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THE RELATIONSHIP BETWEEN CREATIVITY AND LEADERSHIP AND THE EFFECTS OF A CREATIVE LEADERSHIP DEVELOPMENT PROGRAM ON EDUCATIONAL ADMINISTRATORS.

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THE RELATIONSHIP BETWEEN CREATIVITY AND LEADERSHIP AND THE EFFECTS OF A CREATIVE LEADERSHIP DEVELOPMENT PROGRAM ON EDUCATIONAL ADMINISTRATORS

by

Gerald D. Austin

A Dissertation Submitted to the Faculty of the Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment of the Requirements for the Degree Doctor of Education

Greensboro 1977

Approved by

Dr. Roland H. Nelson
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Date of Acceptance by Committee
The purpose of this study was to examine the relationships between creativity and leadership in educational administration and to determine the effects of a creative leadership program on educational administrators.

The study was designed to examine the following hypotheses:

1. There will be a relationship between creativity and leadership for the experimental and control groups prior to treatment.

2. There will be a significant difference in the relationship between creativity and leadership for the experimental and control groups following treatment.

3. There will be a significant longitudinal change in the use of techniques learned in the development program by the experimental group.

The subjects were 42 educational administrators of both sexes enrolled in summer school. Twenty-nine of the administrators were enrolled in the creative leadership development program. They were identified as the experimental group. The other 13 administrators were identified as the control group.

The data were collected using The Torrance Tests of Creative Thinking, Verbal Form A & B, Part 5 and Figural Form A & B, Part 3 for the creativity variables. Leadership was assessed by the California
Psychological Inventory, Dominance Scale; Leadership Opinion Questionnaire; and Fundamental Interpersonal Relations Orientation-Behavior, Control expressed and Control wanted. The change in on-the-job behavior was assessed by the Self-Rating Scale, Part 1, Do You Do These Things.

A correlation analysis was completed for the leadership and creativity variables before and after the program. A confidence level, $p < .05$, was accepted as an indication of a statistically significant correlation for a two-tailed test. A one-tailed $t$ test with a confidence level, $p < .025$, was accepted as an indication of a statistically significant difference between the mean pretest scores and the post-posttest scores by the experimental group on the Self-Rating Scale.

There was not sufficient correlation to support the possibility of a relationship between creativity and leadership prior to or following the program for either the control or experimental group.

The experimental group showed gains on all eight measures of the Self-Rating Scale. On the basis of the analysis, the effects of a creative leadership development program were positive in terms of the techniques developed and applied to the job as related to the Self-Rating Scale.

On the basis of the data obtained in this study, certain recommendations for creative leadership training should be considered:

1. Potential administrators should be assessed for personality traits which can contribute to effective creative leadership.
   a. Those who score high on self-actualization and have a balance between inner and outer-directedness as measured by the Personal Orientation Inventory.
b. Those who score high on control expressed, indicating they can and do take on the responsibilities involved in a leadership role as measured by the Fundamental Interpersonal Relations Orientation-Behavior instrument.

c. Those who score high on consideration, which characterizes job relations of mutual trust, respect for others and their ideas as measured by the Leadership Opinion Questionnaire.

2. Administrators should participate in experiential learning activities that focus on:

a. a variety of leadership styles and the concepts from which those styles are derived;

b. the different decision-making styles that are applicable according to a given situation;

c. the evaluation of decisions and the effectiveness of those decisions.

3. Feedback should be provided immediately following the experiential learning activities focusing on the behaviors exhibited by the participants and the evaluation of the apparent effectiveness of those behaviors.

4. Administrators should be provided with experiences that allow them to become knowledgeable of the eight phases of creative leadership and the opportunity to practice the implementation of each phase.
5. Administrators should learn through participation in a creative leadership development program that personal and organizational growth comes from continuous self-evaluation and personal development.
ACKNOWLEDGMENTS

The writer wishes to express his sincere appreciation to the number of people who have contributed in many ways to this study.

Appreciation is extended to Dr. Roland H. Nelson for his assistance in the formulation of the problem and the directing of the candidate's doctoral study. Also, to Dr. J. Gary Hoover, many thanks goes for his chapter-by-chapter guidance in the refinement of the dissertation. Appreciation is given to Doctors Dale L. Brubaker, Joseph E. Bryson, and E. William Noland for their constructive evaluations and recommendations.

A debt of gratitude goes to Dr. Irving A. Taylor and the Center for Creative Leadership for their assistance in bringing the study to fruition.

Appreciation is extended to Betty Everhart, Shirley Haworth, Charles Horton, Norma Kay, Marion Locklear, and Susan Rice for their technical assistance. A special debt of gratitude is owed to Dorothy Sutton for her statistical research assistance and especially to Dorothy Brame who toiled with the multiplying errors and corrections with a sense of humor and a lot of patience. Thanks goes to Joe Lanier for his invaluable feedback and timely assistance.

My heartfelt thanks goes to my wife, Betty, for the love and encouragement that is so necessary if one is to succeed. And, to my mother, who instilled in me the characteristic to always try just a little harder and never give up.
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CHAPTER I
INTRODUCTION AND STATEMENT OF PROBLEM

McGregor (1960) reported that humanistic values in organizational structure are essential for effective leadership. Man is viewed as basically good and individuals are confirmed as human beings accepting and utilizing individual differences. Also, in such organizations, man is seen as a whole person, trusting and accepting, willing to take risks, accepting ambiguity and right to error and emphasizing collaboration as well as cooperation.

School administrators have typically considered administration largely an artistic enterprise. This concept proposes that administrators are born, not made, and views school administration as an art successfully practiced and refined through experience. The complexities of human nature are such that one might best lead by intuition and leave theories of administration to those with less to do. Successful administrators are characterized by strong stomachs, a tenacity to survive, and common sense (Sergiovanni and Carver, 1973).

Teacher negotiations, school integration, student unrest, problems of computerized planning and record keeping have resulted in a more scientific approach to school leadership. Many programs of higher education have been established to develop a more interdisciplinary approach to the study of administration, to develop both general and specific theories of administration, and to develop an organizational
theory as a means of understanding the sociological, political, and psychological environments within which administrators must work.

Katz (1955) identified three basic skills upon which successful school administration rests—human, conceptual and technical. With these three skills and the knowledge of the influences in educational decision-making, an administrator can become more effective.

Educational administration is now viewed as an applied science based on the interdependence of science and art (Sergiovanni and Carver, 1973). An applied science emphasizes the ability to absorb and use values as criteria for evaluating and influencing decision-making. Educational administration as an applied science is concerned with means as well as ends; therefore, it focuses on quality of process as well as quality of goal achievement.

There is a need for educational leadership that will foster the growth of the organization, school, teacher and student in immediate and long-range conceptual and humanistic goals. This study will provide some analysis for determining the development of educational administrators.

Theory and practice of humanistic leadership as described by McGregor (1960) and supported by scientific approaches suggest that studies of the relationships of creativity to leadership might improve the effectiveness of educational administration. A survey of the literature indicates that many studies have been separately conducted on creativity or leadership; however, only a few studies have been reported that dealt with both creativity and leadership. Therefore, the
major question of the relationship of creativity to leadership in educational administration in a period of transition seemed worthy of study.

Statement of Problem

The purpose of this study is to examine the relationship of creativity to leadership in educational administration and to determine the effects of a creative leadership development program on educational administrators.

Hypotheses

This study was designed to examine the following hypotheses:

1. There will be a relationship between creativity and leadership for the experimental and control groups prior to treatment.

2. There will be a significant difference in the relationship between creativity and leadership for the experimental and control groups following treatment.

3. There will be a significant longitudinal change in the use of techniques learned in the development program by the experimental group.

Definition of Terms

For the purpose of this study, the following definitions were used:

1. Assessment - identification of relevant variables that are involved in problem identification; psycho-social factors, situational factors, and human factors.
2. Creative Leadership - the ability to assess the situation, determining the underlying factors, know the needs and motivations of the followers, being aware of inner-directed capacities, and effectively transacting the psycho-social milieu so there can be a potential for fruitful solution (Taylor, 1972).

3. Creativity - a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, and disharmonies; identifying the difficulty, searching for solutions, making guesses or formulating hypotheses about the deficiencies; testing and retesting the hypotheses; and finally, communicating the results (Taylor, 1972).

4. Evaluation and control - measuring the evolution of the goal by observable criteria of progress and determining the corrective action or alternative action needed and providing the proper feedback to maintain the desired behavior.

5. Feedback - the providing of specific information which is useful to the situation and highlights its relevance to the need system of the follower.

6. Formulation - the molding of incomplete, central, unfinished and challenging problems into a potentially richer problem with a generic basis for a generative solution.

7. Goal-setting - a process of establishing clearly defined and measurable outcomes which are adequate and thorough.
8. Implementation - the action necessary to achieve the goal and to ensure the smooth functioning of the process.

9. Inner-directed - having a strong internal system with empathy, intuition, synthesizing formulation, fluent structuring and a unique organizing style (Shostrom, 1965).

10. Leadership - the ability to influence others to act in a manner that is directed toward goal achievement (Fiedler, 1971).

11. Other-directed - guided by factors or other influencing situations that are outside the realm of the individual (Shostrom, 1965).

12. Planning and organization - an examination of the constraints and opportunities for action in given situations and the engaging in a particular course of action and ordering of the resources available.

13. Reassessment - the evaluation of the control measures are established to assess goal achievement or progress toward goal achievement.


15. Transactualization - an individual that is fully self-actualized, whose motivations are directed toward shaping or designing the external environment (Taylor, 1972).
CHAPTER II
REVIEW OF RELEVANT LITERATURE

Creativity Descriptions

The following descriptions of the creative personality, process, product, and environment were the ones most frequently found in the literature. They overlap but stress different aspects, dimensions, attributes, or characteristics of creativity. These descriptions will receive additional attention throughout the review of literature.

Personality Creativity. Personality creativity stressed the involvement of the total personality in the creative process. It saw creativity as a way of life, a stylized approach to life. The life style involved discrimination and a general rejection of the conventional toward the cultivated inner world of the self. The goal of the creative life style was self-actualization. Creative behavior was an expression of one's intrinsic nature, and one who lived creatively imposed his own personality upon the environment in a distinctly characteristic and discernible manner, while at the same time retaining a sensitivity and receptivity to the environment. The creative life style can be learned and developed. It involved purposeful attitudes, constructive values, and was characterized by courage, a tendency to "become involved," a high motivation to explore newness, and a distrust of acceptance on faith or by authority.
Process Creativity. This view stressed the expressive, impressive, action, reaction, or experiential character of creating. It was concerned with the process of creativity and its psychological correlates, rather than with the product. Process creativity involves a temporary suspension of evaluation and a fascination with facts of the immediate moment. It was characterized by tolerance of ambiguity, risk-taking, and expressed itself in a desire to discover, create and explore.

