expectations central to these theories. The behavior change process presented in social learning theory is different and more complex.

Bandura (1977) has further suggested that four types of experience are responsible for change expectations: performance accomplishments, vicarious experience, verbal persuasion, and psychological states. According to his research, practicing a behavior (performance accomplishments) and seeing another perform a behavior (vicarious experience) have the highest probability of inducing learning because they provide a guide which is immediate and concrete.

Behavior is altered by vicarious experience because it changes expectations in two ways. The individual is assured that something can be done and a graphic picture which illustrates how it is performed is provided. Furthermore, if the individual perceives that he is similar to the model, his expectations can be increased even more because he perceives that it is possible for someone like himself to perform the behavior. Secondly, by demonstrating consequences of behavior, the observer can clarify potential outcomes from specific actions.

Personal accomplishment provides a mechanism for change which is even more powerful. As an individual actually performs a behavior, efficacy expectations are enhanced. As the individual experiences the consequences of behavior first hand, outcome expectations are clarified.

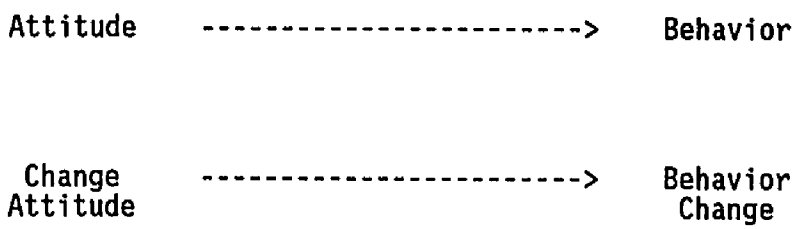
Goldstein and Sorcher (1974) formalized the social learning theory process into the components of behavior modeling training. The approach they outlined consists of four major learning activities:

1. Modeling, where trainees watch "film or videotape displays of a person (the model) performing the specific skill behaviors (p.26)" effectively.
2. Role playing, providing the trainee with the opportunity to practice the behaviors demonstrated by the model.
3. Social reinforcement, providing the trainee with praise and constructive feedback from the trainer and other trainees.
4. Transfer of training, implementing these processes in a way that encourages trainees to apply their learning in "a stable and consistent manner on the job (p.26)."

Goldstein and Sorcher further suggest that behavior modeling assumes a different method for achieving behavior change than the traditional training model. Figure 1 and Figure 2 illustrate these models.

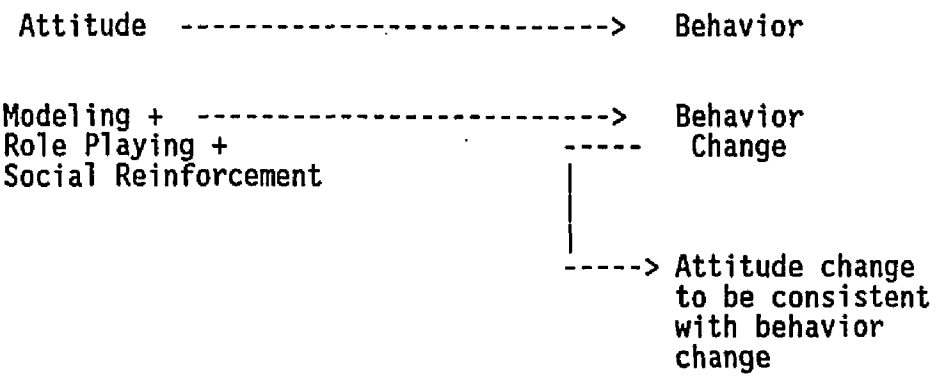
According to the traditional model, training attempts to develop understanding which influences attitudes which supposedly leads to behavior change. A different logic is used in the behavior modeling approach. This approach begins with the learning of new behavior which is followed by changes in attitude. Later, an understanding of the intellectual basis for the effectiveness of the new behavior is developed.

Figure 1. Traditional Training Model



Source: Goldstein and Sorcher, 1974

Figure 2. Behavior Modeling Training Model



Source: Goldstein and Sorcher, 1974

The motivation to improve is created by having the trainee work on problems which are of real significance to him. Modeling effective behaviors helps the trainee to understand what behaviors are desired. Role playing allows the trainee to participate actively and to get the practice necessary to develop the skills. Social reinforcement provides meaningful feedback on performance from the trainer and peers. These three procedures are implemented in such a way that the behavior change is likely to result in a transfer of training from the classroom to the job.

The system shows the trainee what to do, and provides an opportunity for practice and feedback using a step-by-step training approach. The typical program using behavior modeling initially gives a demonstration of the desired behavior via a film or videotape. After watching the filmed behavior model, each trainee practices the learning points to incorporate into his own behavioral style. Thus, the crucial element is the practice and not the mere fact of watching the filmed model.

Several studies (Burnaska, 1976; Byham, Adams, and Kiggins, 1976; Moses and Ritchie, 1976; Smith, 1976; Latham and Saari, 1979; Porras and Hargis, 1982; and Decker, 1982) have shown that behavior modeling can be used to teach a variety of supervisory skills to trainees effectively and quickly. To date, no study has been undertaken to see if behavior modeling can be used effectively to help managers acquire conflict management skills. Since behavior modeling has been successfully used to train for other types of interpersonal skills, one could hypothesize that behavior modeling would be a powerful method for providing trainees with the necessary skills to manage conflict.

Statement of the Problem

The purpose of this study was to determine if the behavior modeling approach to training could be used effectively to teach managers conflict management skills. The theory and research cited previously led to the conclusion that it would be effective. The central questions this study sought to answer were: (1) Does the training make a significant difference in the participants' conflict management behaviors?; and (2) Does video feedback to participants enhance the effectiveness of the training?

Hypotheses

The following hypotheses were tested:

Hypothesis 1. Behavior modeling will be an effective approach for training managers in conflict management skills.

Hypothesis 2. Videotaping participants' role plays for use as feedback produces greater gains than behavior modeling training without video feedback.

Significance of the Study

Management has become increasingly aware that conflict management is an important managerial competency. A survey of managerial interests in conflict management was conducted by the American Management Association (Lippitt, 1982). Responding to the survey were 116 chief executive officers, 86 vice presidents and 66 middle managers. Their responses indicated that organizational conflict is growing as a topic of importance. Specific results from the survey indicate:

- Respondents spend about 24% of their time handling conflicts
- Over the past ten years, their ability to manage conflict has become more important
- Conflict management as a topic is rated of equal or slightly higher importance than planning, communication, motivation and decision-making
- They express interest in the sources of conflict which emphasize psychological factors, such as misunderstandings, communication failure, personality clashes and value differences
- Typically they perceive the level of conflict in their organization to be about right
- They consider the principal causes of organizational conflicts to be misunderstanding, personality clashes, value and goal differences, substandard performance, differences over method, responsibility issues, lack of cooperation, authority issues, competition for resources, and noncompliance with rules and policies (p. 67).

One relevant management development activity is helping managers learn to manage conflict. Managers need to know the causes of conflict, methods to diagnose the type of conflict and modes of managing conflict (Lippitt, 1982).

The significance of the present study was associated with (1) the potential in organizations for conflict; (2) the value of conflict; and (3) the lack of adequate training in conflict management possessed by managers.

The potential for organizational conflict is a natural outgrowth of the organization as a social system. It is subject to the continuous readjustment of relationships with both external and internal environments. This situation creates problems of integration for groups within the organization who are both differentiated and interdependent.

The continuing forces of change, uncertainty, and specialization confront managers and employees alike. There is an identifiable need for managers to increase their knowledge of conflict and its management based on the increasing complexity of organizations and the potential for conflict which exists within organizations.

The increased concentration on conflict management research has created the recognition that conflict is neither inherently good nor bad, and it possesses both functional and dysfunctional aspects. Robbins (1974) provided a provocative summary of attitudes toward organizational conflict and its management by classifying them into three philosophies: traditional, behavioral, and interactionist.

The traditional philosophy, which still survives in some forms, dominated the management literature from the late Nineteenth Century through the middle 1940's. Supporters of this philosophy generally view all conflicts as destructive and recommend the total elimination of all conflict in the organization.

The behavioral philosophy emerged in the 1940's and remains popular in the field of organizational behavior. Supporters of this view perceive conflict as inevitable in organizations and rationalize its existence as serving some organizational goals. Almost all efforts by the behavioralists, however, are directed at resolving conflicts. Therefore, while this philosophy rationalizes the existence of conflict in organizations, it continues to seek resolution.

The interactionist philosophy is the name given to the view which has recently begun to gain attention in the field of organizational behavior. This approach recognizes that conflict is absolutely

necessary; it explicitly supports opposition; and, it seeks to prevent or resolve some conflicts while stimulating appropriate conflicts. Some conflicts are perceived as beneficial, so their encouragement or stimulation is suggested. Other conflicts are not viewed as beneficial, and traditional methods of prevention, resolution, and suppression are considered the best means to handle the situation. Thus, managerial interventions are labeled conflict management rather than conflict resolution. Conflict management is a term which reflects more accurately the acceptance of conflict as an organizational intervention to achieve a set of goals. Whether conflict outcomes are constructive or destructive is seen as dependent upon methods used to manage the conflict.

According to Hart (1981), the value of conflict is that it:

- Opens up issues of importance, resulting in their clarification
- Results in the solution of problems
- Increases the involvement of individuals in issues of importance to them
- Causes authentic communication to occur
- Serves as a release to pent-up emotion, anxiety and stress
- Helps build cohesiveness among people sharing the conflict...
- Helps individuals grow personally and apply what they learn to future situations (p. 6).

If managers are to achieve constructive outcome from conflict, it is necessary to ensure they possess adequate training in conflict management skills. Currently, managers do not appear to have this training. This statement is validated by researchers who have stressed

the lack of training in conflict management provided in graduate or industrial training programs (Essex, 1979; Robertson, 1977; and Butler, 1979). This lack of training creates potential for poorly managed conflict situations.

The present research was intended to make it possible to determine whether behavior modeling is an effective method of training managers in conflict management skills. If the hypotheses were confirmed, the evidence would further extend the generality of behavior modeling to another training area. Results of this research would contribute to our understanding of behavior modeling and have impact on future management training in conflict management.

Limitations of the Study

1. The scope of this study is constrained by the nature of "action research" which is aimed at discovering or uncovering previously undefined relationships through "field" investigation.
2. Participants will be limited to managers in one manufacturing organization. Any conclusions or recommendations in the study should be viewed with this in mind.
3. The study is limited to two conflict situations: improving employee performance and discussing disciplinary action.

Definition of Terms

The following terms were used in the study:

Behavior. The actions or reactions of an individual which are observable.

Behavior Modeling. A teaching-learning process that consists of providing the learner with film or videotape displays of a person performing the specific skills to be learned, i.e. modeling; giving the learner opportunity, training and encouragement to behaviorally rehearse or practice the behaviors modeled, i.e. role playing; and providing the learner with positive feedback as his plays increasingly approximate the behavior of the model, i.e., social reinforcement (Goldstein and Sorcher, 1974).

Conflict. Opposition or antagonistic interaction which can be dichotomized into functional and dysfunctional segments (Robbins, 1974).

Conflict Management. A contingency or situational approach for managing conflicts. The term reflects an acceptance of conflict as an inevitable part of life and connotes the goal of working with conflict - encouraging, tolerating, and creatively channeling it into effective problem-solving.

Collaborative Problem-Solving. A joint effort by the parties involved in a conflict to find a solution acceptable to both. It entails redefining the problem, discovering novel or creative alternatives, and focusing on a common goal (Bolton, 1979).

Learning Points. A written description of the key behaviors seen performed by the model (Decker, 1982).

Manager. A member of an organization whose tasks, duties and responsibilities require the supervision of other people (Bittel, 1978).

Management Training. A planned program of organizational improvement which is undertaken to bring about a relatively permanent change in

the knowledge, skills, attitudes, and/or behaviors of managers (Cascio, 1982).

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter presents a discussion of previous research related to the present study. The review emphasizes research on behavior modeling training and research on conflict and conflict management training.

Behavior Modeling Training

The four components of behavior modeling (modeling, role-playing, social reinforcement, and transfer of training) have been the focus of numerous research efforts. Repeatedly, each component has been shown to be highly influential upon the degree of learning and performance that occurs (Goldstein & Sorcher, 1974).

Research on modeling has a long history in psychological investigation. In general, it has been demonstrated that modeling is an effective method for the learning of new behaviors that previously did not exist (Bryan & Test, 1967; Lack, 1971; Whalen, 1969; Friendenberg, 1971; Krumboltz & Thoresen 1964) and the strengthening or weakening of behaviors that previously did exist (Kleinsassen, 1968; Ritter, 1969; Mann & Rosenthal, 1969; Sutton, 1970).

Psychologists have demonstrated the value of role-playing to increase assertiveness (McFall & Marston, 1970), to decrease smoking (Janis & Mann, 1965) and to change social attitudes (Colbertson, 1957; Harvey & Beverly, 1961; Zimbardo, 1965; Cohen & Latane, 1962). In industrial settings, role-playing has been used successfully to train managers and salesmen (Bradford & Lippitt, 1946; French, 1945; Beckhard,

1956; Stahl, 1963), to improve labor-management relations (Lonergan, 1957; Liveright, 1951; Kellogg, 1954), and to improve communication skills (Shaw, 1959; Starr, 1959; Gordon, 1959; Friedman, 1970).

Much social reinforcement research has focused on verbal behavior "how much a person speaks, what he says, and when and how he says it" (Goldstein & Sorcher, 1974). Studies have shown that social reinforcement can be used to increase how much a subject talks (Verplanch, 1955; Oakes, 1962; McNair, 1957) and to increase what a person says (Hidum & Brown, 1956; Greenspoon, 1954; Taffel, 1952).

