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A study of the relationships among knowledge of leadership theory, behavior, and effectiveness.

Maryse Rinfret-Raynor
University of Massachusetts Amherst

A STUDY OF THE RELATIONSHIPS AMONG KNOWLEDGE OF LEADERSHIP THEORY, BEHAVIOR, AND EFFECTIVENESS

A Dissertation Presented

by

MARYSE RINFRET-RAYNOR

Submitted to the Graduate School of the
University of Massachusetts in partial
fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

April 1977

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MARYSE RINFRET-RAYNOR

Approved as to style and content by:

Kenneth H. Blanchard
Kenneth H. Blanchard, Chairperson

Ronald K. Hambleton
Ronald K. Hambleton, Member

Frederic E. Finch
Frederic E. Finch, Member

Mario D. Fantini
Mario D. Fantini, Dean
School of Education

ACKNOWLEDGEMENTS

To the many special people, who through their love, support, assistance and friendship have motivated me to undertake the long journey to the doctorate degree and have made it possible for me to reach this goal.

To my father, now deceased, who through his love, genuiness and perseverance helped me develop a sense of thoroughness and achievement.

To my mother, who through her love has always been a source of strength and support and provided the very much needed help during this period.

To my husband whose love and confidence has encouraged me to undertake my doctoral studies so that I am better able to realize myself.

To my daughter Karine, for providing me with endless joy at time of greatest stress.

To my daughter Nathalie, for "sharing" within me my most secret feelings.

To Hedley Dimock, friend and teacher, whose interest and support has made my stay at the University of Massachusetts possible and has provided me with opportunities to increase my knowledge in the field of Organizational Behavior.

To Matthew Miles, for initiating me to the whole field of organizational development and in a very special way for helping me to develop confidence as a change agent.

To Kenneth Blanchard, friend and chairman of my program of study and doctoral committee for his very timely advice and endless support while at University of Massachusetts.

To Ron Hambleton whose continued support, specific help and encouragement were vital in the last phase of my doctoral program specifically, in the writing of my dissertation.

To Fred Finch, friend and member of my various committees, for his continued presence, support, and availability during my stay at University of Massachusetts.

To Robert Sinclair whose rigorous thinking and approach has encouraged me to develop excellence in my work.

To my dearest friends, John Beck, Susan Schraggle and Gwen Brown who have walked this long journey of the doctoral program with me and throughout have provided encouragement, shared happy and difficult times and have facilitated my stay at the University of Massachusetts.

A Study of the Relationships among
Knowledge of Leadership Theory,
Behavior, and Effectiveness
(May 1977)

Maryse Rinfret-Raynor, B.A., Université de Montréal,
M.A., Université de Montréal,
Ed.D., University of Massachusetts
Directed by: Professor Kenneth H. Blanchard

ABSTRACT

Training is considered one of the most popular and principal methods to effect change (Bennis, 1973). This study was intended to focus on three variables related to training as a method to affect change at the knowledge, attitude and behavioral levels. Specifically, the research addresses the concept of change as it relates to knowledge, individual leadership behavior as perceived by the leader and by others and leadership adaptability or effectiveness as perceived by the leader and by others as a result of newly acquired knowledge.

The research, based on specific hypotheses, involved the collection of data on three different occasions. At Occasion 1, self-report data was obtained from each of the participants of the study. This data comprised

biographical information, self-perception of leadership style and ideal leadership behavior. In Occasion II and III, self-report data was again collected from each individual. In addition, each individual provided data on four or five other participants, members of a group formed for the purpose of gaining greater knowledge. At Occasion III, data was obtained from each participant on their self-perceived change in leadership knowledge, behavior and effectiveness.

The sample employed in the study consisted of one hundred and four graduate students registered into two courses, during the Spring Semester 1976, at the University of Massachusetts, Amherst, Massachusetts.

The study was conducted by setting up five general hypotheses, with each hypothesis sub-divided into specific hypotheses. The first group of hypotheses related to a general hypothesis addressing the question of increase in knowledge as a result of theoretical input. The result of the data indicated that the knowledge level of people enrolled in leadership training increased significantly after a course and that, although knowledge retention diminished over time, the loss in theoretical knowledge was not statistically significant.

A second general hypothesis concerned the effects of theoretical input upon behavior. A first specific

hypothesis predicted that the self-perception of participant's leadership behavior would become more congruent with the "Situational Leadership Theory", after exposure to the theory. The data relating to this hypothesis indicated statistically significant results supporting this first hypothesis. A second specific hypothesis predicting that the self-perception of participants' leadership behavior would become less congruent with the "Situational Leadership Theory" some time after instruction, was also supported.

The third general hypothesis predicted that the similarity between the self-perception of a leader's behavior and the perception of that behavior by others, the greater the effectiveness of the leader. The results of the study, although indicating a relationship between the effectiveness scores and the degree of congruency between self-perception and other's perception, were not statistically significant and therefore, failed to support this general hypothesis.

The concept of the effects of feedback on one's self-perception of his/her leadership behavior was addressed in a fourth general hypothesis.

Two specific hypotheses addressed this general hypothesis and neither one supported it.

Finally, the last group of hypotheses attempted to correlate two background variables with individual change. The results of the study which attempted to establish a relationship between individual change and high task leadership behavior, indicated a partial, non statistically significant relationship between these two variables. The results of the study indicated however, that the more supervisory years of work experience a person has had, the more his/her leadership behavior is likely to change following theoretical input. The relationship between two variables was statistically significant.

Several suggestions can be made concerning further research to complement the results of this study. Similar studies can be repeated with different populations. Other studies, using a similar design could be carried out using a different subject matter. To obtain further data on the design of the course, and the teaching methods, an experimental model could be developed using a comparative design. A further area of research to increase the validity and reliability of the results of this study could involve an experimental design with random selection of the participants. Finally, a time series design is suggested in order to study the longitudinal and lasting effects of the training.

The results of the study helped to reinforce the use of training as a method designed to change individual behavior. More specifically, it showed that leadership skills can be taught and applied effectively. This research also brings some information concerning the design used in the two courses. Finally, this study focused some light on two key factors which influence a change in behavior as a result of increased knowledge through training.

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CHAPTER I

INTRODUCTION

The major focus of the study was to study the relationships between leadership knowledge, leadership behavior and leadership effectiveness, or more specifically the effects of a change in leadership knowledge on the leadership behavior and effectiveness of an individual.

Change has been described by Lewin (1972) as a modification of the state of equilibrium or quasi-equilibrium within an individual. Further work (House, 1967; Hersey and Blanchard, 1972) has shown that change can occur within three different frameworks: knowledge, attitude and behavior. Hersey and Blanchard (1972) further state that it is progressively more difficult and lengthy to effect change at the attitudinal and behavioral dimensions than it is to do so at the theoretical level. Furthermore, a change in knowledge does not necessarily produce a change in attitude and or behavior.

Among the many challenges organizations and institutions have to face today, the problem of dealing with new demands and new technologies is certainly a prime concern of organizational life. Very often, organizations have to implement change within their structure, their personnel, their methods of operation in order to continue to be functional and productive within their environment.

Many methods have been elaborated to help organizations and institutions better deal with change. Management by Objectives (Drucker, 1964), Process Consultation (Schein, 1967), and Organizational Development are only some of these methods which institutions and organizations can use to facilitate change within their structure. These methods as well as others used by organizations are all designed to ultimately produce a change in the behavior of the individuals involved in the change process. Often, some form of training is chosen to produce this change in behavior. "Training interventions are based on the assumption that organizations are improved when their members are trained to perform their work proficiently" (Burke and Hornstein, 1972, p. xvii). Belasco and Trice (1969) refer to this situation as a veneration of education as a means of producing change.

This emphasis on training is particularly true in the area of leadership training. The name itself, leadership training, infers that one is trained then to be a leader later. Through simulations, theoretical input and sometimes practice, the individuals involved are most often expected to function more effectively in a leadership role.

The theoretical input in the field of change and organizational theories, the assumptions previously stated that a change in knowledge produces a change in behavior and a particular concern related to leadership, form the basis for this study.

Statement of the Problem

Much work has been done to clarify the notion of leadership. For many years, the most common approach to the study of leadership concentrated on leadership traits per se, suggesting that there were certain characteristics that were essential for effective leadership. Jennings (1961) concludes that "Fifty years of study have failed to produce one personality trait or set of qualities that can be used to discriminate leaders and non-leaders."

Most theoreticians and practitioners today (Hersey and Blanchard, 1972; Koontz and O'Donnel, 1968; Terry, 1960) describe leadership as a dynamic process resulting from the interaction of the leader, the followers and other situational variables. This approach has strongly influenced the development of leadership training by which individuals are taught to adapt their behavior according to the followers and the specific situation in which they are involved.

The study undertaken here addresses the problem of leadership training and its effects. It focuses on the problem of change as it occurs at the theoretical and behavioral levels. Change will be studied in relation to two courses dealing with leadership theories and their application, leadership diagnosis, leadership behavior and leadership effectiveness.

Purposes of the Study

The purposes of this study were to research the effects of specific theoretical knowledge upon corresponding individual behavior. The research was specifically designed to measure the leadership knowledge, leadership behavior and leadership effectiveness of graduate students as it related to Hersey and Blanchard "Situational Leadership Theory" (1976). The graduate students were from a variety of educational backgrounds and were participating in two courses designed to teach diagnostic and implementation skills to determine ideal situational leadership behavior. Specifically, the investigation attempted the following:

1) To measure change in knowledge as a result of leadership training.

2) To correlate this knowledge with leadership behavior and effectiveness.

3) To study the relationships of these changes to background variables such as supervisory experience and work responsibilities.

4) To study the effects of feedback on individual self-perception.

Hypotheses

In accordance with the purposes of the study, five general hypotheses were stated along with specific hypotheses,

corresponding to each general hypothesis. They are as follows:

Hypothesis A: The specific theoretical knowledge level of individuals enrolled in a leadership training program increases as a direct result of theoretical input. This general hypothesis is further specified as follows:

1. Participants' knowledge of the "Situational Leadership Theory" will increase following exposure to an Organizational Behavior course.
2. The level of knowledge retention of participants engaged in a training program will diminish after some period of time when those participants are not exposed to theoretical knowledge directly reinforcing the previously acquired knowledge.
3. The participants' knowledge level of the "Situational Leadership Theory" prior to instruction will be positively related to the participants' subjective perception of this knowledge.

Hypothesis B: The greater one understands and internalizes theoretical concepts dealing with behavior, the greater one's perception of his/her behavior will change in the direction of the conceptualization.

This general hypothesis is further specified as follows:

1. The perception of participants' own leadership behavior will change after instruction and will

become more congruent with the participants' knowledge of the "Situational Leadership Theory" after instruction.

2. The perception of subjects' own leadership behavior will change to become less congruent with the "Situational Leadership Theory" when measured some period of time after instruction.

Hypothesis C: The greater the similarity between the self-perception of the leader's behavior and the perception of that behavior by others, the greater the effectiveness of the leader.

This general hypothesis is further specified as follows:

1. The congruency between leadership style score measured by self and others some period of time after instruction, will be positively related to the effectiveness ratings given by the members of the group to whom the leader belongs, at the same period.

Hypothesis D: The greater one understands one's behavior through the feedback of others, the more one's self-perception becomes congruent with the perception of one's behavior by others.

This general hypothesis is further specified as follows:

1. One's self-perception of his/her leadership style gathered sometime after instruction, will be more

congruent with others' perception measured immediately after instruction than one's self-perception, taken immediately after instruction will be with others' perception measured at this same time.

2. The difference between participants' perception of their leadership behavior and others' perception will be larger immediately after instruction than the difference will be some time after instruction.

Hypothesis E: The greater the degree of behavior change as a result of theoretical input dealing with behavior, the more authoritarian the individual is, and the more supervisory experience the person has had.

This general hypothesis is further specified as follows:

1. The individual degree of behavior change as a result of theoretical input will be positively related to the self-perceived high task leadership style of the leader.
2. The individual degree of behavior change as a result of theoretical input will be positively related to the number of supervisory years of work experience an individual has had prior to the beginning of the course.

Definition of Terms

In this study, a variety of terms were used that deserve clarification. Below are listed the most important terms and their definitions.

Diagnostic Skills: the ability to use one's knowledge effectively and readily in investigating or analyzing the cause or nature of a situation or problem (Webster's Dictionary, 1964).

Graduate Students: individuals enrolled part-time or full-time at a University and registered into a graduate level course.

Leadership Adaptability or Effectiveness: the ability of the leader to adapt his/her leadership style to meet the needs of the followers and the situation (Hersey and Blanchard, 1972).

Leadership Style: the way in which other individuals perceive a leader's behavior (Hersey and Blanchard, 1972).

Leadership Effectiveness and Adaptability Description - LEAD-SELF: an instrument which provides the leader with scores on Task Behavior and Relationship Behavior, the range of leadership styles available to a specific leader and a score of effectiveness, or adaptability.

Leader Effectiveness and Adaptability Description - LEAD SELF (Actual): refers to the use of the LEAD SELF instrument as a measure of leader self-perception of his/her behavior in specific situations as described by the LEAD SELF instrument.

Leader Effectiveness and Adaptability Description - LEAD SELF (Ideal): refers to the use of the LEAD SELF instrument as a measure of the leader perception of the behavior of a highly effective leader in each of the situations described by the LEAD SELF instrument.

Leader Effectiveness and Adaptability Description - LEAD OTHER: an instrument that provides scores of a leader's behavior, as perceived by others. The instrument provides scores of range of leadership styles, dominant leadership style and adaptability or effectiveness.

Relationship Behavior: "the extent to which a leader engages in two-way communication by providing socio-emotional support, 'psychological strokes,' and facilitating behaviors" (Gates, Hersey and Blanchard, 1976, p. 349).

Situational Leadership Theory: "it is based upon an interplay among (1) the amount of direction (task behavior) a leader gives, (2) the amount of socioemotional support (relationship behavior) a leader provides, and (3) the 'maturity' level that followers exhibit on a specific task" (Gates, Hersey and Blanchard, 1976, p. 349).

Task Behavior: "the extent to which a leader engages in one-way communication by explaining what each subordinate is to do as well as when, where, and how tasks are to be accomplished" (Gates, Hersey and Blanchard, 1976, p. 349).

Training: the systematically organized and presented formal instruction which occurs off the job, in some conference room, lecture hall, or seminar room. It is equated therefore with what many others have called "formal instruction" or "classroom instruction" (Bèlisco and Trice, 1969, p. 12).

Delimitations of the Study

The nature and design of the study bring the following delimitations. Further discussion of the delimitations will be presented in Chapter V.

The nature of the sample population makes it difficult to generalize the findings of the study to the general population. Graduate students present special characteristics which are not found in all groups.

The design of the study also presents a delimitation. The same instruments will be completed by the participants in three different occasions. Testing and repetition of the testing instruments will account for some of the learning

(Belisco and Trice, 1969). The differentiation made between actual leadership behavior and ideal leadership behavior may bring some confusion on the part of the sample population.

Finally, the Leader Effectiveness and Adaptability instrument--SELF and OTHER--although administered to over 10,000 people, had not been systematically tested for validity and reliability at the time of the study.

Organization of the Remainder of the Dissertation

A total of five chapters will make up this dissertation. The rationale for the study, the purposes, the hypotheses and the projected delimitations of the study have already been discussed in this Chapter. A selective review of the literature as it relates to the concept of change, learning theories and the concept of perception is presented in Chapter II. Chapter III provides a detailed description of the research design, methodology and procedures used in the study. The results of the study in a statistical and narrative form are presented in Chapter IV. Finally, the results of the study in relation to the implications, delimitations and suggestions for further research appears in Chapter V.

C H A P T E R I I

SELECTIVE REVIEW OF THE LITERATURE

Introduction

This chapter is designed to present a selective review of the literature pertaining to the problem being studied. The literature review will be presented in three sections and will deal with the concepts of change, learning theories and perception.

Change

The purpose of this section is to present an overview of the major elements involved in the change process. In order to achieve this goal, this section will specifically focus on the nature of change, the change process itself, the methods used to implement change, the relationship between training and the change process and finally, the group as a medium for change.

The Nature of Change

Lippitt (1973) defined change as "any planned or unplanned alteration of the status quo in an organism, situation or process" (p. 54). In defining change this way, Lippitt recognizes that change is a phenomenon which happens consciously or unconsciously. Planned change, as distinguished from unplanned change is seen by Lippitt (1973) as

"an intended, designed or purposive attempt to influence directly the status quo of itself, another organism or situation" (p. 54). Similarly, Chin and Benne (1969) defined planned change as "attempts to bring about change which are conscious, deliberate and intended at least on the part of one or more agents related to the change attempt" (p. 33). This latter definition implies that an outside stimulus is necessary to implement planned change.

Dobb (1972) specifies that there are three different kinds of changes: the antecedent, the consequent and the concomitant change. The antecedent change refers to the precipitating circumstances underlying or compelling people to produce or accept change. The consequent change is described as what happens to people as a consequence of adopting changes and the concomitant change happens when one group of people change as a result of changes which have taken place in another group.

Changes, whether planned or unplanned can happen at four different levels: knowledge, attitudinal, behavioral and group organizational performance level. (Hersey and Blanchard, 1972; House 1967). Hersey and Blanchard specify that time and difficulty are elements which relate to one's ability to affect these different changes. It is easier and less lengthy to effect a change at the knowledge level than it is at the attitudinal level and similarly it is

easier to produce change at the attitudinal level than it is at the behavioral level. It is even more difficult to induce change when dealing with group or organizational performance.

Finally, change can take place according to two cycles: the participative and the coerced cycle. A participative change cycle is implemented when new knowledge is made available to the individual and the group. In this situation, it is hoped that the group will accept the data and will develop a positive attitude and commitment in the direction of the desired change. The commitment element is essential to this cycle as it will insure that the new knowledge is translated into behavior. The coerced change cycle, contrary to the participative cycle, is imposed on an individual or a group. Occasionally, people will develop commitment to the imposed change and it will then begin to approximate a participative change cycle. The participative and the coerced change cycles will be achieved through different means. The participative cycle requires, from the originator of the change, personal power. The coerced cycle, however, will only be successful when it is instigated by people with position power. In this context, coerced change is usually associated with rewards and punishments (Hersey and Blanchard, 1972).

The Change Process

When reviewing the literature on the subject of change, Kurt Lewin appears as the "father" of the change process model. Other theoreticians (Lippitt, Watson and Westley, 1972; Schlein, 1969; Zalesnik, 1972) have used his model and have expanded on it.

For Lewin (1972), the study of the condition of change begins with an analysis of the condition for "no change". In this situation, the organism is in a state of equilibrium. This level of quasi-equilibrium can be modified in two ways, by adding forces in the desired direction or by diminishing opposing forces. In both cases, the equilibrium will move to the same new level and a change will take place. The secondary effect will, however, be quite different. In the first case, the process of moving to the new level will be accompanied by a state of high tension. In the second case, a state of relatively low tension is likely to follow. In many ways, these two methods of re-establishing the equilibrium parallel the participative and the coerced change cycle described earlier. They also present some of the same elements. This process model of looking at change, provided the basis for the development of "Forced Field Analysis", a method of problem-solving.

Phases of the change process. Three major phases are necessary for a change to take place: unfreezing,

moving or change and freezing (Lewin, 1972; Schein, 1969). "Unfreezing is a graceless term that implies that a period of unlearning must take place before learning can be initiated. It is an umbrella term which encompasses a complex process initiated to create a desire to learn" (Schein and Bennis, 1975, p. 43). For any change to occur, the defenses which tend to be aroused in the person experiencing the change must be made less operative, circumvented, or used directly as change levels. The second phase, called changing or moving, refers to the stage which follows the period during which the equilibrium has been upset. During this period, the individual will seek information relevant to his/her dilemma in order to re-establish a comfortable equilibrium for himself or herself. He/she will then seek out, process, and utilize the information for the purpose of achieveing new perceptions, attitudes and behavior. The third stage of the change process consists in the integration of new responses into the ongoing personality of the individual involved in the change process. This "refreezing" is the process which insures a permanent or "stable" change in the individual (Schein 1969).

Lippitt, Watson and Westly (1972) have expanded these three phases of the change process on the basis of the inter-personal relationship which they claim has to be established between the person undergoing change and the

change agent. Therefore, they have developed the following five phases: development of a need for change, establishment of a change relationship, working toward the change, generalization and stabilization and achievement of a terminal relationship.

Mechanisms of Change

Mechanisms of unfreezing. Three mechanisms relate to the phase of unfreezing: the lack of confirmation or disconfirmation, the induction of guilt-anxiety and the creation of psychological safety by reduction of threat or removal of barriers. The author will briefly review each of these mechanisms.

The lack of confirmation or disconfirmation is based on the premise that the change target's significant behavior, beliefs, and attitudes are supported by his/her self-image which is greatly influenced by his/her environment. The process of unfreezing or the motivation to change can be initiated therefore by a failure of confirmation or actual disconfirmation by his/her environment. In disconfirmation, the change target is confronted with information which fails to reinforce his/her self-image. This can be achieved a) by informing the individual that his/her self-image is out of line with what others and the situation will allow him/her, or be able to sustain, b) by informing him/her that his/her definition of the situation

is out of line with reality as defined by others in that situation and c) by informing him/her that his/her image of the others is out of line with their own self-image or that of each other. Lack of information on the other hand occurs when relevant information is lacking.

The induction of guilt-anxiety refers to the process by which an individual is motivated to change in order to reduce or avoid guilt-feelings. Following a lack of confirmation or disconfirmation, the individual experiences guilt for reasons such as his/her inability to respond to others expectations or perceptions.

The creation of psychological safety by reduction of threat or removal of barriers is another mechanism which can create a motivation to change. This will occur in a situation where an individual has a desire to change but is prevented from doing so because of fear of the consequences of his/her new behavior, attitudes or knowledge (Schein and Bennis, 1965; Schein, 1969).