The creative process involved an exposure stage that was open to the environment in terms of quantity and quality of inputs; a pre-divergent stage where inputs were directed toward a central reformulation; a conversion stage where the structure of the inputs was reformulated into a new configuration; a post-divergent stage where the new idea was expressed, revised and developed into a workable form; an expression stage where a new product was produced.

Product Creativity. The emphasis in product creativity was on end results. The artifact or thought produced became the basis for evaluation. This was a view of creativity from its terminal point.

The creative product may be as tangible as an invention or as intangible as an idea. The criteria for a product were the problem it resolved, the area in which it was presented, and its effects.

Environmental Creativity. Environmental stimulation has facilitated creative behavior. It can be contrasted with reinforcement in which predictable outcomes of behavior were shaped by schedules, while stimulation initiated creative outcomes that were unpredictable. Stimulation occurred in a personal, organizational, social and cultural climate.
Some of the conditions which are reported to facilitate creative behavior were: (1) reduction of frustration factors, (2) elimination of competition, (3) provisions for support, and (4) emphasis on problem-solving.

**Literature Review**

The general areas of importance to this study are those that relate to the various phases of creativity and leadership. This review of relevant literature is limited to the following subdivisions:

1. Assessment
2. Formulation
3. Transformation
4. Goal-Setting
5. Planning and Organizing
6. Evaluation and Control
7. Implementation
8. Reassessment
9. Overview

**Assessment**

In many respects assessment is basic to the entire process of effective leadership. Therefore, leaders should be open to the full range of stimuli and factors involved in assessment, including personal feelings, interest and needs. Assessment may be conceptualized in four areas: (1) psychosocial factors, (2) situational factors, (3) human factors, and (4) general factors.

Psychosocial factors are based on cultural considerations. These factors reflect the "spirit of the times." The role of leadership
in the promotion of change is a many-splendored thing (Brickell, 1961). Administrators playing the dual role of educational leader and personnel manager hold the key to successful change and innovation within the school setting. Difficult as it may be, the administrator should remain well informed of emerging educational theory and research. Administrators must also engage in a study of group processes and of the personalities and talents of the personnel who are responsible to them. How administrators function in relation to personnel and knowledge will determine the kinds and degree of change and innovation that will transpire in schools (Eberle, 1969).

Psychosocial factors establish the parameters within which the creative leader may freely operate. Wilson (1969) suggested that leadership in the years ahead, at all levels of society, will require intellectual capacity beyond mere technical, managerial or professional skills. Tomorrow's leaders will face increasing pressures to expand their knowledge and abilities. Evolutionary change requires continuing education to remain effective in any field. Accelerating rates of technological change and their sweeping impact on society will affect every field and will impose new criteria for leadership.

The creative educational leader is a person of curiosity and discontent, a person of unlimited enthusiasm for the job, a person with talent for transmitting enthusiasm to associates on the school team, a person who is flexible, keeps an open mind and is willing to accept and use new information, a person who is unorthodox and boldly questions conventional ideas and is goal oriented — not method oriented, a person
willing to pay the price in physical and mental labor to achieve worthwhile goals (Torrance, 1961).

Observations of mature, highly creative individuals indicated that these people have disciplined their minds and have learned key skills for their own creative development (Shallcross, 1973). In studies of such individuals, Barron (1968), Getzels and Jackson (1962), Guilford (1950), and Parnes and Noeller (1971) found certain major conclusions: that mature, highly creative people seek to open their minds and the minds of others to new and alternative perceptions of situations, use the self as a source, and find creative solutions through a back-and-forth process. Steiner (1965) suggested that it was possible to design an organization in such a way that the individuals accomplished more within the organization than they would produce, as individuals, outside the organization. This is why great leaders are paid large amounts of money.

Whereas psychosocial factors may be conceived as being cultural norms, leadership milieu factors can be thought of as presenting the norms of a portion of that culture and existing interpersonal and other factors in the more immediate situation. As is the case with psychosocial factors, these leadership milieu factors can also serve to influence the creative leader's choice of action.

If the structure of knowledge is to be grasped, MacKinnon (1968) suggested that it would be necessary for the leader in whatever field to have a large body of learned facts as well as a mastery of a large array of reasoning skills. These skills along with an acute and accurate
sense-perception should be used by the leader to develop an intuitive understanding of experiences. Creative persons are open to experiences of the inner self and of the outer world.

Creativity relies on a variety or diversity of inputs. Pelz (1971) reported that scientific output rises in proportion to diversity in the individual's working tasks. Mars (1967) pointed out that those who put all their time on technical work are less effective than those who spend some time on administration and communication. He also found that those who develop narrow specialties lose their effectiveness after a few years.

Informal problem-solving should be spread throughout the organization instead of just for a specific group (Lanzetta, 1965). The diversity of the group provided for a diversity of alternative solutions. Mars (1967) concluded that the administrator must try to improve personal creativity through varied readings in the field, practice exercises, seminars, and other kinds of training experiences.

Koprowski (1972) summarized that creative individuals differed from less creative persons of like age, educational, and occupational background in several important respects. The quality of intellectual makeup was appreciably different. In solving problems, the creative person spent more time in the early stages of the process. Creative persons viewed problems from many different angles, were not afraid to try novel approaches, allowed more unusual responses to sift through from the imaginative subconscious, and not only tolerated ambiguity and complexity, but also welcomed and needed them. Interests were broad
and the creative person tended to be humanitarian rather than provincial in outlooks toward life. More important than the level of intelligence was the effectiveness with which one uses intelligence (MacKinnon, 1968). Therefore, knowing what goes into individual creativity was a good starting point in recognizing what was needed to make organizations more creative. Koprowski (1972) suggested that some planned form of job rotation would be extremely broadening and beneficial at certain points in most careers.

Another set of elements which must be considered during the assessment phase of effective creative leadership cycle are the human factors which can influence the matter under consideration. It is profitable to think about human factors within the framework of needs and abilities. Effective creative leadership consists of behaving in a way which meets the needs of the leader and causes the followers to focus energy from their need systems to the application of their abilities in accomplishing the task at hand (MacKinnon, 1968).

Accordingly, Fiedler (1964) seemed to make the assumption that, other things being equal, task-oriented and person-oriented leaders possessed essentially the same degree of intelligence and creative ability, and that it was only the demand characteristics of the situation which made the task-oriented leader unable to utilize creative ability. Jacoby (1968) speculated that the more creative the individual, the greater the tendency to gravitate toward and to assume the leadership role in groups and environments which facilitated and which were conducive to creative output.
In terms of personality makeup, Koprowski (1972) found that the creative person had a great need for independence and to call his own shots. Even more important, conventional authority was seen as arbitrary and often unnecessary. Authority was respected from a professional expertise point of view. Interest usually spanned many seemingly unrelated fields. The creative person was basically motivated by interesting, challenging work and not by symbols of status and prestige. He liked to work at his own pace and to be his own man.

Another kind of evidence about the assessments made by creative leaders was the level at which they assessed the problem. Maier and Hoffman (1965) found where leaders perceived conflict in terms of "problem subordinates," the quality of decisions reached was distinctly inferior to that where decisions were reached under circumstances in which the discussion leader perceived disagreements as the source for ideas and innovation. In those latter circumstances, innovative solutions increased markedly.

Brainstorming has been advocated by many as a successful technique for problem-solving. Another basic technique in developing new original thinking was to try and free the individual from built-in inhibitions and to prevent premature judgments. The principle of deferred judgment or evaluation was recognized as valuable whether for an individual or for a group (Osborn, 1960). Osborn also suggested many techniques for increasing problem-solving ability and for generating new ideas. However, Benson (1957) was critical of brainstorming and pointed out the danger of having "potluck group thinking" and "cerebral
 popcorn," as he termed it, take the place of systematic logic. Egan (1969) refuted that position and found that systematizing could hinder creativity.

Competitive conditions among organizations may generate inter­organizational secrecy (Cummings, 1968). Yet, it was known that a wide range of informational inputs was a facilitator of creative responses. Most creative persons value the criticism of knowledgeable colleagues with similar interest - irrespective of their organizational identification. Among professionals, the creative person may desire the review of ideas by fellow professionals outside of a single organization. This may lead to the exposure of information considered "top secret" by the institutionally identified decision-makers. Cummings (1968) also observed that in the bureaucratic climate, conflict concerning objectives and the means of accomplishment was not expected. It may even be considered illegitimate. Yet, the creative individual usually desired and even sought a diversity of opinion and information in order to facilitate idea generation. This diversity, in turn, frequently led to conflict among organizational components representing differing viewpoints and interest groups.

The effective leader's ability to provide followers with access to the satisfaction of growth needs was a powerful tool for inducing followership. Specific growth needs must be defined in terms of the environment in which a person operates; that is, the leader must decide what types of growth needs are relative to each situation. This was a part of the assessment process (MacKinnon, 1968).
The following parameters contributed to the promotion of creativity and growth needs: the physical environment, the philosophical orientation of the culture, the language system, the developmental level of the culture, educational opportunities and experiences, political, economic, and social factors (Stein, 1966). All of these factors affected both the development and survival of creative ideas, products, and process. The challenge to the change agent was clear - if one desired to effect change, the above factors must be studied and understood. A definite relationship between organizational climate and innovation was reported by Hillman, (1971). Also, there was a strong correlation between salaries paid to the principal and the amount of innovation occurring in the school.

Administrators who obtained high scores on creative ability also demonstrated that they had a good store of factual knowledge of school administration by obtaining high scores on the job knowledge measure of the National Teachers Exam: Administration and Supervision (Antley, 1966). Also, it was found that administrators who obtained higher scores on creative ability tended to involve more persons in decision-making processes.

Guilford (1950) referred to creativity as a behavior pattern which included the following factors: sensitivity to problems, perception, fluency, novel ideas, flexibility of mind, synthesizing ability, analyzing ability, reorganizational ability, complexity or intricacy of conceptual structure of which one is capable, motivational factors, attitudes and temperament.
Taylor (1971) stated that transaction involves an environment from which inputs are received, a period of assimilation, a transformation of the environmental inputs, expression of the transformation, and finally a product which embodies the resulting transaction. The openness of the environment was referred to by Rogers (1954) as the initial phase or exposure, a period in which the environment was perceived which initiated the process.

The argument for including humanities content into preparatory programs for educational administrators has been summarized as follows: successful organizational leadership is a creative act in that the administrator must take a myriad of variables, intricately interrelated, and from them fashion a meaningful pattern, structure, form or sequence. The administrator has to understand how one creative element derived inevitable from another and subsequently determined a third. An awareness of natural sequences, forecasting consequences, and recognizing critical points or structural climaxes were also essential. One must know where the imposition of personal will may have an effect and where the result of a sequence is predetermined. All of these capabilities were characteristic of the successful artist as well as of the successful administrator. The processes of the poet, dramatist, novelist, painter, architect, sculptor, and composer were in many ways similar to the processes of the administrator (Farquhar, 1967).