The ultimate objective of all training programs is to improve the participant's performance at the workplace. Research on transfer of training has demonstrated that three principles increase the level of transfer of training. First, the trainee should be provided the general guidelines for satisfactory performance on the job (Judd, 1902; Woodrow, 1939; Goldbeck et al., 1957; Miller et al., 1951; Ulmer, 1939). Second, the trainee should be provided numerous practice opportunities (Mandler, 1954; Atwater, 1953; Cantor, 1955; Shore & Sechrest, 1961). Third, the training must resemble the work setting as closely as possible (Crafts, 1935; Duncan, 1953; Gagne et al., 1950; Underwood, 1951; Young & Underwood, 1954).

While research on the four components of behavior modeling indicates each has been applied successfully, there are cautionary notes.

> ...though modeling does indeed result in the learning of new behaviors, without sufficient practice old ways of acting very clearly tend to re-assert themselves. Practice or role-playing is also a marked facilitator of new learning, but one must practice the correct behaviors, and without prior modeling or similar demonstration, the trainee's performance is advanced very little. Given both modeling and role-playing,

> the newly-learned behaviors have greater potential for enduring, but will not do so unless the trainee perceives the enacting of these behaviors to be a rewarding experience; thus, the crucial necessity for reinforcement. However, though reinforcement is indeed crucial, and though evidence supporting its impact on behavior change is very impressive, we have held that willingness to offer reinforcement too is frequently a necessary, but not sufficient condition for human learning. The behaviors to be reinforced must be enacted by the trainee correctly and with sufficient frequency that adequate opportunity for reinforcement occurs. It is procedures such as modeling and role-playing that lead to such sufficient frequency of correct enactment. Without such procedures, the new behaviors - even if reinforced - will often occur too seldom for new learning to occur. Combining these three procedures would, it appears, bring us much closer to a powerful, reliable, and widely applicable approach to human learning. Yet power, reliability and broad applicability are not enough, for a truly effective approach to learning must also demonstrate such learning beyond the training setting and prove to be powerful, reliable, broadly applicable, and enduring on the job (Goldstein & Sorcher, 1974).

A literature search on the four components used in combination, i.e. behavior modeling, located several significant studies. However, scientific evaluations on behavior modeling are sparse because the technique is relatively new as a training method.

Burnaska (1976) conducted a study to determine if behavior modeling training improved the interpersonal skills of managers, to measure how long the training effects would last, and to ascertain if employees of the trained managers perceived behavioral changes in their manager. The experimental design was the post-test only control group design. The experimental group was comprised of sixty-two (62) randomly selected middle-level managers. This group received training in interpersonal skills by the behavior modeling approach. Sixty-two (62) middle-level managers from the same company were also randomly selected to be in the control group that did not receive training.

To evaluate the effectiveness of Burnaska's training program, behavioral and perceptual measurements were gathered. Behavioral observations were used to determine if the training improved the managers' interpersonal skills and how long the training effects might last. These measurements were taken within a month after training and again five months later.

Twenty-five trained observers were used to collect these data. Four judges observed each manager in three role-plays without knowing if the manager belonged to the experimental or control group. After each role-play, the judge rated the manager's behavior on four, seven-point Likert-type scales:

1. Maintained Employees Self-Esteem
2. Established Open and Clear Communication
3. Maintained Control of the Situation
4. Accomplished Objective of the Discussion.

An operational definition was provided for each scale.

To determine if employees of the trained managers could perceive changes in the overall behavior of their manager, a questionnaire was administered to the employees. This questionnaire contained 51 items with a seven-point Likert-type scale. Employees completed the questionnaire one week prior to training and four months after training.

The behavioral measures were "factor analyzed using principal factoring with interactions" (p. 332) because the rating scales of the four judges were moderately intercorrelated (median r=.50). A factor labelled Managerial Interpersonal Skill accounted for 67% of the common variance and 58% of the total variance for the four scales. Each of the

trained (N=62) and untrained (N=62) managers was assigned a factor score on this dimension. A three-way analysis of variance was then used to analyze the data -- Trained X Untrained Managers, Immediately After X 4 Months After Ratings, and Role-Play 1 X Role Play 2 X Role Play 3. The results of this three-way analysis of variance of judges' behavioral ratings were: Manger ($F=481.69$, $p \leq .05$), Time ($F=21.07$, $p \leq .05$), Evaluation Situation ($F=27.86$, $p \leq .05$), Manager X Time ($F=.02$), Manager X Evaluation Situation (1.04), Time X Evaluation Situation ($F=.19$), and Manager X Time X Evaluation Situation ($F=.61$).

There was moderate intercorrelation of the 51 items of the employee questionnaire, "so principal factoring with a varimax rotation was performed on these data" (p. 333). Sixty-five percent of the common variance and 58% of the total variance was accounted for by eight orthogonal factors which were extracted. Factor scores for the eight factors were assigned to all employees, and an analysis of variance was conducted to determine Before X 4 Months After, and Trained X Untrained Managers. The results of this analysis found only two significant differences ($p \leq .05$).

The analysis of the behavioral measures in Burnaska's study revealed that the trained managers performed better than the untrained managers, and the four months after ratings were higher than the immediately after ratings. While the perceptual scores showed only sight improvement, the researcher states there is support from the data for his statement that "four months may not be a sufficient amount of time

for a manager to use his new skills with each of his employees frequently enough to produce a change in all his employees' perceptions of him" (p. 334).

Moses and Ritchie (1976) used a special behavioral assessment center to examine the effectiveness of behavior modeling training for supervisors at AT&T. Two matched groups of supervisors were formed. One group (N=90) was randomly selected to receive the behavior modeling training (experimental group). The other group (N=93) received no training (control group).

Approximately two months after the experimental group received training, individuals from both groups were evaluated in a special assessment center. Four individuals who had received training in behavioral observation served as assessors. Each supervisor conducted three different problem discussions with a role-player. The assessors used a rating scale constructed for this study to evaluate each discussion independently. No details of the rating scale were provided.

A repeated measures analysis of variance was used to analyze the data. The trained group was evaluated as being more effective in resolving the problem discussions ($F=57.26$, $p \leq .01$).

In a study by Byham, Adams, and Kiggins (1976), the transfer of behavior modeling training to the work place was investigated. Eight supervisors from two accounting operations were chosen to comprise the experimental group. The control group consisted of eight supervisors from roughly matched departments. The experimental group received training in ten modules each concerning a specific interaction with subordinates.

Subordinates' perceptions of their supervisors' ability to handle each of these situations was used as the criterion. Interviews with 20% of the subordinates randomly sampled from both groups were conducted. A trained interviewer coded the responses. The authors state that the interviews "had very high reliability of coding judgments" (p. 347). However, no reliability score is reported and no details of the scoring process are provided.

The results of the study are presented in percentage point differences. Eight of the ten areas showed positive results ranging from +11 to +36 in the pre-post comparison. In a comparison between the experimental and control groups, there were positive results ranging from +7 to +36.

According to the researchers, the results of this study may be limited because:

1. The data are based on a random sampling of subordinates rather than the more preferable stratified random sampling. This allowed for the possibility that as many as three subordinates of one supervisor might have been interviewed and none of another, thus letting the changes in behavior of a few supervisors overly influence the results...
2. A subordinate may very well not know that a supervisor had changed his or her way of handling a situation if neither the subordinate nor the subordinates' acquaintances had had a problem in the time period involved...(p. 348).

Smith (1976) investigated the effectiveness of behavior modeling training to improve customer satisfaction and sales. The study included

a control group (no training), a traditional training group, a behavioral modeling training group, and a behavior modeling plus team building group.

In the traditional training group, the managers were given no opportunity to practice or receive feedback on the material taught. The modeling training demonstrated how a manager should interview a complaining customer and followed the standard format for the modeling approach. The modeling plus team building group received training identical to the modeling group. In addition, they received team building through lecturettes plus practice in making personal statements about their feelings and relationships, and managers met as a subgroup to prepare an action plan for their branches.

The managers were given a pre- and post-assessment to measure the effectiveness of their communication skills. The instrument contained 20 customer comments for which the managers were instructed to write replies. These responses were rated on a scale from 1.0 to 4.0 based on their helpfulness, understanding, and respect. While there was no significant change in the traditional training group ($t=1.967$), there was significant improvement in the communication effectiveness for the Modeling Training group ($t=6.801$, $p \leq .05$) and the Modeling plus Team Building group ($t=6.552$, $p \leq .05$).

Four months after the training, a 5% random sample of customers in the branches involved in the training were surveyed to measure customer satisfaction. Communication effectiveness was correlated with the level of customer satisfaction four months after training. There was a direct

and positive relationship ($r=.743$, $p \leq .001$) between communication skills and customer satisfaction.

The sales performance of the branches involved were measured 10 months after the training. The change in actual sales was significant ($X^2=43.13$, $df=3$, $p \leq ,001$), but only the Modeling plus Team-Building group showed an improvement (+7.9%). A decline in sales was reported for the Control (-2.1%), Traditional (-2.6%) and Modeling (-2.2%) training branches.

Latham and Saari (1979) conducted an extensive experiment to evaluate a behavioral modeling approach based on the principles of Goldstein and Sorcher. The experiment consisted of an experimental group (N=20) which received training in supervisory skills, and a control group (N=20) which received no training. While the dependent variables in their experiment included participant reaction, learning, behavioral, and performance measures, the focus of this review will be the behavioral and performance criteria.

Tape-recorded role plays of supervisors resolving supervisor-employee problems were used to assess supervisory behavior. The 20 experimental group members and 20 control group members were individually taped conducting a discussion which had been the focus of one of the training topics. In addition, ten members of the control group were given the learning points to determine if knowledge alone is sufficient to elicit the desired behavior.

The tape recordings were assessed by 15 trained assessors working in groups of three. The assessors were blind as to whether the supervisor was in the experimental or control group. The judges rated each

recording individually, then through group consensus agreed on a single score. The scores of the trained group were significantly higher than those of the control group with the learning points ($t=5.38$, $p \leq .05$) and without the learning points ($t=4.86$, $p \leq .05$).

To evaluate on-the-job behaviors, each supervisor's boss was given a behavioral observation scale one month before and one year after the training. The scale contained 35 behavioral items, developed on the basis of a job analysis, which identified effective supervisory behavior. A five-point scale was assigned to each item. The supervisor's boss indicated the extent to which he observed the supervisor demonstrate the behavior. A two-tailed t-test on the post-measure indicated that the training group performed significantly better than the control group ($t=2.51$, $p \leq .05$).

Decker (1980) conducted a behavior modeling study to assess the effects of different learning points. He refers to these as descriptive codes (learning points which describe the key modeled behaviors) and role codes (learning points that describe rules governing the model's responses). The study involved students (N=20) in an introductory psychology course. The subjects were volunteers and were randomly assigned to condition.

Behavior modeling was used to improve the assertiveness skills of the participants. The video-taped model was shown to the students. Then, half the students were given descriptive codes and half were given rule codes. The model was shown again, and the students were asked to pay attention to the learning points in the second showing.

Following the second viewing of the modeling tape, the students were asked to reproduce the model's performance in a role-play attempt with an experimenter. The experimenter reproduced the role of the problem person in the modeling tape. The students were then asked to perform another task to elicit generalization of the learning. This task was conducted in the identical manner but used a different problem which required the same learning points.

Two trained raters provided the reproduction scores using a checklist of all relevant model behavior. Two different trained raters produced the generalizability scores. A 5-point rating scale was constructed to cover the nine dimensions representing the model's performance. No further information on scoring or the instruments is provided.

The descriptive code reproduction mean score (M=69.9) was significantly greater than the rule code reproduction mean score (M=46.2), $t(18)=2.86$, $p<.01$. However, there was no significant difference between the generalizability mean scores. While the descriptive codes facilitated reproduction better than rule codes, generalization was not affected by the type of code.

In a second study, Decker (1982) examined the use of rule-oriented learning points as generated by the experimenter and symbolic rehearsal instructions (the process in which the observers visualize or imagine themselves performing the behaviors of the model). The experimental group (N=12) and control group (N=12) consisted of first-line supervisors from a large midwestern hospital.

Both groups met for a one-day workshop with two parts: a four-hour session on coaching employees and a four-hour session on handling employee-initiated complaints. The two groups received the same behavior modeling format with the exception of the experimental manipulation. Both groups received an introduction to the topic, two video-taped behavior modeling presentations, group discussions of the model's effectiveness, and skill practice; however, only the experimental group was provided written copies of the learning points between the two presentations, and then told to close their eyes and mentally picture themselves performing the learning points.

Seven days after the training was completed, the participants were asked to return for a follow-up review. At this time, they were video-taped in semi-structured coaching and employee complaint role-plays. The same problem was presented to each trainee, but scripts were not provided.

The video-tapes were rated by trained assessors who were blind to condition. The assessors used a 7-point semantic differential rating scale (1=positive response, 7=negative response) covering dimensions which paralleled the learning points for each problem situation. The inter-rater reliability ranged from .92 to .99 for coaching and .96 to .99 for employee-initiated complaints.

The experimental group mean score for coaching (M=26.71) was significantly higher than the control group mean (M=52.19), $F=14.30$, $p \leq .001$. The results of the employee-initiated complaint role-play were also significantly greater for the experimental group (M=28.62) than the control group (M=54.37), $F=7.36$, $p \leq .01$. According to Decker, "the

significance of this study is the finding that very simple and quick procedures used to formalize symbolic coding, cognitive organization, and symbolic rehearsal are effective... This is an indication of the power of these techniques because the formalized procedures had greater effect than any uncontrolled spontaneous trainee coding and/or rehearsal operations (p. 331)."

Porras et al. (1982) tested the utility of behavior modeling for first-line supervisors in a plywood mill. The experimental group (N=17) met weekly for half-day workshops over a period of ten weeks. Each session had a distinct focus, but the overall goal was to have the supervisors master a set of interpersonal skills and to effectively integrate their use. The structure of each session followed a similar format: outline the general principles underlying the module, present the learning point, show a video-tape modeling the desired behavior, practice and video-tape role-plays, feedback and discussion of positive aspects of their performance. The control group (N=13) received no training.

The impact of the training was assessed by questionnaires administered to one-third of the employees of each supervisor. The questionnaires employed a 7-point Likert scale and asked for ratings of specific supervisor behavior on five dimensions. The ratings were collected one week prior to commencing the training, one week after completion, and again six months after the initial post measurement.