Mechanism of changing. Cognitive redefinition is the mechanism which relates to the development of new responses based on new information, or to the process of changing. The process involved in the changing phase consists of the actual assimilation of new information which will allow the individual to develop new constructs, that is beliefs, assumptions and evaluation held by a person about some

object in his/her social world (Kelley, 1955). In order to assimilate new information, the individual has to develop alternate assumptions and beliefs through the process of cognitive redefinition of the situation. This process involves new definitions of terms, the broadening of perceptions and the development of new standards of evaluation and judgment. Cognitive redefinition can be accomplished through identification or through scanning. Identification involves a high degree of emotional interpersonal relationship and refers to the process by which the queues for change come from one person whom the subject has chosen as a model. When information about change come from multiple sources it is called scanning. Scanning implies attention to the content of the message regardless of the person and identification implies attention to the person regardless of the content (Schlein, 1969).

Mechanisms of refreezing. Refreezing or the process of stabilizing and integrating the changes will be accomplished by a) the integration of the new responses into the personality of the individual and b) by the integration of these same new responses into significant ongoing relationships through reconfirmation (Schein, 1969; Schein and Bennis, 1965).

Conditions Influencing Change

Change does not happen in a vacuum. Whether individual,

group, or organizational change is under consideration, certain variables or factors influence the change process. Change depends on forces internal to the individual; forces external to the individual; forces within the situation where the change is to take place and finally it is influenced by forces internal to the relationship between the change agent and the change target (House, 1967; Lippitt, 1973). Among the forces internal to the individual, one recognizes the level of needs one is trying to satisfy (Maslow, 1954), the beliefs and values which one supports (Allport, 1943; Dobb, 1972; McClelland, 1969), the individual's sense of identity, his/her motivation to self-examination and finally the individual intellectual and emotional readiness for change (Zalesnik, 1972).

The forces external to the individual concern those factors which will affect the individual willingness and ability to change through his/her environment. Argyris (1957) has demonstrated, for example, the importance of the need for congruence between individual and organizational goals in order to achieve planned change within an organization. The theory of motivation developed by Herzberg (1957) also explains how the work situation can motivate or hinder individual and organizational change.

Among the forces in the situation, Lippitt (1973) recognizes the communication patterns and networks; the

norms of behavior of the individuals and the organizations; the rewards and punishments, the satisfaction and dissatisfaction with the status quo, and finally the fear of failures. Much attention has also been given to the environment climate to which the changed individual belongs. Research (Buchanan, 1957; Form and Form, 1953; House, 1960; Sofer, 1955) has shown that a participant involved in a training program will change in the direction of the training, only when those people in his/her environment from whom he/she derives his/her behavioral expectations support the change (Belisco and Trice, 1969, p. 123).

The forces in the relationship which influence the change process are first explained by Beckhard (1969) when dealing with the change agent as a consultant. These forces relate to the use of the consultant's power through his/her role and/or knowledge, his/her ability to diagnose the situation and his/her limitations and finally the ability of the helper to see the process as helpful. Zelesnik (1972, p. 46) deals with the relationship between the change agent and the change target from a very different point of view. Following his theory, a change in response to others involves an emotional response to who the other person is, and what he/she is doing to the individual interpersonally. The emotional response can take the form of counterdependence, rebelliousness,

hostility, comfortable dependency, affection, wanting to be close and friendly and finally wanting to please. Zaleznik warns about conformity since it represents no change on the part of the individual.

Change and Training

Many methods or processes have been developed to produce change in individuals, groups and organizations. Training is considered one of the most popular and principal methods attempting to effect change (Bennis, 1973) and, as such, has been the focus of much discussion and research. We will attempt in this section to focus on some of these key elements, namely training as a means of affecting change, the problems encountered in measuring change, the ceremonial aspects of training and finally the individual characteristics of people who change following training programs.

Training, a method for affecting change. Training as a method of change is based on two assumptions: 1) that the primary challenge of training involves "not only the task of having individuals, groups and organizations assimilate new information, but to bring about a change in the behavior of the systems through their utilization of the information" (Lippitt, 1973, p. 101) and, 2) that organizations are improved when their members are trained to perform their work proficiently (Burke and Hornstein,

1972). Bennis and Lippitt (Lippitt, 1973) claim that these assumptions can only be true if the change program involves experimentation, risk, insecurity, challenge, fear and courage.

The results of training program evaluation are very confusing. Generally, however, the literature tends to show that the degree of success depends on the kind of training. Training programs designed to improve skills and motor activity frequently demonstrate positive effect (Crawford, 1962; Wolfe, 1951). There is also some evidence that leadership training (Shartle, 1956) and laboratory education (Bunker and Knowles, 1967; Dunnette, 1969; Schein and Bennis, 1965) result in some behavior and attitudinal change. Although most studies suggest that training may lead to individual change, there is little evidence to show that it has any impact on organizational change (Burke and Hornstein, 1972, pp. xvii-xviii). Several factors or elements appear to influence the positive potential of training programs as a force for change. House (1967) suggests that the amount and the nature of a change following a management development effort is related to three sets of variables, namely, the initial state of the learner, the amount of development efforts engaged in by the learner, and the organizational environment of the learner. He further suggests that a change in

the learner job performance is a function of the change in learner skills multiplied by changes in learner's attitudes in interaction with the social influence in the environment (pp. 108-110).

Time is also a factor which influences training results. Petersen (1972, pp. 28-42) and Fleishman (1955, pp. 29-54) found that the average behavior style of group members changes significantly during training and that the effects of training tend to diminish when measured at a later date. These studies indicate the differences which can be obtained when evaluating training results. Kirkpatrick (1956, p. 55) suggests a distinction between immediate, intermediate and ultimate objectives of training experiences in order to account for the time factor.

A final element which influences training results is that of the measurement itself. In a very extensive study, Belisco and Trice (1969, p. 119) showed that 1) changes associated with training are small 2) that testing alone is associated with sharp changes and 3) that the combination of testing and training, or the interaction effect, is more effective than training alone.

It does therefore appear that the question of evaluation of training program as a means to effect change is a very complex phenomenon indeed. Generally, the emotional state of the learner, the environmental conditions, the

time at which the measure of change takes place and finally the measurement itself to determine the value of training are all factors which contribute to the complexity of determining the value of training. These elements can raise serious questions concerning statements which favor or condemn training as a method of affecting change.

Ceremonial aspects of training. Most research directed toward the evaluation of training programs have focused on specific outcomes related to set objectives. Generally, therefore, training has been said to be successful when it has satisfied the specific objectives. Belisco and Trice (1969) have found that there is another kind of training results very seldom included in the evaluation of training efforts. They refer to these results as "ceremonial aspects of training". These ceremonial aspects of training can be further defined as "unanticipated results which had failed to be included in the yardsticks of the objective study" (p. 111). They can include such elements as, increased morale among employees, changes in identification with the organization, and changes in self-concept. Belisco and Trice suggest that the combinations of both talent (ceremonial) and manifest (intended) functions of training operating simultaneously and "even though the increment of change coming from each alone are small, together can provide a sizable impact" (p. 119).

Individual characteristics of people who change following training programs. It is not unusual to find individuals who change more than others when one studies the individual change which has taken place following training. As pointed out by Belisco and Trice (1969, p. 121), "the identification of the factor or syndrome of factors which distinguishes the 'change' from the 'non-change' is of more than casual importance since it can provide insight into the processes of individual and organizational change associated with training and therefore help improve the success of training." Research indicates that: Information + Personal Predispositions + Social Situation = Change. The main focus in this equation is personal predispositions. In line with previous research, Belisco and Trice (1969, p. 126) have found that high-self-esteem, high intelligence, high authoritarianism, high tolerance for ambiguity, younger age, many previous experiences and female sex were factors which distinguished those individuals most likely to change after training. (The underlined characteristics show the clearest relationship with an improvement after training). Jwaideh (1973) found that similar characteristics accounted for the individual differences between early adopters and late adopters of educational innovations. In addition, she found a relationship between the individual's values and needs and his/her

ability to change. Educational innovations which run counter to some important individual values will tend to be rejected. Similarly, an educational innovation which does not work toward need satisfaction, will not be accepted by the individual. If, however, the innovation or change is directly relevant and effective in fulfilling important and salient needs, it will tend to be more readily accepted.

The Group as a Medium for Change

Theoreticians (Lippitt, 1973; Bennis, Benne and Chin, 1969) have concerned themselves with individual, group and organizational change. Although individual change occupies a large place in our society, most planned change efforts, especially those related to training are carried out in the context of a group. The group or the members of a group can help or hinder a process of change. In many instances, the group is a major source of emotional support for the individual as well as a major source of pressure to conform socially (Zeleznik, 1972, p. 45). When change efforts are taking place, these can be supported or blocked by the attitudes or actions of the members of the group. Cartwright (1972, p. 78) suggests that it is possible to make constructive use of these pressures by the following methods: a) the group is used as a medium of change, b) the group itself becomes

the target for change and finally, c) the group itself organizes its efforts and becomes agent of change. For the purpose of this study, the author will focus on the group as a medium of change.

Several elements must be considered when one attempts to use the group as a medium of change. The first element relates to the feelings members have toward the group and its members. The chances of re-education seem to be increased whenever a strong we-feeling exists between those who act as change agent and those affected by the change. The second element concerns the attractiveness of the group. The more attractive a group is to its members, the greater the influence the group can exert on its members. The third element deals with the nature of the change sought and the basis of attraction of a member to the group. The greater the congruency between these two elements, the greater the influence of the group on its members. The fourth element or factor relates to the status of the member or individual seeking the change. The greater the prestige of a group member in the eyes of the other group member, the greater the influence he/she can exert. Finally, the fifth consideration concerns the norms held by the members of a group. Any change which attempts to deviate or encounter group norms will be met with much resistance by the members of the group concerned with the change.

Learning

In the previous section, the author selectively reviewed the literature concerned with change. This study, however, has a specific focus in looking at change; it is dealing with change as a result of learning. For this purpose, the present section will address itself to the phenomenon of learning and more specifically, it will consider what is learning, the general conditions which result in effective learning, cognition and the learning process, adult learning, some learning models and finally, training and learning theories.

What is Learning?

Much work and research has been carried out on the subject of learning. The author's attempt in this section is to present the general trends and concepts which can help the reader understand the study undertaken.

Two general schools of thought exist around the concept of learning. A first group sees learning as a process by which behavior is changed, shaped and controlled (Knowles, 1973, p. 8). A second group tend to see learning as an experimental phenomena which originates from the learner.

Among the theoreticians who see learning as a process capable of shaping and controlling behavior, many feel that behavioral changes result from experience. "There is a remarkable agreement upon the definition of learning

as being reflected in a change in behavior as a result of experiences" (Haggard, 1963, pp. 19-27). Berelson and Steinen (1964), Borger and Seaborne (1971) and Cronbach (1963) are theoreticians who subscribe to this school. Berelson et al (1964, p. 41) go a step further in explaining their thinking. For this group, learning is defined as "change in behavior that result from previous behavior in similar situations. Mostly, but by no means always, behavior also becomes demonstrably more effective and more adaptive after the exercise than it was before. Other theoreticians believe that learning results in changes created through the interaction of a person with his/her environment. Burton (1963, pp. 7-19) further feels that this interaction fills an individual's need which makes him/her more capable of dealing with his/her environment. From a similar point of view, Crow and Crow (1963, pp. 1-3) mentioned that the acquisition of habits, knowledge and attitudes made through learning helps the individual make both personal and social adjustments.

The theoreticians mentioned above are among some of those who see learning as a process capable of influencing behavior. Some members of this group (Gagne, 1965; Hilgard and Bower, 1966) take further care to distinguish between planned learning and natural growth (Knowles, 1973, p. 7): "Learning is a change in human disposition

or capability, which can be retained and not simply ascribable to the process of growth" (Gagne, 1965, p. 5).

Argyris, Kolb, Maslow and Rogers are among the theoreticians who belong to the humanistic school of thought. Rogers (1969) describes experimental learning as having the quality of personal involvement, as being self-initiated, persuasive, self-evaluated and finally as being an integral part of the learner's experience (p. 5). From another point of view, Maslow sees the goal of learning to be self-actualization or "the full use of talents, capacities, potentialities, etc." (Maslow, 1970, p. 150). Two sets of forces act upon the individual attempting to reach this goal." One set clings to safety and defensiveness out of fear, tending to regress backward, hanging on to the past... The other set of forces impels him forward toward wholeness of the self and uniqueness of self, toward full functioning of all his capacities... (Maslow, 1972, p. 44). Argyris' approach to learning, although different, is also representative of the humanistic school. He considers learning as a hypothetico-deductive process in which hypotheses, especially those related to behavior, are formed, tested and modified. Therefore, behavioral learning involves the experience-based modification of some elements of the theoretical framework or theory-in-use which governs the action of an individual (Argyris, 1974, pp. 4-19). He

further states that learning occurs as a result of dilemmas experienced by the individual. The dilemmas consist of conflicts within a person, conflicts brought about by incongruity, inconsistency, effectiveness, values and testability (pp. 30-34).

Finally Kolb (1971) without specifically defining learning, characterizes learning as being a continuous process involving relearning.

As one notices by the definitions presented, learning does not happen automatically. Certain factors will help and facilitate learning within an individual. The review of the conditions which facilitate or hinders learning will be the focus of the next section.

Factors Influencing Learning

Two classes of variables influence the learning process: a) those variables within the learner and b) those variables in the learning situation. These two categories are interrelated and some balance must be achieved for a change to take place (Gagne, 1972).

Variables within the learner. The internal forces which influence the learning process are related to the learner's motivation. This factor appears to be at the essence of one's ability to learn. "The acquisition of knowledge is a fairly straightforward process provided the individual wants the new knowledge. It can be made

available to him in several ways. However, if he doesn't want the knowledge, or if he doesn't know he needs it, we will have considerable difficulty getting him to learn it" (McGregor, 1960, p. 208). The forces facilitating learning within and individual appear to stem from the individual drive toward self-identity and self-realization (Fromm, 1947; Clark, 1962). Several elements can help motivate an individual to learn. Argyris (1974), Rogers (1969) and This and Lippitt (1971) relate an individual's motivation to the learner's active participation and self-satisfaction in the learning process. In addition, Rogers (1969) mentions that learning will be facilitated when the learner perceives threat to the self as being low, when learning is self-initiated and when self-evaluation is an integral part of the process. Several other factors can help motivate an individual. Those will be reviewed in the following sections dealing with forces external to the learner.

Variables in the learning situation. Forces at the cultural level and forces at the institutional level are two elements which can influence learning according to Clark (1962). These forces relate to the values held by a society and its institutions. Clark claims that the upper middle class values of many societies encourage an individual to learn, and specifically, to acquire specific

skills in order to reach the "top".

Several other theoreticians (Argyris, 1974; Roethlisberger, 1962; Rogers, 1969) feel that the teacher plays a significant role in creating an effective learning climate. Rogers (1969) refers to the teacher as a facilitator who must possess realness, be praising, accepting and trusting and also show empathic understanding (p. 106-109). Rothlisberger (1969) also stresses the important function of the teacher if learning is to take place. He mentions that this function can only be performed by the teacher who has some "awareness of himself and some skills in dealing with this dimension in his relationships to others" (p. 4). Argyris (1974) finally, also gives some attention to the role of the teacher whom he calls an instructor. This instructor can and will encourage spontaneity and integrate feelings and ideas. The teacher, described by Argyris, has also more faith in the learners than they may have themselves and he/she is able to recognize the limits of the learners learning methodologies.

Lookings at the learning situation itself, other elements seem to contribute to effective learning. In line with Lewin's change theories, Shaw (1957) claims that some kind of transitional experience is needed. Two factors contribute to the transitional experience a) an atmosphere in which stereotypical modes are "suspendable"

and b) some kind of up-ending experience which he defines as an unusual or inspired act of behavior on the part of some one else toward the one having the experience. Finally, This & Lippitt (1971) consider other factors which influence learning. These are the material used for sequential learning, the learning methods used and the reinforcement provided for correct behavior.

The author recognizes that the ideas presented previously as stated by different theoreticians represent different schools of thought. This approach appeared useful as no pure model of teaching exists and therefore it offers opportunity to benefit from considering different points of view and thinking.

Cognition and the Learning Process

One of the basic element of learning consist of knowledge or new information. Gagne and Briggs (1974) claim that knowledge can be organized into broad categories: intellectual skills, cognitive strategies, verbal information, motor skills and attitudes (p. 51). For the purpose of this research, the author will only review cognitive strategies as they are most applicable to the study undertaken. "A cognitive strategy is an internally organized skill that selects and guides the internal processes involved in defining and solving novel problems ...It is a skill by which the learner manages his own

thinking behavior" (Gagne and Briggs, 1974, p. 48). In order for the learner to develop cognitive strategies, he/she needs to have a variety of problem solutions from which he can choose and draw from. Piutner, Ryan, West et al (1963) also classify knowledge into different categories. For this group, knowledge comprehends perception, conception, associative learning and appreciation. These categories parallel very closely, the general classification presented earlier by Briggs and Gagne. The concept of associative learning, for example, is very similar to the concept of cognitive strategies discussed previously. Kolb (1971) is also concerned with stages relating to learning. His ideas are, however, different from those expressed by Gagne and Briggs and Piutner, Ryan, West and al. While these latter theoreticians perceive several levels within the learning process itself, Kolb (1971) envisions a cognitive growth which relates to the learner's learning ability. He sees the process of cognitive growth moving from concrete to abstract and from active to reflective. This process occurs in successive stages incorporating what has gone before into a new higher level of cognitive functioning. As such, Kolb perceives the intellectual maturation to parallel the developmental level and stages of the learning cycle (pp. 5-6). Based on Piaget's work in interpreting four stages of cognitive

development in the child, Kolb has developed a comprehensive picture of the stages of the adult learning process. To the sensory motor stage of Piaget (Flavell, 1963, p. 107) Kolb presents the concrete-active period where the individual immerses himself/herself in an immediate experience and becomes involved in an active way". He lets it happen to him. Parallelling the representational stage developed by Piaget, (Bruner, 1966, p. 13) Kolb describes the second stage of the learning process as being reflective-observation. During this period, the individual focuses on the experience he/she has lived and search for its meaning. In a third phase, Kolb describes the abstract inductive reasoning period to parallel Piaget's stage (Flavell, 1963, p. 203) of concrete operation. The abstract inductive reasoning phase is characterized by analysis and assimilation of the factual information into a theory or a conceptualization of the experience. Finally, the representational logic learning phase developed by Piaget (Flavell, 1963, p. 211) is transposed into Kolb's model and becomes the hypothetical deductive learning stage. During this period, the implications of the concept are generated and posed in the form of experimental tests. This stage concludes with the individual, moving back into the first stage, this time with a specific hypothesis to be tested.

Kolb pursues his theory even further and assumes that different individuals will develop specific learning styles which will allow them to achieve certain learning tasks better than others. This ability is a function of "our hereditary equipment, our particular developmental history and the demands of our current environment. Some of us, therefore, become divergers, convergers, assimilators and accomodators (Kolb, 1971, p. 10). Kolb's concept and ideas are presented in Figure I.

Divergers are concrete and reflective in their learning style and they learn ikonically. They tend to be interested in people, emotional and highly imaginative. Convergers are abstract and active in their learning style and they learn primarily through hypothetical-deductive reasoning. They are usually somewhat rigid, authoritarian and conformist, and tend to have narrow technical interests. Assimilators are reflective and abstract and they learn inductively. When conflict arises between facts and theory, the assimilators tend to discard the facts. They also tend to choose "non-practical" theoretical discipline for their career. Finally, the accommodators are concrete and active and they learn enactively. They tend to emphasize objectives and practical reality over theory, and to choose fields of work that are concrete, immediate and practical (1971, pp. 9-15).

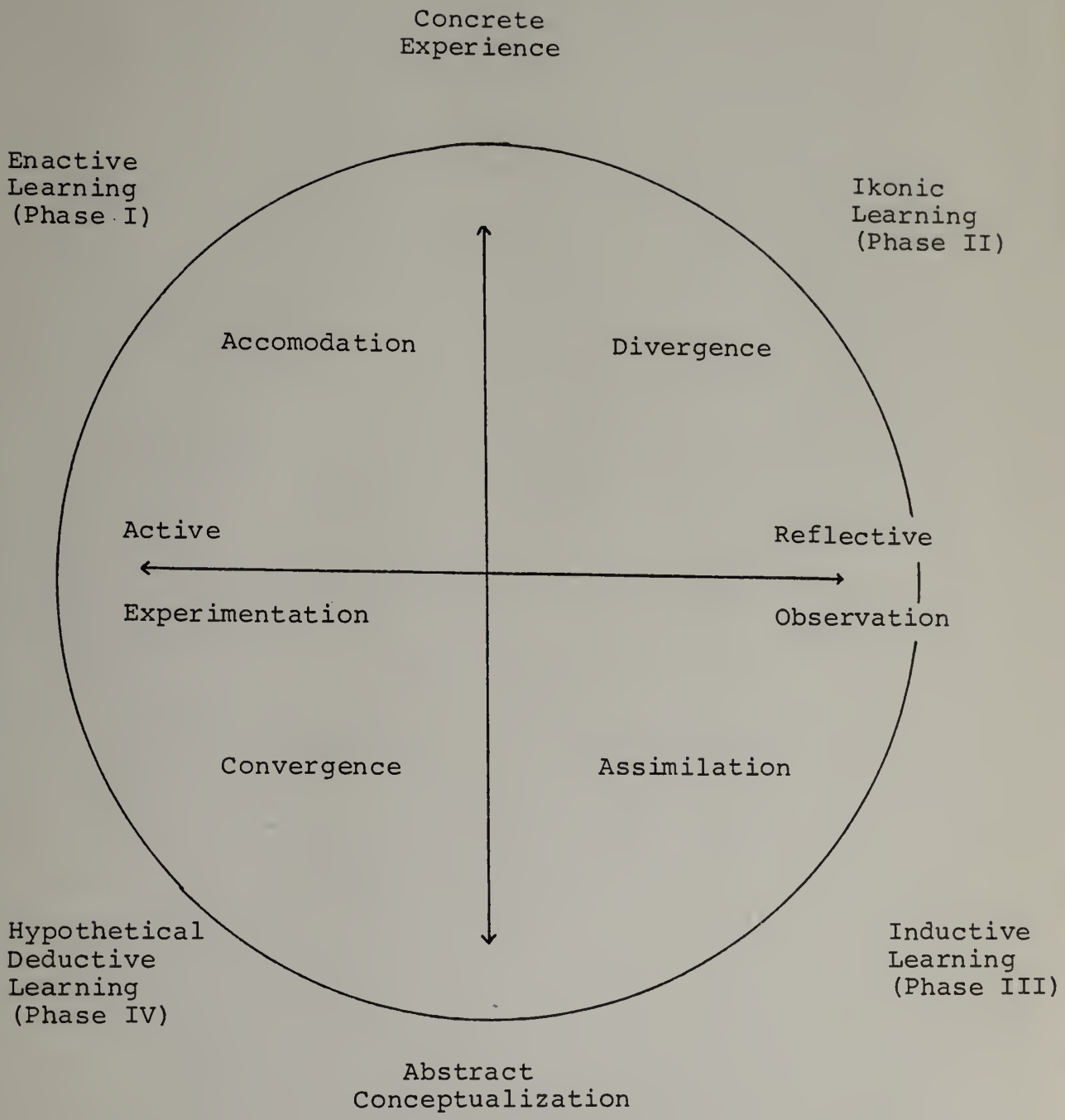


Figure 1: Kolb Individual Learning Style Model
Reproduced From Kolb (1971)

Adult Learning

Most of the work done in the field of learning has been based on learning theories and concepts as they apply to children. More and more, however, children are not the only ones involved in the learning process. Many adults are now becoming formal adult learners. This phenomenon has contributed to a new field in the area of learning, the field of adult education. Even then, "most scholars in the field of adult education itself have been involved in this area through their efforts to adapt theories about child learning to the differences in degree among adults." Knowles (1973, p. 34). Kempfer, 1955; Brunner, 1959 and Verner and Booth (1964) are examples of theoreticians who have attempted to apply children learning theories to adult learning. In the late 1960, however, a new concept has evolved, that of andragogy. Andragogy is not a new word but the theory and technology it is coming to identify are new. Knowles (1972) adds, "I am not talking about a clear-cut differentiation between children and adults as learners. Rather, I am differentiating between the assumptions about learners that have traditionally been made by those who practice pedagogy in contrast to the assumptions made in andragogy" (p. 39). Using the evidence from research (Brunner, 1961; Erickson, 1950, 1959, 1964; Getzels and Jackson, 1962; Bower and Hollister, 1967; Iscoe and Stevenson, 1960; White, 1959) Knowles

assumptions rest on the speculation "that as an individual matures, his need and capacity to be self-directing, to utilize his experience in learning to identify his own readiness to learn, to organize his learning around life problems, increases steadily from infancy to pre-adolescence, and then increases rapidly during adolescence" (p. 43). It is possible to speculate further that this movement from dependency to independency reaches its peak in adulthood.