Parnes (1959) has shown that the creative process in groups was enhanced if the phases of idea generation and idea evaluation were separated in time. The creative process was also enhanced in groups by
leadership that was "supervisory" and "participatory:" "supervisory" leadership groups produced higher quality scores, but "participatory" leadership groups produced a greater quantity of possibilities.

Creative thinking in public life was vital to leadership (Osborn, 1960). Although an executive must possess judicial judgment to a marked degree, one could not be solely a judge; excellence in resourcefulness was also important. Then the administrator should recognize the value of creativity and know-how to encourage the creative power of associates.

Executive ability to see situations as a whole after all available data were presented enabled administrators to concentrate on central elements and to know where the entry of action could be made (Farquhar, 1967). Executives should be continually and instinctively making order and relationships out of unrelated ideas — sorting, categorizing — to the end of action. The order imposed on this mass of experience and the actions initiated often determine the success of an executive.

Many of the relevant factors which affected creative leadership have been assessed. To fully serve its purpose, the assessment phase needed to be as thorough as possible.

Formulation

An important part of the creative leadership processes was the type of problems which creative leaders chose, and the manner and generic depth to which the problem was formulated. In formulating the generic, or underlying problem, it was important to proceed in a manner which served to relate the achievement of the solution of the problem to
the personal need system of the followers. The way a problem was formulated affected the manner in which it impacted the needs system of the followers (Taylor, 1971).

Expectations held for the administrative behavior of the superintendent by the board of education and the subordinate staff and their perceptions of actual performance as measured by the Leader Behavior Description Questionnaire (LBDQ), were multi-varied (Halpin, 1956). Though board members tended to stress Initiation Structure in their expectations, the staff members tended to stress Consideration; consequently, the superintendent was faced with a dilemma - whether to adhere to subordinate or superordinate expectations. Moreover, he found, although staffs and board members tended to agree among themselves with respect to the superintendent's actual performances, they did not agree on other matters. Staff members perceived the superintendent as low in Consideration; the board members perceived him as high, thus reversing their expectations and further confounding the role and personality dilemma within the school system.

Hollander (1969) pointed to the increasing signs of movement toward a fuller analysis of leadership as a social process, and not as a fixed state of being. Raudsepp (1963) suggested that the effective supervisor should have certain attributes and functions in order to foster creative output. Some of these are: the supervisor must understand the nature of the creative process and the difficulties implicit in it, have an understanding of the creative temperament and a respect for individual differences among creative personnel, provide encouragement,
enthusiasm, and inspiration to the staff, attempt to increase self-confidence of staff members by demonstrating confidence in their ability; and have a good relationship with the staff without generating feelings of personal insecurity.

Simon (1955) concluded the leader was merely a bus driver whose passengers would leave unless taken in the direction adopted by them. The enlightened leader worked to establish conditions which gave greater latitude for initiative and responsibility to followers and which relaxed external controls on their performance. Therefore, the responsibility to help in building a climate that would make each follower more self-directive and self-responsible and more capable of utilizing talents and skills was accepted by effective leaders. The leader who nurtured creativity in others could best do so by being a creative person (MacKinnon, 1968).

Complete commitment to the organization would not promote innovation, neither would complete alienation from the organization. The relationship between personal and organizational goals seemed to be where individuals perceived the organization as an avenue for professional growth (Thompson, 1965).

Mars (1967) indicated that the modern leader or administrator was responsible for providing the kind of leadership and administration which would maximize the creative behavior of members of the organization. This was a responsibility which could not be delegated; regardless of the support and encouragement of their peers, followers had to be convinced that the leadership of the organization valued creativity before creative behavior could be expected.
Disinterest in social interaction was not equivalent to being incapable of it (Jacoby, 1968). It was likely that when confronted by situations, such as supervisory roles, in which they were required to interact with others in order to achieve their goals, creative individuals would respond in a supportive, person-oriented manner. In other words, it appeared as if creative people as individuals preferred to be relatively asocial while creative people as supervisors adopted a more person-oriented approach. Deutsch and Shea (1959) maintained that in addition to being creative, the "ideal" supervisor was visualized as a sympathetic, friendly person who liked both people and ideas. Such supervisors were able to relate cooperatively and stimulatingly with subordinates.

Jacoby (1968) cited results that appeared to suggest that task-oriented leaders might not provide creative input simply because they were not creatively endowed, and not because they were too busy attending to group maintenance functions. It was also inferred that individuals who occupy the leadership role in permissive groups (i.e., person-oriented leaders) tended to possess more creative ability than those individuals who assumed the leadership role in highly structured, task-oriented groups. Fiedler (1964) found that a harmonious, cohesive group presented a favorable working climate for the permissive, considerate person-oriented leader, and the leader was able to contribute to group performance according to personal intelligence. A less pleasant disharmonious group climate required a more task-oriented, active controlling leader. These findings suggested that the maintenance functions
of the leader absorbed energies under stressful conditions, throwing the burden of creative group performance upon the group members.

Leadership and other processes of the organization should insure maximum probability that in all interactions and in all relationships within the organization each member, in light of personal backgrounds, values, desires, and expectations, would view the experience as supportive and one which built and maintained a sense of personal worth and importance (Korman, 1971).

Blake (1964) implied that the most desirable leadership style was "team management." Hersey and Blanchard (1969) concluded that the high consideration and high initiating structure style is theoretically the ideal leader behavior. Likert (1961) found that supervisors with the best records of performance were employee centered, while job-centered supervisors were found more often to have low producing sections. An important point concerning the formulation of new styles and techniques of leadership was found by Likert (1961); depending on the size and complexity of the organization three years to seven years were required to effectively implement a new management theory. A person's leadership style reflected the individual's basic motivational and need structure (Fiedler, 1967).

Although there has been much emphasis placed on the value of leadership training, no correlation has been established between such training and the effectiveness of leaders in an organization. A major problem with leadership training has been that it has attempted to shape the person to fit into one set pattern of the ideal leader, based on the
assumption that the effectiveness of a leader would increase as influence over followers increased. Fiedler (1967) has found that this was not always the case. His "Contingency Model" was based on the concept that "effective group performance depends upon the proper match between (a) the leader's style of interacting with subordinates and (b) the degree to which the situation gives control and influence to the leader." Using his Least-Preferred Co-Worker score (LPC), Fiedler divided leaders into two groups: relationship-motivated and task-motivated. He found that the task-motivated leaders performed better under moderately favorable circumstances. Formal leadership training tended to improve the performance of some leaders and to detract from the performance of others. The important consideration, then, in planning for effective leadership would be to place the individual in a leadership position which was appropriate to a particular style of leadership.

Endres (1972) stated that in order for organizations to equip themselves to deal with everyday changes required in today's complex world, they should develop an organizational work environment that would minimize the conflict between the individual's needs and the organization's goals. In such a work environment the individual was respected by the organization, individual needs were recognized and the organization provided opportunities to satisfy higher-order needs. When leaders worked toward establishment of an organization which encompassed these principles in their management philosophy and practice, efficient and effective change tended to result.
Cartwright (1951) found in one series of experiments that a method of group decision in which the group as a whole made a decision to have its members change their behavior was from two to ten times more effective in producing actual change as was a formal lecture which encouraged the group members to change.

Egan (1969) concluded that from the considerable research literature on the kinds of organization structure and process which helped creativity, two specific points emerged. First, the relationship between superior and subordinate was important as well as the influence of the immediate group. Secondly, the attitudes and roles which the individual was to fill were significant.

Antley (1966) stated that creative administrators generally tended to operate at a higher level of decision-making. They did more in schoolwide problems rather than the isolated problem or one that affected only one attendance center in their school system.

Anderson and Fiedler (1964) found that it appeared that personality characteristics of the leader such as intelligence, attitudes and special creative aptitudes were more highly relevant to group achievement in the participatory condition.

Lasswell and Holbert (1966) cite that social change is a process since it is not chaotic. As human beings are involved, value outcomes are sought to be maximized. Lake (1968) states the collective process of interaction is pursued by relatively stable patterns of practice which are somewhat specialized to particular value outcomes, which we have called institutions.
As Havelock and Benne (1967) ably put it, every time the agent of change is transmitting information from one setting or discipline to another he is utilizing knowledge.

Tannenbaum (1971) sees two key individual characteristics that are central to the explanation of the relative effectiveness of leaders. First, is "social sensitivity," the ability of an individual to understand accurately another individual or social group. Secondly, is "action or behavioral flexibility," the ability to behave appropriately or to respond appropriately in the light of one's understanding of the person or persons he is dealing with.

Therefore, it is assumed that formulation which puts the problem in a way such that achieving a solution represents either direct or indirect personal needs satisfaction will result in greater motivation and performance.

**Transformation**

The central nature of the creative leadership transformation process is a basic question. Although the creative process in creative leadership may be manifest in various forms, the search for an underlying pattern has not produced a single answer. It has been stated that only simple problems lend themselves to direct solution processes and that complex problems require complex solution processes, or processes which transform these problems into forms that allow for solution.

MacKinnon (1968) found that rote learning, i.e., learning of facts for their own sake, repeated drill of material, too much emphasis upon facts unrelated to other facts, and excessive concern with memorization could all strengthen and reinforce sense-perception. On the
other hand, emphasis on the transfer of training from one subject to another, the searching for common principles in terms of which facts from quite different domains of knowledge could be related, the stressing of analogies, similes, and metaphors, a seeking for symbolic equivalents of experience in the widest possible number of sensory and imaginal modalities, exercises in imaginative play, training in retreating from the facts in order to see them in larger perspective and in relation to more aspects of the larger context thus achieved was believed to strengthen the disposition to intuitive perception as well as to intuitive thinking.

Originality of response has two aspects which must be distinguished: the quantity of original responses which one can give versus the quality of responses. To nurture the fullest creativity in those most fertile with new ideas, greater emphasis must be placed upon seeking the implications and deeper meanings and possibilities inherent in every idea. This is a matter of pursuing ideas in depth and with scope, rather than criticizing and rejecting. Insights, however fresh and clever they may seem, do not enter the stream of creative solutions to important problems unless their consequences are tested in application and revised and extended to meet the requirements of the situation for which they are first devised (MacKinnon, 1968).

Gordon (1961) has developed a highly structured approach to creative problem-solving called synectics. This involved two basic operations: (a) making the strange familiar and (b) making the familiar strange. Fantasy was encouraged and the free play of the mind was considered important.
Administrators who promoted the good group atmosphere generated communication within the managerial group about how to improve the organization (Becker and Stafford, 1966). This led to a consideration of various innovations and finally to adoption of those innovations which were perceived as potentially beneficial. Antley (1966) cited that creative administrators offered more possible solutions to their problems.