Results of the study showed most of the change occurred during the pre-test and immediately after post-test. During this time, significant improvement was made by the experimental group on the five variables,

t=2.05, p<.01. The researchers compared the experimental group scores for the five variables from T_2 to T_3 and discovered no significant decay in behavior change, t=.046, p<.01. Porras et al. conclude that the "employee perceptions indicated that supervisors did master the skills and use them in face-to-face interactions" (p. 448).

Summary

Several studies focusing on behavior modeling training have been examined in depth. While other studies exist, they do not yield anything beyond the studies reported. The research supports the notion that behavior modeling is an effective training method for increasing management skills. While the focus in these studies has been on training managers to handle specific employee-related situations, the overall goal has been to help the participants master and integrate a set of interpersonal skills.

An important finding in these studies is that managers transfer and apply newly acquired skills to the job. Changes in on-the-job behavior can be recognized by their supervisors and subordinates. These are indicators to support the fact that as managers change their job-related behaviors, there will be increases in productivity. Thus, behavior modeling programs which solve management performance problems can have a significant impact on the organization.

Conflict and Conflict Management Training

The literature is diverse in recommendations for conflict management training. Schmidt and Tannenbaum (1960) advocate an approach to

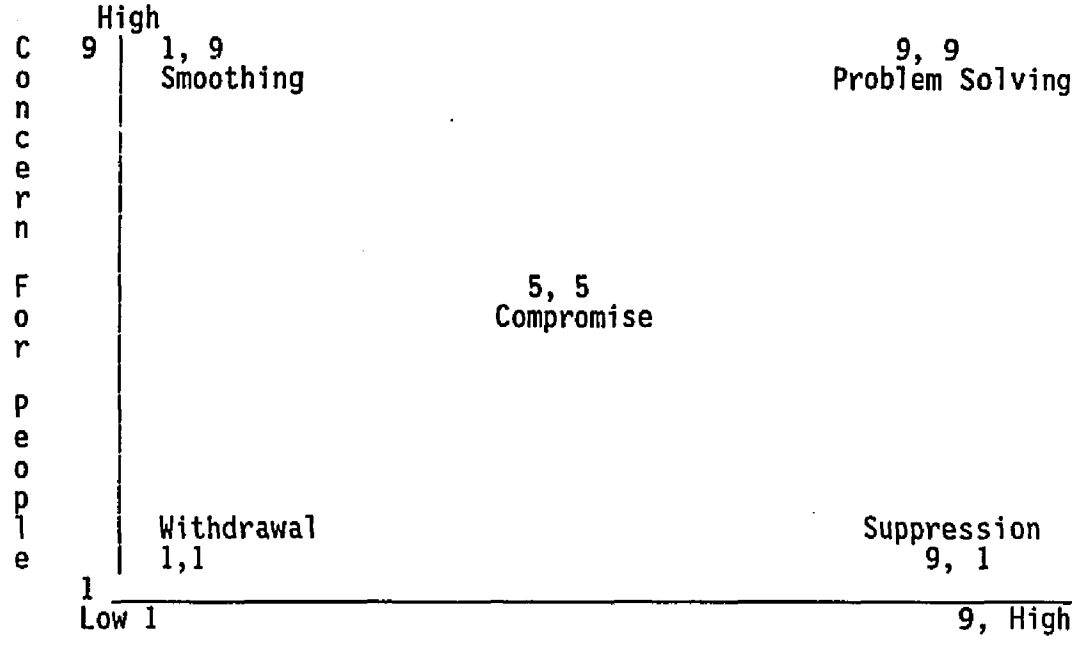
managing conflict which includes the necessity for a manager to possess three abilities. These abilities are (1) the capability to diagnose and understand the differences, (2) knowledge of and capability to select an appropriate behavior from a variety of choices, and (3) an awareness of his own feelings and the ability to deal with these feelings.

Blake, et al., (1964) proposed a program for resolving intergroup conflict which rests on perceptual and attitude structuring. Their assumption is that an understanding of the other party's perspective and applying mutual problem-solving will lead to an integrative (win-win) solution.

Blake and Mouton (1970), also developed the Conflict Grid (Figure 3) which specifies five modes of behavior the manager can use to resolve interpersonal conflict. According to the model, when an individual confronts a conflict situation, there are two concerns: concern for people and concern for production or results. Problem-solving is perceived as the most effective mode of handling conflict because it is highest in concern for both task and people.

FIGURE 3

The Conflict Grid



Source: Blake and Mouton, 1970

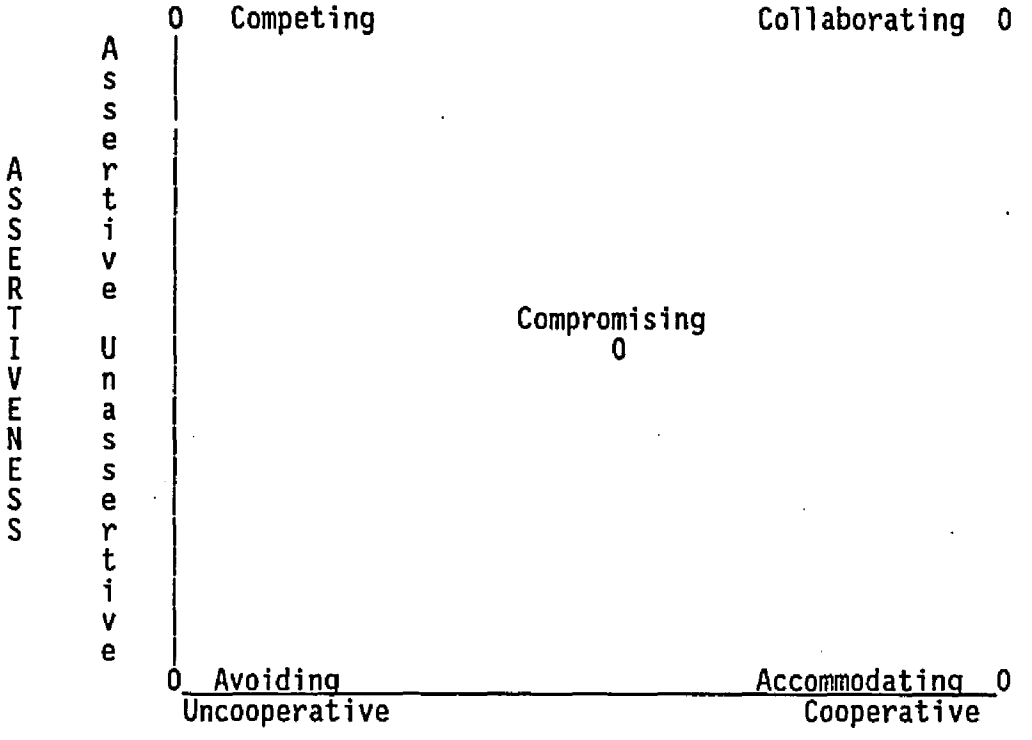
Ruble and Thomas (1976) extended the work of Blake and Mouton in their two-dimensional model of conflict-handling behavior (Figure 4). The model contains two dimensions which distinguish between a person's desire to satisfy the concerns of the other party (cooperation) and to satisfy personal concerns (assertiveness). The cooperativeness axis progresses from uncooperative to cooperative, and the assertiveness axis proceeds from unassertive to assertive.

Thomas (1977) proposes conflict management education that uses "multidimensional values in teaching to avoid rejecting input, threats to self-esteem, abandoning individual strengths, and reducing flexibility" (Shockley-Zalakak, p. 494). His approach stresses preparation for opportunities and problems that are highly dependent on the interface between the individual's strengths and the needs of the specific situation.

Power training is recommended by Chesler, Crowfoot and Bryant (1978) as an essential prerequisite for effective conflict management. They argue that if a person is to benefit from conflict management training, he must understand how to gain and use power.

FIGURE 4

Two-Dimensional Model of Conflict Behavior



Source: Ruble and Thomas, 1976.

While several programs have been proposed for conducting conflict management training, a review of the literature revealed that few efforts have been made to evaluate scientifically training designed to enhance conflict management skills. The remainder of this section will review those studies pertinent to this study.

Becker (1978) evaluated a conflict decision-making workshop which was designed for police personnel. The experimental design was the post-test only control design. Material for the workshop was drawn from the areas of human relations, intergroup conflict, negotiation, and resolution and follow-up abilities.

To evaluate the effectiveness of the workshop, Becker tested the participants on their retention of material (knowledge) and ability to use the concepts learned (performance). The results of the workshop indicated a significant difference between the experimental and control groups on the knowledge tests and on the four performance measures ($p<.05$). Further details of the instruments and statistical data were not proyided.

Essex (1979) evaluated the effectiveness of an in-service workshop model to train school administrators (N=44) to manage conflict surrounding the identification, evaluation, and placement of handicapped students. Participants were volunteer subjects who participated in one of two experimental workshops.

Form A (pre-test) and Form B (post-test) of the researcher designed Conflict Management Exercise were used to collect the data for the study. The instruments were designed to measure the participants' ability to apply the processes and procedures presented in the workshop

to a written, simulated conflict exercise concerning a special education issue. The reliability coefficients for the instruments were: Form A - .67(alpha), .65(Spearman-Brown), .65(Gutman split-half); Form B - .53(alpha), .66(Spearman-Brown), .63(Gutman split-half). The analysis of the data revealed a significant difference between the pre-and post-test scores ($F=138.36$, $p<.01$).

Butler (1979) designed a conflict management training program for school psychologists. The program was developed after a literature review indicated graduate studies in psychology did not include training. The program was designed to meet the awareness, cognitive, and cognitive-behavioral needs of school psychologists in the areas of interpersonal communication, decision-making, and conflict management.

In a study which focused on a human services organization, Howell (1981) attempted to identify and describe the competencies necessary for managers and supervisors to manage conflict. According to his study, the skills necessary for conflict management are understanding the nature of conflict, knowing one's personal conflict management style, responding skills, assertiveness skills, conflict resolution skills, and team-building and team-members skills.

Bright & Robin (1981) present a case study concerning the clinical treatment of one parent-adolescent triad experiencing conflict. Prior to treatment, family discussions often ended in stand-offs, with members being frustrated at their inability to reach acceptable solutions to problems.

Treatment consisted of the family attending six, one-hour therapy sessions where they were taught problem-solving communication skills.

The four-step model included: (1) defining the problem; (2) brainstorming a variety of creative ideas for resolving the disagreement; (3) evaluating the solutions (pros/cons) to reach a negotiated agreement; and (4) planning to implement the solution. Communication skills (active listening and assertiveness) were incorporated into the treatment sessions.

Behavioral assessment instruments were completed before and after treatment and at a 10-month follow-up. The Issues Checklist assessed frequency and intensity of discussions. The Conflict Behavior Questionnaire evaluated parent and adolescent communications on dissatisfaction with the other member's behavior and with the interaction between the two members. The parents and adolescent were audiotaped discussing two problems drawn from the Issues Checklist for 10 minutes apiece. Trained observers used the Marital Interaction Coding System to classify each statement into one of 23 categories.

Results indicate scores on the Issues Checklist decreased substantially for mother, father, and daughter from pre- to post-assessment. In fact, six out of eight post-assessment scores equaled 1.00, which is minimum value. This instrument was used to report frequency changes, and no statistical procedures were used. On the Conflict Behavior Questionnaire, examination of the magnitude of changes indicates that mother-daughter communication and conflict improved more than father-daughter communications and conflict. The magnitude in change was gauged by raw scores, and no statistical procedures were applied. The proportion of problem-solving communication behavior using the Marital

Interaction Coding System increasing from 0.1012 to 0.1449 (t-test, $p<0.001$).

While the Bright and Robin study is not highly generalizable and presents issues different from those of adults in organizations, there is similarity in the skills applied. The six hours of treatment did not achieve the optimum level of skill in the clients, but it shows the effectiveness of even a short intervention in changing behavior.

Ridley et al. (1981) conducted a study to evaluate the effectiveness of a premarital conflict management training program. Couples were recruited from a university and its larger community. They were randomly assigned to a problem-solving (PS) training program (N=26 couples) or to a relationship discussion (RD) group (N=28 couples).

The PS group participated in eight, three-hour problem-solving training sessions (24 hours total). Each group consisted of three or four couples, and was facilitated by a graduate student trained in problem-solving skills. RD couples also met three hours a week for eight weeks (24 hours). They were assigned selected relationship development readings, supervised in discussions about the readings, and encouraged to apply the readings to their relationship.

Training in the PS group focused on learning three communication skills: owning thoughts and feelings; listening and reflecting thoughts and feelings; and using open-ended questions (questions that cannot be answered by a "yes" or "no" response). Problem-solving steps were introduced and practiced sequentially throughout the training. These steps included: exploring the problem area; defining the problem in relationship terms; identifying how each partner contributes to the

problem; stating a relationship goal; generating alternative solutions; evaluating alternative solutions; selecting the best solution; implementing a solution; and evaluating progress.

The independent variable consisted of four 20-minute audiotaped conversations (two pre-test and two post-test) which were completed by each PS and RD couple. The stimulus for the first pre-and post-test conversation was a role-play situation which depicted a typical problem experienced by premarital couples. The second pre-and post-test conversation was based on a real problem from the couple's relationship.

Verbal responses for each audiotaped conversation were scored to assess the problem-solving skills for each partner. Respondent's scores were determined by the number of times he/she made statements consistent with the operational definitions for the communication skills and the problem-solving steps.

Scoring was conducted by two independent judges who were trained for 25 hours to use the problem-solving scoring procedure. To determine inter-rater reliability, each judge independently rated audiotapes of couple interactions similar to those to be rated in the study. A Pearson Product Moment correlation (r) was calculated between the scores of the two judges. Interrater reliability on the communication skills ranged from a low of r=.88 on summary statements to a high of r=.94 on open questions. Interrater reliability on the problem-solving steps ranged from a low of r=.90 on Exploring the Problem to a high of r=.95 on Stating Goals.