The field of andragogy, although a recent concept, is based on the work of previous theoreticians and researchers. In 1951, Rogers conceptualized student-centered teaching to parallel client-centered therapy. While doing so, Rogers was concerned with the study and development of fully functioning persons. Similarly, Maslow takes a holistic approach which holds that the whole is more than the sum of the parts (Goble, 1971, p. 22). "Growth takes place when the next step forward is subjectively more delightful, more joyous, more intrinsically satisfying, than the previous gratification with which we have become familiar and even bored...The new experience validates itself rather than by any outside criterion (Maslow, 1972, p. 43).

The field of adult education itself also helped the development of andragogy. Houle's work (1961) to discover

why adults engage in learning also shed some light on how they learn. Tough's (1971) research showed that pleasure and self-esteem are critical elements which motivate adults to learn.

This previous work all contributed to show that adults should be highly involved in the learning process if learning is to lead to fully functioning persons or self-actualizing persons.

Knowles (1973) further elaborated on four assumptions underlying andragogy. These assumptions are different from those of pedagogy. They are:

1. Changes in self-concept. This assumption is that as a person grows and matures, his/her self-concept changes from total dependency to increased independence.

2. The role of experience. This assumption deals with the consideration that experience is very much part of an adult personality and that because of this factor, the adult learner can be a very rich source of learning for other learners.

3. Readiness to learn. This assumption is that as an individual matures, his/her readiness to learn is highly related to the performance of his evolving social roles. This concept parallels that of the developmental tasks of children.

4. Orientation to learning. This assumption is that the adult approach to learning is problem-centered. The adult motivation to learn is directly related to the tasks and responsibilities he/she is involved with. (Knowles, 1973, pp. 45-49).

From these assumptions, Knowles concludes that adults should be involved in planning and directing their own

learning and that special emphasis should be placed on experimental techniques which tap the experience of the learners and involve them in analyzing their experience. Knowles adds that the timing of learning experiences should coincide with the learner's developmental tasks and finally that learning should be organized around individuals' problems and concerns (Knowles, 1971, 1973).

Learning Models

This section will focus on different learning models which affect change. Lippitt (1973) suggests that different models effect change in different ways in the field of education and training. This section will be divided into two major parts: a) the more traditional models and b) the humanistic models of learning.

Traditional Models of Learning

Behaviorist school. The basic assumption of this school is that learning results from the rewards and punishments which follow a response to a stimulus. The Behaviorist School has elaborated the S-R theories to a large extent. Although Thorndike, Guthrie and Hill were very much involved in the development of this school, Skinner, however, is the theoretician most closely identified with this school. Skinner relies heavily upon what is called operant conditioning and respondent

conditioning. He makes a distinction between these two terms by claiming that "respondent conditioning is that behavior caused by a known stimulus and that operant conditioning is that behavior for which we cannot see or identify a stimulus though one may, and probably does exist" (This and Lippitt, 1971, p. 86).

Gestalt school. The theoreticians involved with this school maintain that learning is cognitive and involves the whole person. Kurt Lewin, Wolfgang, Tolman and Wertheimer are typical theorists of this school of thought. Central to Gestalt, is the "Law of Pragnanz" which indicates the direction of events. According to this law, the psychological organization of the individual tend to always move in one direction, the direction of the "good" Gestalt. The "good Gestalt" is defined in this context as a state of equilibrium, simplicity and stability. According to Gestalt, the learning process follows the diagram shown in Figure 2. This school further claims that a curriculum design where there is progression from simple task to more complex tasks will facilitate the return to an equilibrium state.

Freudian school. Following Freud, the theoreticians belonging to this school are concerned with the three ego states, and their effect on behavior. Knowles (1973) claims that Freud's concepts of anxiety, repression,

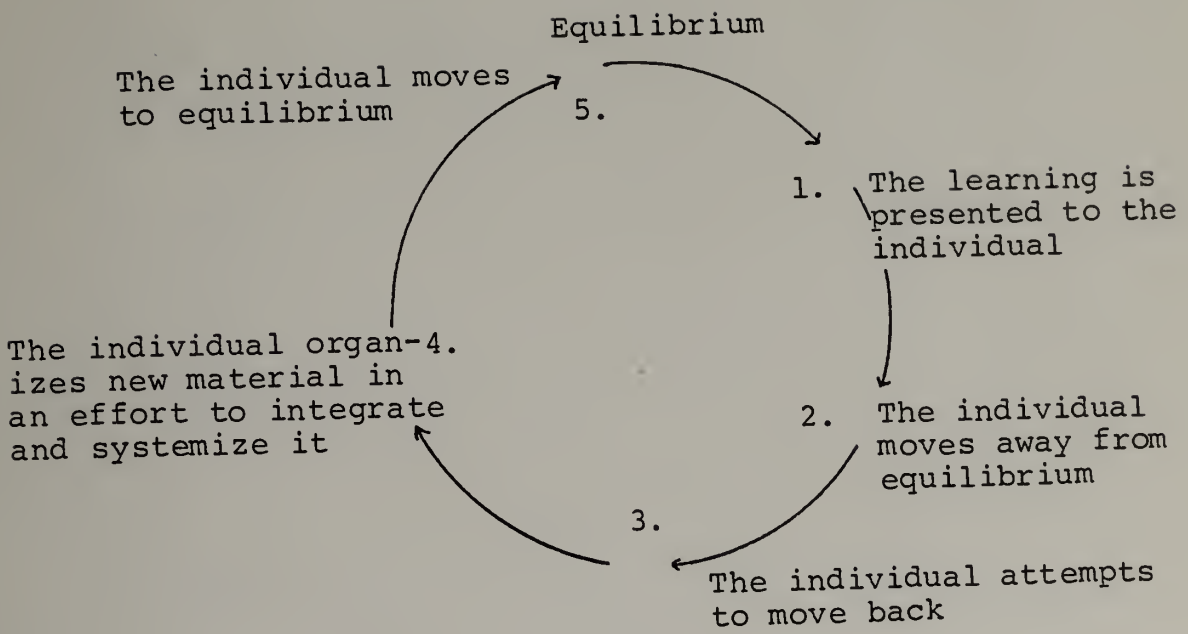


Figure 2: The Movement Toward the Equilibrium in the Gestalt Learning Process Reproduced from This and Lippitt, 1972.

fixation, regression, aggression, defense mechanism, projection, are elements which can block or motivate learning and have had an important influence on the general development of learning theories.

Functionalist school. The members of this school view learning as a very complex phenomenon which cannot be explained by the previously described school. John Dewey is one of the leaders of this group.

Mathematical school. For these learning theorists, learning theories must be explained in mathematical form. It appears that they have no theory of their own but are expressing the findings of other researchers in mathematical terms (Lippitt, 1973, pp. 109-114).

Humanistic Models of Learning

Among the many learning models developed by humanist theoreticians, the author has selected three models of learning. These models have been chosen on the basis of their relevancy to the study undertaken.

Kolb's learning model. Kolb's model of learning is an experimental learning model which was developed by this author following his search for a learning model that would apply to university teaching. This learning model is developed primarily out of the experience of sensitivity training practitioners, Miles (1969), and Schein and Bennis (1965) shown in Figure 3.

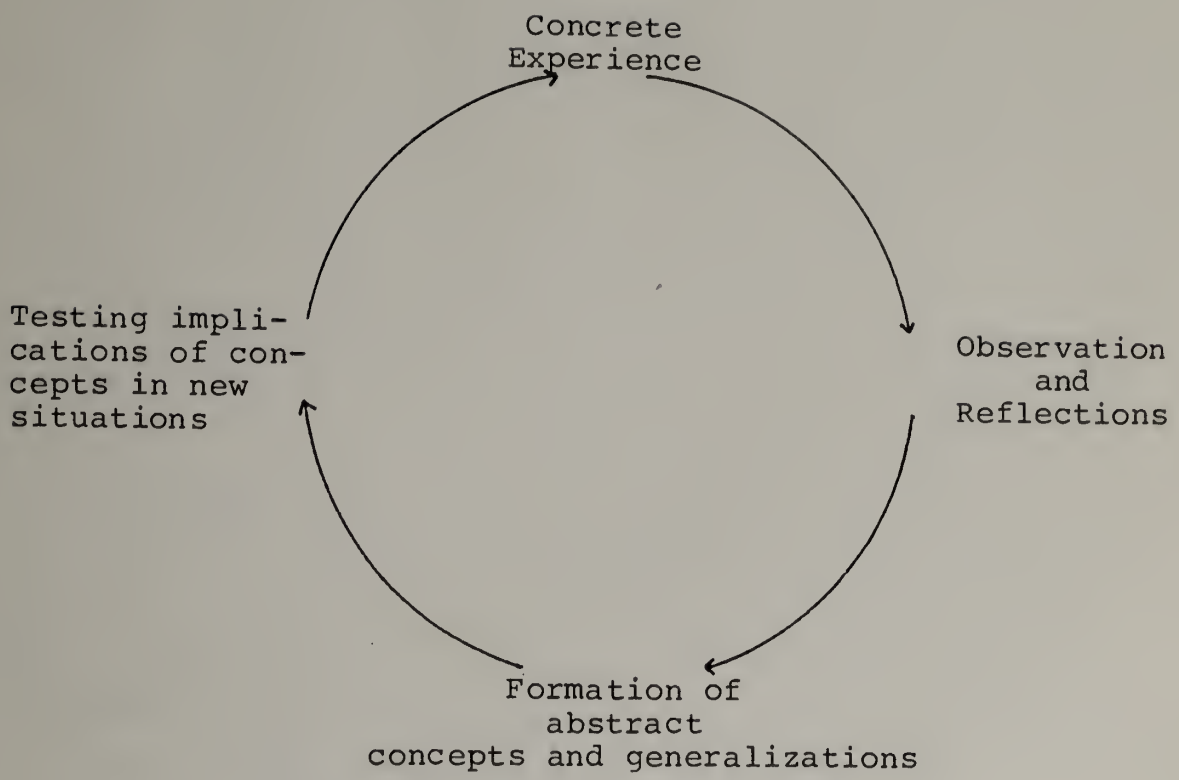


Figure 3: Kolb Experiential Learning Process.
Reproduced from Kolb (1971).

There are two primary dimensions to this learning process: the abstract/concrete element and the active/reflective one. In order for learning to take place, it is necessary for the learner to be able to resolve the "dynamic tension between the polar opposites" (Kolb, 1971, p. 3).

The concrete/abstract dimension. The first dimension represents the concrete experience of events at one end and the abstract conceptualization at the other. Similar to most cognitive theorists (Flavell, 1963; Bruner, 1961, 1966; Harvey Hunt and Schroeder, 1961) Kolb feels that the concrete/abstract concept is one of the primary dimension from which cognitive growth occurs.

Goldstein and Schearer (1941) suggest that the following abilities are associated with greater abstractiveness:

1. To detach our ego from the outer world or from inner experience.
2. To account for acts to oneself, to verbalize the account.
3. To shift reflectively from one aspect of the situation to another.
4. To grasp the essential of a given whole: to break up a given into parts, to isolate and to synthetize them.
5. To plan ahead ideationally, to assume an attitude toward the more possible and to think or perform symbolically (Kolb 1971, p. 4).

"Concreteness, on the other hand, represents the immersion in and domination by one's immediate experience" (Kolb, 1971, p. 4).

The active/reflective dimension. "This element is the second major dimension of cognitive growth. As growth occurs cognition becomes more reflective and internalized, based more on the manipulation of images and symbols than overt actions" (Kolb, 1971, p. 4). Similar to abstractness/concreteness, active experimentation and internalized reflection, are in opposition to one another.

Kolb, similarly to Rogers (1951), also defines the teacher as a facilitator who will help the learner successfully achieve learning through a process which is basically self-directed. Kolb further states, that the role of the teacher is very critical in all phases of the experimental model but in particular, in the active/reflective dimension. There, the teacher must "somehow respond to pragmatic demands for relevance and the application of knowledge while encouraging the reflective examination of experience that is necessary to refine old theories and to build new ones " (p. 5).

Knowles' andragogical model of human resource development (HRD). Knowles model of learning for adults has been developed in opposite to elements usually involved in traditional pedagogical education. The major concep-

tual difference is that the andragogical model is a process model, in contract to the content models employed by most traditional educators. The difference is this: in traditional education the teacher decides in advance what has to be taught, the methodology best suited to transmit the knowledge or information and the design which will allow him/her to accomplish the set goal.

The andragogical teacher on the other hand, develops a set of procedures which will facilitate the learner's involvement. This set of procedures involves the following elements: (1) establishing a climate conducive to learning; (2) creating a mechanism for mutual planning; (3) diagnosing the needs for learning; (4) formulating program objectives (which is content) that will satisfy these needs; (5) designing a pattern of learning experiences; (6) conducting these learning experiences with suitable techniques and materials; and (7) evaluating the learning outcomes and rediagnosing learning needs (p. 102). A comparison of the process and content models is presented in Table I. The content model is referred to as the pedagogical model and the process model as the andragogical model.

Argyris and Schon behavioral model for learning. Argyris and Schon (1974) also present their model in comparison with a traditional model which they find tend to

Table 1
A Comparison of the Assumptions and Designs of Pedagogy and Andragogy

Assumptions			Design Elements		
Variables	Pedagogy	Andragogy	Variables	Pedagogy	Andragogy
Self-concept	Dependency	Increasing self-directiveness	Climate	Authority-oriented Formal Competitive	Mutuality
Experience	Of little worth	Learners are a rich resource for learning	Planning	By teacher	Mechanisms for mutual planning
Readiness	Biological development social pressure	Developmental tasks of social roles	Diagnosis of needs	By teacher	Mutual self-diagnosis
Time perspective	Postponed application	Immediacy of application	Formulation of objectives	By teacher	Mutual negotiation
Orientation to learning	Subject centered	Problem centered	Design	Logic of the subject matter ——— Content units	Sequenced in terms of readiness ——— Problem units

Table 1 (Continued

Assumptions			Design Elements		
Variables	Pedagogy	Andragogy	Variables	Pedagogy	Andragogy
			Activities	Transmittal techniques	Experiential techniques (inquiry)
			Evaluation	By teacher	Mutual re-diagnosis of needs ——— Mutual measurement of program

engender "low self-esteem, low trust, low openness and little public testing and learning" (p. 83). For the purpose of this research, only "Model II, Theory-in-use" (Argyris and Schon, 1974, p. 87), will be considered here. In the interest of time and length, this model will only be presented graphically (Table II).

Argyris and Schon feel that this model of behavior learning encourages growth, the challenge of one's theory-in-use, authenticity, autonomy, openness to possible change in behavior, high self-awareness and acceptance and finally greater mental health (p. 91-98).

Training and Learning Theories

The last part of the section on learning relates to the integration of learning theories into the design of training programs. More specifically, it addresses the problem of chosing a learning theory or learning theories best suited for a particular training program.

Malcolm Knowles (1973) claims that one of the most important factors to consider is the organizational management philosophy one is dealing with when planning a training program. He further states that organismic models of learning will be very inappropriate to an organization behaving according to Theory X assumptions but very adaptable to an organization behaving according to

Table 2. Model II Theory-in-Use

Governing Variables	Action Strategies	Consequences for the Behavioral World	Consequences for Learning	Consequences for Quality of Life	Effectiveness
1. Valid information.	1. Design situations or environment where participants can be origins and can experience high personal causation (psychological success, confirmation, essentiality).	1. Actor experienced as minimally defensive (facilitator, collaborator, choice creator).	1. Disconfirmable processes.	1. Quality of life will be more positive than negative (high authenticity and high freedom of choice).	
2. Free and informed choice.	2. Tasks is controlled jointly.	2. Minimally defensive interpersonal relations and group dynamics	2. Double-loop learning.	2. Effectiveness of problem solving and decision making will be great, especially for difficult problems.	2. Increased long-run effectiveness.
3. Internal commitment to the choice and constant monitoring of its implementation.	3. Protection of self is a joint enterprise and oriented toward growth (speak in directly observable categories, seek to reduce blindness about own inconsistency and incongruity). 4. Bilateral protection of others.	3. Learning-oriented norms (trust, individualtiy, open confrontation on difficult issues).	3. Public testing of theories.		

Theory Y assumptions (McGregor, 1960, pp. 33-34 and 47-48). Using Rogers' (1972, pp. 272-279) assumptions about current education and those underlying experimental learning, Knowles draws a parallel with McGregor Theory X and Theory Y Assumptions about human nature. This parallel comparison is presented in Table III.

Lippitt's (1973) point of view concerning training and learning theories is based on the goals of the training activities and programs. Lippitt suggests the following model to clarify the relationship between learning goal and the transfer of learning (p. 114):

$$\text{Learning goal(s)} = \frac{\begin{array}{l}\text{Present state of the organization} \\ + \text{ present state of trainees} \\ + \text{ recognized need for change}\end{array}}{\begin{array}{l}\text{Appropriate learning theory} \\ + \text{ appropriate training design} \\ + \text{ supportive climate for changed trainee behavior}\end{array}}$$

This model by Lippitt is more inclusive than that of Knowles although not presenting specific solutions to the question raised as to which learning theory should be used. Lippitt presents several situational variables which should be considered if desired outcomes or goals are to be accomplished.

Table III

A Comparison of the Assumptions About Human Nature and Behavior Underlying Theory X and Theory Y Management Philosophy

Theory X Assumptions about Human Nature (McGregor)	Assumptions Implicit in Current Education (Rogers)
The average human being inherently dislikes work and will avoid it if he can.	The student cannot be trusted to pursue his own learning.
Because of this characteristically human dislike of work, most people must be coerced, controlled, threatened in the interest of organizational objectives.	Presentation equals learning.
The average human being prefers to be directed, wishes to avoid responsibility, has relatively little ambition, wants security above all.	The aim of education is to accumulate brick upon brick of factual knowledge.
	The truth is known.
	Creative citizens develop from passive learners.
	Evaluation is education and education is evaluation.
Theory Y Assumptions about Human Nature	**Assumptions Relevant to Significant Experiential Learning**
The expenditure of physical and mental effort is as natural as play or rest.	Human beings have a natural potentiality for learning.
External control and the threat of punishment are not the only means for bringing about effort toward organizational objectives. Man will exercise self-direction and self-control in the service objectives to which he is committed.	Significant learning takes place when the subject matter is perceived by the student as relevant to his own purposes.
Committment to objectives is a function of the rewards associated with their achievement.	Much significant learning is acquired through doing.
The average human being learns under proper conditions, not only to accept but to seek responsibility.	Learning is facilitated by student's responsible participation in the learning process.
	Self-initiated learning involving the whole person--feelings as well as intellect—is the most pervasive and lasting.

TABLE III Continued

Theory Y Assumptions about Human Nature	Assumptions Relevant to Significant Experiential Learning
A high capacity for imagination, ingenuity, and creativity in solving organizational problems is widely, not narrowly distributed in the population.	Creativity in learning is best facilitated when self-criticism and self-evaluation are primary, and evaluation by others is of secondary importance.
Under the conditions of modern industrial life, the intellectual potential of the average human being is only partially utilized.	The most socially useful thing to learning in the modern world is the process of learning, a continuing openness to experience, an incorporation into oneself of the process of change.

Perception

Much of one's behavior is influenced by one's self perception and others' perception of one's behavior. Cantril (1957) describes perception as a "transaction between the perceiver and the perceived, a process of negotiation in which the perceptual end product is a result both of influences within the perceiver and of characteristics of the perceived" (p. 119-126). In this section, the author will look briefly at the perceptual field, self-perception and other perception.