Farguhar (1967) stated that because a major distinguishing feature among modern organizations related to their differential purposes, it followed that purpose was of central importance to organizational life; consequently, the administrator must possess the ability to determine, realize and change organizational purpose when necessary. This ability must be based to a large extent upon skill in making value judgments, a skill which depends mainly upon one's understanding of one's own scheme of values, those of others, and those of society in general. Stated more succinctly, decision-making cannot be value free. Yet, traditional preparatory programs for administrators have tended to neglect the importance of the value dimension of administrative behavior through emphasis on the technical management skills and the social sciences which largely ignored the humanities.

The most comprehensive training for the ability to view situations as a whole could actually be given by the practice of reading and analyzing literature and art (Pamp, 1957). In a leadership function, the executive must do pretty much what a critic of literature must do, i.e., seize upon the key, the theme of the situation and the symbolic structure which gave it life. The executive must individually create the object for analysis by combining the ingredients of people and data.
The innovator represented the interface between the creative idea and the organization (Knight, 1966). The innovator or change agent introduced and carried out the introduction of ideas. For a person to innovate, two congruents were required: an idea and the desire to introduce it and the means with which change could be concluded. The process of the innovator differed from the non-innovator in only two respects - what was seen as the problem and what alternatives were considered in the search for a solution to the problem. Bright (1964) found that while the creation of the idea was crucial, there was available evidence that indicated that innovators often were not the original creators.

Bright (1964) states that existing research has led to the following conclusions about individuals who use the creative problem-solving process:

1. have high-risk activity, often erratic and unpredictable
2. have detached devotion to their work, i.e., deep commitment to the problem as well as the ability to see the problem in a broader perspective
3. are receptive to all kinds of ideas
4. search actively for new alternatives, ideas, and opinions from a wide variety of sources
5. commit themselves to a specific solution to their problems later than do their less creative counterparts
6. tend to be non-conformists and question authority and existing problem solutions.
The process criteria of creativity may include remote associations, self-actualization, and adaptiveness to problem-solving methods (Taylor, 1971). The fundamental problem was that of fruitfully defining the process so that criteria could be derived. From a transactional approach, the process criteria would involve openness and changing the environment in accordance with inner perception. Taylor (1971) stated that a moment of transformation followed where insight or perceptions of the external world were reformulated was at the heart of perceptual transaction and was creative to the extent that the reorganization of the environment was congruent with personal perceptions.

There were several implications in the utilization of creative leadership transformation processes. Complex, basic, and generally ignored problems lent themselves to solution only by transformation where direct approaches were not tenable. Transformation required greater problem latitude, thereby encouraging divergency and cross-fertilization from other fields. It emphasized the feasibility and potency of bringing together highly diverse people into effective creative leadership processes in organizations.

**Goal Setting**

The goal setting phase of the creative leadership process was concerned with establishing clearly defined and measurable creative leadership goals or outcomes. The degree of commitment and both the clarity and measurability of the goals were vital to the successful completion of the creative leadership process. Consideration of goal setting as an element of the creative leadership process focused on two
main things. First, the nature of goals which may be set, and second, a process for stating the goal in a clear, meaningful, and measurable fashion.

Randall (1967) found that high commitment to goals motivated managers to search for creative solutions. A climate for problem-solving provided needed perspective for action. Free and open discussion of differing viewpoints was aimed at examining issues on their own merits. As new facts emerged, managers were able to change their positions based on new evidence. One of the primary reasons for the lag between our visions and our practices was that most organizations were designed not only to serve formal goals, but also to maintain the "powers that be" (Koprowski, 1972). This "hidden agenda" was a formidable obstacle in any organization and tended to perpetuate the status quo.

For an organization to be innovative it was not implied that an amorphous mass of people were doing pretty well what they pleased. It was not so much a matter of whether structure was required, as it was at what level that structure was necessary. For example, the creative individual was quite structured when it came to goals. Maximum allowance for freedom was centered in the exploration of means to achieve these goals. Without some structure it would have been difficult to distinguish between the creative genius and the madman. Structuring was badly needed at the goal level, but probably less so at the means level. Only when an organization adopted goal definition and goal redefinition as a planned way of life could it hope to creatively experiment with the various means to achieve that goal. In such an arrangement, goal achievement and not the staff specialist's "one-best-way" became the measuring
stick for individual and organizational performance. This did not mean that the leader of an organization should get rid of staff specialists. Instead, the leader should redirect their focus from means to goals.

A leader, therefore, sets the basis for relationships within the group, and thereby can affect outcomes (Hemphill, 1961). As suggested, the leader initiates structure. But more than just structure in a concrete sense, the leader affects the process which occurred within that structure. Along with other neglected aspects of process in the study of leadership was the goal-setting activity of the leader. Its importance appeared considerable, though few studies gave it attention. Burke (1966) found that the leader's failure to provide goal orientations within the group led to tension and dissension. This was most acute where there was agreement as to who was to act as leader. Though such expectations about the leader undoubtedly were pervasive in groups studied in research on leadership, they were noted only infrequently.

Gibb and Gibb (1967) suggested that group health was related to the integration of group goals. Unhealthy groups were unable to decide what they wanted to be or what to do. Lacking an adequate system of communication, members did not know that they, as a group, were not doing what they wanted to do. The difficulties in goal formation came rather directly from partial data processing, which in turn grew out of fear and distrust. When members distrusted the motivations of other members, it was difficult to share goals in a meaningful way. The problem that the group faced was to create out of the available data a satisfying goal which would adequately include the real goals of the
members and which would be more fulfilling than any of the half-verbalized goals of individuals.

There seemed to be sufficient evidence to warrant the implication that role set was an important determinant of the degree of risk of response to situations (Cummings and Mize, 1968). It was also suggested that attempting to alter a person's role set within one dimension of self-perception, one's willingness could be influenced to make risky decisions, an effect which may increase the probability of generating ideas in the presence of ambiguity regarding the consequences of implementing such ideas.

Wallach and Kogan (1964) found that considering problems in a group context rather than as individual decision-makers would enhance the riskiness of the decisions made by individual decision-makers. One of the primary determinants of a climate conducive to creativity was the degree to which executives were willing to commit themselves to risky decisions or responses. To the extent that such a condition existed among personnel capable of creative responses, the conservative bias implicit in traditional models of organization tended to be counterbalanced.

A wealth of social-psychological knowledge suggests that a person's behavior was partially conditioned by the role in which one was placed and the perception of the requirements imposed by that role. This role set also influenced the executive's self-perception which acted to influence the opportunities and constraints seen and considered by the executive. It was logical to hypothesize, therefore, that the
role set of a person would condition a willingness to commit oneself to risky decisions or responses in the face of ambiguous consequences (Cummings and Mize, 1968).

Bennis and Peter (1966) proposed that any program of planned change would contain the elements of a client system, behavioral change agents, specification and selection of goals and implementation. The process of goal setting illustrated the manner in which goal achievement was made relevant to the personal needs systems of the followers.

Planning and Organization

Once goals had been set, the planning and organizing phase of the creative leadership cycle was begun. This phase set the stage for the efforts directed toward accomplishing the goal achievement. Viewed from this perspective, the initial efforts during the planning and organizing phase might be conceived of as an assessment of the variables which affect goal achievement.

The essential role of a leader was to clarify choices and place priorities (Wilson, 1966). The chief asset of any leader has been good judgment; with the emergence of complex economic, social and technical problems that could affect priorities and choices, other traits were desirable. Margaret Mead (1967) made the case for the growing importance of education:

The most vivid truth of the new age (is that) no one will live all his life in the world in which he was born, and no one will be in the world in which he worked his maturity. (p. 131)
Lanzetta (1965) commented that people searched for novel solutions when they had a problem and did not know how to resolve it. The more important the problem, the stronger the motivation to search. But for the search to be continued, and to be reasonably likely to produce a novel alternative it had to be reinforced, free of continuous evaluation, as free as possible of time limits, and be conducted by a large number of people of diverse training and background.

For the modern organizational leader to provide a climate in which creativity can flourish the bureaucratic orientation of the organization had to be deemphasized (Mars, 1967). The leader needed to restructure the reward system in the organization because the typical rewards of status, power and money encouraged jockeying for position, pleasing of superiors, conformity, and "not making waves;" all of which were the types of activities which discouraged innovation and creative behavior. Delegation and decentralization had to be incorporated into the organization, not by changing tasks, but rather by utilizing influence and power. The departmental structure of the organization had to be made less rigid (Mars, 1967).

Another barrier to innovation was the naive conception that change resulted from issuing orders, drawing charts or revising policies and procedures manuals. The truth was that people changed only when there was a personal payoff. While this payoff could take many forms depending on the individual, the trend was for people to react less to money benefits and a desirable working condition and more to intrinsic meaning and challenge in their work (Koprowski, 1972).
Any group which operated with a set of resources was expected to produce certain outputs. Within this system, an interchange of inputs occurred and this was facilitated by leadership functions which directed the enterprise. The leader's contribution and its consequences varied with system demands in terms of a "distinctive competence." Taken by itself, therefore, the typical conception of leadership as one person directing others could be misleading. Though the leader provided a valued resource, the group's resources were not the leader's alone. Together, such resources provided the basis for functions fulfilled in the successful attainment of group goals; or, in other terms, group outputs (Katz and Kahn, 1966).

Management science involved the use of scientific methods and attitudes to synchronize specialized functions for the purpose of achieving preconceived objectives (Gregory, 1969). Programmed activity tended to drive out unprogrammed activity (March and Simon, 1958). Creative thinking needed large amounts of time devoted to unprogrammed activity. To the extent that an organization provided for its members a variety of programmed activities which absorbed a very large part of their time, it may have operated to reduce creative contributions.

Four major variables were involved in the leadership syndrome: (1) personal characteristics of the leader; (2) needs, value system, attitudes, and other personal characteristics of those led; (3) nature of the organization — its purpose, its structure, nature of its task, the atmosphere within it; (4) the whole environmental situation the organization and each of its members face — political, social, economic,
psychological, scientific, or military—singly or in combination (Curtis, 1972). The personal characteristics demanded of a leader varied depending on variables comprising a part of the leadership syndrome as a whole. That syndrome thus became a complex and varying, but balanced, relationship among all these variables which were in a constant state of change.

This creative leadership style as a variable and participative style which allowed the leader to change styles to fit changes in the other variables of the total leadership syndrome was identified by Curtis (1972).

Klein (1967) noted that most urban planning ran into trouble when the agents of change had done all their planning before introducing ideas to those who would be affected. When this happened, the innovators had usually developed a considerable investment in their plans and were often far more committed to defending them than to attempting to understand objections to them. They were not prepared to repeat the long process of planning which finally led them to their conclusions. "Gresham's Law" of planning—routine drives out planning—implied that when one was deeply involved in a very highly routine activity, it was not likely that creative problem-solving would be involved (Knight, 1966).

If the actions necessary for goal achievement were to be carried out as smoothly as possible, it was necessary to recognize the potential problems which could arise from the human element in the equation. If this was adequately assessed during the planning and organizing phase,
it was possible to take steps to minimize, or even eliminate, the difficulties.