An analysis of variance was performed on the pre-test data to determine if there were group or sex differences prior to training. The

PS group was not significantly different from the RD group, and no significant sex differences existed.

Evidence for a treatment effect was derived from an analysis of variance (treatment x group). The results indicate that the PS group showed a significant increase for all communication skills and problem-solving steps: "I" Messages, $t=129.63$, $p<.0001$; Summary Statements, $t=166.71$, $p<.0001$; Define Problem, $t=96.15$, $p<.0001$; Identify Contributions to Problem, $t=145.69$, $p<.0001$; State Goal, $t=168.75$, $p<.0001$; Generate Alternatives, $t=57.68$, $p<.0001$; Evaluate Alternatives, $t=194.68$, $p<.0001$; Select Alternatives, $t=248.58$, $p<.0001$.

Although the issues identified by Ridley and associates in the training were couple oriented, the skills are generalizable to managing interpersonal conflict in organizations. According to the results of the training, the program successfully taught the skills necessary for managing conflict and induced significant behavior changes in the experimental group participants.

Ingari (1982) evaluated a one-day conflict management workshop for state agency personnel (N=74). The effectiveness of the workshop was based on participants' attitude about the program and cognitive learning. To elicit attitudinal data, semantic differential scales were used for the concepts "Conflict", "Assertiveness," and "Listening." The score for "Conflict" ($t=5.70$, $p<.0001$) indicated the workshop had a positive effect on attitude. Scores for "Assertiveness," and "Listening" were not significant. There was a significant difference in

the cognitive pre- and post-test scores ($t=10.9$, $p<.0001$). Thus, attendance at the workshop dramatically increased participants' knowledge about conflict.

A conceptual training model to teach conflict management in organizations is presented in a study by Swanson (1983). His study develops six criteria that an adequate training model must meet. The model must be relatively easy to remember and use, allow for interpolation, extrapolation and prediction, view conflict from a systems perspective, utilize a social psychology perspective, have a situational perspective, and encourage communication about the conflict.

The Swanson model contains two phases. Phase I (Understanding the Conflict) consists of various concerns about the conflict: Who are the parties in conflict?; When is the conflict occurring?; Where is the conflict occurring?; and, How do the parties to the conflict conduct their interaction? Phase II (Managing the Conflict) deals with the behaviors and skills necessary to manage the conflict. The critical questions at this phase are: Can the parties share a common definition of the conflict?; Can the parties share their reasons for the conflict?; Can the parties share their reasons for the conflict; When is the optimum time to manage the conflict?; Where is the appropriate environment to manage the conflict?; and How can the conflict be managed? The result of this research is a structural framework for trainers and a frame of reference to guide the trainee's behavioral choices in a conflict situation.

Summary

The review of the literature on conflict management training did not reveal any studies which attempted to use behavior modeling as the training approach. Also, there was only one study conducted in an organization where behavioral change was used as the measure of training effectiveness.

The studies in this review can be grouped into three categories: (1) studies which use cognitive learning as the primary measure of effectiveness (Essex, 1979; Ingari, 1982); (2) studies which focus on training for unique populations (Becker, 1978; Essex, 1979; Butler, 1979; Bright & Robin, 1981; Ridley et al., 1981) and (3) studies which design training program content (Butler, 1979; Howell, 1981, 1983). While these studies are important and provide a foundation for this research, they do not offer insight into the effectiveness of behavior modeling for training managers to manage conflict.

CHAPTER 3

METHODOLOGY

This chapter presents a discussion of the methodology used in the present study. The chapter consists of the following sections: Sample, Experimental Design, Instrumentation, Experimental Procedures, and Statistical Analysis.

Sample

The subjects for this study were forty-eight (48) managers from an industrial organization in central Virginia. The organization is a division of a large, diversified, multi-national corporation. The organization reflected in the present study has approximately 12,000 employees.

The managers included in this study were invited to participate in the experimental phase. In a needs assessment, they had identified conflict management as a skill deficit. The managers knew they were participating in a study. They were not aware, however, of the experimental conditions, assuming the training was conducted separately for logistical reasons.

Managerial experience ranged from six months to twelve years. The age range was from 27 years of age to 59 years of age. The race/sex composition included twenty-four (24) white males, seven (7) minority males, fourteen (14) white females and two (2) minority females.

Experimental Design

The design used for this study was a combination of pre-test/post-test control group design and the post-test only control group design. It is a form of the Solomon four-group design. Symbolically, the design can be diagrammed:

Group IA	R	A_1	T_1	T_2	A_2
Group IB	R		T_1	T_2	A_2
Group IIA	R	A_1	T_1	T_2	A_2
Group IIB	R		T_1	T_2	A_2

where "A" equals assessment and "T" equals training. This design was chosen because it combined the virtues of "our best two designs" (Kerlinger, 1973). All sources of internal validity are controlled and "the interaction of testing and X are determinable" (Campbell & Stanley, 1963).

The subjects were randomly assigned to one of the four conditions. The two experimental treatment groups were (1) Group I = behavior modeling/no video feedback (N=24), and (2) Group II = behavior modeling training/video feedback (N=24). Each sub-group, or condition, had twelve (12) subjects.

The dependent variables, collaborative problem-solving behaviors, were collected by having the subjects participate in a semi-structured role-play. They assumed the role of a manager attempting to correct a

performance problem. Each subject was presented with the same core problem, but no scripts were provided. These role-plays were videotaped, retained, and assessed independently by three trained assessors to produce the dependent variables. The assessors were blind to treatment and condition.

Instrumentation

The Conflict Management Assessment form (CMAF) was designed by the researcher to collect the data for this study. The CMAF consists of seven (7) behavioral statements which parallel the learning points presented in the training, plus an overall summary item.

Each behavioral statement and the summary item has a 5 point rating scale assigned to it (1=less than adequate, 5=more than adequate). The rating scale was behavioral anchored at the extremes (#1 and #5) and in the middle (#3). The behavioral anchors provided descriptors illustrating effective, average and ineffective performance for each behavioral statement (see Appendix A).

Experimental Procedures

The procedures for this research are outlined in the following subsections: Assessor Training, Role-Player Preparation, Training Procedures, and Data Collection.

Assessor Training. Approximately one month prior to the start of the study, a group of twenty individuals participated in a half-day (4 hours) assessor training program. The purpose of the session was to provide an overview of the study, to review the role of the assessor, to familiarize them with behavioral observation and documentation, and to give them practice using the rating scale (see Appendix B).

Role-Player Preparation. Four (4) role-players were used in the pre- and post-assessment center role-plays. They were coached on specific behaviors to provide consistency in the quality of the employee role. They each participated in approximately eighteen role-plays and were blind to treatment.

Training Procedures. The training groups met for two, four-hour training sessions, each focusing on a specific conflict situation and the skills needed to manage it. The first session focused on correcting a performance problem (see Appendix C) and the second session addressed discussing disciplinary action with an employee (see Appendix D). Although each unit had a distinct focus, a goal of the training was to have the managers master a generic set of conflict management skills and to effectively integrate these skills into their management style and behavior.

The managers met in groups of twelve (12) by experimental condition for two four-hour sessions scheduled one week apart. Except for the experimental manipulation, all four training groups followed the same format in each of the sessions: (1) introduction of the topic, (2)

presentation and discussion of the learning points, (3) view a video-taped model demonstrate effective use of the learning points, (4) discussion of the model, (5) review the video-taped model, and (6) skills practice.

The skills practice within a session was accomplished by dividing the participants into three four-person groups with a facilitator. The participants in each sub-group were given an opportunity to behaviorally rehearse the learning points. The rehearsals were based on situations the participants generated from actual experience. Another participant role-played the subordinate in each instance. After each role-play, the participant-manager received feedback/reinforcement from the other trainees and the facilitator. The experimental manipulation which differentiated Group I - behavior modeling without video feedback from Group II - behavior modeling with video feedback was that each rehearsal in Group II was video-taped and replayed for the participants so the "manager" could observe behavior illustrating comments given during the feedback segment.

Data Collection. Two weeks before the training started, 24 subjects (Group IA = 12 and Group IIA = 12) were asked to participate in a special behavioral assessment center. They were asked to role-play a manager while a role-player assumed the employee role. The "manager" was asked to resolve a performance problem. Every participant was given the same problem (see Appendix E), but no scripts were provided. These role-plays were video-taped and retained.

Two weeks after the training was concluded, all 48 subjects were asked to participate in a follow-up assessment center. The participants were given the same performance problem presented in the pre-training assessment center. Once again the role-plays were video-taped and retained.

A week after the post-training role-plays were collected, the pre- and post-video tapes were evaluated independently by three assessors who had received training in behavioral observation and documentation and the use of the rating scale constructed expecially for the evaluation process in this study. A total of eighteen (18) assessors were used. Three were assigned to pairs of subjects, were used for both groups and were blind to treatment. The judges were assigned to get an estimate of the variation between subjects that was not contaminated with judge effects and to account for differences in judges. It did involve a sacrifice in the degrees of freedom, but it provided a better job of accounting for the sources of variation in the data. Mainly, it accounted for the variation among judges' use of the rating scale. The procedure also reduced the error term (see Appendix F).

Statistical Analysis

The data collected for this study were analyzed by means of analysis of variance with terms for the effects of the two methods, for effects of pre- vs. post-, for interaction between method and pre- vs. post-, for judges and for subjects. All of these were fixed effects except for subjects which were random effects. Subjects were assumed to be a sample of the population to whom the results should apply, but

judges were assumed to constitute the entire population of judges. This model was chosen because it accounted for the effects of judges and subjects and so the variance between subjects could be used to test these effects. The BMDP2V statistical program was used to test the effects of methods, pre- vs. post-, interaction and judges. Variance between subjects was calculated by averaging the variation between subjects who were rated by the same judges for all such pairs of subjects (see Appendix G).

CHAPTER 4

RESULTS

In this chapter, the data analysis and findings of the present study are presented and described. In discussing the findings, the two hypotheses are addressed separately.

Hypothesis 1

The first hypothesis predicted that behavior modeling would be an effective method for training managers in conflict management skills. A two-way analysis of variance was performed on the assessors' rating scores for the 24 managers who participated in both pre- and post-assessemnt conditions. A separate analysis was performed on each scale. Pre-assessment vs. post assessment scores comprised the within subjects measure; training method was a between subjects variable. The analyses examined the main effects of pre- vs. post-assessment, method, assessment by method interaction and judges. The results for each behavioral statement, 1-8, revealed F-ratios ranging from 22.47 to 124.84 at 1 and 111 degrees of freedom. The results for each scale were significant at any of the traditionally accepted levels of confidence (see Table 1).

Table 1

PRE-ASSESSMENT VS. POST-ASSESSMENT

Behavioral Statement	*Degrees of Freedom	F-Ratio	Probability
1	1/111	22.47	< .01
2	1/111	24.86	< .01
3	1/111	30.68	< .01
4	1/111	36.77	< .01
5	1/111	53.91	< .01
6	1/111	36.53	< .01
7	1/111	124.84	< .01
8	1/111	120.72	< .01

*Degrees of Freedom = Total df (143) minus sum of df for other sources of variation (32).

Hypothesis 2

The second hypothesis predicted that videotaping participants' role plays for use as feedback (Group 2) would produce greater gains than behavior modeling training without video feedback (Group 1). A two-way analysis of variance performed for all 48 managers tested the effects of method, pre-test vs. no pre-test, interaction and judges. The between subject analyses was performed separately on each of the eight scales. When considering only assessors' post-training evaluations, there was no main effect attributable to prior exposure to the pre-assessment problem. In addition, results indicate no grouping effect of judges, no method by assessment condition interaction and, most importantly, no significant effect of training method.

The test of this main effect for behavioral statements 1, 2, 4, 5, 6, and 7 resulted in an F-ratio of < 1 at 1 and 24 degrees of freedom. The F-ratio for item #3 was 12.50 at 1 and 24 degrees of freedom. The F-ratio for item #8 was 1.80 at 1 and 24 degrees of freedom. The results for all items, except item #3 were not statistically significant and, therefore, Hypothesis 2 was rejected (see Table 2).

Table 2

GROUP 1 VS. GROUP 2

Behavioral Statement	*Degrees of Freedom	F-Ratio	Probability
1	1/24	< 1	> .05
2	1/24	< 1	> .05
3	1/24	12.50	< .05
4	1/24	< 1	> .05
5	1/24	< 1	> .05
6	1/24	< 1	> .05
7	1/24	< 1	> .05
8	1/24	1.80	> .05

*Degrees of Freedom = one (1) df for each pair of subjects (see Appendixes F and G).

Discussion of Findings

The results of the analysis of the data indicated that Hypothesis 1 was accepted and Hypothesis 2 was rejected. The fact that differences between pre-training and post-training assessments were significant, but that behavioral ratings of managers who had no exposure to the pre-training problem were comparable to ratings of managers who were previously assessed, suggests that the differences are attributable to the behavior modeling training. The effect of training was significant for all eight performance scales. The results for Hypothesis 1 were consistent with previous research on behavior modeling training demonstrating that it is an effective training method.

The comparison of behavioral ratings for managers in conditions IA and IIA indicated that: (a) there was no significant effect of judges or of training method (video feedback versus no video feedback), and no significant method by assessment interaction, and (b) there was a significant effect of pre- vs. post-assessment ratings. For the 24 managers participating in both pre- and post-assessments, there was a significant difference between assessors' ratings given prior to behavior modeling training and evaluations given after these managers had completed the two training sessions. The fact that these results were evidenced on all eight scales provides strong support for the first hypothesis.

The results failed to support Hypothesis 2; i.e. that using video-taped feedback would improve the role-play/feedback segment. The fact that there were no significant differences between behavior modeling training/no video feedback and behavior modeling training/video feedback

suggests that inclusion of a video-taped replay of the rehearsal attempt does not make the practice session more effective. Although the video-taped feedback increased the amount of feedback to the participant, the post-training assessments did not produce a more accurate behavioral reproduction as judged by assessor ratings. These results suggest that although the amount of feedback was increased, the quality of the feedback was not improved by using video-taped feedback during the practice session.