The Perceptual Field

An individual's perceptions are influenced by his/her needs, values, interests and cultural background (Bruner, 1958, pp. 85-94). Krech, Crestchfield, Egerton and Ballachey (1962) claim that the construction of a "cognitive world" by the individual will influence his/her social behavior. This image or "map" of the world built by the individual is a function of "one's physical and social environments, physiological structure, wants and goals, and past experiences" (pp. 16-17).

Similarly, Rogers (1951) mentions that most of the individuals' experiences constitute the ground of the perceptual field. The individual reacts to what he/she experiences according to his/her perception. This perceptual

field is "reality" for the individual (p. 484). The individual does not react to some absolute reality but to his/her perception of this reality. It is this perception which for the individual is reality. Reality is, therefore, for the individual, his/her perceptions. Behavior is then postulated as a reaction not to reality, but to the perception of reality (pp. 484-492).

Self-Perception

Daryl Bem (1970) shed some light on the general concept of self-perception when he was attempting to provide a theoretical framework for the process of belief and attitude change. Bem's major hypothesis states that "in identifying his own internal states, an individual partly relies on the same external cues that others use when they infer his internal states" (p. 50). The identification of many internal states by an individual is only possible because outside observers have inferred those states from observable external cues. The individual has then learned, from the outside observer, to label the internal situation which he/she assumed was accompanying those cues. Bem further mentions that the individual's behavior is the most important clue to the identification of a person's feelings, beliefs and attitudes. "When we want to know how a person feels, we look to see how he acts" (p. 57). According to Bem, this same overt behavior

will allow the individual to interpret his own internal states. A change in one's behavior will also indicate a change in one's feelings, attitudes and beliefs (Bem, 1970). On another level, Rogers (1951) states that the perceptions of the self which are admissible to awareness form the self-concept or self-structure of the individual. In this context, self-perception is composed of "such elements as the perceptions of one's characteristics and abilities; the perceptions and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive and negative balance" (p. 136).

Finally, one self-awareness is related to this individual's ability to accurately perceive other persons in his/her environment. Zalkind and Costello (1962) identify four conclusions which they believe are suggested by research in the field of perception. Three of the four conclusions link together the concepts of self-perception and other perception. The four conclusions are:

1. Knowing oneself makes it easier to see others accurately.
2. One's own characteristics affect the characteristics he is likely to see in others.
3. The person who accepts himself is more likely to be able to see favorable aspects of other people.

4. Accuracy is perceiving others is not a single skill (p. 227).

Other's Perception

Different elements are related to the ability of one individual to accurately perceive another individual. Rogers (1961) claims that the best vantage point for understanding another person's behavior is through the individual himself/herself. Since the perceptual field or repertoire of experiences is a "private world" (p. 484) unique to each person, communication of one's feelings to another becomes a key element if one individual is to accurately perceive another individual.

Bem (1970), on the other hand, feels that behavior and motives are essential considerations when dealing with perception of other people. Finally, Burke and Bennis (1961) found that in group, members tend to organize their perceptions of others around three major behavioral dimensions:

1. It includes elements of friendliness, acceptance and positive evaluation.
2. It combines dominance and leadership with strength.
3. It relates to the extent of the members' participation and activity in the group (pp. 165-182).

These theoreticians also found that the way people see themselves and the way in which they are seen by others become very similar over time.

The group seems to play an important part in the process of interpersonal perception. Zalkind and Costello (1962) report that recent research points to the conclusion that the whole process of interpersonal perception is, at least in part, a function of the group context in which the perception occurs. For example, as a result of his research, Bieri (1953) suggests that when people interact in a friendly atmosphere, they tend to see others as similar to themselves. Further, when members of a group see themselves as congenial members, their perception of the goal-oriented behavior of other members is more accurate (pp. 61-66).

Perceptions play an important role in organizational life. "Accurate self-perception increases the likelihood of accurate interpersonal perception, and realistic perceptions of others are key elements in our ability to communicate, engage in joint problem-solving and otherwise work with others. If our behavior is perceived by others differently from the way we intend, the probability of working effectively with them is going to be diminished. The greater the discrepancy between self-perception and perception of us by others, the greater the probability of inaccurate communication and misunderstanding" (Finch, Litterer and Jones, 1976, p. 167). Litterer (1973) further claims that since organizations strive to bring about

"integrated behavior" (p. 109), any lack of congruency between self-perception and other perception will require the development of additional administrative mechanisms to bring about integration of effort in spite of the difference in perception.

Harry Ingham and Joseph Luft (1969) have developed a model which allows the conceptualization of the relationship between self-perception and other perception. This model of framework is called the "Johari Window" and is presented in Figure 4.

The first quadrant represents aspects of the self which are known to both the individual concerned and other people. It is the open area where perceptions are similar for both the perceived and the perceiver. The second quadrant or blind area represents these aspects of the self which are unknown to the individual concerned but known to others. The third quadrant, or private area represent those elements of the self which are known to the individual concerned but are hidden from other people. Finally, the fourth quadrant represents those characteristics of the individual which are unknown to both himself/herself and others.

This model is based on the assumption that "valid information is necessary before we can change our behavior and make it more effective in our relationships with

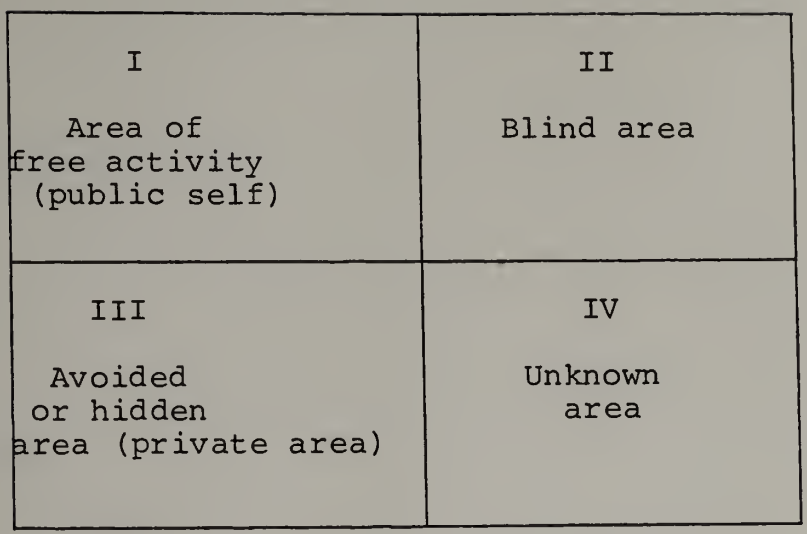


Figure 4: The Johari Window. Reproduced from Luft, 1969.

others" (Finch, Litterer and Jones, 1976, p. 216). The goal of decreasing the blind area to increase the area of quadrant I is accomplished through feedback. "The purpose of feedback is to provide constructive information to help another person become aware of how his behavior affects you and how you perceive his action" (Johnson, 1972, p. 15). Having received information through feedback, the individual will decide whether or not the information warrants a change in his/her behavior. Feedback therefore can help an individual gain greater congruency between him/her self-perception and the perceptions of others.

Several interesting findings have been found following research dealing with feedback. For the purpose of this research, three will be reported here: 1) Kolb and Schwitzebel (1970) found that there is a positive relationship between the total amount of feedback received from fellow group members and goal achievements. The relationship proved to be strongest in the last half of a change project. This finding was interpreted to mean that both the quality and quantity of feedback are important considerations. 2) While studying the effects of feedback on changes in individual behavior, Lippitt (1959) found that thirteen individuals out of a group of fourteen persons who received feedback, changed in the direction the group wanted them to change while only eight out of

fourteen who received no feedback showed change. 3) Ayers (1964) designed a study to focus on the effects of knowledge of results on management training. An experimental group and a control group were used for the study and the Leader Opinion Questionnaire (LOQ) was the instrument chosen to measure the change. The LOQ was administered at a various stage in the training program. Only the experimental group members were allowed to score their own questionnaires and to refer to the scoring key to see what their leadership profile looked like. It was found that the number of changes over the course of the training were considerably greater for the experimental group than for the control group, which participated but did not receive any information concerning changes in their leadership profile.

This chapter has included a selective review of the literature dealing with change, learning theories and concepts, and perception. The selection of these three concepts has first been done following the author's belief that behavior change following theoretical inputs is the result of the interplay between learning theories and concepts, and knowledge of self. Schematically, the relationship can be presented as shown in Figure 5.

Furthermore, the selection of the particular elements dealing with the concepts of change, learning and percep-

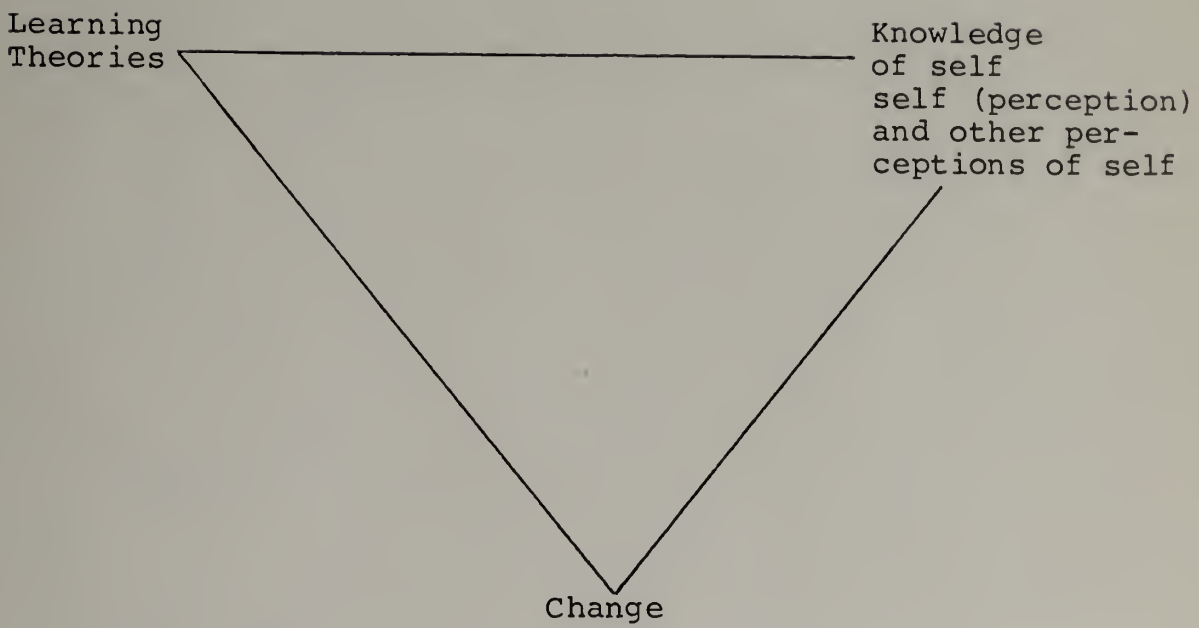


Figure 5: Relationships Between Learning Theories, Knowledge of Self and Change.

tion was motivated by the hypotheses to be tested. The author wanted to provide a general framework and background in order to better understand the results of the study. Among the many elements covered in this chapter the author now wants to focus on those which are particularly relevant to the study.

In considering change, the author feels that the concept of planned change effort, and of the change process itself are key elements in understanding hypotheses B(1) and E(1) and (2). Also, the review of the literature dealing with drawing as a method of affecting change and the discussion of the influence of the time element on training results provide the framework related to hypotheses A(1) and (2), B(2).

The section on learning attempted to provide some general information on cognition and intellectual knowledge. Special attention was given to Adult Learning as all of the learning which was considered here, was directed to adults. Knowles (1973) presents a strong case to show that the adult learning modes are different than that of the child. Hypothesis A(1) and (2) deals with theoretical knowledge and theoretical change. The author felt that understanding what is cognitive learning and the general conditions which result in effective learning were particularly helpful in studying change in theoretical

knowledge. Finally, the training method which influences learning in this study also provides information related to hypotheses A(1) and A(2).

The third and last concept to be studied in this chapter, was that of perception. The author feels that the section on self-perception and in particular one of the conclusions reached by Zalkind and Costello (1962) is especially useful in understanding hypothesis C. The section dealing with other's perception and feedback provides information dealing with hypotheses D.

The author will conclude this section by a review of the hypotheses to be tested in this study.

Hypotheses

Hypothesis A: The specific theoretical knowledge level of individuals enrolled in a leadership training program increases as a direct result of theoretical input. This general hypothesis is further specified as follows:

1. Participants' knowledge of the "Situational Leadership Theory" will increase following exposure to an Organizational Behavior course.
2. The level of knowledge retention of participants engaged in a training program will diminish after some period of time when those participants are not exposed to theoretical knowledge

directly reinforcing the previously acquired knowledge.

3. The participants' knowledge level of the "Situational Leadership Theory" prior to instruction will be positively related to the participants' subjective perception of this knowledge.

Hypothesis B: The greater one understands and internalizes theoretical concepts dealing with behavior, the greater one's perception of his/her behavior will change in the direction of the conceptualization. This general hypothesis is further specified as follows:

1. The perception of participants' own leadership behavior will change after instruction and will become more congruent with the participants' knowledge of the "Situational Leadership Theory" after instruction.
2. The perception of subjects' own leadership behavior will change to become less congruent with the "Situational Leadership Theory" when measured some period of time after instruction.

Hypothesis C: The greater the similarity between the self-perception of the leader's behavior and the perception of that behavior by others, the greater the effectiveness of the leader. This general hypothesis is further specified as follows:

1. The congruency between leadership style score measured by self and others some period of time after instruction, will be positively related to the effectiveness ratings given by the members of the group to whom the leader belongs, at the same period.

Hypothesis D: The greater one understands one's behavior through the feedback of others, the more one's self-perception becomes congruent with the perception of one's behavior by others. This general hypothesis is further specified as follows:

1. One's self-perception of his/her leadership style gathered sometime after instruction, will be more congruent with others' perception measured immediately after instruction than one's self-perception, taken immediately after instruction, will be with others' perception measured at this same time.
2. The difference between participants' perception of their leadership behavior and others' perception will be larger immediately after instruction than the difference will be some time after instruction.

Hypothesis E: The greater the degree of behavior change as a result of theoretical input dealing with be-

havior, the more authoritarian the individual is, and the more supervisory experience the person has had. This general hypothesis is further specified as follows:

1. The individual degree of behavior change as a result of theoretical input will be positively related to the self-perceived high task leadership style of the leader.
2. The individual degree of behavior change as a result of theoretical input will be positively related to the number of supervisory years of work experience an individual has had prior to the beginning of the course.

CHAPTER III

METHODOLOGY

Introduction

This chapter presents a detailed description of the research methodology used in the study. Specifically, this chapter will provide a description of the study, the sample population, the instructional treatment, the instrumentation used in the study, the design selected and the method of data collection.

Description of the Study

The study was designed to be exploratory in nature and to test certain assumptions related to leadership knowledge, leadership behavior as perceived by self and others and leadership effectiveness. These assumptions resulted in specific hypotheses to be tested which can be found in Chapter I.

The design of the study involved the collection of data on three different occasions, Occasion I, Occasion II and Occasion III. At Occasion I, self-report data was obtained from each of the participants of the study. This data comprised biographical information, self-perception of leadership style and ideal leadership behavior. In

Occasion II and III self-report data was again collected from each individual. This data included participants' self-perception of their leadership style and ideal leadership behavior. In addition, each individual provided data on four or five other participants, the number of participants corresponding to the size of the group the individual participated in, for the purpose of gaining greater knowledge. This data provided scores for leadership style and leadership effectiveness for each individual as perceived by their peers. In addition, at Occasion III, data was obtained from each participant on their self-perceived change in leadership knowledge, behavior and effectiveness.

Description of the Sample

The sample employed in the study consisted of 104 graduate students registered into two courses at the University of Massachusetts, Amherst, Massachusetts. The two courses were given in the Spring Semester, 1976, and were entitled "Organizational Behavior" and "The Management of Change: a Case Study Approach". The students registered in these two courses came mainly from the School of Education and the School of Business. A few students came from other backgrounds, namely, nursing, humanities, sciences and veterinary sciences.

A detailed description of the sample population will be presented in Chapter IV, when the author reports the results of the study, including a discussion of the LEAD Biographical Information Questionnaire.

Instructional Treatment

As mentioned earlier, each participant in the study was registered in the "Organizaional Behavior" and the "Management of Change: A Case Study Approach" courses.

The "Organizational Behavior" was organized to operate for three five hour classes (4:00 - 6:30, 7:30 - 10:00 p.m.) over a six week period and was followed by an intensive laboratory experience which took place over a week-end, from Friday 7:00 p.m. to Sunday afternoon 4:00 p.m.

The Organization Behavior course had the following goals:

1. To help students begin to apply behavioral science theories in analyzing situations in which they are involved.
2. To increase students' theoretical knowledge in the areas of motivation, behavior and leadership.
3. To increase understanding of how problem solving operates.
4. To increase student knowledge of their own personal style in groups.

Lectures dealing with motivation, leadership theories, leadership behavior and effectiveness occupy the three five hour class sessions were designed to provide the

participants with sound diagnostic skills in the area of leadership and motivation. During the extensive laboratory experience, the graduate students were divided into groups of 5 to 7 members each. The major task of each group during this weekend was to analyze, discuss and make decisions around role playing situations, simulations, written cases and cases presented through audio visual aid methods. Periodically during the weekend, the group members process their work and the interaction of the members of the group.

The management of change: a case study approach is also designed to operate for four five hour classes followed by an intensive laboratory experience which takes place over a weekend.

The management of change: a case study approach has the following goals:

1. To increase students' theoretical knowledge in the areas of Organizational Development (O.D.) and Change.
2. To help students to begin to apply O.D. and Change theories in analyzing situations.
3. To increase students' understanding of the various O.D. technologies and strategies and to use these in situations where appropriate.

The management of change: a case study approach focuses on implementation of change strategies. After a review of the various change theories, the participants involved in the course spend some time studying the

implication of these theoretical concepts for analyzing the results of case studies. Other parts of the course focus on Organizational Development theories and technologies.

During the four classes preceding the weekend, the graduate students are therefore exposed to basic change theories, case studies and discussion of various technologies used to implement change. The laboratory experience, which takes the form of a workshop, simulates an Organizational Development intervention. To accomplish their tasks, the participants are divided into small groups of 5 to 7 members each. Similar to the format of the Organizational Behavior weekend, several periods are alloted to process the work of each group and the interaction of its members.

The graduate students participating in the study were assigned to the same group for the two courses in which they were registered. Thus, participants assigned to a small group in the first course remained with the same group for the second course.

Instrumentation

Six different instruments were used to obtain the data for the study. The purpose of the instruments were:

a) to obtain biographical information from the participants or sample population,

b) to assess the knowledge level of the student population,

c) to assess the participants' self-perception of their leadership style,

d) to assess the leadership style of each student as perceived by the members of his/her group,

e) to obtain a subjective measure of change,

f) to obtain a measure of effectiveness as measured by self and others.

Instruments used to obtain biographical information from the sample population. One instrument developed by the investigator was used for this purpose. The purpose of the instrument was to gather information from the participants prior to the beginning of the first course in Organizational Behavior. This instrument was previously administered to three different groups and was modified each time. The goals of this instrument were two-fold; one, to provide basic information about the participants, and two, to help the interpretation of the results of the study. (See Appendix A for a copy of the Biographical Information Questionnaire.)

Instruments used to assess the knowledge level of the participants. Hersey and Blanchard's LEAD SELF Inventory (1973) was given to each subject in the study sample. The instrument, originally composed of twelve short paragraphs describing a work situation, was modified to include twenty situations. Each of these situations presents a

choice of four alternative actions. The task of the respondents was to read each work situation and to select one of the alternative actions based on their knowledge of what the ideal leader should do in this particular situation; that is according to how they thought a highly effective leader would behave in each of the situations presented. We will refer to this instrument as the LEAD SELF (Ideal) throughout this study. The Leader Effectiveness and Adaptability Description - LEAD - Instrument measures the range of leadership styles available to leaders as well as their adaptability and effectiveness. Using Task Behavior and Relationship Behavior components, Hersey and Blanchard (1973), present a theory of leadership based on the maturity level of the followers. Their instrument is based on the "Situational Leadership Theory" and it stresses the relationship between Task Behavior, Relationship Behavior and the Maturity of the followers. Hersey and Blanchard describe the effective leader as one who uses the appropriate style of leadership in a given situation; a leader is ineffective when his/her style is inappropriate to a given situation (p. 83). Maturing level is defined in the "Situational Leadership Theory" by achievement-motivation, the willingness and ability to take responsibility, and task relevant education and experience of an individual or a group. Beginning with

structured task behavior, which is appropriate for working with immature people, the "Situational Leadership Theory" suggests that the leader behavior should move through high task-low relationship behavior to high task-high relationship behavior and high relationship-low task behavior to low task-low relationship behavior if one's followers progress from immaturity to above average maturity (pp. 134-135).

Instruments used to assess the self-perception of the participants' leadership style. Again, Hersey and Blanchard LEAD SELF (1973) Inventory was used to measure the participants' perception of their leadership style. The task of the respondents was to read each work situation, assuming they were the actual leader within that situation and that they had to solve the situation presented. They were to select one of the four alternative actions given, which they felt best corresponded to what they would actually have done in the described situation. We will refer to this instrument as the LEAD SELF (Actual) throughout this study. (See Appendix B for a copy of the LEAD SELF instrument).

Instruments used to assess the participants' leadership style as seen by others. Each group member involved in the study filled out a LEAD OTHER-SHORT FORM instrument on each of the other members of their small group.

The LEAD OTHER instrument was developed by Hersey and Blanchard (1973). The instrument measures the leadership style and adaptability and effectiveness of an individual as seen by another individual. The LEAD OTHER is made up of twelve situations each having four different alternative actions.

In completing the LEAD OTHER, the task of each respondent is to read each situation described and to select one of the four alternative actions presented. The choice corresponds to the assessment by one individual of another person's leadership behavior.

The LEAD OTHER-SHORT FORM also measures the leadership style and leadership effectiveness of an individual as perceived by another individual. The LEAD OTHER-SHORT FORM (Appendix C) summarizes the data otherwise obtained by the LEAD OTHER (Appendix D).