Evaluation and Control

The goal-setting phase was concerned with the evolving of the goal in a form which would have been measurable and operational. Because of this, there would be observable criteria of progress. That is, success or failure. Similarly, the steps which would have been followed in establishing the feedback system as in the section on planning and organization would have ensured that the necessary information and systems would have been developed for evaluating and controlling the processes which were set in motion. The requirement that feedback be given with sufficient frequency to maintain the desired behavior would ensure that sub-goals would be established as required.

Stimulating people to challenge and to contest status quo and conformities was likely to do little more than provoke disagreement and controversy, increase polarization, and ultimately end in win-lose, impasse, compromise, or chaos. Yet, the status quo requirements must continuously be challenged in a problem-solving and creative way, not in a manner that involved man against man to see who could win or, even worse, in a way that ends in anarchy (Blake, 1971). As an initial rule or regulation filtered down a bureaucratic hierarchy, it became increasingly prescriptive and hence restrictive (Brubaker and Nelson, 1974).

Creative people required creative climate for work (Haefile, 1962). The characteristics of such a climate followed the principles of creativity embodied in the creative stages and creative personality. In organizations there must be a compromise between the optimum creative
climate and total organizational maintenance and discipline. Both creativity and conformity were needed; the one is essential to social stability, the other to social progress (Haefile, 1962).

The essence of the dilemma was that the factors increasing the probability that organizational participants would devise and present innovative proposals were precisely those factors that decreased the probability that the organization would adopt the proposals (Sapolsky, 1967). The stimulation of potential innovation, then, was distinct from and even antagonistic to the stimulation of the adoption of innovation. There appeared to be no obvious way to resolve the dilemma. With the rates of innovation presentation and adoption related in precisely opposite directions to the amount of diversity that occurred in organizational incentive and task structures, an effort to increase one rate was achieved only at the cost of decreasing the other. Without accurate measurements of the rates of innovation presentation and adoption and without models of their optimal relationship, there was no way to specify an organizational design that would satisfy the innovation requirements envisioned by social commentators (Sapolsky, 1967).

It was a fundamental characteristic of creative persons that they were strongly motivated to achieve in situations which demanded conforming behavior. Those who were genuinely interested in nurturing creativity must be prepared to grant more autonomy to their more promising or abler workers and even reward them for behaviors which at times might disturb group harmony (MacKinnon, 1968).

Bennis (1966) reported that social structure in organizations of the future would have some unique characteristics. The key word would
be "temporary;" there would be adaptive, rapidly changing temporary systems. These factors would be organized around problems to be solved. Lanzetta (1965) stated that for the search for novel solutions to a problem to be continued and to be reasonably likely to produce a novel alternative, the search had to be free of continuous evaluation. Continuous evaluation diverted the search to a mere quest for data to bolster solutions already proposed and discouraged other members of the organization from getting involved in the search.

Mars (1967) indicated that the administrator had to think of some changes in the administrative practices of the organization, changes based in general on a lessening of control and the introduction of the four "d's:" democracy, delegation, decentralization, and dispersal.

Koprowski (1972) stated that excessive structure takes many forms. It was an outgrowth of the need to control - the need to know that things got done right, on time, and without unnecessary costs. Organizational charts, job descriptions, budgets, policy and procedure manuals were all tangible evidence of structure. While certain controls are necessary, excessive structure was the unfortunate offspring of legitimate structure.

Increasing the amount of control in an organization by giving subordinates an opportunity to exert internal control over their job content and job behaviors (as opposed to being subjected exclusively to external control by leaders and authority figures) increased motivation and identification and led to better communication and understanding. Hence, it was postulated that the total amount of control over one's own
and other's job-content behaviors by organizational members should be positively correlated with organization performance (Tannenbaum, 1972).

Permissiveness in high-trust, high-feedback groups could be realized in exciting, spontaneous, and playful integration of creative efforts in the group (Gibb and Gibb, 1967). Opponents of permissiveness were thinking about low-trust groups, while the advocates of permissiveness were thinking about the high-trust situation that occurs in the relatively well-developed group.

It has been observed that developed groups operate in a leaderless situation without formal, prepared agenda, without organizational coercion in the formal sense, and without the parliamentary procedures which have been thought to make decision-making easier (Gibb and Gibb, 1967).

The control and evaluation systems of the traditional organization are based upon the norms of stability, calculability and routinization (Cummings and Mize, 1968). On the other hand, the external environment of the organization was continually changing and thereby required creative responses for adaptation. New knowledge inputs were incorporated within the organization to insure purposeful creativity. Yet, the creative responses (particularly their timing) was difficult to predict and discouragingly variable and unstable.

Parnes and Meadows (1959) have shown that the creative process in groups was enhanced if the phases of idea generation and idea evaluation were separated in time. Therefore, the emphasis was on follower feedback with the use of various methods of measurement for a maximum desirability of follower involvement.
Implementation

The implementation phase involved the action necessary to achieve the desired goal. This phase was then put into effect. If difficulties were encountered, the preparation which had been done served as a diagnostic purpose in indicating the corrective action which should be taken.

Atherton (1971) made a case that our way of life was threatened by educators who knew methods, but failed to comprehend meanings, techniques, and principles. In the field of education there was a need for both training and education (if these two terms could be separated in shades of meaning.) Persons should be trained in ways of making a livelihood. But, they needed education also so that they could obtain knowledge and comprehension which were so vital in one's preparation for making a living. A combination of good training and excellent education was essential for the development of leaders and leadership.

To change as individuals, except superficially, was a terribly anxiety-arousing and frightening venture for most individuals (Tannenbaum, 1971). And even for those who more or less prided themselves in being fairly open and flexible, there was no one who did not have those limits beyond which one became tight, rigid, and defensive.

For the individual who chose to work against the usual expectations in any setting, it meant personal trauma. This applied to all those who undertook such a role - the manager in relation to the staff, the consultant in relation to the client, the teacher in relation to the student - it included anyone whose main professional focus was that of trying to facilitate change in other human beings (Tannenbaum, 1971).
Wilson (1969) indicated that a leader must feel comfortable in the world of ideas. The only limitations on the province of this leader were the capacity for thought and the ability and willingness to act on it and articulate it. The new leader's aspirations were higher and goals were more deeply challenging. But, the new leader was less a Captain of Fate than of Mankind.

In order to be effective, the leader in creative training had to be able to establish a climate that was conducive to creative behavior—one that was not judgmental and that provided situations for creative behavior in others (Shallcross, 1973). The leader was not one who was creative, but rather, the creative leader was the one who provided situations in which others could try their hands at demonstrating creativity.

The character structure of the innovator in innovation-resisting organizations corresponded to what the existential psychologists call the self-actualizing person (Shepard, 1967). The innovator was a self-structured rather than an organization person; personal behavior and sense of self-worth were not blindly determined by the organization's reward and punishment system (either in the form of submission to it or rebellion against it:) if the innovator could not transform the situation into one which was both autonomous and interdependent, one felt free to fight it or leave it.

Such leaders are rare because the institutions of our society have not provided the conditions under which many persons are able to grow to this degree of human maturity. The innovation-producing organization must aim to provide an environment in which this kind of growth
can occur. This means a climate in which members can view one another as resources rather than competitive threats or judges; a climate of openness and mutual support in which differences can be confronted and worked through, and in which feedback on performance is a mutual responsibility among members so that all can learn to contribute more. Such an environment is difficult to provide, since it is at variance with traditional leadership doctrine (Shepard, 1967).

MacKinnon (1968) found that creative people had strong theoretical and aesthetic interest. Also, strong introversion tendencies were visible among creative people. This presented a problem for greater interpersonal interaction and group dynamics. However, Drevdale (1964) noted that the creative individual's lack of concern with the social environment did not appear to be an attempt to escape, but merely the result of an evaluation of life that placed such things toward the bottom of a hierarchy of importance.

As Selznick (1957) pointed out, an entire interpersonal system was implicated in answering the question of leadership effectiveness. The leader was not effective merely by being influential, without regard to the processes at work and the ends achieved. Far more was involved than the capacity to mobilize personal support or the maintenance of equilibrium through the routine solution of everyday problems. The leader's function was to define the ends of group existence, to design an enterprise distinctively adapted to these ends, and to see that the design became a living reality.

School administrators showed a significant increase in creativity and leadership traits as measured by self-rating after participation in
a mini-workshop in creative leadership (Burstiner, 1972). When school principals were involved in a creative training program, improvements were noted in supervisory practices, classroom teaching and pupils' learning experiences (Devine, 1964).

Brown (1968) reported that teachers exhibited significant change in these categories: receptivity to change, personal self, professional self, professional relations with others, structuring of learning, and consideration of individual children after participation in a workshop for strategy for teacher change.

The role of values was determined central in the description of goals and the characteristics of change agents. The organization developing strategy-promoting innovativeness had to attack the values upon which the organization ordered its human effort (Argyris, 1965).

Tannenbaum (1971) asked what was known about what differentiates people with relatively high sensitivity and high flexibility from those who are relatively low in these characteristics. The conclusion was that the more emotionally mature, well-adjusted, mentally healthy, and self-actualizing the individual, the more he was likely to be high in these characteristics. The route to becoming more effective interpersonally is the same route as becoming a more complete, more adequate human being.

Because of the immense variety inherent in the humanities, the claims which have been advanced for their efficacy in administrator preparation are many and diverse. Foster's (1965) review of relevant literature was indicative of this feeling about humanities. Study in
the humanities improved the ability to communicate, increased moral wisdom and aroused the minds of people with the intellectual capacity to do something about the world's problems, encouraged tolerance in the beliefs of others, enabled administrators to practice self-criticism without the interference of anxiety and gave a sense of emotional independence and security in the dynamic struggle with "the system." The humanities provided the ability to create a harmonious whole out of dissimilarities, prepared one to choose "between good and bad, truth and falsehood, the beautiful and the ugly, the worthwhile and the trivial," and finally, improved the ability to make decisions of every sort.

The argument, training leaders to make value judgments, has received considerable support from Culbertson (1963) who carried it a step further by identifying a number of literary works which, if effectively incorporated into preparatory programs, would contribute to the development of administrative skills in solving moral dilemmas through making informed value judgments. Such content he concluded should be used to assist potential administrators to think clearly about persistent moral issues faced by those heading organizations, to analyze the contradictory forces that were generated by competing value systems, and to assess the possible consequences of being guided by one set of values as opposed to another.

Michael (1966) suggested that the growing computerization of organizations enormously increased demands upon administrators to contend with the moral and ethical consequences of the policies they chose. These consequences might have been at odds with the values they would have needed to become perpetual students of the humanities.
In times like these, stated Harlow (1962) the determination of educational purposes was a matter for the most carefully reasoned, most carefully disciplined intellectual effort. It was in this fact that there was to be found an opportunity for the improvement of training programs for prospective educational administrators. For values and the making of value judgments were the domain of one of the major modes of human thought; namely, the humanities. Therefore, the creative leader had to implement those actions which brought those processes into being.