Another explanation for the lack of significant difference between Method 1 vs. Method 2 may be explained by the lack of skill with which the participants entered the training. As a group, the participants were completely inept in this skill area. The results indicate that two, four hour training sessions could produce only a limited amount of change. Video-taped feedback might enhance reinforcement in training where the participants have had prior training or in one-to-one coaching situations between a participant and facilitator outside the training session.

Finally, the CMAF itself may not be sensitive enough to measure the differences between the two methods and the simulation design may have prevented certain behaviors from being exhibited. It was difficult to assess scale #2, Ask for Reasons, because the roleplayers supplied reasons before being asked. For scale #5, Evaluate Alternatives, the simulation did not easily lend itself to displaying this behavior. The behavior "Incorporates Employee's Ideas" in scale #6, Select an Alternative, was difficult to assess because the roleplayers did not really generate any ideas. On scale #7, Follow-Up, there was ambiguity

regarding how to evaluate follow-up meetings that were mentioned but were not for the purpose of discussing progress. Also it was difficult for the assessors to ascribe an overall rating on scale #8 since they were not given guidelines on weighting the seven specific scales.

Appendixes F and G illustrate the rationale for the assignment of assessors to participants. These appendices show that subjects 1 and 2, for example, were treated exactly the same with respect to method, measurement time, and judges. Their total scores differ only due to participant effects (1 vs. 2) and error. The same is true for other pairs of participants, 3 and 4, 5 and 6, etc. Each pair of participants gives one estimate, independent of all others, of the variation between participants ($30_s^2 + 0^2$, actually) because of the assignment of judges. Also, each set of scores (Method 1 -Pre, Method 1 -Post, etc.) has each judge represented the same number of times.

Method 1 and Method 2 differ only because of the effects of the training method and different participants. Pre- and post-assessments differ because of the effect of training and not due to participants.

Summary

The practical significance of this study is that it supports earlier research which indicates that behavior modeling is an effective method for helping managers acquire specific leadership skills. The components of behavior modeling training were formalized from social learning theory by Goldstein and Sorcher (1974). This study, taken with the previous research, indicates that complex social leadership skills can be acquired by participants in a relatively short period of time

provided the basic components of behavior modeling training are adhered to by the facilitator. "At a theoretical level, behavioral modeling works because of reciprocal interactions among cognitive, behavioral, and environmental variables... [It] allows the trainees to try new behaviors, to experience different consequences, and to accurately perceive the outcomes" (Latham & Saari, 1979, p. 246).

CHAPTER 5

SUMMARY, CONCLUSIONS AND IMPLICATIONS

In this chapter, the findings of the data analysis will be reviewed and conclusions will be drawn from these findings. The implications of the study for management training and development and further research will be discussed. The chapter includes the following sections: Summary, Conclusions, and Implications.

Summary

Industrial/organizational psychologists and management development specialists have been occupied for many years with the issue of how to develop managerial skills. This research utilized behavior modeling training, developed from the tenets of social learning theory, to improve the conflict management skills of managers in one industrial organization.

The researcher sought to determine (1) if behavior modeling was an effective method for improving manager's conflict/management skills, and (2) if videotaping participant's role-plays and replaying them during the feedback segment enhanced the training. Experimental variables included behavior modeling training/no video feedback and behavior modeling training/video feedback. The dependent variables included assessments of 24 participant's pre-training role-play and all participant's post-training role-play. The behavioral scores were produced by eighteen assessors, three for each role-play, who had received training in behavioral observation and documentation. The scores were

collected on a researcher designed instrument, the Conflict Management Assessment Form (CMAF). The CMAF consists of seven (7) behavioral statements which parallel the learning points presented in the training and one overall summary item. Each behavioral statement and the summary item has a 5-point rating scale assigned to it. The rating scale is behaviorally anchored at the low and high ends and in the middle to illustrate ineffective vs. effective performance for each statement.

Conclusions

The results indicate that behavior modeling influences scores on the eight dependent measures (scales) comprising the Conflict Management Assessment Form. However, behavior modeling training with video feedback has no more effect on the dependent measures than behavior modeling training without video feedback. In summary, Hypothesis 1 was accepted and Hypothesis 2 was rejected.

Discussion

Training programs are typically evaluated by reaction sheets given to participants at the conclusion of a session. If participants "like" the training, it is continued until someone decides it needs to be changed or is obsolete. The evaluation process is extremely subjective and no one knows if the training attained its objectives.

The assessment method for the present study distinguished it from most approaches to training evaluation. Measurement criteria for evaluating the training were established before it started and were

concerned with the participant's ability to behaviorally demonstrate the skills presented in the training.

The effect of behavior modeling training on assessors' rating scores supports findings from earlier research. The participants learned a set of conflict management skills quickly and were able to demonstrate these behaviors in a simulation.

In terms of the training methodology under investigation, the results fail to support the hypothesis that the use of video feedback during the reproduction segment will produce greater gain scores than without video feedback. In addition to seeing no main effect of method, there was no significant effect of pre-test vs. no pre-test, and no interactions.

A possible explanation for the lack of support of Hypothesis 2 is that the effect of behavioral modeling itself overshadows any effect attributable to manipulation of one component. This explanation is suggested by the large delta scores reported in previous research. One exception is evidenced in rating differences on Scale 3. Visual feedback given in the experimental group may have improved performance on an otherwise difficult step to conceptualize.

Although there were no significant "judge" effects, future research could benefit from the following modifications: (a) have the same rater judge a participant in both the pre- and post-assessment, (b) reduce the number of assessors to a core group who evaluates everyone, (c) ask the group to generate a single concensus score for each participant on each scale. These procedures would control more tightly for variation among raters.

Additionally, the scaling used to derive the dependent measure could be modified. In the present study, each judge made an evaluation of the participant on eight scales. Each scale contained a content and process behavioral anchor. These two components were weighted by the judge to yield a final rating. To avoid rater-to-rater differences in the weighting process, the process component for each scale could be separate and comprise a ninth scale. The final measure would then be seven behavioral content ratings, one behavioral process rating and one overall composite rating for each participant.

Implications for Future Research

The role of the management development specialist is to immerse managers in programs which alter their interaction style. Traditionally, training has exposed managers to basic organizational behavior and leadership theory. The approach to training has been to use lecturing, discussion, case studies, skill-building exercises and role-plays. Through these efforts managers have had their consciousness raised and are aware of the "people skills" component of management.

Unfortunately, most managers do not know how to apply their increased awareness. What management development specialists need to provide is training which develops the skills required for effective managerial performance. Behavior modeling is a useful skills development training method.

Research can help refine the method. Future research needs to determine whether skill-building training (active listening, questioning) prior to behavior modeling would enhance the method and how

long the changes from training will endure. Research needs to explore the cost/benefit ratio of modeling vs. other training techniques, and the usefulness of behavior modeling for intact work groups and organization development opportunities.

Behavior modeling training has been shown to be a powerful training method for changing behavior. Further research can both enhance the approach and expand our understanding of the adult learning process and management development.

APPENDICIES

APPENDIX A

CONFLICT MANAGEMENT RATING SCALE

1.....2.....3.....4.....5

(less than adequate) (adequate) (more than adequate)

Definitions

A "less than adequate" rating is reflected as a number less than 2.5. A number within this range indicates that the participant did not behaviorally demonstrate the necessary amount or level of skill on a given dimension to be considered effective.

An "adequate" rating is reflected as a number equal to or between the points 2.5 and 3.5. A number within this range indicates that the participant behaviorally demonstrated the necessary amount or level of skill on a given dimension to be considered effective.

A "more than adequate" rating is reflected as a number greater than 3.5. A number within this range indicates that the participant behaviorally demonstrated a greater amount or level of skill than is necessary on a given dimension to be considered effective.

1. Describe the Problem: State the problem and its impact on the effective operation of the business.

1.....2.....3.....4.....5

(less than adequate)	(adequate)	(more than adequate)
A. Does not state the problem or the impact	A. States the problem, but not the impact	A. States the problem and the impact
B. Speaks softly and is misunderstood	B. Speaks softly and clearly, but can be understood	B. Speaks clearly and is easily understood
C. Is hostile and aggressive	C. Seems unconcerned	C. Supportive, Calm tone of voice

2. Ask for Reasons and Listen Attentively: Give the employee an opportunity to comment and discuss causes of the problem. Probe and clarify to ensure the employee's comments are understood.

1.....2.....3.....4.....5
(less than adequate) (adequate) (more than adequate)

A. Does not give the employee an opportunity to comment	A. Gives the employee an opportunity to comment, but does not probe and/or clarify	A. Gives the employee an opportunity to comment and probe and/or clarifies
B. Does not discuss causes/reasons for the problem	B. Discusses causes reasons for the problem, but does not probe and/or clarify	B. Discusses causes/reasons for the problem and probes and/or clarifies
C. Rudely interrupts, attacks and criticizes the employee	C. Usually listens but tends to criticize without indicating an understanding	C. Listens attentively and is diplomatic and shows understanding when criticizing

3. Define Needs: Ask for the employee's agreement to solve the problem and explain why.

1.....2.....3.....4.....5

(less than adequate)	(adequate)	(more than adequate)
A. Does not ask for the employee's agreement to solve the problem	A. Asks for the employee's agreement to solve the problem	A. Asks for the employee's agreement to solve the problem and explains why
B. Is hostile and aggressive	B. Seem unconcerned	B. Supportive, calm tone of voice
C. Speaks softly and is misunderstood	C. Speaks softly and clearly, but can be understood	C. Speaks clearly and is easily understood

4. Generate Alternatives: Mutually identify a list of possible solutions

1.....2 (less than adequate)	3 (adequate)	4.....5 (more than adequate)
A. Does not encourage generating a list of possible solutions	A. Encourages generating a list	A. Encourages generating a list and states why
B. Does not ask for the employee's ideas	B. Asks for the employee's ideas, but does not add his/her own suggestions	B. Asks for the employee's ideas and adds his/her own suggestions
C. Is hostile and aggressive	C. Seems unconcerned	C. Supportive, calm tone of voice
D. Speaks softly and is misunderstood	D. Speaks softly and clearly, but can be understood	D. Speaks clearly and is easily understood

5. Evaluate Alternatives: Discuss the positive and negative points of each alternative and its feasibility.

1.....2 (less than adequate)	3 (adequate)	4.....5 (more than adequate)
A. Does not discuss the positive/negative aspects of each alternative	A. Tells the employee the positive/negative aspects of each alternative that she/he perceives	A. Discusses the positive/ negative aspects of each alternative and asks for the employee's input
B. Is hostile and aggressive	B. Seems unconcerned	B. Supportive, calm tone of voice
C. Speaks softly and is misunderstood	C. Speaks softly and clearly, but can be understood	C. Speaks clearly and is easily understood

6. Select An Alternative(s): Decide on specific action to be taken by each (supervisor and employee) and plan who will do what, when, where, and how often.

1.....2 (less than adequate)	3 (adequate)	4.....5 (more than adequate)
A. Does not decide on specific action to be taken by each nor plan who will do what, when, where, and how often	A. Decides on a specific action by "dictating" to the employee	A. Involves the employee in deciding on a specific action and plans who will do what, when, where, and how often
B. Does not incorporate employee's ideas when developing solution	B. Develops solution without incorporating employee's ideas very much. Solution is not totally acceptable to employee	B. Incorporates employee's ideas in formulating solution; solution is feasible
C. Is hostile and aggressive	C. Seems unconcerned	C. Supportive, calm tone of voice
D. Speaks softly and is misunderstood	D. Speaks softly and clearly, but can be understood	D. Speaks clearly and is easily understood

7. Follow-Up: Agree on a specific time to discuss and evaluate progress.

1.....2 (less than adequate)	3 (adequate)	4.....5 (more than adequate)
A. Does not suggest follow-up	A. Follow-up suggested but no definite time set	A. Mutually establishes time to discuss and evaluate progress
B. Is hostile and aggressive	B. Seems unconcerned	B. Supportive calm tone of voice
C. Speaks softly and is misunderstood	C. Speaks softly and clearly, but can be understood	C. Speaks clearly and is easily understood

8. Overall Rating: The degree to which this individual effectively manages a problem-solving discussion.

1.....2 (less than adequate)	3 (adequate)	4.....5 (more than adequate)
A. Demonstrates less than half of the problem-solving behaviors	A. Demonstrates about half of the problem-solving behaviors; some effective, some ineffective	A. Demonstrates all the problem-solving behaviors effectively
B. Emotional, nervous or hostile in trying to get his/her point across. Is very quiet; voice cracks, etc.	B. Somewhat patient and understanding, occasionally gets critical and aggressive	B. Patient, consistent, and understanding in dealing with employee; smooth voice tone; calm responses to questions

APPENDIX B

Assessor Training

I. Introduction

1. Objectives of the study
2. Program Overview

A. Design
B. Data Collection
C. Behavioral Skill Dimensions

II. Role of the Assessor

III. Behavioral Observation and Documentation

1. Definition of a Behavior
2. Criteria for Making Behavioral Observations
3. Note-Taking Suggestions
4. Classifying Behaviors into Dimensions
5. Rating Scale

IV. Practice Session

1. View Videotape
2. Observe and Record Behaviors
3. Classify Behaviors
4. Rate Behaviors

V. Discussion and Closing Comments

APPENDIX C

IMPROVING EMPLOYEE PERFORMANCE AND WORK HABITS

Purpose: The purposes of this session are to . . .

. Discuss the need for the skill.

. Review the critical steps for improving employee performance and work habits.

. Practice using the steps.

Objective: At the conclusion of this session, the participants will be able to . . .

. Demonstrate and use the critical steps for improving employee performance and work habits.

MODULE 1 - INTRODUCTION

Time Required: 30 Minutes
Materials: None

1. Opening

   Trainer introduces self and asks participants to introduce themselves giving information of their choice.

2. Housekeeping

   Breaks, restroom facilities, etc.

3. Review Objectives

   Trainer discusses the objectives for the session and presents an overview of the half-day.