Instrument used to assess a subjective measure of change. This instrument, entitled "Course Follow-up Questionnaire" was designed by the investigator in order to obtain a subjective measure of change. The instrument addresses the feelings and impressions of the participants concerning their knowledge of leadership theories, leadership styles, and leadership effectiveness prior to the beginning of the Organizational Behavior course and following the Management of Change: A Case Study Approach course. In addition, the instrument was designed to

obtain data on the climate of each respondent's small discussion group, and on the degree of influence of these courses on the participant's program of study and career plan.

The "Course Follow-up Questionnaire" is composed of a few open-ended questions and several closed questions. It was administered to each of the graduate students participating in the study. (See Appendix E for a copy of the "Course Follow-Up Questionnaire.").

Instrument used to obtain a subjective measure of effectiveness. The LERF or Leadership Effectiveness Rating Form was developed by the investigator to measure the leadership effectiveness as perceived by self and others. Four situations requiring four different leadership styles are presented to each respondent. The first task of each respondent is to name those individuals (including self) who within his/her group, are capable of behaving according to the required leadership style. The second task of each respondent is to assess, on a scale of -4 to +4, the effectiveness of each individual whose name has been listed.

The Leadership Effectiveness Rating Form was pretested with two colleagues of the investigator and three University Faculty members. It was evaluated in terms of clarity of direction, and clarity of scale. Some minor

changes were made prior to the administration of the instrument with the sample population. (See Appendix F for a copy of the Leadership Effectiveness Rating Form).

Data Collection

The data were collected during the first five months of 1976. Following a discussion and meetings in the Fall of 1975, it was agreed with Professor K. Blanchard, that the data for the study would be obtained from the graduate students registered in the courses he would be teaching during the Spring Semester. In addition, the data would be collected as an integral part of three courses.

The design of the study required that data be obtained on three occasions; Occasion I, Occasion II and Occasion III. The author will discuss below each Occasion and the instruments used.

Occasion I. At the first session, prior to the beginning of the Organizational Behavior class, the one hundred and four graduate students registered for this course completed the Biographical Information Questionnaire. On the following class, the same graduate students completed the LEAD SELF (Actual) and the LEAD SELF (Ideal).

Occasion II. Testing for Occasion II took place at the end of the first laboratory on March 6, 1976. Eighty-nine of the one hundred and four graduate students completed testing at Occasion II. The other fifteen remain-

ing graduate students did not attend the weekend laboratory. The instrumentation for Occasion II were the LEAD SELF (Actual), the LEAD SELF (Ideal) and the LEAD OTHER-SHORT FORM. Each participant in the study completed their own LEAD SELF (Actual and Ideal). In addition, each participant completed a LEAD OTHER-SHORT FORM for each member of his/her group.

Occasion III. At the conclusion of the second laboratory, May 2, 1976, a third-testing session was carried out. The instrumentation used for Occasion III was the LEAD SELF (Actual and Ideal), the Post Course Follow-up Questionnaire and the Leadership Effectiveness Rating Form.

C H A P T E R IV

RESULTS AND DISCUSSION

Introduction

This chapter presents the results of the study undertaken. The chapter is organized around the hypotheses stated in Chapter I.

Preceding the discussion of the research hypotheses, there is a short section describing the people who initially enrolled in the course. Similarly, following the analysis of the research hypotheses, there is a short section reporting the participants' self-perception of their leadership knowledge and effectiveness before and after the courses. Although these two analyses will present separate data for the group from the School of Education and the group from the School of Business, the analysis of the research hypotheses will deal with both groups combined. This decision was reached after carrying out some initial computer runs, separating the School of Business and the School of Education, and discovering that the results were essentially the same for both groups.

Description of the Participants in the Study

The description of the graduate students originally registered in the Organizational Behavior courses is

based on the LEAD Biographical Information Questionnaire completed before the beginning of the courses. This instrument allowed the investigator to obtain a more careful description of the participants enrolled in these classes. In Table 4, the results are presented.

The results indicated that seventy-eight students were enrolled in the course offered by the School of Education and twenty-six with the School of Business. Of this number, 48.1% were male and 44.2% were female. Approximately 7% did not answer the question.

The ages of the participants varied between eighteen and fifty-one. About 9% were less than twenty years old. About 58% were between twenty-one and thirty years of age, representing therefore the largest concentration. The remaining 33% of the participants were over thirty years of age.

Although many racial groups were represented in the classes, 79% were white or caucasian. Another 21% was composed of 7% Black, 4% oriental and 6% were from other racial groups. The other participants did not answer this question.

All those enrolled in the courses were either full-time or part-time students. About 68% were full time while 20.2% were part-time. Of the other 11.6%, 2.9% were auditing and 8.7% did not answer this question.

TABLE 4

Results from the

LEAD Biographical Information Questionnaire

LEAD-BIO. QUESTION	Education (N=78)	Business (N=26)	Combined (N=104)
*Q3: Sex			
Male	43.6%	61.5%	48.1%
Female	48.7	30.8	44.2
Omit	7.7	7.7	7.7
Q4: Race			
Caucasion	73.1%	84.6%	79 %
Black	9.0	--	7
Oriental	3.8	3.8	4
Native American	2.6		2
Spanish	2.6		2
Other	1.3	3.8	2
Omit	7.7	7.7	8
Q5: Work Status			
Full-time Student	20.5%	53.8%	28.8%
Part-time Student	1.3	--	1.0
Part-time Student/ part-time working	3.8	3.8	3.8
Part-time Student/ full-time working	17.9	7.7	15.4
Full-time Student/ part-time working	19.2	23.1	20.4
Full-time Student/ full-time working	24.4	3.8	19.2
Other	3.8	--	2.9
Omit	9.0	7.7	8.7

TABLE 4 (Cont.)

LEAD-BIO. Question	Education	Business	Combined
Q6: Number of University Credits			
Less than 3	2.6%	--	1.9%
3 to 6	17.9	15.4	17.3
9 to 12	30.8	38.5	32.7
13 to 18	35.9	38.5	36.5
Over 18	3.8	--	2.9
Not taking any	1.3	--	1.0
Omit	7.7	7.7	7.7
Q7: Degree expected			
Master's	23.1%	76.9%	36.5%
Master/Doctorate	7.7	3.8	6.7
Doctorate	39.7	--	29.8
C.A.G.S.	15.4	--	14.4
None	2.6	11.5	1.9
Omit	11.5	7.7	10.6
Q8: Major field of study			
Humanities	5.1%	3.8%	4.8%
Science	1.3	7.7	2.9
Business	2.6	73.1	20.2
Education	69.2	3.8	52.9
Social Science	9.0	3.8	7.7
Prof. Schools	5.1	--	3.8
Omit	7.7	7.7	7.7
Q9: Years of supervisory experience			
None	12.8%	46.2%	21.2%
One or 2	24.4	11.5	21.2
3 to 5	34.6	19.2	30.8
6 to 10	9.0	11.5	9.6
More than 10	11.5	3.8	9.6
Omit	7.7	7.7	7.7

TABLE 4 (Cont.)

LEAD-BIO. QUESTION	Education	Business	Combined
Q10: Present Position (50% working)			
Educational Admin.	11.5%	--	8.7%
Teacher	10.3	--	7.7
Community Project Administrator	6.4	--	4.8
Student-related Services	6.4	3.8	5.8
Manager in Business	2.6	7.7	3.8
Worker	--	3.8	1.0
Intern	1.3	--	1.0
Involved with training	7.7	--	5.8
Admin./Supervisor of people serving program	3.8	--	2.9
Omit	50.0	84.6	58.7
Q11: Nature of work			
Top-management/ administrator	3.8%	--	2.9%
Mid-management/ administrator	7.7	7.7	7.7
Supervisory mgt. administrator	23.1	3.8	18.3
Specialist	11.5	3.8	9.6
Other	3.8	--	2.9
Omit	50.0	84.6	58.7
Q12: Number of individual supervised			
One or 2	9.0%	--	6.7%
3 to 5	9.0	--	6.7
6 to 10	7.7	3.8	6.7
11 to 20	5.1	7.7	5.8
More than 20	12.8	3.8	10.6
Omit	56.4	84.6	

TABLE 4 (Cont.)

LEAD-BIO. QUESTION	Education	Business	Combined
Q13: Self-feeling of success			
Not successful	--	--	--
Somewhat successful	7.7	--	5.8
Successful	26.9	7.7	22.1
Very successful	6.4	7.7	6.7
Unsure	3.8	--	2.9
Omit	55.1	84.6	62.5
Q14: Other perception - success			
Not successful	--	--	--
Somewhat successful	6.4	--	4.8
Successful	24.4	11.5	21.2
Very successful	7.7	3.8	6.7
Unsure	5.1	--	3.8
Omit	56.4	84.6	63.5
Q15: Satisfaction			
Not at all	5.1%	3.8%	4.8%
Somewhat satisfied	19.2	7.7	16.3
Satisfied	15.4	--	11.5
Very satisfied	9.0	3.8	7.7
Omit	51.3	84.6	59.6
Q16: Career Plans			
Promotion	1.3%	--	1.0%
Unsure	15.4	7.7	13.5
Continue present position and personal growth	16.7	--	12.5
Change agent/ consultation	7.7	--	5.8
Teaching	9.0	7.7	8.7
Educational Admin.	20.5	3.8	16.3
Mental Health	7.7	3.8	6.7
Management career	1.3	57.7	15.4
Counselling or program planning	7.7	--	5.8
Omit	12.8	19.2	14.4

TABLE 4 (Cont.)

LEAD-BIO. QUESTION	Education	Business	Combined
Q17: Dominant Leadership Style			
A: High-task/Low relationship			
Most frequent (1)	6.4%	--	4.8%
(2)	5.1	11.5	6.7
(3)	56.9	38.5	29.8
Least frequent (4)	46.2	34.6	43.3
Omit	15.4	15.4	15.4
B: High-task/High relationship			
Most frequent (1)	41.0%	57.7%	45.2%
(2)	28.2	23.1	26.9
(3)	15.4	3.8	12.5
Least frequent (4)	1.3	--	1.0
Omit	14.1	15.4	14.4
C: High relationship/ Low task			
Most frequent (1)	14.1%	19.2%	15.4%
(2)	43.6	23.1	38.5
(3)	10.3	26.9	14.4
Least frequent (4)	17.9	15.4	17.3
Omit	14.1	15.4	14.4
D: Low task/Low relationship			
Most frequent (1)	26.9%	7.7%	22.1%
(2)	6.4	30.8	12.5
(3)	32.1	15.4	27.9
Least frequent (4)	19.2	30.8	22.1
Omit	15.4	15.4	15.4
Q21: Reasons for enrolling in the course			
Reason A:			
1. Recommended course	26.9%	3.8%	21.2%
2. Required course	--	26.9	6.7

TABLE 4 (Cont.)

LEAD-BIO. QUESTION	Education	Business	Combined
Q21:			
3. Gain theoretical knowledge of organizational concepts as it relates to human resources	15.4%	19.2%	16.3%
4. Need to develop skills	1.3	--	1.0
5. K.H. Blanchard's reputation	2.6	3.8	2.9
6. Gain insight into group behavior	6.4	7.7	6.7
7. Interest into subject matter	9.0	11.5	9.6
8. For own professional growth	1.3	--	1.0
9. For future job-relevant and useful toward career goal	5.1	--	3.8
10. Major field of study	1.3	3.8	1.9
11. Gain greater awareness of one's behavior in relation with others	6.4	11.5	7.7
12. Understand organizational theories as it relates to ungoing work	10.3	--	7.7
13. Omit	14.1	11.5	13.5
Reason B:			
1. Recommended course	10.3%	3.8%	8.7%
2. Required course	2.6	15.4	5.8
3. Gain theoretical knowledge of organizational concepts as it relates to human resources	6.4	11.5	7.7
4. Need to develop skills	3.8	7.7	4.8
5. K.H. Blanchard's reputation	5.1	--	3.8

TABLE 4 (Cont.)

LEAD-BIO. QUESTION	Education	Business	Combined
Q21:			
6. Gain insight into group behavior	2.6%	3.8%	13.5%
7. Interest into subject matter	16.7	3.8	13.5
8. For own professional growth	2.6	3.8	2.9
9. For future job-relevant and useful toward career goal	2.6	3.8	2.9
10. Major field of study	3.8	--	2.9
11. Gain greater awareness of one's behavior in relation to others	7.7	3.8	6.7
12. Understand organizational theories as it relates to ungoing work	1.3	--	1.0
13. Omit	34.6	42.3	36.5
Reason C:			
1. Recommended course	1.3%	--	1.0%
2. Required course	5.1	--	3.8
3. Gain theoretical knowledge of organizational concepts as it relates to human resources	1.3	--	1.0
4. Need to develop skills	2.6	3.8	2.9
5. K.H. Blanchard's reputation	2.6	--	1.9
6. Gain insight into group behavior	2.6	3.8	2.9
7. Interest into subject matter	2.6	--	1.9
8. For own professional growth	2.6	3.8	2.9
9. For future job-relevant and useful toward career goal		3.9	1.0

TABLE 4 (Cont.)

LEAD-BIO. QUESTION	Education	Business	Combined
Q21:			
10. Major field of study		--	--
11. Gain greater awareness of one's behavior in relation with others	2.6	3.8	2.9
12. Understand organizational theories as it relates to ungoing work	3.8	--	2.9
13. Omit	75.6	80.8	76.9

*For further details on the wording of the questions see the LEAD Biographical Information Questionnaire, Appendix A.

The number of University credits registered for by the participants during the term varied from less than 3 to over 18, with the mean being between 9 and 12 credits.

The participants enrolled in the classes were working at different degree levels. 36.5% were working toward a Master's, 6% toward a Master/Doctorate program combined, 29.8% toward a Doctorate, and 14.4% toward the C.A.G.S. diploma.

Although the courses were offered by the School of Business and the School of Education, the students originally enrolled in the classes were from a variety of backgrounds. The breakdown is as follows: 4.8% from the Humanities, 2.9% from Sciences, 20.2% from Business, 52.9% from Education, 7.7% from the Social Sciences and 3.8% from professional schools. 7.7% did not answer this question.

The number of years of supervisory experience varied from none to more than 10, with the mean being between one and two.

About 41% of the students held jobs at the time they took the course. 50% of those were registered with the School of Education while 15.4% were registered with the School of Business. The data dealing with this group's specific occupation, the level of their position, the number of individuals supervised by them, their feelings

of success and their degree of satisfaction with their position can be found in questions 11, 12, 13, 14 and 15 of Table 4.

The career plans of the students enrolled in the courses were varied. While 12.5% wanted to continue in their present position and at the same time increase their degree of effectiveness, 1% wanted to be promoted to a new position within their organization. 13.5% were unsure as to what they wanted and 14.4% did not answer this question. The remaining 58.7% aspired to teaching, educational administration, mental health related professions, management careers and counselling or program planning.

When in a leadership situation, 4.8% of the students saw their dominant leadership style as being high task, low relationship behavior, 45.2% as being high task, high relationship behavior, 15.4% as being high relationship, low task behavior and finally 22.1% as being low task, low relationship behavior.

Several reasons motivated graduate students to register into the Organizational Behavior courses. Although 12.5% registered because it was a required course, the remaining 87.5% enrolled with varied motives; 29.9% registered in order to gain theoretical knowledge of organizational concepts as it relates to human resources, and

15.4% enrolled because of their interest into the subject matter.

Hypothesis A(1)

The first hypothesis predicted that the participants' knowledge of the "Situational Leadership Theory" would increase following exposure to the Organizational Behavior course as measured by the difference in scores on the LEAD SELF (Ideal) Occasion I and Occasion II.

This hypothesis was tested by computing a t-test of the significance between the mean scores of ideal effectiveness at Occasion I and the mean scores of ideal effectiveness at Occasion II.

The effectiveness or style adaptability for a leader can be determined on the LEAD instrument from a predetermined weighing of each alternative action choice and then by calculating the total score as indicated on a scoring table provided with the instrument (see Appendix B for a copy of the scoring table). For this study, the weighing was modified from +2 to -2 (the weighing suggested by Hersey and Blanchard, 1973) to range from 0 to +3. This slight transformation of the data was done for convenience and had no effect on the results. The leader behavior with the highest probability of success of the alternatives offered was always weighed a +3. The behavior with the lowest probability was always weighed at 0. The second

best alternative was weighed a +2 and the third a +1.

The results of the analysis are presented in Table 5. The results indicate that the mean difference scores of ideal effectiveness at Occasion I and ideal effectiveness at Occasion II are significantly different at the .001 level. Therefore, Hypothesis A(1) is supported.

Hypothesis A(2)

The second hypothesis indicated that the level of knowledge retention of participants engaged in a training program diminished after time when one is not exposed to theoretical knowledge directly reinforcing the previously acquired knowledge as measured by the LEAD SELF (Ideal) at Occasion II and Occasion III.

This hypothesis was tested by computing a t-test of the significance between the mean scores of ideal effectiveness at Occasion II and the mean scores of ideal effectiveness at Occasion III.

The results are presented in Table 6. The results indicate that, although the differences between the mean scores of ideal effectiveness at Occasion II and Occasion III are in the direction predicted, the difference between the mean scores is not statistically significant.

Hypothesis A(3)

This hypothesis predicted that the participants' knowledge level of the "Situational Leadership Theory" at

TABLE 5

IDEAL EFFECTIVENESS SCORES AT

OCCASION I AND OCCASION II

{HYPOTHESIS A(1)}

Sample Size	Occasion I		Occasion II		t Value	degrees of freedom
	$\bar{x}$	sd	$\bar{x}$	sd		
81	38.14	5.29	48.05	6.01	+12.32*	80

*p <.001

TABLE 6

IDEAL EFFECTIVENESS SCORES AT

OCCASION II AND OCCASION III

{HYPOTHESIS A(2)}

Sample Size	Occasion II		Occasion III		t Value	degrees of freedom
	$\bar{x}$	sd	$\bar{x}$	sd		
45	48.60	6.05	46.87	5.39	-1.94	44

Occasion I, LEAD SELF (Actual) would relate positively to the participants' subjective perception of this knowledge as measured on the Course Follow-up Questionnaire.

The Pearson product moment correlation coefficient was computed to measure the extent of the relationship between the knowledge level of the participants as measured by the LEAD SELF (Actual) and the Course Follow-up Questionnaire. The hypothesis would be supported if there was a negative correlation since scores on question 8 went from 1 to 5, 1 being extremely effective, 2 very effective, 3 effective, 4 somewhat effective and 5 ineffective.

The results indicate that there is a negative correlation ($r = -.27$) between Ideal Effectiveness Score at Occasion I and the subjective measure of effectiveness on the Course Follow-up Questionnaire. This correlation is significant at the .05 level. Therefore, hypothesis A(3) is supported, although the correlation is somewhat lower than might have been expected. In part, this is likely due to the unreliability of the two measures being correlated.

Hypothesis B(1)

Hypothesis B(1) predicted that the perception of participants' own leadership behavior as measured by LEAD SELF (Actual) would change from Occasion I to

Occasion II to become more congruent with the "Situational Leadership Theory" as measured by LEAD SELF (Ideal).

This hypothesis was tested by obtaining mean scores for Ideal Effectiveness at Occasion I and Occasion II, and mean scores for Actual Effectiveness also at Occasion I and Occasion II.

A mean difference score was then computed between the mean score of Ideal and Actual Effectiveness at Occasion I. Similarly, a mean difference score was also obtained, establishing the difference between the mean scores of Ideal and Actual Effectiveness at Occasion II. Finally, a t-test was computed to determine the significance between the mean difference scores at Occasion I and Occasion II.

The results are presented in Table 7. The results indicate that the mean difference scores between Ideal and Actual Effectiveness at Occasion I and Ideal and Actual Effectiveness at Occasion II are large enough to be significant at the .01 level. Hypothesis B(1) is thus supported.

Hypothesis B(2)

This hypothesis states that the perception of subjects' own leadership behavior, as measured by the LEAD SELF (Actual), Occasion II and Occasion III, will change to become less congruent with the "Situational Leadership

TABLE 7

DIFFERENCES BETWEEN IDEAL AND ACTUAL EFFECTIVENESS SCORES AT OCCASION I AND OCCASION II {HYPOTHESIS B(1)}

Sample Size	Occasion I		Occasion II		t Value	degrees of freedom
	$\bar{x}$	sd	$\bar{x}$	sd		
27	-1.44	4.15	1.67	3.26	+2.82*	26

*p <.01

Theory" as measured by LEAD SELF (Ideal), Occasion II and Occasion III.

This hypothesis was tested by first computing mean difference scores for Ideal Effectiveness scores and Actual Effectiveness scores at Occasion II. Mean difference scores were also computed for Ideal Effectiveness scores and Actual Effectiveness scores at Occasion III. A t-test of significance was then computed between the two mean difference scores of effectiveness at Occasion II and Occasion III.

The results are presented in Table 8. The results indicate that a definite change takes place between the participants' perception of their behavior and their knowledge of the "Situational Leadership Theory". It further indicates that this change is in the direction predicted, that is, the participants' behavior becomes less congruent with the "Situational Leadership Theory" at Occasion III than it was at Occasion II. Finally, the change is large enough to be significant at the .01 level of significance. This hypothesis is therefore supported.

Hypothesis C(1)

This hypothesis predicted that the congruency between leadership style scores on the LEAD SELF (Actual) at Occasion III and the LERF would be positively related to the effectiveness ratings by the members of the group

TABLE 8

DIFFERENCE BETWEEN IDEAL AND ACTUAL EFFECTIVENESS SCORES AT OCCASION II AND OCCASION III {HYPOTHESIS B(2)}

Sample Size	Occasion II		Occasion III		t Value	degrees of freedom
	$\bar{x}$	sd	$\bar{x}$	sd		
27	1.67	3.25	-.30	3.02	-2.81*	26

*p <.01

to whom the leader belongs, as indicated by the LERF effectiveness score.

In order to test this hypothesis, the investigator ranked ordered the leadership style scores on the LEAD SELF (Actual) instrument and the LERF instrument. The ranking ranged from 1 to 4, 1 being given to the highest style score and 4 being given to the lowest score. When two style scores were identical, a mean rank score was given.