**Reassessment**

The control measures established to assess goal achievement or progress were evaluated. The reassessment was done relative to the goals which were set on the basis of the preceding steps of the creative leadership cycle. If the results which had been achieved did not make the criteria for success in terms of the goals which had been set, the creative leadership process began anew with an assessment of the current situation.

The innovative behavior of an organization differed depending upon whether it perceived itself as successful or unsuccessful. Cyert and March (1963) wrote about the organization's perception of its success based upon research concerning level of aspiration. They hypothesized that an organization's perceived success depends upon its past history rather than on an absolute level of performance. And that success produced excess resources which the firm could decide to use in a variety of ways. They found a wide search on the part of the organization for new ideas external to structure and people of the organization. Internal changes occurred in an unsuccessful performance.
The organization's recognition of the problem (need for change) was determined partly by its ability to obtain the goals it had set (Knight, 1966). A special interest was in the perception of the insiders, whether they felt their organization was successful. Mansfield (1963) found that the successful firms made more radical and more frequent product and process innovations than the unsuccessful firms. An experiment by Knight, Leavitt, and Freidheim (1962) indicated that groups indeed exhibited different behavior under conditions of success, moderate success, and failure.

Anderson and Fiedler's (1964) study indicated the very complex relationship between type of leadership and group effectiveness. The role of the leader thus became important in relation to both the final group achievement and the satisfaction and morale of the individual members. Indeed, these two separate leadership functions might have represented the best criteria to assess the relative effectiveness of the leader's performance.

Overview

A great new challenge to the American way of conducting its affairs was taking shape. Conformity with older patterns was breaking down. Yet, creative definitions of new patterns were coming at a very slow pace. Unless the challenge of finding new patterns that can serve to strengthen society was successfully met, some of the nation's most cherished human values might very well have been sacrificed. If it could be met, however, the deeply embedded beliefs as to the role of people in society might not only be reinforced, but might find even
richer and more extensive applications in the society of tomorrow. What
greater implications can there be for education than the fact that the
school was the second most influencing institution (the family is the
first) upon society and our way of life (Tannenbaum, 1971).

In order to provide creative leadership and implement the changes
that are indicated, Tannenbaum (1971) related two characteristics that
were necessary for the leader. First was social sensitivity or empathy,
which was the ability to behave appropriately in the light of one's un-
derstanding of the person or persons one was dealing with. So, sensi-
tivity defined the social target and flexibility, the second character-
istic, determined the extent to which one was able to reach the target.

Ingmire (1969) found a significant relationship between the ver-
bal and non-verbal scores on the Minnesota Test of Creative Thinking
(MTCT) and the leadership roles held by high school seniors.

In a study of creativity and leadership behavior of school super-
intendents, Grimsley (1970) found that leadership behavior exhibited by
school administrators was not directly related to the extent they pos-
sessed creativity or intelligence; nor was it related to their age, ex-
perience, educational level, professional preparation, or tenure in
their present position.

Guilford (1967) indicated that courses and workshops designed to
foster creative thinking and problem-solving skills needed to be insti-
tuted so the identification of potential talent to cope with the com-
plexities of modern society could be made. Good supervision and admin-
istration also require a variety of creative approaches because of the
dynamic and interacting natures of these processes (Burstiner, 1972).
Rogers (1954) was very emphatic in his concern. If, as a people, we enjoy conformity rather than creativity, shall we not be permitted this choice? Such a choice would be entirely reasonable were it not for one great shadow which hung over all of us. In a time when knowledge was advancing by the most incredible leaps and bounds, genuinely creative adaptation seemed to represent the only possibility for keeping abreast of the kaleidoscopic changes in the world. With scientific discovery and invention proceeding, a generally passive and culture-bound people could not cope with the multiplying issues and problems. Unless individuals, groups, and nations could imagine, construct, and creatively revise new ways of relating to these complex changes, the lights would go out. Unless one could make new and original adaptations to the environment, our culture would perish. Not only individual maladjustment and group tensions, but international annihilation would be the price paid for a lack of creativity (Rogers, 1954).

However complicated the outlook, there were some implications for leadership such as found by Jacobs (1965) in the study of high school principals. High innovative principals displayed the following behavior as measured by the Leadership Behavior Questionnaire (LBQ):

1. Initiation structure - One clearly defined a personal role and let followers know what was expected.

2. Predictive accuracy - One exhibited foresight and predicted outcomes accurately.

3. Representation - One spoke and acted as the representative of the group.
4. Integration - One maintained a closely knit organization and resolved inter-member conflicts.

5. Persuasion - One used persuasion and argument convincingly.

6. Consideration - One regarded the comfort, well-being, status and contributions of followers.

The top leadership of an organization had a non-delegated responsibility to maintain a creative climate. The administrator must have believed in creativity with the same strength and intensity as his superiors, and must have acted in a way which clearly demonstrated that belief (Mars, 1971).

All this leads to Haefile's (1962) description of what the organization had to do in order to enable a leader to be creative:

1. Alternative goal - The creative leader should have been offered a clear alternative road of progress to ensure security.

2. Recognition - The pride of creation demands recognition. From recognition of one's creative work, the status and material rewards sought must inevitably follow.

3. Use - A part of favorable climate was that results were used.

4. Freedom - The creator must have the freedom and autonomy to create.
5. Services - Climate to aid the creative process was fostered by providing many routine-type services.

6. Selection and training - Personnel can be selected and trained to match the degree of creative climate the organization could provide.

Leadership in organizations was a complex phenomenon. This phenomenon was viewed as a set of social expectations implicit in organizational characteristics and structure, as a set of behaviors which some individuals are more likely to engage in than others, as an interactive phenomenon stemming from both people and situations for its effectiveness, as an emergent phenomenon stemming from one's peers, and as a set of decisions which one must make.
CHAPTER III

METHODS

The methods used in conducting this study are reported in four parts:

1. Subjects
2. Apparatus
3. Procedure
4. Analysis

Subjects

The subjects for this investigation were 42 educational administrators of both sexes who were enrolled in summer school, 1973 at the University of North Carolina at Greensboro. Twenty-nine of these administrators were enrolled in the creative leadership seminar conducted adjunctly at the Center for Creative Leadership by the Leadership Development Program. They were identified as the experimental group.

The other 13 administrators were selected from all other administrators enrolling in summer school on the basis of: (1) their volunteering for the study, (2) they were not participating in the seminar, and (3) they had not previously participated in the seminar. They were identified as the control group.

Apparatus

Different instruments were selected to gather information needed to make the comparisons between creativity and leadership and to observe possible effects of the creative leadership development program.
Creativity was assessed by the use of the Torrance Tests of Creative Thinking, Verbal Form A & B (TORV), Part 5 and Figural Form A & B (TORF), Part 3. Leadership was assessed by the use of the California Psychological Inventory, Dominance Scale (DO); Leadership Opinion Questionnaire (LOQ); and Fundamental Interpersonal Relations Orientation–Behavior (FIRO-B), Control expressed (Ce) and Control wanted (Cw). The change in on-the-job behavior was assessed by the Self-Rating Scale (SRS), Part 1, Do You Do These Things.

The Creativity Tests

Both Verbal Form A, Part 5 and Figural Form A, Part 3 of the Torrance Tests of Creative Thinking were given to all subjects as a pretest. Both Verbal Form B, Part 5 and Figural Form B, Part 3 of the Torrance Tests of Creative Thinking were given to all subjects as a posttest.

Verbal Form A & B, Part 5. This test consists of Unusual Uses, in Form A of cardboard boxes and in Form B of tin cans. The subjects are directed to think of as many interesting and unusual uses as they can for these items.

Figural Form A & B, Part 3. This test consists of 37 pairs of lines in Form A and 31 circles in Form B. The subjects are directed to make as many objects or pictures as they can. They are directed to make each picture tell as complete and interesting a story as possible and to record the title for each picture in the space provided.

The tasks of The Torrance Tests of Creative Thinking are scored for fluency, flexibility and originality. The score for originality is
most important for the scores of the other two areas are directly related to originality in that fluency and flexibility are included in the originality score.

**California Psychological Inventory.** The Dominance Scale is used to identify strong, dominant, influential and ascendant individuals who are able to take the initiative and exercise leadership.

The California Psychological Inventory was given to each subject as a one-time test. It was given as part of the pretest packet.

The Dominance Scale was used because it has consistently differentiated leaders.

**Leadership Opinion Questionnaire.** This test was given to all subjects both as a pretest and a posttest. This instrument measures two independent dimensions of supervisory leadership: Consideration (C), the extent to which an individual is likely to have job relations characterized by mutual trust, respect for others' ideas, consideration of others' feelings; and Structure (S), the extent to which an individual is likely to define and structure his own role and those of his subordinates toward goal attainment.

**Procedures**

The experimental group of educational administrators, \( n=29 \), enrolled in a creative leadership seminar, was selected to examine the major questions in this study. The control group of educational administrators, \( n=13 \), was selected from all educational administrators enrolled in summer school, 1973, at the University of North Carolina at Greensboro. Members of the control group volunteered for the study.
A pretest battery composed of The Torrance Tests of Creative Thinking, Verbal Form A, Part 5 and Figural Form A, part 3; California Psychological Inventory, Dominance Scale; Leadership Opinion Questionnaire; and Fundamental Interpersonal Relations Orientation-Behavior, Control expressed and Control wanted, was administered to members of both the experimental group and the control group. The pretest was self-administered and returned within five days. A Self-Rating Scale, Part 1, Do You Do These Things, was administered to members of the experimental group only.

Members of the experimental group participated in a creative leadership seminar subsequent to the pretest. Members of the control group did not participate in a similar seminar, nor had they previously been involved in such a seminar.

The posttest battery composed of The Torrance Tests of Creative Thinking, Verbal Form B, part 5 and Figural Form B, part 3; Leadership Opinion Questionnaire; and Fundamental Interpersonal Relations Orientation-Behavior, Control expressed and Control wanted, was administered to members of both the experimental group and the control group at the conclusion of the five-week seminar. A post-posttest composed of the Self-Rating Scale, Part 1, Do You Do These Things, was administered to members of the experimental group six months following the conclusion of the creative leadership seminar.

Analysis

In order to determine the relationship between creativity and leadership, a correlation analysis was completed for the leadership
variables, \((D0), (Cw), (Ce), \text{LOQ (C)}, \text{LOQ (S)},\) and the creativity variables \((\text{TORR-V})\) and \((\text{TORR-F})\).

Correlation coefficients for the change between the pre and post correlations of creativity and leadership were determined for the experimental and control groups.

The correlation analysis was conducted before and after the seminar. A confidence level, \(p < .05\), was accepted as an indication of a statistically significant correlation.