MODULE 2 - THE MODELING DISPLAY

Time Required: 1 Hour
Materials: A/V Equipment, Modeling Tape, "Critical Steps for Employee Performance and Work Habits"

1. Need for the Skill

There are times when you are faced with the problem of an employee who is under-performing or developing a poor work habit. As a supervisor, it is your responsibility to recognize these problems and to discuss them with your employees. A discussion about performance would refer to the quality or quantity of your employee's output. A discussion about a work habit would concern your employee's output. A discussion about a work habit would concern your employee's behavior at work. In any case, the problem can be a sensitive issue and must be handled effectively for there to be improvement.

The key is to handle the discussion with your employee in a way that he/she is motivated to improve. If an improvement or change is due to fear or threats, the improvement will be short-lived and there may be other negative side effects, such as complaints to fellow workers or attempts to reduce your work group's effectiveness. For sure, you have to convince your employee that he/she must improve, but you can do this in a way that motivates your employee to want to improve. Without this motivation, there is really no other way that you, as a supervisor, can successfully improve the performance of your work group.

Three important elements for motivating your employee to improve a performance or work habit problem are:

1) Focus on the problem and its consequences, not personality. Generalities like "sloppy," "lazy" or "poor attitude" usually make your employee react defensively. Your employee can more easily deal with the problem if you focus on specific examples of behavior or performance. Still, the employee may avoid discussing the actual problem. Focusing on specific employee behaviors helps you manage the discussion so that the situation is discussed and approached as a problem to be mutually solved.

2) Actively listen to what your employee has to way. There may be good reasons for the poor performance or work habit. By listening to your employee's viewpoint, you are then in a much better position to handle the situation. Before you and your employee agree on what action to take, gather all the facts: 1) those that you have observed, 2) those that come from your employee, and 3) the relevant policies and procedures.

3) Ask for your employee's help in solving the problem. Being patient and encouraging your employee to come up with ideas shows that you value and have confidence in your employee's ideas and experience. If he/she suggests a useful solution to the problem, try to use this idea. This will do much to enhance your employee's self-esteem and commitment toward solving the problem.

   You are attempting here to make this discussion a non-threatening talk about your employee's behavior. Talk directly with your employee. Direct your attention and comments to your employee. Keeping your employee involved in the discussion helps gain his/her commitment to improve and shows your interest in helping your employee resolve the problem.

2. Critical Steps

   The trainer distributes and discusses the steps for improving employee performance and work habits.

3. Preparing the Group

   Briefly introduce the setting and situation the participants will see in the modeling display. Cue them to observe specific events that will take place. Provide brief references to the relevance of the situation for the group.

   Ask participants to document, i.e., take complete notes. The notes should contain behavioral descriptions of specifically what is said and done.

4. View Modeling Display

   Participants watch the modeling tape and observe and document the behaviors of the model.

5. Identify Significant Behaviors

   The trainer leads a discussion which encourages the participants to describe the model's effective behavior(s) in each critical step.

6. Replay Modeling Display

   The modeling tape is shown to the participants a second time.

MODULE 3 - SKILL PRACTICE AND FEEDBACK

Time Required: 2 Hours, 15 Minutes
Materials: A/V Recording Equipment and Blank Tape; Employee Description Form

1. Skill Practice

The participants practice role playing the desired behaviors in groups of three. Participants use the situation they have prepared and brought to the session on their work sheets.

*Special Note - For the video feedback group, the practice session is video-taped before the group and played back for discussion.

2. Feedback and Reinforcement

Have the skill practice supervisor critique self and describe what he/she would change in handling the situation again.

Ask the "subordinate" how they felt in their role and whether they felt the "supervisor" listened to them.

Observer provides feedback. State the ground rules for effective feedback which include:

a) Address all feedback to the "supervisor."

b) Refer to specific behavior/dialog from the exercise.

c) Indicate why the behavior/dialog was effective or ineffective.

d) If the behavior/dialog was ineffective, provide an alternative positive behavior and rationale.

*Special Note - For the video feedback group, the video-taped rehearsal is replayed to enhance the feedback session.

MODULE 4 - CONCLUSION

Time Required: 15 Minutes
Materials: Evaluation Forms, Discussing Disciplinary Action Worksheets

1. Preparation

   . Trainer discusses need to prepare before taking action.

2. Summary

   . Briefly review the objectives for the session.
   . Briefly review the critical steps and answer any questions.

3. Assignment

   . Distribute worksheets for next session.

4. Evaluation

   . Participants complete evaluation forms.

CRITICAL STEPS FOR IMPROVING EMPLOYEE PERFORMANCE AND WORK HABITS

1. Describe the Problem

   State the problem and its impact on the effective operation of the business. Focus on the problem and stay away from personalities.

2. Ask for Reasons and Listen Attentively

   Give the employee an opportunity to comment and discuss causes of the problem. Probe and clarify to ensure the employee's comments are understood.

3. Define Needs

   Ask for the employee's agreement to solve the problem and explain why. Employee participation helps reduce resistance and increases commitment to change.

4. Generate Alternatives

   Mutually identify a list of possible solutions. By asking for the employee's ideas, you are communicating that the employee is mutually responsible for solving the problem and that you are willing to discuss his/her suggestions.

5. Evaluate Alternates

   Discuss the positive and negative points of each alternative and its feasibility.

6. Select an Alternative(s)

   Decide on specific action to be taken by each of you and plan who will do what, when, where, and how often.

7. Follow-Up

   Agree on a specific time to discuss and evaluate progress.

IMPROVING EMPLOYEE PERFORMANCE AND WORK HABITS

1. Describe the specific performance problem or poor work habit that necessitates a discussion.

_____

_____.

2. Reason(s) why this concerns you.

_____

_____.

3. List the subordinate's performance expectations as they are assumed to have been expressed previously by the supervisor (formal objectives, goals, or targets: job duties or functions: or standards). Assess the subordinate's progress to date regarding each expectation.

Performance Expectations	Progress to Date
a. _____	a. _____
_____	_____
b. _____	b. _____
_____	_____
c. _____	c. _____
_____	_____

4. Relate any specific, job-related, negative behaviors that may have a current or future effect on the subordinate's performance and/or job mobility (work habits, personal relationships, technical or management skills, and so forth).

_____

_____.

5. How might the employee feel and respond in the discussion? What reasons might they give?

_____

_____.

6. How would you respond to the feelings/reasons?

_____

_____.

7. What solutions could you offer?

_____

_____.

IMPROVING PERFORMANCE AND WORK HABITS

OBSERVER FEEDBACK FORM

FOR FEEDBACK AND DISCUSSION:

1. What was the problem? How did the "supervisor" focus on the problem and get the employee involved?
2. What were the effective behaviors you observed in each critical step?
3. What alternative positive behaviors can you suggest?

CRITICAL STEPS

List the behaviors you observed in each step.

1. Describe the problem

_____

_____.

2. Ask for reasons and listen attentively.

_____

_____.

3. Define needs.

_____

_____.

4. Generate Alternatives.

_____

_____.

5. Evaluate Alternatives.

_____

_____.

6. Select an alternative(s).

_____

_____.

7. Follow-up.

_____

_____.

APPENDIX D

DISCUSSING DISCIPLINARY ACTION

Purpose: The purposes of this session are to...

- Discuss the need for the skill.
- Review the critical steps for discussing disciplinary action with an employee.
- Practice using the steps.

Objective: At the conclusion of this session, the participants will be able to...

- Demonstrate and use the critical steps for discussing action.

MODULE 1 - INTRODUCTION

Time Required: 30 Minutes
Materials: None

1. Opening

   . Trainer introduces self.

   . Ask participants to introduce self and make a statement about what they learned in the first session.

2. Housekeeping

   . Breaks, etc.

3. Review Objectives

   . Trainer discusses the objectives for the session and presents an overview of the half-day.

MODULE 2 - THE MODELING DISPLAY

Time Required: 1 Hour
Materials: A/V Equipment; Modeling Tape; "Critical Steps for Discussing Disciplinary Action"

1. Need for the Skill

Your employee's performance or work habit may still not have improved even after several discussions. These previous discussions included talking about the problem, agreeing on what to do to correct it, and clarifying what the consequences would be if there was no improvement. In this discussion you now need to talk to your employee not only about why there has been no improvement but also about whether or not you will take any disciplinary action.

When you enter into this discussion with your employee you need to keep two options open--to take or not to take disciplinary action. After talking things over with your employee, you may feel that your employee has some legitimate reasons why his/her performance or work habit still has not improved. In this case, taking any disciplinary action at this point would be unwarranted. Instead, the discussion turns into another counseling discussion.

If in using your discretion, you feel that the reasons given for lack of improvement are insufficient, then some form of disciplinary action is warranted. Although you are disciplining your employee, you still need to support your employee. The objective continues to be to help him/her improve. Your sincere support along with the added discipline will hopefully encourage your employee to correct the problem.

The first action you take will usually be mild, such as an oral reminder. If performance still does not improve, increasingly severe discipline is administered, sometimes resulting in termination.

If you use the option of taking disciplinary action, this discipline will be unpleasant for both you and your employee. As a supervisor you are probably disappointed that the problem was not resolved without formal disciplinary action. On the other hand, your employee will not want to be disciplined and may feel it is unfair. Therefore, you need to clearly state why the situation requires you to take the disciplinary action. Avoid making general statements like "It's the rule." Instead, give your rationale for the specific discipline, such as, "When an employee violates this safety practice and smokes in a hazardous area, he is immediately given a written reminder to emphasize the seriousness of this unsafe practice."

Your objective in this discussion continues to be to solve the problem and to encourage your employee to improve, not to punish your employee. Hopefully, the problem can be resolved without disciplinary action. If you feel discipline is necessary, administer it in a positive manner that emphasizes the importance of getting the problem solved.

2. Critical Steps

The trainer distributes and discusses the steps for handling a disciplinary discussion.

3. Preparing the Group

Briefly introduce the setting and the situation the participants will see in the modeling display. Cue them to observe specific events that will take place. Provide brief reference to the relevance of the situation for the group.

Ask participants to document, i.e. take complete notes. The notes should contain behavioral descriptions of specifically what is said and done.

4. View Modeling Display

Participants watch the modeling tape and observe and document the behaviors of the model.

5. Identify Significant Behaviors

The trainer leads a discussion which encourages the participants to describe the model's effective behavior(s) in each critical step.

6. Replay Modeling Display

The modeling tape is shown to the participants a second time.

MODULE 3 - SKILL PRACTICE AND FEEDBACK

Time Required: 2 hours, 15 minutes
Materials: A/V Recording Equipment and Blank Tape; Employee Description Form

1. Skill Practice

The participants practice role playing the desired behaviors in groups of three. Participants use the situation they have prepared and brought to the session on their work sheets.

*Special Note - For the video feedback, the practice session is video-taped and played back for discussion.

2. Feedback and Reinforcement

Have the skill practice supervisor critique self and describe what he/she would change in handling the situation again.

Ask the "subordinate" how they felt in their role and whether they felt the "supervisor" listened to them.

Observer provides feedback. State the ground rules for effective feedback which include:

(a) Address all feedback to the "supervisor."

(b) Refer to specific behavior/dialog from the exercise.

(c) Indicate why the behavior/dialog was effective or ineffective.

(d) If the behavior/dialog was ineffective, provide an alternative positive behavior and rationale.

*Special Note - For the video feedback group, the video-taped rehearsal is replayed to enhance the feedback session.

MODULE 4 - CONCLUSION

Time Required: 15 Minutes
Materials: Evaluation forms

1. Preparation

   . Trainer discusses need to prepare for the discussion.

2. Summary

   . Briefly review the objectives for the session.

   . Briefly review the critical steps and answer any questions.

3. Evaluation

   . Participants complete evaluation forms.

CRITICAL STEPS FOR DISCUSSING DISCIPLINARY ACTION

1. Describe the Problem

   State the specific rule, violation, or performance problem that provoked the need for disciplinary action and its impact on the business. Focus on the problem and stay away from personalities.

2. Review Previous Discussion(s)

   Refer to previous discussions to correct the specific problem area and the dates of those discussions. Indicate there has been insufficient improvement.

3. Describe the Step and Potential Consequences

   Inform the employee of the step of the disciplinary action and state the consequences of continued lack of improvement.

4. Ask for Reasons and Listen Attentively

   Give the employee an opportunity to comment and discuss causes of the problem. Probe and clarify to ensure the employee's comments are understood.

5. Define Needs

   Ask for the employee's agreement to solve the problem and explain why. Employee participation helps reduce resistance and increases commitment to change.

6. Generate Alternatives

   Mutually identify a list of possible solutions. By asking for the employee's ideas, you are communicating that the employee is mutually responsible for solving the problem and that you are willing to discuss his/her suggestions.

7. Evaulate Alternatives

   Discuss the positive and negative points of each alternative and its feasibility.

8. Select an Alternative(s)

   Decide on specific action to be taken by each of you and plan who will do what, when, where, and how often.

9. Follow-Up

   Agree on a specific time to discuss and evaluate progress.

CRITICAL STEPS FOR DISCUSSING DISCIPLINARY ACTION

EMPLOYEE DESCRIPTION FORM

1. Describe the Problem

2. Review Previous Discussion(s)

3. Describe the Step and Potential Consequences

4. Ask for Reasons and Listen Attentively

5. Define Needs

6. Generate Alternatives

7. Evaluate Alternatives

8. Select an Alternative(s)

9. Follow-Up

_____

_____

DISCUSSING DISCIPLINARY ACTION

OBSERVER FEEDBACK FORM

For Feedback and Discussion

1. What was the problem? How did the "supervisor" focus on the problem and get the employee involved?
2. What were the effective behaviors you observed in each critical step?
3. What alternative positive behaviors can you suggest?

Critical Steps

List the behaviors you observed in each step.

1. Describe the problem.

_____

_____.

2. Review previous discussions.

_____

_____.

3. Describe the step and potential consequences.

_____

_____.

4. Ask for reasons and listen attentively.

_____

_____.

5. Define needs.

_____

_____.

6. Generate Alternatives.

_____

_____.

7. Evaluate Alternatives.

_____

_____.

8. Select an Alternative.

_____

_____.

9. Follow-Up.

_____

_____.

APPENDIX E

Late Reports

Role-Player

Your supervisor has asked you to report to his/her office this morning to discuss the fact that an important monthly report has been coming in late during the last three months. Your report is due the second working day of each month, and you have been submitting it about 15 days late.