A congruency score was obtained for each leadership dimension (high task, low relationship; high task, high relationship; low task, high relationship; and low task, low relationship) by calculating the discrepancy between the scores of each quadrant on the LEAD SELF (Actual) and the LERF. A total discrepancy score was obtained by adding together the discrepancy score of each quadrant.

A general or total effectiveness score was obtained by averaging the effectiveness ratings given by each group participants to a fellow group member.

A Pearson moment correlation coefficient was computed to measure the relationship between the discrepancy score and the effectiveness score. A negative correlation will support the hypothesis, as the lower the discrepancy score, the greater the congruency value.

The results indicate that there is a relationship between the effectiveness scores and the congruency scores. This correlation ($r = -.26$) is, however, not large enough to be statistically significant. Therefore, Hypothesis C(1) is rejected.

Hypothesis D(1)

Hypothesis D(1) predicted that after receiving feedback, one's self-perception would be more congruent with the feedback received than would one's self-perception be prior to receiving feedback.

In order to test this hypothesis, the investigator ranked ordered the leadership style scores obtained on the LEAD SELF (Actual) at Occasion II and Occasion III and also the leadership style scores obtained on the LEAD OTHER at Occasion I.

The congruency scores were arrived by calculating discrepancy scores between the LEAD OTHER and the LEAD SELF (Actual), Occasion II and between the LEAD OTHER and LEAD SELF (Actual), Occasion III. Mean discrepancy scores were then computed. A t-test of significance was finally computed to establish the degree of the significance of the differences between the mean scores of congruency.

A large mean congruency score between the LEAD OTHER and the LEAD SELF (Actual) Occasion I would indicate that

feedback influences one's self-perception to move in the direction of the feedback received.

The results are presented in Table 9. The results indicate a statistical significant difference between the mean scores at .01 level. This difference is in the wrong direction, showing a greater congruency between the LEAD OTHER and the LEAD SELF (Actual) at Occasion II than between the LEAD OTHER and the LEAD SELF (Actual) at Occasion III. Hypothesis D(1) is thus rejected.

Hypothesis D(2)

This hypothesis states that the difference between participants' perception of their leadership behavior and others' perception will be larger at Occasion II that it will be at Occasion III as measured by the LEAD SELF (Actual) and the LEAD OTHER, Occasion II and the LEAD SELF (Actual) and the LERF, Occasion III.

In order to test this hypothesis, the leadership style scores on the LERF were ranked ordered by the same method which was used to rank ordered the LEAD SELF (Actual) at Occasion II and Occasion III and the LEAD OTHER. Difference mean scores were calculated for the LEAD OTHER and the LEAD SELF (Actual), Occasion II. Similarly, mean difference scores were computed for the LERF and the LEAD SELF (Actual), Occasion III. A t-test of significance was computed to establish the statistical degree of

TABLE 9

DIFFERENCES BETWEEN CONGRUENCY SCORES FOR LEAD OTHER AND LEAD SELF (ACTUAL) AT OCCASION III AND CONGRUENCY SCORES FOR LEAD OTHER AND LEAD SELF (ACTUAL) AT OCCASION II {HYPOTHESIS D(1)}

Sample Size	Occasion II		Occasion III		t Value	degrees of freedom
	$\bar{x}$	sd	$\bar{x}$	sd		
27	3.30	2.00	4.19	1.73	-3.52*	26

*p <.01

difference between the mean scores.

The results appear in Table 10. The results indicate that there is a significant difference ($p < .05$) between the congruency scores for the LEAD OTHER and the LEAD SELF (Actual) at Occasion II and the congruency scores for the LEAD SELF (Actual) and the LERF at Occasion III. This difference is, however, in the wrong direction. The scores between self-perception and other perception at Occasion II are more congruent than the scores at Occasion III. Consequently, Hypothesis D(2) is rejected.

Hypothesis E(1)

Hypothesis E(1) predicted that the degree of individual behavior change as measured by the difference between LEAD SELF (Actual) at Occasion I and Occasion III would be positively related to self-perceived high task leadership style scores on the Biographical Information Questionnaire.

Pearson moment correlation coefficients were computed to determine the relationship between the amount of behavior change and the task dimension of the "Situational Leadership Theory". A behavior change score was obtained by calculating the mean effectiveness difference between the LEAD SELF (Actual) at Occasion I and Occasion III. A positive correlation would indicate a rela-

TABLE 10

DIFFERENCES BETWEEN CONGRUENCY SCORES FOR LEAD OTHER AND LEAD SELF (ACTUAL) AT OCCASION II AND CONGRUENCY SCORES FOR LERF AND LEAD LERF (ACTUAL) AT OCCASION III: {HYPOTHESIS D(2)}

Sample Size	Occasion II: Lead Other - Lead Self		Occasion III: Lead Other: Lerf		t Value	degrees of freedom
	$\bar{x}$	sd	$\bar{x}$	sd		
27	3.30	2.00	4.35	2.16	-2.24*	26

*p <.05

tionship between the change score and the high task dimension of leadership behavior.

The results indicate a relationship between the behavior change score and the high task, high relationship leadership behavior dimension. However, the correlation r = .12 is, not statistically significant. Hypothesis E(1) is consequently rejected.

Hypothesis E(2)

Hypothesis E(2) predicted that the degree of behavior change as indicated by the difference between LEAD SELF (Actual), Occasion I and Occasion III, would be positively related to the number of supervisory years of work experience, as measured by the LEAD Biographical Information Questionnaire.

Pearson moment correlation coefficients were computed to test the relationship between the number of supervisory years of work experience a person has had and the degree of behavior change. A positive correlation would indicate a relationship between the dependent variable, the number of supervisory years of work experience and the independent variable, the degree of behavior change.

The results indicate a positive relationship (r = .19) between the two variables. The correlation is strong enough to be signficant at .05 level. Hypothesis E(2) is therefore supported.

Course Follow-up Questionnaire

Following the completion of the Management of Change: A Case Study Approach course, the participants who had attended both courses were asked to complete the Course Follow-up Questionnaire. The purpose of this instrument was to obtain the participants' subjective feelings of change in regard to their knowledge of leadership theories, their knowledge of their own leadership style, and their leadership effectiveness prior to and after the courses. In addition, the instrument was designed to gather data on the climate of their small group during the laboratory experience and also on their perception of the ways in which the total experience would influence their program of study and their work or career plans.

The results of the Course Follow-up Questionnaire are summarized in Table 11.

A total of forty-nine graduate students completed the Course Follow-up Questionnaire. 93.9% had attended more than 75% of the classes held at the Campus of the University of Massachusetts and the weekend laboratory experiences. During the last weekend, organized around the course Management of Change: A Case Study Approach, 100% had participated, at least, at four of the five sessions held during that weekend.

The graduate students who completed the Course Follow-up Questionnaire felt that their knowledge of leadership

TABLE 11

SUMMARY OF THE RESULTS OF THE

COURSE FOLLOW-UP QUESTIONNAIRE

	Education (N=33)	Business (N=16)	Combined (N=49)
*Q2: Degree of participation in the two courses.			
Attended all classes and both weekends	72.7%	87.5%	77.6%
Attended 75% of the classes and both weekends	21.2	6.3	16.3
Attended 50% of the classes and both weekends	3.0	--	2.0
Attended less than 50% of the classes and both weekends	--	--	--
Attended both weekends but none of the classes	--	--	--
Other	3.0	6.3	4.1
Q3: Number of sessions attended during the weekend			
One	--	--	--
Two	--	--	--
Three	--	--	--
Four	9.1%	6.3%	8.2%
Five	90.9	93.8	91.8
Q4: Courses taken			
Management of Change	--	--	--
Management of Change and Organizational Behavior	100%	100%	100%

TABLE 11 (Cont.)

Course Follow-Up Question	Education	Business	Combined
Q5: Knowledge of leadership theories			
Poor	--	--	--
Fair	6.1%	--	4.1%
Good	51.5	25.0	42.9
Very good	30.3	18.8	26.5
Excellent	12.1	56.3	26.5
Q6: Knowledge of one's leadership style			
Poor	--	--	--
Fair	--	6.3%	2.0%
Good	30.3	6.3	22.4
Very Good	57.6	37.5	51.0
Excellent	12.1	50.0	24.5
Q7: Influence of theoretical content of one's leadership style			
To a minimal extent	3.0%	--	2.0%
To a moderate extent	45.5	18.8	36.7
To a considerable extent	36.4	31.3	34.7
To a great extent	12.1	43.8	22.4
To a very great extent	3.0	6.3	4.1
Q8: Rating of leadership effectiveness prior to the courses			
Extremely effective	--	--	--
Very effective	9.1%	18.8%	12.2%
Effective	54.5	50.0	53.1
Somewhat effective	36.4	31.3	34.7
Ineffective	--	--	--

TABLE 11 (Cont.)

Course Follow-Up Question	Education	Business	Combined
Q9: Rating of leadership effectiveness after the courses			
Extremely effective	--	6.3%	2.0%
Very effective	45.5%	75.0	55.1
Effective	45.5	18.8	36.7
Somewhat effective	9.1	--	6.1
Ineffective	--	--	--
Q10: One's effectiveness in small group			
Extremely effective	15.2%	6.3%	12.2%
Very effective	42.4	50.0	44.9
Effective	12.1	25.0	16.3
Somewhat effective	27.3	18.8	24.5
Ineffective	3.0	--	2.0
Q11: Support provided by one's small group			
Extremely supportive	39.4%	25.0%	34.7%
Very supportive	21.2	43.8	28.6
Supportive	15.2	18.8	16.3
Somewhat supportive	18.2	12.5	16.3
Not supportive	6.1	--	4.1
Q12: Effect of courses			
A: Program of Study			
1. Choice of future courses	25.9%	25.0%	26.5%
2. Development of new interest to be pursued	3.7	12.5	7.0
3. Greater awareness of importance of group process	11.1	6.3	9.3

TABLE 11 (Cont.)

Course Follow-Up Question	Education	Business	Combined
Q12:			
4. Gave focus for dissertation project and resources for it	3.7%	6.3%	4.7%
5. Will use a method of decision-making	3.7	6.3	4.7
6. Will look for more group experiences to apply concepts learned	7.4	--	4.7
7. Will strengthen the social science aspect of my program	3.7	6.3	4.7
8. Will relate theory to ongoing special project	3.7	--	2.3
9. Answer does not apply	11.1	6.3	9.3
10. Will influence the major focus of my program	14.8	6.3	11.6
11. Little or no influence	3.7	6.3	7.0
12. Do not know	7.4	6.3	7.0
B: On work			
1. By becoming a more effective leader	17.9%	23.1%	19.5%
2. Will increase chance of success	--	7.7	3.4
3. By bringing critical attention to the effects of interpersonal relationships in organizational career	3.6	15.4	7.3
4. By being more aware of the need for diagnosis and evaluation of work environment	3.6	7.7	4.9
5. By knowing that there is no best leadership style	3.6	--	2.4

TABLE 11 (Cont.)

Course Follow-Up Question	Education	Business	Combined
Q12:			
6. By being aware of the effects of being a change agent from within	--	16.7%	5.0%
7. General positive effect	7.1%	16.7	10.0
8. Has opened up new career possibility	7.1	33.3	15.0
9. Will bring new prospective on present work	7.1	--	5.0
10. Will be more aware of the importance of a balance between task and relationship behavior	7.1	--	5.0
11. Will be more aware of my role in a group	21.4	--	15.0
12. Gave me a system to understand organizational behavior	7.1	16.7	10.0
13. More confidence in my work	--	--	--
14. Brought changes in a management training program	--	--	--
15. Has changed my participation in staff meeting	7.1	--	5.0

theories, after the theoretical input, ranged from fair to excellent, with 42.9% evaluating it as being "good". They also felt that their knowledge of their own leadership style ranged from fair to excellent, with 51% indicating that it was "very good".

The theoretical content of the course served to have a varied effect on the leadership style of the participants in the study. When asked about the extent of the influence of the theoretical content on their leadership style during the laboratory experience, the answers ranged from a minimal extent to a very great extent, with 71.4% evaluating the theoretical content as having had a moderate or considerable extent.

In rating their leadership effectiveness prior to the course, all felt that their effectiveness ranged from "somewhat effective", 34.7% to "very effective", 12.2%. The majority, or 53.1% rated their effectiveness as being "effective". None felt that they were "extremely effective" or ineffective. The participants in the study rated their effectiveness after the course somewhat differently. The results ranged from "very effective" to "somewhat effective". 2.0% felt they were "extremely effective", 55.1% that they were "very effective", 36.7% that they were "effective" and 6.1% that they were "somewhat effective". None of the students felt they were

"ineffective". One's effectiveness in his/her group during the weekend ranged from "ineffective" to "extremely effective", with 44.9% feeling they were "very effective" and 24.5% feeling they were "somewhat effective".

The graduate students also evaluated the climate of their small group. The results ranged from "extremely supportive" to "not supportive" and are distributed as follows: "extremely supportive" 34.7%; "very supportive" 28.6%; "supportive" 16.3%; "somewhat supportive" 16.3%; and "not supportive" 4.1%.

Most students, or 90.7%, felt that the experience they had participated in would influence their program of study. The three major areas of influence were the major focus of one's program with 11.6%, the choice of future courses with 26.5% and the awareness of the importance of group process in the program activities with 9.3%. Students also felt that the experience would influence their work or career goals. 19.5% of the participants felt that this experience would have a general positive effect on their career; 19.5% also felt that they would become better leaders as a result of this experience and 12.2% felt that it had opened up new career possibilities.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Introduction

This chapter presents an overview and conclusions of the study. Specifically, this chapter provides a summary of the study, interpretations of the findings, delimitations and significance of the study and finally, some suggestions for further research.

Summary

The major focus of the study was to research the effects of specific theoretical knowledge upon corresponding behavior. More specifically, the study attempted to measure change in knowledge as a result of leadership training; to study the relationship between increase in knowledge and leadership behavior and effectiveness; to correlate individual behavior change and effectiveness; to correlate individual behavior change with an individual self-perceived leadership style and supervisory experience; and finally, to study the effects of feedback on individual self-perception.

In order to accomplish the goals of the study, a field study, hypothesis testing (Kerlinger, 1973) was undertaken.

The sample employed in the study consisted of one hundred and four graduate students registered at the University of Massachusetts. Two separate sub-groups made up the total sample production: twenty-six students registered in an Organizational Behavior course offered by the School of Business and seventy-eight registered in an Organizational Behavior course offered by the School of Education.

The major instrument used in the study was Hersey and Blanchard's Leader Effectiveness and Adaptability Description. This instrument measures the range of flexibility, adaptability and effectiveness of a leader. The Leader Effectiveness and Adaptability Description Instrument provided scores of self-report of self-perceived leadership style and effectiveness. Each participant in the study was asked to complete the Leader Effectiveness and Adaptability Description Instrument, in relation to their knowledge of the theory (LEAD - Ideal) and of their actual leadership behavior (LEAD - Actual). The Leader Effectiveness and Adaptability Description Instrument was completed on three different occasions during the course of the study. These were referred to as Occasion I, Occasion II and Occasion III.

In order to obtain data on the leadership style and effectiveness of each participant in the study, a Leader

Effectiveness and Adaptability Description - Other (short form) and a Leadership Effectiveness Rating Form was completed by a group of peers of each student.

In addition, each graduate student completed a LEAD Biographical Information Questionnaire and a Course Follow-up Questionnaire. These two instruments provided data on the nature and background of the participants in the study and on their self-perception of their leadership knowledge, style, range and adaptability.

The data obtained from the Leader Effectiveness and Adaptability Description Instrument was subjected to a t-test in order to indicate the significance of the results gathered from the data collected at Occasions I, II and III.

Pearson product moment correlations were computed to establish the similarity between the leadership style scores as perceived by self and others. Pearson correlations were also computed between the Leadership Effectiveness Rating Form and the Course Follow-up Questionnaire and finally between the degree of change as measured by the LEAD SELF instrument and the biographical information provided by the participants.

The field study was explored by the setting of five general hypotheses. Each general hypothesis was subdivided into specific hypotheses. The results of the study follow the analysis of each of the specific hypothesis.

The first group of hypotheses related to the first general hypothesis addressing the question of increase in knowledge as a result of theoretical input.

Hypothesis A(1) predicted that the participants' knowledge of the "Situational Leadership Theory" would increase following exposure to the Organizational Behavior course. This Hypothesis, which was tested by a t-test of significance between the effectiveness score on the LEAD SELF (Ideal) before and after the course, was statistically significant and indicated that knowledge level of people enrolled in a leadership training course increases after the course.

Since time affects retention of knowledge, hypothesis A(2) predicted that the level of knowledge retention of the participants involved in the study, would decrease after a period of time, when they are not exposed to theoretical knowledge directly related to the training program. A t-test of significance between LEAD (Ideal) effectiveness score taken immediately after the course and the LEAD (Ideal) effectiveness score gathered six weeks after the course, indicated that the results were in the direction predicted, but were not statistically significant. Apparently students retained what they learned in the course, which was substantial as revealed by the mean post-test score.

Hypothesis A(3) predicted that the participants' knowledge level of the "Situational Leadership Theory" would correlate with the participants' self-perception of this knowledge. In order to establish the relationship between the knowledge level as measured by the LEAD instrument and the self-perceived knowledge of the participants, a Pearson moment correlation coefficient was computed. The results indicated that there was a definite correlation and that the correlation was statistically significant at the .05 level.

The second set of hypotheses related to hypothesis B and it dealt with the effects of theoretical input upon behavior.

Hypothesis B(1) predicted that the self-perception of participants' leadership behavior would become more congruent with the "Situational Leadership Theory" after exposure to this theory. Using the LEAD SELF (Ideal) and LEAD SELF (Actual) instruments, a t-test of significance was computed between the mean difference score obtained by calculating the difference between the score on those two instruments at Occasion I and Occasion II. The t-test of significance indicated a difference large enough to be statistically significant at the .01 level. Hypothesis B(1) was therefore supported.

Hypothesis B(2), which predicted that the self-perception of participants' leadership behavior would become less congruent with the "Situational Leadership Theory" some time after instruction, was also supported. Similar to hypothesis B(1), mean difference scores were computed for Occasion II and Occasion III. A t-test of significance was then calculated between the mean score.

The third general hypothesis predicted that the greater the similarity between the self-perception of a leader's behavior and the perception of that behavior by others, the greater the effectiveness of the leader. One specific hypothesis addressed this general hypothesis and it stated that the degree of congruency between the leadership style scores on the LEAD SELF (Actual) instrument and the LERF would positively relate to the effectiveness ratings given to a specific leader by the members of his/her group. After determining leadership style scores on the LEAD SELF (Actual) and the LERF, a discrepancy score was obtained by calculating the difference between the two scores. This discrepancy score was then related to the effectiveness score by Pearson moment correlation coefficient in order to obtain the degree of correlation. Although the correlation was not statistically significant, the results indicated a relationship between the effectiveness scores and the congruency scores. Hypothesis C(1) failed to be supported.

The concept of the effects of feedback was addressed in hypothesis D, which stated that, as a result of feedback, an individual's self-perception of his/her leadership behavior will become more congruent with others' perception of this individual's leadership behavior.

Two specific hypotheses dealt with this general hypothesis. Hypothesis D(1) predicted that one's self-perception at Occasion III would be closer to others' perception at Occasion II than one's self-perception would be at Occasion II. Congruency scores were obtained between the LEAD SELF (Actual) Occasion II and the LEAD OTHER, Occasion II and the LEAD SELF (Actual), Occasion III and the LEAD OTHER, Occasion II. The results showed a statistically significant difference between the mean score; the difference being, however, in the wrong direction. This indicated that others' perceptions were closer to self-perception at Occasion II than they were at Occasion III.

Hypothesis D(2) stated that the difference between participants' self-perception of their leadership behavior and other's perception would be greater at Occasion II than at Occasion III. This hypothesis, tested by computing a t-test of significance between the mean difference score, indicated that scores between self-perception and others' perception at Occasion II were more congruent than the scores at Occasion III. Therefore, although the re-

sults indicated a significant difference between the congruency score, this hypothesis was rejected.

Finally, the last group of hypotheses attempted to correlate certain background variables with individual behavior change.

Pearson moment correlation coefficient was computed to establish the relationship between individual change and high task leadership behavior score. The same method of correlation was used to correlate individual change and the number of years of supervisory work experience.

The results indicated only a partial relationship between the high task leadership score and individual change. This relationship was with the high task, high relationship leadership behavior dimension. This relationship was, however, too small to be statistically significant.

In regard to the relationship between individual change and the number of years of supervisory experience a person has had, the correlation was statistically significant indicating that the more supervisory years of work experience a person has had, the more his/her leadership behavior is likely to change following theoretical input.

Interpretation of the Findings

This section provides an interpretation of the findings of the study based on the results of the research undertaken. The interpretations made are organized around

five major areas from which the hypotheses had been elaborated. The major areas are: change in knowledge following theoretical input, change in behavior as it relates to change in knowledge, the relationship between self-perception, other perception and effectiveness, the effects of feedback, and finally, the relationship between background variables and individual behavior change.

One of the first implications relating to the results of the study concerns the fact that people's leadership knowledge increases significantly following theoretical input dealing with the "Situational Leadership Theory". In the study, the knowledge level of the "Situational Leadership Theory" increased significantly following a relatively short training program. It is possible to assume, therefore, that short training programs dealing with "Situational Leadership Theory" would increase an individual's knowledge of this concept of leadership behavior.

A second hypothesis dealing with knowledge related to knowledge retention. The non-statistically significant results allow one to believe that knowledge retention can be kept at a reasonable level when one is exposed to theoretical material which supports the concepts learned. Although the participants in the study were learning general change strategies during the Management of Change: A Case

Study Approach, one might suspect that many of these concepts related to the "Situational Leadership Theory" and helped the participants retain the knowledge acquired. This is one interpretation which can be forwarded to explain why knowledge level decreased but not to the extent anticipated, according to the literature dealing with knowledge retention.

The results of the third hypothesis measuring participants' self-perception of their leadership knowledge and correlating it with the LEAD SELF (Ideal) score, provides some evidence, although minor, that the LEAD instrument is a valid instrument.