Tables 1, 2, 3, and 4 were used to report the significant levels of the correlation coefficients.

In order to determine the longitudinal change in the use of techniques learned in the creative leadership seminar, the difference between the mean pretest score obtained by the experimental group on the Self-Rating Scale and the mean post-posttest scores was tested for statistical significance by a \(t\) test. Table 5 was used to report this data.

A confidence level, \(p < .025\) (one-tailed \(t\) test,) was accepted as an indication of a statistically significant difference between pre and post-post mean scores.
CHAPTER IV
RESULTS

The purpose of this study was to investigate the relationship between creativity and leadership and longitudinal effect of a creative leadership development program.

Correlation

A correlation analysis was performed on the creativity variables TORV and TORF and the leadership variables CPI (DO), LOQ (C), LOQ (S), FIRO-B (Ce), and FIRO-B (Cw) as designed in the BMDX84 program of the Biomedical Computer Programs by the Health Sciences Computing Facilities of the University of California, Los Angeles.

Correlations for the Control Group

Table 1 depicts the correlation coefficients for the control group on the pretest variables.

Table 1
Correlation of Creativity and Leadership Variables
Control Group Pretest

<table>
<thead>
<tr>
<th>Variables</th>
<th>Figural Originality</th>
<th>Verbal Originality</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI (DO)</td>
<td>.367</td>
<td>.003</td>
</tr>
<tr>
<td>FIRO-B (Cw)</td>
<td>.292</td>
<td>-.037</td>
</tr>
<tr>
<td>FIRO-B (Ce)</td>
<td>.031</td>
<td>-.272</td>
</tr>
<tr>
<td>LOQ (C)</td>
<td>.229</td>
<td>.046</td>
</tr>
<tr>
<td>LOQ (S)</td>
<td>-.161</td>
<td>.365</td>
</tr>
</tbody>
</table>
The correlation of figural creativity (TORF) with the leadership variables, CPI (DO), LOQ (C), LOQ (S), FIRO-B (Ce), and FIRO-B (Cw) was not significant. The correlation of verbal creativity (TORV) with the leadership variables was not significant.

Table 2 depicts the correlation coefficients for the control group on the posttest variables. The correlation of figural creativity with the leadership variables was not significant. The correlation of verbal creativity with the leadership variables was not significant.

Table 2
Correlation of Creativity and Leadership Variables
Control Group Posttest

<table>
<thead>
<tr>
<th>Variables</th>
<th>Figural Originality</th>
<th>Verbal Originality</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI (DO)</td>
<td>.223</td>
<td>.062</td>
</tr>
<tr>
<td>FIRO-B (Cw)</td>
<td>-.375</td>
<td>-.338</td>
</tr>
<tr>
<td>FIRO-B (Ce)</td>
<td>.075</td>
<td>-.066</td>
</tr>
<tr>
<td>LOQ (C)</td>
<td>.251</td>
<td>.207</td>
</tr>
<tr>
<td>LOQ (S)</td>
<td>-.175</td>
<td>-.412</td>
</tr>
</tbody>
</table>

Correlations for the Experimental Group

Table 3 depicts the correlation coefficients for the experimental group on the pretest variables. The correlation of figural creativity with the leadership variables was not significant. The correlation of verbal creativity with the leadership variables was significant for (DO) \( r = .41 \) and (Cw) \( r = .40 \). The correlation coefficients for other leadership variables were not significant.
Table 3
Correlation of Creativity and Leadership Variables
Experimental Group Pretest

<table>
<thead>
<tr>
<th>Variables</th>
<th>Figural Originality</th>
<th>Verbal Originality</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI (DO)</td>
<td>-.215</td>
<td>.411</td>
</tr>
<tr>
<td>FIRO-B (Cw)</td>
<td>.003</td>
<td>-.402</td>
</tr>
<tr>
<td>FIRO-B (Ce)</td>
<td>-.142</td>
<td>.303</td>
</tr>
<tr>
<td>LOQ (C)</td>
<td>.048</td>
<td>.071</td>
</tr>
<tr>
<td>LOQ (S)</td>
<td>.017</td>
<td>.108</td>
</tr>
</tbody>
</table>

Table 4 depicts the correlation coefficients for the experimental group on the posttest variables. The correlation of figural creativity with the leadership variables was significant for LOQ (C) $r = .50$ and LOQ (S) $r = .39$. The correlation coefficients for other leadership variables were not significant. The correlation of verbal creativity with the leadership variables was not significant.

Table 4
Correlation of Creativity and Leadership Variables
Experimental Group Posttest

<table>
<thead>
<tr>
<th>Variables</th>
<th>Figural Originality</th>
<th>Verbal Originality</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI (DO)</td>
<td>.047</td>
<td>.161</td>
</tr>
<tr>
<td>FIRO-B (Cw)</td>
<td>.099</td>
<td>-.012</td>
</tr>
<tr>
<td>FIRO-B (Ce)</td>
<td>.184</td>
<td>.352</td>
</tr>
<tr>
<td>LOQ (C)</td>
<td>.496</td>
<td>-.164</td>
</tr>
<tr>
<td>LOQ (S)</td>
<td>-.385</td>
<td>.260</td>
</tr>
</tbody>
</table>
Comparison of Means

Table 5 depicts the significance of the difference between pre and post-post means of the Self-Rating Scale for the experimental group.

Table 5

Comparison of Pretest and Post-Posttest Means on Self-Rating Scale, Experimental Group

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre Scores</th>
<th>Post-Post Scores</th>
<th>D</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}_1$</td>
<td>$s_1$</td>
<td>$\bar{X}_2$</td>
<td>$s_2$</td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>48.4</td>
<td>8.7</td>
<td>54.7</td>
<td>5.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Formulation</td>
<td>45.7</td>
<td>10.0</td>
<td>52.3</td>
<td>7.9</td>
<td>6.6</td>
</tr>
<tr>
<td>Transformation</td>
<td>40.2</td>
<td>11.3</td>
<td>48.7</td>
<td>10.1</td>
<td>8.5</td>
</tr>
<tr>
<td>Goal-Setting</td>
<td>46.7</td>
<td>8.0</td>
<td>52.1</td>
<td>7.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Planning</td>
<td>47.8</td>
<td>9.2</td>
<td>54.3</td>
<td>7.2</td>
<td>6.5</td>
</tr>
<tr>
<td>Evaluation</td>
<td>43.2</td>
<td>9.0</td>
<td>50.9</td>
<td>7.9</td>
<td>7.7</td>
</tr>
<tr>
<td>Implementation</td>
<td>44.1</td>
<td>9.6</td>
<td>52.7</td>
<td>7.4</td>
<td>8.6</td>
</tr>
<tr>
<td>Reassessment</td>
<td>45.5</td>
<td>9.9</td>
<td>52.1</td>
<td>7.1</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Since the directional change was predicted, a one-tailed $t$ test was used.

The post-post mean scores for all the variables were significantly higher than the pretest mean scores. The variables formulation and goal-setting were significant at $p < .01$. All the other variables were significant at $p < .005$. 
CHAPTER V
DISCUSSION

The purpose of this study was to examine the relationships between creativity and leadership in educational administration and to determine the effects of a creative leadership program on educational administrators.

The study was designed to examine the following hypotheses:

1. There will be a relationship between creativity and leadership for the experimental and control groups prior to treatment.

2. There will be a significant difference in the relationship between creativity and leadership for the experimental and control groups following treatment.

3. There will be a significant longitudinal change in the use of techniques learned in the development program by the experimental group.

Statistical analysis of pretest data indicated there was no significant correlation between creativity and leadership for the control group. Prior to treatment there was a significant correlation between verbal creativity (TORV) and leadership dominance (DO), and figural creativity (TORF) and desire for control (Cw) for the experimental group. The analysis of the remaining variables of creativity and leadership indicated no significant correlation.
Statistical analysis of posttest data indicated there was no significant correlation between creativity and leadership for the control group. Following treatment, an analysis of the data for the experimental group showed there was a significant level of correlation between figural creativity (TORF) and leadership consideration (LOQc) and figural creativity (TORF) and leadership structure (LOQs). The correlation coefficients for the other variables were not significant.

Sub-test scores on the Self-Rating-Scale (SRS) prior to treatment for the experimental group were between 40.2 and 48.4. Following treatment the sub-test scores were from 48.7 to 54.7. The difference between pretest and posttest scores for all coefficients was statistically significant at $p < .01$.

The insignificant levels of correlation for the control and experimental groups indicated that both groups were similar at the beginning of the study. The lack of any significant correlation for the control group did not support the possibility of a relationship between creativity and leadership either prior to or following treatment. The correlation of two of ten variables for the experimental group was not sufficient to support the possibility of a relationship between creativity and leadership prior to or following treatment.

The experimental group gains on all eight measures of the SRS were significant at the $p < .01$. On the basis of the analysis of the data for the SRS, the effects of a creative leadership development program were positive in terms of the techniques related to the SRS.
Analysis of the posttest scores indicated a slight reduction in scores for the control group. Taylor (1972) has reported a tendency of subjects who did not receive creativity treatment to show reduction in creativity scores from pretest to posttest.

Katz (1955) identified three basic skills upon which successful school administration rest - human, conceptual, and technical. Results on the SRS of the study indicated that the creative leadership development program was effective for improving those skills.

There were limitations to the study. One was the fact that the members of both the experimental and control groups were selected by a method other than a pure scientific random sample. However, Campbell and Stanley (1963) noted that the sampling biases of less than a totally scientific random sample does not jeopardize the random equivalence of the groups, but rather only their "representativeness."

Another limitation was the lack of an objective measurement to indicate that the members of the experimental group had implemented the techniques developed by the creative leadership development program. Only their subjective responses were available via the Self-Rating Scale. Burstiner (1972) and Antley (1966) had used self-rating scales in their studies of educational administrators.

Summary

Increased participation in the decision-making process in the educational field has led to the emergence of certain change in leadership functions. Trends resulting from this change have brought about the need for creative leadership development.
Teacher negotiations, school integration, student unrest, and curriculum analysis have resulted in a more scientific approach to school leadership. This trend has brought about a more interdisciplinary approach to the study of administration.

Another trend is to develop the human, conceptual, and technical skills that are necessary for educational decision-making, including the ability to absorb and use values as criteria for evaluating decision-making. The trend of educational leaders is to be involved in the personal growth of the individuals that make up the organization as well as the function of the organization.

The move from an authoritarian model of leadership to a more democratic model has resulted in several studies that examine the efficiency and effectiveness of various leadership strategies.

Leaders of modern educational organizations have found it productive to deemphasize bureaucratic orientation (Mars, 1967). The rewards system of the organization must be designed to meet the needs of the individuals as well as achieve the goals of the organization.

Creativity and innovation are more productive in an organization which responds to personal needs. A strong commitment to organizational goals has been found to stimulate a search for creative solutions for leadership (Randall, 1967).