Reasons you may use for the report being late are:

- Information is not given to you on time.
- More important priorities.
- The secretary has been slow in typing the report and has made numerous errors. Thus, the turn-around time has been delayed.

Your objective during the meeting with your supervisor is to gain sympathy for your position and to try to put the burden for solving your problem on the supervisor's back.

LATE REPORTS

Participant

You have asked (name) to come to your office this morning. The employee has submitted a monthly report to you late for the last three months consecutively. The report is to be submitted by the second working day of the month. This individual has been submitting the report about 15 days late.

You have decided that the two of you need to discuss this matter to see if it can be corrected. You need this report to monitor progress and, if there are problems, to take corrective action. Your purpose is to:

- Convince the employee there is a problem.
- Determine the cause(s) of the problem.
- Figure out possible solution(s) to the problem that both of you can agree upon.

APPENDIX F

Training Method 1 with Pretesting

Assessors

Participants	1	2	3	5	6	7	8	9	10	11	12	13	15	16	17	18	19	20
1		B	B					B								A	A	A
2		B	B					B								A	A	A
3	A	A	A			B	B		B									
4	A	A	A			B	B		B									
5	B			B	B		A	A	A									
6	B			B	B		A	A	A									
7											A	A	A	B			B	B
8											A	A	A	B			B	B
9				A	A	A				B	B				B			
10				A	A	A				B	B				B			
11										A		B	B	A	A	B		
12										A		B	B	A	A	B		

Training Method 1 Without Pretesting

Assessors

Participants	1	2	3	5	6	7	8	9	10	11	12	13	15	16	17	18	19	20
13																A	A	A
14																A	A	A
15											A	A	A					
16											A	A	A					
17										A				A	A			
18										A				A	A			
19				A	A	A												
20				A	A	A												
21							A	A	A									
22							A	A	A									
23	A	A	A															
24	A	A	A															

A - After-training assessment
B - Before-training assessment

TRAINING METHOD 2 WITH PRETESTING

ASSESSORS

		1	2	3	5	6	7	8	9	10	11	12	13	15	16	17	18	19	20
P	25	A	A	A			B	B		B									
A	26	A	A	A			B	B		B									
R	27	B			B	B											A	A	A
T	28	B			B	B											A	A	A
I	29							A	A	A	B	B				B			
C	30							A	A	A	B	B				B			
I	31				A	A	A								B			B	B
P	32				A	A	A								B			B	B
A	33		B	B					B			A	A	A					
N	34		B	B					B			A	A	A					
T	35										A		B	B	A	A	B		
S	36										A		B	B	A	A	B		

TRAINING METHOD 2 WITHOUT PRETESTING

Assessors

		1	2	3	5	6	7	8	9	10	11	12	13	15	16	17	18	19	20
P	37				A	A	A												
A	38				A	A	A												
R	39	A	A	A															
T	40	A	A	A															
I	41																A	A	A
C	42																A	A	A
I	43											A	A	A					
P	44											A	A	A					
A	45							A	A	A									
N	46							A	A	A									
T	47										A				A	A			
S	48										A				A	A			

A - After-training assessment
B - Before-training assessment

APPENDIX G

Scale I Method 1 vs. 2, Before vs. After

Method 1

	Before				After					
Subject	Judges			Scores	Judges			Scores	Total	Diff. Sq.
1	2	3	9	3.0 4.0 3.0	18	19	20	4.0 3.0 3.0	20.0	.00
2	2	3	9	3.5 3.0 3.0	18	19	20	4.0 3.5 3.0	20.0	
3	7	8	10	4.0 2.0 2.0	1	2	3	4.0 3.5 4.0	19.5	12.25
4	7	8	10	3.0 2.5 2.0	1	2	3	3.0 2.5 3.0	16.0	
5	1	5	6	3.5 4.0 3.5	8	9	10	3.5 4.0 4.5	23.0	12.25
6	1	5	6	4.5 5.0 4.0	8	9	10	4.0 5.0 4.0	26.5	
7	16	19	20	2.5 2.0 2.0	12	13	15	3.0 5.0 3.0	17.5	.25
8	16	19	20	2.5 2.0 3.0	12	13	15	3.0 3.0 3.5	17.0	
9	11	12	17	2.0 2.0 2.0	5	6	7	3.0 3.5 3.5	16.0	20.25
10	11	12	17	3.5 2.5 4.0	5	6	7	3.5 4.0 3.0	20.5	
11	13	15	18	4.0 3.0 3.0	11	16	17	4.0 3.0 3.5	20.5	2.25
12	13	15	18	3.0 2.5 3.0	11	16	17	3.0 3.5 4.0	19.0	
				108.0				127.5		

METHOD 1 VS. 2, BEFORE, VS. AFTER

Method 2

	Before			After				
Subject	Judges	Scores		Judges	Scores		Total	Diff. Sq.
25	7 8 10	3.5	3.0 3.5	1 2 3	4.0	4.0 3.0	21.0	12.25
26	7 8 10	4.5	3.5 4.5	1 2 3	4.5	4.0 3.5	24.5	
27	1 5 6	3.5	3.5 2.5	18 19 20	3.5	3.0 4.0	20.0	20.25
28	1 5 6	3.0	3.5 4.0	18 19 20	5.0	4.0 5.0	24.5	
29	11 12 17	2.5	2.5 2.5	8 9 10	4.0	3.0 3.5	18.0	6.25
30	11 12 17	2.5	2.0 2.0	8 9 10	3.0	3.0 3.0	15.5	
31	16 19 20	3.0	3.0 4.0	5 6 7	2.0	3.0 2.5	17.5	6.25
32	16 19 20	2.5	3.0 3.0	5 6 7	4.0	3.5 4.0	20.0	
33	2 3 9	4.0	5.0 5.0	12 13 15	4.5	4.5 5.0	28.0	110.25
34	2 3 9	2.0	3.0 3.0	12 13 15	3.0	3.0 3.5	17.5	
35	13 15 18	3.0	4.0 3.0	11 16 17	4.0	3.5 4.0	21.5	36.0
36	13 15 18	2.0	1.0 2.0	11 16 17	3.5	3.0 4.0	15.5	
		112.0			131.5			238.50
		220.0			259.0			

Average Difference Squared = 19.88

$30_S^2 + 0^2 = 1.65$

BIBLIOGRAPHY

BIBLIOGRAPHY

Atwater, S.K.
Proactive inhibition and associative facilitation as affected by degree of prior learning. Journal of Experimental Psychology, 1953, 46, 400-404.

Bandura, A.
Principles of Behavior Modification. New York: Holt, 1969.

Bandura, A.
Psychological Modeling. Chicago: Aldine, 1971.

Bandura, A.
Social Learning Theory. Englewood Cliffs, N.J.: Prentice-Hall, 1977.

Bass, B. M. and Vaughan, J. A.
Training in Industry. Belmont, CA: Brooks/Cole Publishing Company, 1966.

Becker, K.
Conflict Decision Making: an evaluation of a workshop. Unpublished doctoral dissertation, the Florida State University, 1978.

Beckhard, R.
Role-playing: do it yourself technique. Sales Management, 1956, 76, 27-29.

Belasco, J. A. and Trice, H. M.
The Assessment of Change in Training and Therapy. New York: McGraw-Hill Book Company, 1969.

Berlew, D. E.
Is conflict a creative force? International Management, February 1980, 23-24.

Bittle, L. R. (ed.)
Encyclopedia of Professional Management. New York: McGraw-Hill Book Company, 1978.

Blake, R. R. and Mouton, J. S.
The Managerial Grid. Houston: Gulf Publishing Company, 1964.

Blake, R. R. and Mouton, J. S.
The Fifth Achievement. Journal of Applied Behavioral Science, June 1970, 413-426.

Blake, R. R., Shepard, H. A. and Mouton, J. S.
Managing Intergroup Conflict in Industry. Houston: Gulf Publishing company, 1964.

Blalock, Jr. H. M. and Blalock, A. B.
Methodology in Social Research. New York: McGraw-Hill Book Company, 1968.

Bolton, R. B.
People Skills. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979.

Boulding, K. E.
Conflict and Defense. New York: Harper-Row, 1962.

Boyd, Jr., H. W., Westfall, R. and Starsch, S. F.
Marketing Research. Homewood, Illinois: Richard D. Irwin, Inc., 1977.

Brademas, D. J.
An evaluation of a management development training program. Unpublished doctoral dissertation, University of Illinois at Urbana - Champaign, 1976.

Bradford, L. P. and Lippitt, R.
Role-playing in supervisory training. Personnel, 1946, 22, 358-369.

Brehm, J. W. and Cohen, A. R.
Explorations in Cognitive Dissonance. New York: Wiley, 1962.

Bryan, J. H. and Test, M. A.
Models and helping: naturalistic studies in aiding behavior. Journal of Personal and Social Psychology, 1967, 6, 400-407.

Burke, R. J.
Methods of managing superior - subordinate conflict: their effectiveness and consequences. Canadian Journal of Behavioral Science, February 1970, 124-135.

Burke, R. J.
Methods of solving interpersonal conflict. Personnel Administration, July-August 1969, 48-55.

Burnaska, R. F.
The effects of behavior modeling training upon managers' behaviors and employees' perceptions. Personnel Psychology, July 1976, 329-335.

Butler, A. S.
A conflict management training program for school psychologists. Unpublished doctoral dissertation, Rutgers University, The State University of New Jersey, 1979.

Byham, W. C., Adams, D., and Kiggins, A.
Transfer of modeling training to the job. Personnel Psychology, July 1976, 345-349.

Campbell, D. T. and Stanley, J. C.
Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally College Publishing Company, 1963.

Cantor, J. H.
Amount of pretraining as a factor in stimulus predifferentation and performance set. Journal of Experimental Psychology, 1955, 50, 180-184.

Cascio, W. F.
Applied Psychology in Personnel Management. Reston, VA: Reston Publishing Company, Inc., 1982.

Champion, D. L.
A comparison of men and women managers on preferences for organizational conflict management. Unpublished doctoral dissertation, The Florida State University, 1979.

Chesler, M. A., Crowfoot, J. E., and Bryant, B. I.
Power Training, California Management Review, Winter 1978, 84-90.

Chisman, F. P.
Attitude Psychology and the Study of Public Opinion. University Park, PA: The Pennsylvania State University Press, 1976.

Churchill, Jr., G. A.
Marketing Research. Hinsdale, Illinois: Deyden Press, 1979.

Cohen, A. R. and Latane, B.
An experiment on choice in commitment to counter-attitudinal behavior. In J. W. Brehm and A. R. Cohen, Explorations in Cognitive dissonance. New York: Wiley, 1962, 88-91.

Crafts, L. W.
Transfer as related to number of common elements. Journal of General Psychology, 1935, 13, 147-158.

Culbertson, F. M.
Modification of an emotionally held attitude through role-playing. Journal of Abnormal and Social Psychology, 1957, 54, 230-233.

Davitz, J. R. and Davitz, L. L.
Evaluating Research and Proposals in the Behavioral Sciences. New York: Teachers College Press, 1977.

Decker, P. J.
Effects of symbolic coding and rehearsal in behavior modeling training. Journal of Applied Psychology, June 1980, 627-634.

Decker, P. J.
The enhancement of behavior modeling training of supervisory skills by the inclusion of retention processes. Personnel Psychology, 1982, 35, 323-331.

Deer, C. B.
Managing organizational conflict. California Management Review, Winter 1978, 76-83.

Deutsch, M.
Conflict and its resolution. In Smith, C. G. (ed). Conflict Resolution. Notre Dame, Indiana: University of Notre Dame Press, 1971.

DuBrin, A. J.
Contemporary Applied Management. Plano, Texas: Business Publications, Inc. 1982.

Duncan, C. P.
Transfer after training with single versus multiple tasks. Journal of Abnormal and Social Psychology, 1957, 54, 230-233.

Essex, L. N.
The development and evaluation of an inservice workshop training program in conflict management for school administrators. Unpublished doctoral dissertation, University of Minnesota, 1979.

Filley, A. C.
Interpersonal Conflict Resolution. Glenview, Illinois: Scott, Foreman and Company, 1975.

Filley, A. C.
Some normative issues in conflict management. California Management Review, Winter 1978, 61-65.

French, J. R. P.
Role-playing as a method of training foreman. Sociometry, 1945, 8, 410-422.

Friedman, S.
Role-playing in a youth employment office. Group Psychotherapy, 1970, 23, 21-26.

Friendenberg, W. P.
Verbal and non-verbal attraction modeling in an initial therapy interview. Unpublished masters thesis, Syracuse University, 1971.

Frost, J. H. and Wilmot, W. W.
Interpersonal Conflict. Dubuque, Iowa: Wm. C. Brown Company Publishers, 1978.

Gagne, R. M., Baker, K. E. and Foster, H.
On the relation between similarity and transfer of training. Psychological Review, 1950, 57, 67-79.

Goldbeck, R. A., Bernstein, B. B., Hillix, W. A., and Marx, M. H.
Application of the half-split technique to problem-solving tasks. Journal of Experimental Psychology, 1957, 53, 330-338.

Goldstein, A. P. and Sorcher, M.
Changing Supervisor Behavior. New York: Pergamon Press, Inc., 1974.

Gordon, M.
Role-Playing in industry. Group Psychotherapy, 1959, 12, 187-191.

Greenspoon. J.
The effect of two non-verbal stimuli on the frequency of members of two verbal response classes. American Psychologist, 1954, 9, 384-389.

Harrison, F.
The management of organizational conflict. University of Michigan Business Review, July 1971, 158-163.

Hart, L. B.
Learning From Conflict. Reading, MA: Addison-Wesley, 1981.

Harvey, O. M. and Beverly, G. D.
Some personality correlates of concept change through role-playing. Journal of Abnormal and Social Psychology, 1961, 63, 125-130.