The next series of interpretation of the findings relates to self-perceived leadership behavior change as a result of theoretical input dealing with leadership behavior. A first implication which can be inferred from the results of the findings is that people's self-perception of their behavior will change in the direction of the theoretical concepts learned when they are exposed to theoretical input dealing with behavioral components. This can be interpreted to mean that the participants involved in the study have integrated the theoretical concepts presented.

Since knowledge level was measured by the LEAD SELF (Ideal) and self-perception of one's behavior was measured

by the LEAD SELF (Actual), the results obtained illustrate that the participants in the study tend to discriminate between "real" and "ideal" behavior.

The last hypothesis focusing on the participants' self-perception of their leadership behavior following theoretical input shows that the participants' self-perception of their leadership behavior moves away from the theoretical concepts learned when it is measured some time after the end of a training session. Much research in the literature has focused on the need to have a climate which will support the behavior learned in order for this behavior to continue after the training program. One can assume that the same applies, if one is to continue to perceive his/her leadership behavior to be congruent with the theoretical concepts learned. Another interpretation can stem from the fact that when one's leadership behavior is assessed several weeks after a training program, many factors can have diverted one's perception of his/her leadership behavior away from the original theoretical input learned.

The third set of hypotheses predicted that one's effectiveness was related to the degree of congruency between self-perception of one's leadership behavior and other's perception of this behavior. Although the results indicated some relationship between these two

variables, the correlation was not significant. A possible interpretation can be centered around the concept of effectiveness. Hersey and Blanchard (1972) define effectiveness as the ability of the leader to adapt his/her leadership style to meet the needs of the followers and the situation. Webster's Dictionary (1974) defines "effective as the ability to produce a decided, decisive or desired effect". This illustrated variation around the concept of effectiveness might have brought some confusion and different interpretations when evaluating the leadership effectiveness of the participants. This factor could have produced different ratings on the part of the participants, leading therefore to somewhat misleading results. The instrument itself, the Leader Effectiveness Rating Form, might be responsible for the results obtained, although recent results by Hambleton, Eignor and Blanchard (1976) suggest that the instrument has substantial reliability and validity.

The fourth series of results related to the effects of feedback on the participants' perception of their leadership style. The hypotheses predicted that one's self-perception of his/her leadership behavior would move in the direction of the feedback received when taken after the feedback had been received. Although significant, the results were in the wrong direction. One possible explana-

tion relates to the mean score obtained on the LEAD SELF (Actual) Occasion II and Occasion III, the LEAD OTHER Occasion II and the LERF, Occasion III. When one compares the difference between the highest and the lowest mean score on each quadrant of each instrument one finds that the LEAD SELF, Occasion II has a high score of 3.61 and a low score of 1.49; the LEAD SELF, Occasion III has a high score of 3.44 and a low score of 1.85; the LEAD OTHER has a high score of 3.20 and a low score of 1.75; and finally, the LERF has a high score of 2.88 and a low score of 2.16. Two observations result from the examination of these scores. It first appears that other participants attribute a much wider style range capability to the individual they evaluate than the participant does himself/herself in his/her self-perception of his/her leadership behavior. This appears to be accurate for both the LEAD OTHER and the LERF although the LERF instrument seems to be affected the most by this phenomena. A possible explanation could relate to the "halo" effect. Those who have participated in intense workshops or intensive laboratory experiences are aware of the "good" feelings one experiences at the end of such an experience. As a result, most of the participants tend to see the members of his/her group in a very positive light. It is possible to assume that this happened in the weekend experiences with which we are

concerned here. When filling out the LEAD OTHER and the LERF instruments, most participant observers saw the person they had to evaluate as a very flexible leader, capable of assuming many leadership styles according to the situation in which they were involved. This could be particularly true of the ratings given on the LERF instrument. This instrument was completed two to three weeks after the experience for many participants and it is possible that time could have compounded the "halo effect".

A second observation relates to the LERF instrument itself. The small difference of .72 between the high and the low quadrant score could be attributed to some misinterpretation of the instructions. Although the goal of the investigator in designing the instrument was to obtain results which were discriminatory, it is possible that some confusion existed as to the role of the individuals who had to complete the instrument and as a consequence the LERF did not discriminate those who had a high style range from those who had little flexibility in their leadership style.

Finally, the last series of hypotheses correlated two background variables, high task leadership style and number of years of supervisory work experience to individual change.

The assumption made in relating high task leadership

style to individual change was that people with a high task dominant leadership style would be more authoritarian. The literature (Belisco and Trice, 1969) shows that authoritarian individuals tend to change more than other individuals following training programs.

The subjective measure which was used, through the LEAD Biographical Information, to correlate behavior change and dominant high task leadership score might not have been very representative of the "actual" dominant leadership style of the participants. A more accurate measure might have been the LEAD SELF (Actual) Occasion I.

The number of years of work experience correlated with individual behavior change showed a statistically significant correlation indicating that the more supervisory years of experience a person has, the greater the possibility of changing his/her behavior through training. This correlation confirms the results in the study carried out by Belisco and Trice (1969).

Delimitations

This section presents some of the factors which limit the meaning of the results of the investigation. This section expands on some of the delimitations presented in Chapter I and in addition, includes elements which were found to limit the findings of the study while the research was conducted.

The use of the same standardized instrument may be a basic limitation of the study. Throughout the study, the participants were asked to complete the same instrument in three different occasions. Belisco and Trice (1969) have focused on the learning which takes place from repeated testing with the same instrument. In addition, the adapted LEAD instrument used for the study involved a minimum of twenty situations each offering four possible action strategies. Also, the instrument had to be completed in terms of Actual and Ideal Behavior. Thus, the filling out of the instrument required a fair amount of time from the participants. This factor may have affected the concentration of the participants and therefore the results of the study.

The number of participants lost in the course of the study represents a trial limitation. Because of this factor, hypotheses C and D were tested with only twenty-seven participants. In addition, it is possible to believe that these participants presented characteristics that were different from the other participants.

Significance of the Study

This study was intended to focus on three variables. Namely knowledge as a result of theoretical input; individual leadership behavior as perceived by the leader and by others. Finally, leadership adaptability or

effectiveness as perceived by the leader and by others as a result of new acquired knowledge.

As stated previously, training is one of the methods often used to effect change at the knowledge, attitude and behavioral levels. The results of the study suggest a statistically significant increase in the participants' knowledge level of the "Situational Leadership Theory" after a relatively short training program. These results allow the investigator to believe that the increase in the ability of the leader to effectively diagnose a leadership situation, will influence this leader's leadership style and therefore make him/her more effective.

The positive correlation between the knowledge level of the participants and their behavior help reinforce the use of training as a method designed to help individuals interact more effectively with their environment. More specifically, it shows that leadership skills can be taught and applied effectively. The results of the study of the relationship which may exist between theoretical input and behavior change is of special importance to the behavioral practitioner and the educator, as much of their work is intended to produce change in behavior through educational means.

The results of this study also bring some information concerning the design used in the two courses. The follow-

ing elements appear to deserve special attention: a) the participants' knowledge level increases significantly following the Organizational Behavior course and the retention level, although diminishing after the end of the first course, remains higher than predicted throughout the second course; b) the participants' self-perception of their leadership behavior moves in the direction of the theory at the end of the first course and away from the theory by the end of the second course; c) participants' self-perception of their leadership behavior is closer to other's perception of this behavior before receiving feedback than after receiving feedback.

Finally, it is hoped that this study helps focus some light on two of the key factors which influence a change in behavior as a result of increased knowledge through training.

> Such an identification is of more than casual importance to both the practitioner and the academician. For the practitioner, identifying those individuals who change more readily as a result of a training experience is one way of improving the success of training experience. For the academician, examining the personality, demographic and social profiles of the changers can provide insight and organizational change associated with training (Belisco and Trice, 1969, p. 121).

Suggestions for Further Research

Several suggestions can be made concerning further investigations to compliment the results of this investigation.

Similar studies can be repeated with populations drawn from the professional sector. Given that students represent a special group of individuals, the repetition of the study with groups of different backgrounds would enable wider generalizations of the findings.

Other studies, using a similar design, can be carried out using a different content as subject matter. This would allow for verification if the results, particularly those pertaining to the increase in knowledge level, can be generalized to other areas of learning.

In order to obtain further data on the design of the course and the teaching methods, a comparative design can be used. This experimental design, suggested by Weiss (1972), would involve three different groups. Each group would participate in a course dealing with the "Situational Leadership Theory". Each course would, however, be designed differently. One course could be offered using a similar design to the present Organizational Behavior course. Another course could use only lectures and case studies. Finally, a third group could be organized around a highly participative design, taking full advantage of the experience and background of the participants. Such a comparitive design would highlight which strategies and which conditions have better effect on different kinds of students. In addition, it would allow the investigator

to gather some data on the teaching design which seems to better satisfy the goals of the training program.

An experimental design, using pre-test, post-test control group design with random selection of the participants (Belisco and Trice, 1969) would increase the validity and reliability of the findings of the study carried out. This design would allow for the establishment of a base line related to the knowledge level of the participants. Campbell and Stanley (1963) and Weiss (1972) claim that this design controls for internal validity, that is the control of history, maturation, testing, instrumentation, selection and mortality.

Another area suggested for further research involves a time series design to study the longitudinal and lasting effects of the training as well as the continued application of the "Situational Leadership Theory" to real life and on the job situations.

APPENDIX

A P P E N D I X A

BIOGRAPHICAL INFORMATION QUESTIONNAIRE

This questionnaire has been designed to provide background information on participants in two courses, Organizational Behavior in Schools and/or Management of Change. The information you give in this questionnaire will be combined with data collected from other instruments that will be administered to you later in the semester, to provide a better understanding of the overall strengths and weaknesses of the courses. This basic assessment data will provide a basis for more effectively handling individual needs in the course and restructuring and organizing course content for the future.

Although we will ask you to add your name to the questionnaire, the sole purpose of this information is to make it easier for us to connect your answers to the various instruments that will be given to you during the semester.

Please go ahead now and complete the questionnaire as carefully as possible. It should take no more than 10 minutes. Thank you in advance for your co-operation.

1. Name: _____
   Last Name First Name Middle Initial

2. What is your sex? (Circle one)
   (1) Male (2) Female

3. What is your present age? (In years): __ __

4. What is your race or ethnic background? (Circle one)
   (1) Caucasian/White
   (2) Black/Negro/Afro-American
   (3) Oriental/Asian
   (4) Native American/Indian
   (5) Hispanic/Chicano/Puerto Rican/Spanish Surnamed
   (6) Other (please specify: _____)

5. What is your present student/work status? (Circle one)
   (1) Full-time student
   (2) Part-time student
   (3) Part-time studying/Part-time working
   (4) Part-time studying/Full-time working
   (5) Full-time studying/Part-time working
   (6) Full-time studying/Full-time working
   (7) Other (Please indicate: _____)

6. How many University credits are you taking this semester (Circle one)
   (1) Less than three
   (2) Three to eight
   (3) Nine to twelve
   (4) Thirteen to eighteen
   (5) Over eighteen
   (6) I am not taking any credits

7. What degree(s) do you expect to obtain following following completion of your present studies? (Circle one)
   (1) Masters
   (2) Masters/Doctorate
   (3) Doctorate
   (4) C.A.G.S.
   (5) None

8. What is your major academic field of study? (Circle one)
   (1) Humanities
   (2) Science
   (3) Business
   (4) Education
   (5) Social Sciences
   (6) Engineering
   (7) Professional School (Law, Medicine, Dentistry, Social Work, etc.)

9. How many years of experience have you in supervising the work of others? (Circle one)
   (1) None
   (2) One or two
   (3) Three to five
   (4) Six to ten
   (5) More than ten

Questions 10 to 15 should only be completed by individuals who are presently working in a position where they have at least some supervisory responsibilities.

10. What is your present position? (Please specify your job title, and describe the type of work you do:)

_____

_____

_____

_____

_____

11. From the job descriptions below, please indicate the description which best corresponds to the nature of your work? (Circle one)

(1) Top Management/Administration: you are responsible for making decisions which could effect the entire organization. Ex. Superintendent of Schools, Corporation President etc.

(2) Middle Management/Administration: you are responsible for a number of sections or departments within your organization. You supervise the heads of these sections. You can make decisions on your own while you make other decisions in conjunction with your peers and your superiors. Ex. Principal, District Manager, etc.

(3) Supervisory Management/Administration: you are responsible for one unit or group of people within your organization. You supervise the work of these people. The decisions you make mainly relate to the work done by your subordinates. Ex. Teacher, department chairperson, etc.

(4) Specialist: you have a special assignment in an area requiring additional skills and

training. Your responsibilities involve advising and consulting, not directing the behaviors of others.

(5) Other (Please specify: _____)

12. How many individuals do you supervise? (Circle one)

(1) One or two
(2) Three to five
(3) Six to ten
(4) Eleven to twenty
(5) More than twenty (Please specify the number: _____)

13. Overall, how successful do you feel you are in your present position? (Circle one)

(1) Not successful at all
(2) Somewhat successful
(3) Successful
(4) Very successful
(5) Unsure
(6) No opinion

14. Overall, how successful do you feel your peers think you are in your present position? (Circle one)

(1) Not successful at all
(2) Somewhat successful
(3) Successful
(4) Very successful
(5) Unsure
(6) No opinion

15. How satisfied are you with your present position? (Circle one)

    (1) Not satisfied at all
    (2) Somewhat satisfied
    (3) Satisfied
    (4) Very satisfied

---

16. Please describe your future career plans? _____

_____

_____

_____

_____

17. Listed below are four different styles of leadership that individuals often use in conducting their supervisory responsibilities. Please read the four styles of leadership and then rank them in the order that you are likely to use them in your present work (or would use <u>if</u> you were working in a supervisory position). (1: most frequent, 4: least frequent)

    ( ) A. Stress the need to accomplish work goals by giving directions on what has to be done, how it is to be done, and when it is to be done.

    ( ) B. Direct efforts to accomplish work goals while being friendly and supportive.

    ( ) C. Develop friendly interaction with subordinates while allowing them to direct and define their job responsibilities.

    ( ) D. Trust subordinates to accomplish their work effectively by delegating responsibilities to them and intentionally not interfering in their efforts.

18. Please indicate below the reasons for enrolling in the course? (Indicate in point form, ie. 1.2.3.)

_____

_____

_____

APPENDIX B

LEADER EFFECTIVENESS AND ADAPTABILITY DESCRIPTION INSTRUMENT

LEAD-SELF INSTRUMENT

The purpose of the LEAD-SELF INSTRUMENT is to provide information concerning your style of leadership in a variety of situations. The instrument consists of twenty situations and for each situation there are presented four possible actions that a leader might initiate. There are two sections to this instrument. Please complete the first part thoroughly before engaging in the second part.

In the first part of the questionnaire your task is to select an action for each of the twenty situations assuming that you are the leader involved in the situations. Read the situations and the corresponding possible actions and indicate which of the actions you would select if you were a leader confronted with the situations. Be honest and indicate what you think you would do, <u>not</u> what you think you <u>ought</u> to do. Read each situation carefully, look at the four possible actions, and select the action which you think comes closest to what you would <u>actually</u> do in that situation. For each situation, indicate your answer by circling the letter corresponding to the action you have selected beside the corresponding question number

on the LEAD-SELF (ACTUAL) section of the answer sheet. Circle only one choice for each situation.

Now go ahead and put your name on the answer sheet and complete the LEAD-SELF (ACTUAL) section of the LEAD-SELF INSTRUMENT. The only purpose for having you sign your name is so we can connect your answers on this instrument to data collected at other times during this semester.[1]

[1]This version of the LEAD SELF has been adapted from the original LEAD SELF, developed by Paul Hersey and Kenneth H. Blanchard. Permission for its adaptation was obtained from the above authors.

1. The new department which you are now heading has not produced the results expected. In the last week, many have called in sick. You feel that they are quickly losing interest in their new jobs. Your superiors are expecting results from this department soon.

   a. Incorporate their recommendations but stress expected results.

   b. Allow the group members to work it out themselves.

   c. Take steps to produce results expected and supervise closely.

   d. Participate in the discussion of the problem with the department but do not intervene directly.

2. Because of budget restrictions imposed on your department, additional demands have been put on your staff. You have noticed their performance to be dropping. They seem uncaring in their approach and you have had to remind them of their responsibilities.

   a. Involve the group in discussing the problem, and then you take necessary steps to correct the situation.

   b. Take steps to direct your group to fulfill additional demands.

   c. Allow group members to find their own solution to their dropping performance.

   d. Encourage the group to find a solution to this problem and be supportive of their efforts.

3. Your superior has appointed you to head a task force that is far overdue in making requested recommendations for change. The group is not clear on its goals. Attendance at sessions has been poor. Their meetings have turned into social gatherings. Potentially they have the talent necessary to help.

   a. Let the group work out its problems.

   b. Incorporate group recommendations, but see that objectives are met.

c. Redefine goals and supervise carefully.

d. Allow group involvement in setting goals; be supportive of their efforts.

4. It has come to your attention that some of your subordinates have been taking extended lunch hours. Extended lunch hours have been a constant problem in your department. As a result some other employees have had to carry an extra load. The latecomers are aware of this situation.

a. Avoid confrontation by not applying pressure; leave the situation alone.

b. Act quickly and firmly to correct the situation.

c. Discussion situation with latecomers and then you initiate necessary action.

d. Participate with the group in developing a solution but do not push your involvement.

5. In the past, you've had a great deal of trouble with the group you supervised. They have had a lackadasical approach, and only your constant prodding has brought about task completion. However, you recently have noticed a change. The group's performance is increasing, and you've had to remind them of task completion less and less. Some group members have approached you with suggestions for increasing performance.

a. Continue to direct and closely supervise their efforts.

b. Incorporate group recommendations, but see that tasks are completed.

c. Involve the group in a discussion involving procedures and be supportive of their contributions.

d. Let the group take responsibility for task completion; do not intervene any longer.

6. In the past, you have allowed subordinates the right to decide on what conferences they want to attend, and they have had their expenses paid for them. Budget restrictions suggest that the past procedure is no longer feasible, and some sort of new approach involving conference attendance is in line. Your subordinates are aware of the problem of finances. In the past, in crisis situations, they have been a great deal of help. The group has an excellent record of accomplishment, and they work together extremely well.

   a. You decide on the new approach to conference attendance and carefully watch for adherence to your decision.

   b. Involve the group in a discussion of the problem, but make the final decision yourself.

   c. Allow the group to formulate the new approach by itself.

   d. Allow group involvement in the formulation of the new approach, making sure to reinforce positive contributions.

7. Your group has a fine record and are serious about its responsibilities. Although you have left the group members alone, they have surpassed their section objective and they have worked well together. Recently an accident occured in their section and you have heard some reports of their negligence.

   a. Discuss the situation with the group and allow them to take corrective action.

   b. Give the group some time to first work out the problem itself.

   c. Talk with subordinates and then you initiate necessary action.

   d. Take steps to direct and correct the situation.

8. You have been selected to serve as chairperson of a committee. After two meetings, you can see that the committee members are serious about their responsibilities and are achieving results, but lack of direction often takes them off the task.

   a. Closely direct the group.

   b. Let the group work out its own direction.

   c. Get the group involved in a discussion of the task, but direct efforts toward accomplishing objectives.

   d. Do what you can to make the group feel important and involved.

9. You and your superior have recently decided that a new innovation has to be installed in your area if long-term gains are to be maximized. In the past, when innovations have been installed in your area, your group has been eager to use them, but have lacked the expertise to do so.

   a. Closely direct the group in the use of the innovation.

   b. Involve the group in a discussion of the innovation, but make sure you direct its implementation.

   c. Get the group involved in a discussion and encourage their contributions.

   d. Allow the group to implement the innovation without your involvement.

10. As director of the department, you have hired an extremely competent person to solve a problem within your department. Because of her competence you have purposely not intervened. You now find that she is having difficulty in solving the problem.

   a. Work closely with her and together engage in finding the solution of the problem.

   b. Take steps to direct her efforts so that expected results are obtained.

c. Participate in a discussion of this problem with her; be supportive, but do not direct her efforts.

d. Give her some more time to try to resolve the problem without your intervening.

11. Your subordinates are very competent and are able to work well on their own. You have generally left them alone and delegated key responsibilities to individual members. Their performance has been outstanding.

a. Provide continual support and encouragement for group members, but little direction.

b. Direct and closely supervise the activities of your subordinates.

c. Continue to leave the group alone.

d. Work closely with your subordinates as a team, providing direction and support when needed.

12. You have been forced to miss, due to illness in the family, the first two meetings of a committee that you have been asked to chair. You have found, upon attending the third meeting, that the committee is functioning well and staged goals are being accomplished. You are unsure about how you fit into the group and what your role should be.

a. Let the group continue to work as it has during the first two meetings.

b. Assume the leadership of the committee and begin to direct its activities.

c. Do what you can to make the committee feel important and involved, supporting their past efforts.

d. Support the efforts of the committee, but generally direct their activities.

13. Two of your subordinates have been unable to come up with an equitable solution for a problem concerning them both. They have been willing to try to resolve the problem, but seem unable to do so.

    a. Let the members continue to try to work out the problem themselves.

    b. Resolve the problem yourself and then closely supervise the two subordinates.

    c. Get involved in a discussion of the problem with the two subordinates, making sure you are highly supportive.

    d. Incorporate any suggestions the two may have, but make sure the problem is resolved.

14. You have been approached to help a group start a new committee. The members of this committee are known for their high performance in their jobs. They have defined the goals for this committee and are now asking for your help as problems have arisen.

    a. Redefine goals and set methods to achieve them.

    b. Attend the meetings but take no definite action.

    c. Work with group and together engage in problem-solving.

    d. Participate with the group in the discussion of the problems but allow members to implement the solutions.

15. You were very happy with the results of the last group meeting. In recent meetings, you have tried not to be directive, but have encouraged group members to lead. At the last meeting, virtually no encouragement on your part was necessary; the discussion was group led almost throughout, with excellent and productive results. You now want to make a decision on how to approach this week's meeting.

    a. Allow the group to conduct the meeting with you as a silent partner.

b. You direct the meeting and delegate responsibilities.

c. Allow group discussion, but take the dominant role.

d. Allow group discussion, and encourage the efforts of members.

16. Your group is being pressured to make a policy change. In the past you have explained the situation to group members and have let them develop their own solution. Without your help they have been able to generate effective solutions, and they have worked well together. This time, however, they do not seem to be interested. You are wondering what to do.

a. Give the group some more time to work on the change by itself before intervening.

b. Discuss the policy change with the group and encourage members in their efforts to implement it.

c. Work with the group and together implement the change.

d. You determine change procedures and see that they are implemented.

17. Until recently you have supervised your group closely. Lately you changed the procedure and now see the performance level of the group to be increasing. You have made sure group members understand their responsibility and expected level of performance.

a. Emphasize the importance of deadlines and tasks.

b. Take no definite action.

c. Engage in friendly interaction, but continue to make sure that all members are aware of their responsibilities.

d. Do what you can to make the group feel important and involved.

18. The chairperson of the department you supervise, usually dependable for producing his budget on time, has missed the deadline for this year. Your friendly conversation and expression of concern for his performance has not resulted in any constructive change in his behavior. Matters are approaching a crisis.

    a. Redefine the task and deadlines and supervise closely.

    b. Wait for your chairperson to act on his own.

    c. Offer your assistance and emphasize deadlines.

    d. Discuss the problem with him and support his efforts.

19. In the past you used to work closely with your subordinates. Productivity was high and people got along well together. Recognizing their abilities, you felt they could work alone so you redirected your energies to new areas. Now the group is having difficulties.

    a. Redefine goals and see that objectives are met.

    b. Participate in a discussion of the situation with the group but direct its efforts to solve the problem.

    c. Discuss the difficulties with the group and support their solutions and actions.

    d. Allow the group more time to work out its difficulties alone.

20. Group performance and interpersonal relations are good. You feel somewhat unsure about your lack of direction and involvement with the group.

    a. Continue to leave the group alone.

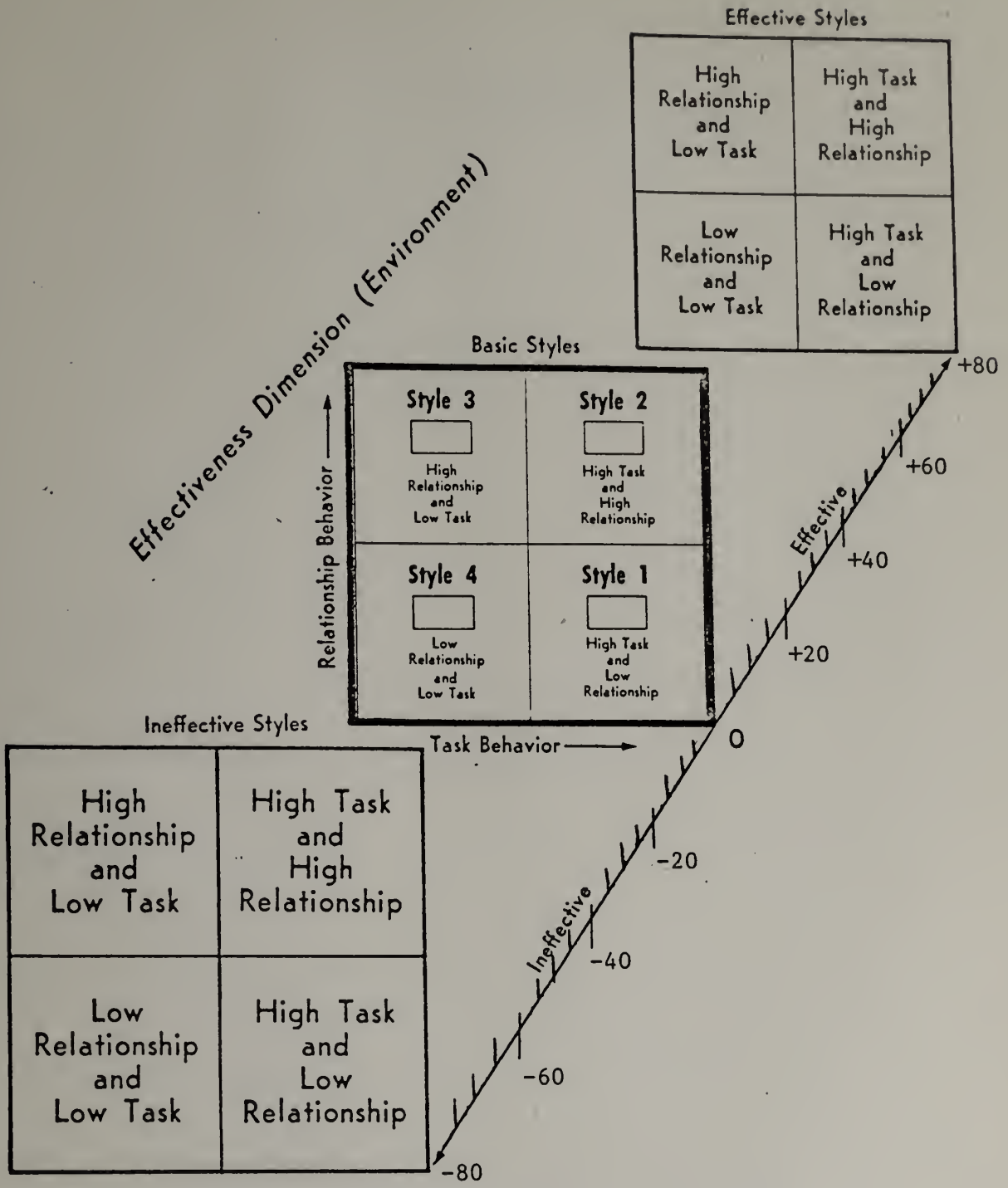
    b. Discuss the situation with the group and then you initiate necessary changes.

    c. Take steps to direct subordinates toward working in a well-defined manner.

    d. Be supportive in discussing the situation with the group but don't be too directive.

LEAD-SELF (IDEAL)

Your second task is to complete the questionnaire as you think the "ideal" leader would behave when confronted by the twenty situations in this questionnaire. In order to do this, go back over the twenty situations, and this time select actions that you think would be selected by the "ideal" leader. That is, what would a highly effective leader do when presented with each situation. Remember, read each situation carefully, then read the possible actions, and finally, select the action that you think best describe the behavior of the "ideal" leader. In other words, if you were a highly effective leader, what would your behavior be in each situation. Please mark your answer in the LEAD-SELF (IDEAL) section of the answer sheet. Now go ahead and complete the LEAD-SELF INSTRUMENT.



The tri-dimensional leader effectiveness model. Copyright 1973 by Paul Hersey and Kenneth H. Blanchard. Reprinted by permission.

LEAD INSTRUMENT - ANSWER SHEET

NAME: _____
Last First Middle

DATE: _____
Day Month Year

LEAD-SELF (ACTUAL)					LEAD-SELF (IDEAL)				
1.	A	B	C	D	1.	A	B	C	D
2.	A	B	C	D	2.	A	B	C	D
3.	A	B	C	D	3.	A	B	C	D
4.	A	B	C	D	4.	A	B	C	D
5.	A	B	C	D	5.	A	B	C	D
6.	A	B	C	D	6.	A	B	C	D
7.	A	B	C	D	7.	A	B	C	D
8.	A	B	C	D	8.	A	B	C	D
9.	A	B	C	D	9.	A	B	C	D
10.	A	B	C	D	10.	A	B	C	D
11.	A	B	C	D	11.	A	B	C	D
12.	A	B	C	D	12.	A	B	C	D
13.	A	B	C	D	13.	A	B	C	D
14.	A	B	C	D	14.	A	B	C	D
15.	A	B	C	D	15.	A	B	C	D
16.	A	B	C	D	16.	A	B	C	D
17.	A	B	C	D	17.	A	B	C	D
18.	A	B	C	D	18.	A	B	C	D
19.	A	B	C	D	19.	A	B	C	D
20.	A	B	C	D	20.	A	B	C	D

LEAD-SELF - SCORING SHEET

SITUATIONS	Column I (Style Range) Alternative Actions				Column II (Style Adaptability) Alternative Actions			
	(1)	(2)	(3)	(4)	(a)	(b)	(c)	(d)
1	C	A	D	B	B	D	A	C
2	B	A	D	C	C	D	A	B
3	C	B	D	A	A	D	B	C
4	B	C	D	A	A	D	C	B
5	A	B	C	D	D	C	A	B
6	A	B	D	C	A	B	D	C
7	D	C	A	B	D	C	B	A
8	A	C	D	B	B	D	A	C
9	A	B	C	D	D	C	A	B
10	B	A	C	D	B	A	D	C
11	B	D	A	C	B	D	A	C
12	B	D	C	A	B	D	C	A
13	B	D	C	A	A	C	B	D
14	A	C	D	B	A	C	B	D
15	B	C	D	A	B	C	D	A
16	D	C	B	A	D	C	A	B
17	A	C	D	B	B	D	A	C
18	A	C	D	B	B	D	C	A
19	A	C	B	D	A	C	D	B
20	C	B	D	A	C	B	D	A
TOTALS								
Multiply by:					(a) -2	(b) -1	(c) +1	(d) +2

= TOTAL: | | + | | + | | + | |

APPENDIX C

LEAD OTHER - SHORT FORM

Style and Style Range

Distribute the 20 style choices among the four styles for each group member. Remember the style in which you place the most choices is your perception of that group member's dominate or basic style; any style in which you place two or more choices (other than the dominate style) is what you think is a supporting style for that group member.

GROUP MEMBERS

Leader Behavior

S1 HT/LR							
S2 HT/HR							
S3 HR/LT							
S4 LR/LT							

Adaptability or Effectiveness

Indicate on a scale of -40 to +40 your perception of how effective each group member was in adapting his/her style(s) appropriately to the needs of the group.

Effectiveness							

A P P E N D I X D

LEAD OTHER

Leader adaptability and style inventory. Copyright 1973 by Paul Hersey and Kenneth H. Blanchard. Reprinted by permission.

LASI Other

LEADER ADAPTABILITY and STYLE INVENTORY

Assume _____ is involved in
(name of leader)
each of the following twelve situations. Each situation has four alternative actions this leader might initiate. READ each item carefully. THINK about what this person would do in each circumstance. Then CIRCLE the letter of the alternative action choice which you think would most closely describe the behavior of this leader in the situation presented. Circle only *one choice.*

Published by
CENTER FOR LEADERSHIP STUDIES
Ohio University
Athens, Ohio 45701

1

SITUATION

Subordinates are not responding lately to this leader's friendly conversation and obvious concern for their welfare. Their performance is in a tailspin.

ALTERNATIVE ACTIONS

This leader would . . .

A. emphasize the use of uniform procedures and the necessity for task accomplishment.
B. be available for discussion but would not push.
C. talk with subordinates and then set goals.
D. intentionally not intervene.

2

SITUATION

The observable performance of this leader's group is increasing. The leader has been making sure that all members were aware of their roles and standards.

ALTERNATIVE ACTIONS

This leader would . . .

A. engage in friendly interaction, but continue to make sure that all members are aware of their roles and standards.
B. take no definite action.
C. do what could be done to make the group feel important and involved.
D. emphasize the importance of deadlines and tasks.

3

SITUATION

This leader's group is unable to solve a problem. The leader has normally left the group alone. Group performance and interpersonal relations have been good.

ALTERNATIVE ACTIONS

This leader would . . .

A. involve the group and together engage in problem-solving.
B. let the group work it out.
C. act quickly and firmly to correct and redirect.
D. encourage group to work on problem and be available for discussion.

4

SITUATION

This leader is considering a major change. The leader's subordinates have a fine record of accomplishment. They respect the need for change.

ALTERNATIVE ACTIONS

This leader would . . .

A. allow group involvement in developing the change, but would not push.
B. announce changes and then implement with close supervision.
C. allow group to formulate its own direction.
D. incorporate group recommendations but direct the change.

5

SITUATION

The performance of this leader's group has been dropping during the last few months. Members have been unconcerned with meeting objectives. Redefining roles has helped in the past. They have continually needed reminding to have their tasks done on time.

ALTERNATIVE ACTIONS

This leader would . . .

A. allow group to formulate its own direction.
B. incorporate group recommendations, but see that objectives are met.
C. redefine goals and supervise carefully.
D. allow group involvement in setting goals, but would not push.

6

SITUATION

This leader stepped into an efficiently run situation. The previous administrator ran a tight ship. The leader wants to maintain a productive situation, but would like to begin humanizing the environment.

ALTERNATIVE ACTIONS

This leader would . . .

A. do what could be done to make group feel important and involved.
B. emphasize the importance of deadlines and tasks.
C. intentionally not intervene.
D. get group involved in decision-making, but see that objectives are met.

7

SITUATION

This leader is considering making major changes in organizational structure. Members of the group have made suggestions about needed change. The group has demonstrated flexibility in day-to-day operations.

ALTERNATIVE ACTIONS

This leader would . . .

A. define the change and supervise carefully.
B. acquire group's approval on the change and allow members to organize its implementation.
C. be willing to make changes as recommended, but maintain control of implementation.
D. avoid confrontation; leave things alone.

8

SITUATION

Group performance and interpersonal relations are good. This leader feels somewhat unsure about the lack of direction given to the group.

ALTERNATIVE ACTIONS

This leader would . . .

A. leave the group alone.
B. discuss the situation with the group and then initiate necessary changes.
C. take steps to direct subordinates toward working in a well-defined manner.
D. be careful of hurting boss-subordinate relations by being too directive.

9

SITUATION

This leader has been appointed by a superior to head a task force that is far overdue in making requested recommendations for change. The group is not clear on its goals. Attendance at sessions has been poor. Their meetings have turned into social gatherings. Potentially they have the talent necessary to help.

ALTERNATIVE ACTIONS

This leader would . . .

A. let the group work it out.
B. incorporate group recommendations, but see that objectives are met.
C. redefine goals and supervise carefully.
D. allow group involvement in setting goals, but would not push.

10

SITUATION

Subordinates, usually able to take responsibility, are not responding to the leader's recent redefining of standards.

ALTERNATIVE ACTIONS

This leader would . . .

A. allow group involvement in redefining standards, but would not push.
B. redefine standards and supervise carefully.
C. avoid confrontation by not applying pressure.
D. incorporate group recommendations, but see that new standards are met.

11

SITUATION

This leader has been promoted to a new position. The previous manager was uninvolved in the affairs of the group. The group has adequately handled its tasks and direction. Group interrelations are good.

ALTERNATIVE ACTIONS

This leader would . . .

A. take steps to direct subordinates toward working in a well-defined manner.
B. involve subordinates in decision-making and reinforced good contibutions.
C. discuss past performance with group and then examine the need for new practices.
D. continue to leave the group alone.

12

SITUATION

Recent information indicates some internal difficulties among subordinates. The group has a remarkable record of accomplishment. Members have effectively maintained long range goals. They have worked in harmony for the past year. All are well qualified for the task.

ALTERNATIVE ACTIONS

This leader would . . .

A. try out solution with subordinates and examine the need for new practices.
B. allow group members to work it out themselves.
C. act quickly and firmly to correct and redirect.
D. be available for discussion, but be careful of hurting boss-subordinate relations.

A P P E N D I X E

COURSE FOLLOW-UP QUESTIONNAIRE

This questionnaire has been designed to obtain information on the two courses you have now completed (Organizational Behavior and Management of Change). The data will provide a basis for more effectively handling individual needs and possibly improving course content in the future.

Although we are asking you to put your name on the questionnaire so that we can connect your answers on this instrument to your answers on other instruments administered to you during this semester, you can be sure that all information will remain confidential. Please go ahead now and complete the questionnaire as carefully as you can.

---

1. Name:_____
   Last name First name Middle initial

2. The Organizational Behavior course and the Management of Change course were made up of work in class on the U. Mass. campus and two weekends off campus. Please circle the number which best corresponds to your attendance during these courses.

   (1) Attending all classes and both weekends
   (2) Attended 75% of the classes and both weekends
   (3) Attended 50% of the classes and both weekends
   (4) Attended less than 50% of the classes and both weekends
   (5) Attended both weekends but none of the classes
   (6) Other, please specify_____

3. During this weekend, how many sessions have you attended? Sessions were held on Friday night, Sat. A.M., Sat. P.M., Sun. A.M., Sun. P.M., (Circle one)

   (1) One
   (2) Two
   (3) Three
   (4) Four
   (5) Five

4. Of the courses listed below, please indicate those you have taken? (Circle one)

   (1) Management of Change only
   (2) Management of Change and the Organizational Behavior Course

If you have registered for the Management of Change course only, please stop and do not complete the questionnaire further. Please turn it in to the instructor. If you have registered for both courses, the Management of Change and the Organizational Behavior courses, please complete the remainder of this questionnaire and when completed, turn it in to the instructor.

---

5. How would you rate your knowledge of leadership theories now that you have taken both courses? (Circle one)

   (1) Poor
   (2) Fair
   (3) Good
   (4) Very good
   (5) Excellent

6. How would you rate your knowledge of your own leadership style now that you have taken both courses? (Circle one)

   (1) Poor
   (2) Fair
   (3) Good
   (4) Very good
   (5) Excellent

7. To what extent did you find that the theoretical content of the courses influenced your leadership style this weekend? (Circle one)

   (1) To a minimal extent
   (2) To a moderate extent
   (3) To a considerable extent
   (4) To a great extent
   (5) To a very great extent

8. How would you have rated your leadership effectiveness prior to taking the two courses? (Circle one)

   (1) Extremely effective
   (2) Very effective
   (3) Effective
   (4) Somewhat effective
   (5) Ineffective

9. How would you rate your leadership effectiveness now that these courses are over? (Circle one)

   (1) Extremely effective
   (2) Very effective
   (3) Effective
   (4) Somewhat effective
   (5) Ineffective

10. How effective do you feel you were in your small group during this weekend? (Circle one)

    (1) Extremely effective
    (2) Very effective
    (3) Effective
    (4) Somewhat effective
    (5) Ineffective

11. How supportive did you find the climate of your small group to be during this weekend? (Circle one)

    (1) Extremely supportive
    (2) Very supportive
    (3) Supportive
    (4) Somewhat supportive
    (5) Not supportive

12. Overall, how do you feel this experience will influence the following areas? (Indicate in point form)

a) Your program of study? _____

_____

_____

_____

_____

b) Your work or career planning? _____

_____

_____

_____

_____

A P P E N D I X F

LEADER EFFECTIVENESS RATING FORM

The purpose of this questionnaire is to help you consider leadership effectiveness within your group. On this instrument, you will be presented with four different situations requiring four different leadership behaviors. The appropriate leadership style required by each situation is indicated at the end of each example presented.

Your task in this questionnaire is to read each situation presented. Then in COLUMN I, using the space provided, write the names of the member or members of your group who you feel would use the required leadership style when presented with the described situation (as this style is within their leadership range). In addition, if you feel that this leadership style is within your own leadership range and that you can use the leadership style required by the situation presented, include your name in COLUMN I. Finally, if you feel that none of the members of your group or yourself can use the required leadership style, leave that part of COLUMN 1 blank.

Once you have completed COLUMN I, go on to COLUMN II and using the scale provided, rate the effectiveness of each group member named in COLUMN I, in his/her ability

to effectively use the leadership style required by each situation. When responding to COLUMN II, use the left hand side of the scale when you think that the person whose name appears in COLUMN I would be ineffective in using the required style. Circle -4 if you feel that he/she would be totally ineffective and circle -1 if you feel that he/she would be somewhat ineffective. Circle -2 and -3 to represent intermediate degree of effectiveness. Use the right hand of the scale when you think that the person whose name appears in COLUMN I would be effective in using the required style. Circle +4 if you feel that he/she would be extremely effective, and +1 if you feel that he/she would be effective. Circle +2 and +3 to represent intermediate degree of effectiveness.

EXAMPLE:

SITUATION	COLUMN I	COLUMN II
Your subordinates, usually able to take responsibility, are not responding to your recent re-defining of standards. (This required a HT/HR Style).	John Doe	-4 -3 -2 -1 (+1) +2 +3 +4
	Suzanne Jones	-4 -3 -2 (-1) +1 +2 +3 +4
	Ken Smith	-4 -3 -2 -1 +1 +2 (+3) +4
		-4 -3 -3 -1 +1 +2 +3 +4

Please put your name on the questionnaire so that we can connect your answers on this instrument to your answers on other instruments administered to you during this semester. You can be assured that all information will remain confidential.

Please go ahead now and complete the instrument as carefully as possible.

Thank you.

NAME_____

YOUR GROUP NAME_____

SITUATIONS	COLUMN I GROUP MEMBERS' NAMES	COLUMN II EFFECTIVENESS RATINGS OF MEMBERS WHOSE NAME APPEARS IN COLUMN I
1. You have been assigned the responsibility to coordinate the after school program for your elementary school. The principal has taken this action after having received many calls from parents complaining about the quality of the program. Due to lack of interest, five new and reluctant teachers have been appointed to help you with this responsiblity. You have called a meeting to decide the specific responsibilities of each teacher. (This requires a HT/LR style).	_____ _____ _____ _____ _____ _____	-4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 Ineffective Extremely effective
2. The members of your department have been asked to help in the planning of an important special event. In the past, your group has been very dependable and has worked well together on their own, without your supervision. Because of the importance of the task you are wondering what to do. (This requires a LT/LR style)	_____ _____ _____ _____ _____ _____	-4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 -4 -3 -2 -1 +1 +2 +3 +4 Ineffective Extremely effective

SITUATIONS	COLUMN I GROUP MEMBERS' NAMES	COLUMN II EFFECTIVENESS RATINGS OF MEMBERS WHOSE NAME APPEARS IN COLUMN I
3. Your assistant who has been with you for the last two years, has worked well under your guidance and support. You have recently become aware that a new position is opening up for you and you want to start preparing your assistant for your present position by beginning to delegate more responsibility but maintaining your support of this assistant. (This requires a HR/LT style)		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		Ineffective Extremely effecti
4. You have asked the Director the Director of Personnel to help prepare job definitions for each member of your department. The Director, with whom you have a good relationship, is usually very responsive to your suggestions. So far he has not fulfilled this responsibility and two weeks have passed since you expected the work to be completed. (This requires a HT/HR style).		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		-4 -3 -2 -1 +1 +2 +3 +4
		Ineffective Extremely effecti

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