Hayes, W. G. and Williams, Jr., E. J.
Supervisory Training - an index of change. Public Personnel Review, July 1971, 158-163.

Hildum, D. C. and Brown, R. W.
Verbal reinforcement and interview bias. Journal of Abnormal and Social Psychology, 1956, 53, 108-111.

Himes, J. S.
Conflict and Conflict Management. Athens, GA: University of Georgia Press, 1980.

Hoh, A. K.
Consensus-building: a creative approach to resolving conflicts. Management Review, March 1981, 52-54.

Howell, J. L.
The identification, description and analysis of competencies focused on conflict management in a human resources organization: an exploratory study. Unpublished doctoral dissertation, University of Massachusetts, 1981.

Ingari, Santro
An exploratory study of the suitability of a conflict management workshop for selected state agency personnel. Unpublished doctoral dissertation, University of Massachusetts, 1982.

Janis, I. L. and Mann, L.
Effectiveness of emotional role-playing in modifying smoking habits and attitudes. Journal of Experimental Research in Personality, 1965, 1, 84-90.

Judd, C. H.
Practice and its effects on the perception of illusions. Psychological Review, 1902, 9, 27-39.

Kahn, R. L. and Boulding, E. (eds.)
Power and Conflict in Organization. New York: Basic Books, Inc., 1964.

Keating, M. T.
An analysis of the research utilizing problem solving (RUPS) program as an inservice training system for educators. Unpublished doctoral dissertation. University of Idaho, 1972.

Kellog, E. E.
A role-playing case: how to get the most out of it. Personnel Journal, 1954, 33, 179-183.

Kerlinger, F. N.
Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc., 1973.

Kilmann, R. H. and Thomas, K. W.
Developing a forced choice measure of conflict-handling behavior: the mode instrument. Educational and Psychological Measurement, January 1977, 298-312.

Kindler, H. S.
The art of managing differences. Training and Development Journal, January 1983, 27-32.

Kleinsasser, L. D.
The reduction of performance anxiety as a function of desensitization, pretherapy vicarious learning, and vicarious learning alone. Unpublished doctoral dissertation, Pennsylvania State University, 1968.

Knowles, M.
The Adult Learner: A Neglected Species. Chicago: Follett Publishing Company, 1970.

Kraut, A. I.
Developing managerial skills via modeling techniques. Personnel Psychology, July 1976, 325-328.

Krumboltz, J. D. and Toresen, C. E.
The effect of behavioral counseling in group and individual settings on information seeking behavior. Journal of Counseling Psychology, 1964, 11, 324-333.

Labovitz, G. H.
Managing conflict. Business Horizons, June 1980, 30-37.

Lack, D. Z.
The effects of model and instructions on psychotherapist self-disclosure. Unpublished masters thesis, Syracuse University, 1971.

Latham, G. P. and Saari, L. M.
Application of social-learning theory to training supervisors through behavioral modeling. Journal of Applied Psychology, March 1979, 239-246.

Lawrence, P. R. and Lorsch, J. W.
Organization and Environment. Boston: Graduate School of Business Administration, Harvard University, 1967.

Likert, R. and Likert, J. A.
New Ways of Managing Conflict. New York: McGraw-Hill Book Company, 1976.

Lippitt, G. L.
Managing conflict in today's organizations. Training and Development Journal, July 1982, 67-74.

Liveright, A. A.
Role-playing in leadership training. Personnel Journal, 1951, 29, 412-416.

Lonergan, W. C.
Role-playing in an industrial conflict. Group Psychotherapy, 1957, 10, 105-110.

Lovaas, O. I., Berberick, J. P., Perloff, B. F. and Schaeffer, B.
Acquisition of imitative speech by schizophrenic children. Science, 1966, 151, 705-707.

Magula, M. W.
Toward a theory of conflict: perceptions and preferred behaviors. Unpublished doctoral dissertation, University of Washington, 1977.

Mandler, G.
Transfer of training as a function of degree of response overlearning. Journal of Experimental Psychology, 1954, 47, 411-417.

Mann, J., and Rosenthal, T. L.
Vicarious and direct counter-conditioning of test anxiety through individual and group desensitization. Behavioral Research and Therapy, 1969, 7, 359-367.

March, J. G. and Simon, H. A.
Organizations. New York: Wiley, 1958.

McFall, R. M. and Marston, A. R.
An experimental investigation of behavior rehearsal in assertiveness training. Journal of Abnormal Psychology, 1970, 76, 295-303.

McNair, D. M.
Reinforcement of verbal behavior. Journal of Experimental Psychology, 1957, 53, 40-46.

Miller, G. A., Heise, G. A. and Lichten, W.
The intelligibility of speech as a function of the test materials. Journal of Experimental Psychology, 1951, 41, 329-335.

Mitchell, T. R.
People in Organizations. New York: McGraw-Hill Book Company, 1978.

Moses, J. L. and Ritchie, R. J.
Supervisory relationships training: a behavioral evaluation of a behavior modeling program. Personnel Psychology, July 1976, 337-343.

Murry, V. V.
Some unanswered questions on organizational conflict. Organization and Administrative Sciences, Winter 1974-75, 35-53.

Nadler, D. A., Hackman, J. R., and Lawler, E. E.
Managing Organizational Behavior. Boston: Little, Brown and Company, 1981.

Nadler, L.
Developing Human Resources. Houston: Gulf Publishing Company, 1970.

Nie, N. H., Hull, C. H., Jenkins, J. G. Steinbrenner, K. and Bent, D. H.
Statistical Package for the Social Sciences. New York: McGraw-Hill Book Company, 1975.

Noto, M. G.
Perceived attitudes of top management toward conflict as compared to middle management in the public school system in sixty-four parishes of Louisiana. Unpublished doctoral dissertation, George Peabody College for Teachers, 1979.

Oakes, W. F.
Reinforcement of Bales' categories in group discussion. Psychological Report, 1962, 11, 427-435.

O'Conner, R. D.
Modification of symbolic withdrawal through symbolic modeling. Journal of Applied Behavior Analysis, 1969, 2, 15-22.

Peck, R.
Management of Conflict: A Training Manual. New Haven, Ct: Southern Connecticut State College, 1980.

Phillips, E. and Cheston, R.
Conflict resolution: what works? California Management Review, Summer 1979, 76-83.

Pondy, L. R.
Organizational conflict: concepts and models. Administrative Science Quarterly, December 1967, 296-320.

Pondy, L. R.
A systems theory of organizational conflict. Academy of Management Journal, September, 1966, 246-257.

Porras, J. I., Hargis, K., Patterson, K. J., Maxfield, D. G., Roberts, N., and Bies, R. J.
Modeling based organizational development: a longitudinal assessment. Journal of Applied Behavioral Science, April 1982, 433-446.

Rahim, A. and Bonoma, T.
Managing organizational conflict: a model for diagnosis and intervention. Psychological Reports, 1979, 44, 1323-1344.

Randall, J. S.
You and effective training: part 2 - the learning process. Training and Development Journal, June 1978, 10-12.

Ritter, B.
Treatment of acrophobia with contact desensitization. Behavior Resarch and Therapy, 1969, 7, 41-45.

Robbins, S. P.
Managing Organizational Conflict. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1974.

Robbins, S. P.
Conflict management and conflict resolution are not synonymous terms. California Management Review, Winter 1978, 67-75.

Robert, M.
Managing Conflict From the Inside Out. Austin, Texas: Learning Concepts, 1982.

Robertson, T. A.
A descriptive study of school principals' job related interpersonal conflicts. Unpublished doctoral dissertation, The University of Tennessee, 1977.

Ruble, T. L. and Thomas, K. W.
Support for a two dimensional model of conflict behavior. Organizational Behavior and Human Performance, June 1976, 143-155.

Ryan, Jr., S. G.
Some relationships between supervisory conflict management behaviors, situational factors and subordinate perceptions of conflict in organizational settings. Unpublished doctoral dissertation, City University of New York, 1977.

Schmidt, W. H. and Tannebaum, R.
Management of differences. Harvard Business Review, November - December 1960, 107-115.

Shaw, M. E.
Organizational consideration in role-playing application. Group Psychotherapy, 1959, 12, 156-160.

Sherif, M.
Social Psychology of Intergroup Conflict and Cooperation. Boston: Haughton and Mittlin, 1966.

Sherrow, J. E.
The effect of a creative problem solving workshop on selected municipal recreation personnel. Unpublished doctoral dissertation, University of Illinois, 1969.

Shockley, Zalabak, P. S.
Current conflict management training: an examination of practices in ten large american organizations. Group and Organization Studies, 1984, 12, 491-507.

Shore, E. and Sechrest, L.
Concept attainment as a function of number of positive instances presented. Journal of Educational Psychology, 1961, 52, 303-307.

Smith, P. E.
Management modeling training to improve morale and customer satisfaction. Personnel Psychology, July 1976, 351-359.

Stahl, G. R.
Role-playing is ideal for training. Sales Management, 1953, 40, 40-44.

Starr, A.
Role-playing: an efficient technique at a business conference. Group Psychotherapy, 1959, 12, 166-168.

Sutton, K.
Effects of modeled empathy and structured social class upon level of therapist displayed empathy. Unpublished masters thesis, Syracuse University, 1970.

Taffel, E.
Anxiety and the conditioning of verbal behavior. Journal of Abnormal and Social Psychology, 1955, 51, 496-501.

Thomas, J. M. and Bennis, W. G.
Management of Change and Conflict. Middlesex, England: Penguin Books, 1972.

Thomas, K. W.
Conflict and conflict management. In Dunnette, M., (ed.), Handbook of Industrial and Organizational Psychology, Chicago: Rand-McNally, 1976.

Thomas, K. W.
Organizational conflict. In Kerr, S. (ed.) Organizational Behavior. Columbus, Ohio: Grid Publishing, Inc., 1979.

Thomas, K. W.
Toward multi-dimensional values in teaching the example of conflict behaviors. Academy of Management Review, 1979, 2, 484-490.

Thomas, K. W., and Kilman, R. H.
Thomas-Kilmann Conflict Mode Instrument. New York: Xicon, Inc., 1974.

Thomas, K. W., and Schmidt, W. H.
A survey of managerial interests with respect to conflict. Academy of Management Journal, June 1976, 315-318.

Triandis, H. C.
Attitude and Attitude Change. New York: John Wiley and Sons, Inc., 1971.

Trueblood, R.
The constructive approach to confrontation. Supervisory Management, September 1980, 39-40.

Ulmer, G.
Teaching geometry to cultivate reflective thinking. Journal of Experimental Education, 1939, 8, 18-25.

Underwood, B. J.
Associative transfer in verbal learning as a function of response similarity and degree of first-list learning. Journal of Experimental Psychology, 1951, 42, 44-53.

Verplanck, W. S.
The control of the content of conversation: reinforcement of statements of opinion. Journal of Abnormal and Social Psychology, 1955, 51, 668-676.

Warren, M. W.
Training for Results. Reading, Mass.: Addison-Wesley Publishing Company, 1979.

Watson, C. E.
Management Development Through Training. Reading, Mass.: Addison-Wesley Publishing Company, 1979.

Whalen, C.
Effects of a model and instructions on group verbal behavior. Journal of Consulting and Clinical Psychology, 1969, 3, 509-521.

Woodrow, H.
The effect of type of training upon transference. Journal of Educational Psychology, 1927, 18, 159-172.

Wortman, L. A.
Effective Management for Engineers and Scientists. New York: John Wiley and Sons, 1981.

Yoder, D. and Heneman, H. G.
Training and Development. Washington, D. C. Bureau of National Affairs, inc., 1977.

Young, R. K. and Underwood, B. J.
Transfer in verbal materials with dissimilar stimuli and response similarity varied. Journal of Experimental Psychology, 1954, 47, 153-159.

Zimbardo, P. G.
The effect of effort and improvisation on self-persuasion produced by role-playing. Journal of Experimental Social Psychology, 1965, 1, 103-120.

Zimbardo, P. G., Ebbesen, E. B. and Maslach, C.
Influencing Attitudes and Changing Behaviors. Reading, Mass.: Addison-Wesley Publishing Company, 1977.

VITA

Charles Michael Grissom

Birthdate: February 4, 1948

Birthplace: Elizabeth City, North Carolina

Education:

1978-1986 The College of William and Mary
Williamsburg, Virginia
Doctor of Education

1972-1974 Virginia Commonwealth University
Richmond, Virginia
Master of Education

1966-1970 University of Richmond
Richmond, Virginia
Bachelor of Arts

ABSTRACT

BEHAVIOR MODELING: THE EVALUATION OF A PROGRAM TO DEVELOP CONFLICT MANAGEMENT SKILLS

Charles Michael Grissom

The College of William and Mary, October, 1986

Chairman: Robert Maidment, Ed.D.

The purpose of this study was to determine if the behavior modeling approach to training could be used effectively to teach managers conflict management skills. The researcher explored whether behavior modeling training made a significant difference in the participants' conflict management behaviors and whether videotaped feedback to participants enhanced their gain scores.

Forty-eight managers from an industrial organization in central Virginia were the subjects for this study. The managers were invited to participate following a needs assessment identifing conflict management as a skill deficit.

The design used for this study was a combination of the pretest-posttest control group design and the posttest only control group design. Subjects were randomly assigned to one of the two experimental treatment groups: Group I - behavior modeling training/no video feedback (N=24) and Group II - behavior modeling training/video feedback (N=24). Each group was broken into two sub-groups (N=12). One received a pretest and posttest, the other received a posttest only. The eight dependent variables Describe the Problem, Ask for Reasons and Listen Attentively, Define Needs, Generate Alternatives, Evaluate Alternatives, Select an Alternative, Follow-up, and Overall Rating, were collected using assessment center methodology.

It was hypothesized that (1) behavior modeling would be an effective approach for training managers in conflict management skills, and (2) that videotaping participants' role plays for use as feedback would produce greater gains than behavior modeling without videotaped feedback.

It was concluded that behavior modeling training significantly improved scores on the eight dependent measures. However, behavior modeling training with videotaped feedback had no additional effect on the dependent measures.