The encouragement of individual expression of divergent viewpoints promotes a high level of problem-solving activities by individuals for the achievement of organizational objectives (Randall, 1967).

Administrators who scored higher on creative ability measures tended to involve more persons in the decision-making process (Antley,
Furthermore, administrators who demonstrated high creative ability potential also demonstrated a high level of factual and conceptual knowledge of leadership.

Administrative leaders who promoted and utilized group dynamics were able to successfully adopt various innovations for the achievement of organizational goals (Becker and Stafford, 1966). Consistent with the trends requiring creative leadership abilities, Mars (1967) found that successful educational administrators were introducing democracy, delegation, decentralization, and dispensing in their leadership styles.

Leadership in educational organizations is a complex process. The leadership process involves a variety of behaviors which some individuals are more likely to engage in than others (Haefile, 1962).

Successful leadership has been identified as an interactive process involving needs of individuals as well as goals of organizations. Participation in a mini-workshop of creative leadership resulted in a significant increase of creative leadership traits as measured by a self-rating scale (Burstiner, 1972). Devine (1964) found that educational leaders involved in a creative training program significantly improved supervisory practices.

The present study found that practicing educational administrators in a creative leadership development workshop showed they incorporated creative leadership techniques on the job as measured by a self-rating scale six months following the workshop.

The current state of society in general and educational institutions specifically requires a rethinking and retraining of educational
leaders. The present study shows that a workshop in creative leadership development is an effective means to achieve modern educational goals of leadership training. This finding is consistent with previously cited studies involving creative educational leadership training. Since participatory and democratic leadership can be developed, it is appropriate and potentially beneficial to implement similar development workshops in the interest of effective educational administration.

This study showed that educational administrators who had been involved in creative leadership development implemented and maintained creative leadership techniques in practice.

There was a positive change in the leadership variable, dominance, as it related to the non-verbal creativity variable, the implication being that after training, administrators would exercise leadership in non-verbal situations. Another leadership variable that showed positive change was expressed control as it related to non-verbal creativity. The implication was that the administrator would express control in non-verbal situations. A third leadership variable that showed substantial positive change was leadership consideration as it related to non-verbal creativity. This would indicate that the administrator would demonstrate trust and respect for the followers in job-related situations. Finally, the leadership variable, control expressed, showed a positive change as it related to verbal creativity. This implied that the administrator would make known verbally that he wanted control and would be in control in certain situations.

These positive changes in the scores of the experimental group on the posttest compared to the group's scores on the pretest showed
that after training, administrators would make substantial changes in the techniques they used on the job and that they would be more open to the followers.

Subjects not involved (control group) in creative leadership development showed only slight positive change or even regression in overall creative leadership variables.

There was a substantial regression in the leadership variable, control wanted, as it related to non-verbal creativity. The implication was that in certain cases, the administrator would want to exercise less control with each ensuing situation. Another leadership variable that showed regression was structure as it related to verbal creativity. The implication here was that the administrator would structure and define his role even less with each ensuing situation. A third leadership variable that showed regression as it related to verbal creativity was control wanted. This implied the administrator would verbalize his declining desire to be in control with each ensuing situation.

Regression of this nature was reported by Taylor (1971). The implication was that if administrators are not provided with development they will be less likely to provide leadership that will foster personal and organizational growth.

The post-posttest mean scores for all variables on the Self-Rating Scale were significantly higher than the pretest mean scores. On the most basic variable involved in the process of effective leadership, assessment, those educational administrators participating in a creative
leadership development program indicated a significant increase in their ability to assess (a) psychosocial factors, (b) situational factors, (c) human factors, and (d) general factors.

The participants showed a significant increase in the types of problems they chose, and the manner and generic depth to which the problem was formulated. In formulating problems, they demonstrated an understanding of the importance of proceeding in a manner which served to relate the achievement of the solution of the problem to the needs system of the followers.

Another variable that was significantly higher was transformation. The participants showed they had an understanding of the necessity to search for the underlying pattern of problems and to transform these problems into forms that allowed for solution.

The participants indicated a significant increase in the variable, goal-setting. This demonstrated their concern for establishing clearly defined and measurable outcomes.

Another important variable of the Self-Rating Scale was planning and organization. The participants scored significantly higher on this variable. This indicated their awareness that once goals had been set, then priorities and the methods for meeting those priorities were directed toward accomplishing the goal achievement.

The participants had a significant increase in scores on what may be considered the second most important variable, evaluation and control. Because of the goal-setting and the planning and organization phases, there should be measurable criteria for checking progress.
Evaluation must be conducted at established intervals and a feedback system for relating the information obtained be put into effect. The participants' scores indicated an understanding of this process.

The participants indicated a significant increase in the variable, implementation. This represented their understanding of the action necessary to achieve the goals.

The significant increase achieved in the variable, reassessment, showed the participants were aware of the need to assess goal achievement. If the results did not meet the criteria for success in terms of the goals which had been set, there should be a new assessment of the situation.

Observations of the differences between the experimental group and the control group indicate that educational administrators respond favorably to creative leadership development. It is recommended that educational administrators participate in creative leadership training to improve the effectiveness of leadership and subsequently, to improve the product of instructional programs and services.

In viewing the individual scores for each member of the experimental group, an unusual occurrence kept taking place concerning those members who scored high on the self-actualization measure of the Personal Orientation Inventory. Those members with scores more than a standard deviation above the mean on the self-actualization scale had significant increases on a majority of correlation variables of creativity to leadership. The study was designed to look at group relationships;
however, this finding has an implication for identifying leaders who test-out as being self-actualized and then training them in a creative leadership workshop.

**Recommendations**

On the basis of the data obtained in this study, certain recommendations for creative leadership training should be considered:

1. Potential administrators should be assessed for personality traits which can contribute to effective creative leadership.
   a. Those who score high on self-actualization and have a balance between inner and outer-directedness as measured by the **Personal Orientation Inventory**.
   b. Those who score high on control expressed, indicating they can and do take on the responsibilities involved in a leadership role as measured by the **Fundamental Interpersonal Relations Orientation-Behavior** instrument.
   c. Those who score high on consideration, which characterizes job relations of mutual trust, respect for others and their ideas as measured by the **Leadership Opinion Questionnaire**.

2. Administrators should participate in experiential learning activities that focus on:
   a. a variety of leadership styles and the concepts from which those styles are derived;
   b. the different decision-making styles that are applicable according to a given situation;
c. the evaluation of decisions and the effectiveness of those decisions.

3. Feedback should be provided immediately following the experiential learning activities focusing on the behaviors exhibited by the participants and the evaluation of the apparent effectiveness of those behaviors.

4. Administrators should be provided with experiences that allow them to become knowledgeable of the eight phases of creative leadership and the opportunity to practice the implementation of each phase.

5. Administrators should learn through participation in a creative leadership development program that personal and organizational growth comes from continuous self-evaluation and personal development.

One of the recommendations for further study would be to take a more in-depth view of administrators who score high on self-actualization in order to fully understand the implications. Another recommendation would be to conduct a follow-up of the participants to determine whether they continued to use the techniques developed at the creative leadership workshop and measured by the Self-Rating Scale. A third recommendation would be to study the various creative leadership training programs and measure their effectiveness compared to other leadership preparatory programs. And finally, a study to determine valid criteria for evaluating both the success of creative leadership training programs and the success of potential leaders who participate in those programs.
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**INSTRUMENTS**


APPENDIX A

CREATIVE LEADERSHIP DEVELOPMENT PROGRAM
SUMMER 1973

OUTLINE AND NARRATIVE DESCRIPTION

Week 1
Introduction
Psychological Testing
Self-Disclosure
Leadership Theories and Overview

Week 2
Presentation on Creativity
Eight Phases of Creative Leadership
Madison In-Basket

Week 3
Role Playing
Exercises, Games and Videotapes
Decision-Making Models and Discussion

Week 4
Counseling
Feedback Discussion
Peer Feedback
Values

Week 5
Goal-Setting
Leadership Models
Situational Leadership
Psychological Testing
Evaluation
CREATIVE LEADERSHIP DEVELOPMENT PROGRAM

Members of the experimental group participated in a five-week Creative Leadership Development Program at the Center for Creative Leadership that was conducted adjunctly with the University of North Carolina at Greensboro.

Goals of the program were:

1. to provide the participants with insights into their strengths and weaknesses as leaders;
2. to provide them with knowledge of leadership processes, principles, and behaviors which can be used to improve their leadership effectiveness;
3. to encourage them, and show them how to begin a process of self-directed personal development leading to greater leadership effectiveness; and
4. to collect data from the participants relative to their leadership skills.

Participants immediately became active in self-directed assessment and personal development. Assessment procedures provided opportunities for them to learn about each other as well as to evaluate their own leadership performance. Eight basic elements were identified and introduced during the five weeks of the program.

Leadership theories and processes were examined to provide planned, informed personal development for participants. Theories X and
were reviewed in the process of self-disclosure/evaluation (McGregor, 1960). Task-oriented versus person-oriented leadership approaches offered an opportunity to discover values and utilization of each style (Fiedler, 1967). From the study of these and other leadership theories, participants identified an area they would like to change; a self-development project was then designed.

The second element of the program involved a study of the eight phases of creative leadership. Each of the eight phases is defined in the Definition of Terms in Chapter One and reviewed in Chapter Two. This element presented a model of the creative leadership process which outlined how to set goals, solve problems, and accomplish objectives. Jacoby, 1968; MacKinnon, 1968; and Mars, 1967 have been studied and their work has contributed to the eight phases of the creative leadership model. The model was specifically used to design individual exercises to demonstrate and reinforce the effectiveness of the process in problem-solving situations.

Decision-making processes were reviewed through an analysis of the Madison School In-Basket exercise. Emphasis was placed on a practical decision-making model. Participants learned various decision-making styles by observation and by assessment of the impact of these styles on follower performance and group effectiveness. The leadership decision-making models and styles reviewed and explained by Anderson and Fiedler, 1964 and Tannenbaum, 1971 served as examples for the development of decision-making flow charts to be used in everyday situations.
Application of techniques, models and styles of leadership represented a major part of the development program. Case studies and videotaped role plays were utilized to illustrate behaviors that restrict creativity in groups. Parnes, 1971 and Torrance, 1961 have contributed to methods for implementing theories of creative leadership. Participants learned to examine problems in new ways; a review of videotaped exercises helped expand individual problem-solving potential.

Task and maintenance functions of leaders have been studied by Fiedler, 1967. Jacoby, 1968 has also suggested methods for mobilizing the resources of the group. Emphasis in this element was placed on methods for using the knowledge and creativity which exists in groups. Videotape was beneficially used to focus on participant preference for directive or participative group leadership. Appropriate uses of each approach were examined.

The importance of feedback in all activities was considered throughout the program. Specifically, feedback exercises were designed to change behavior and to demonstrate appropriate uses of feedback in groups. Principles of giving and receiving beneficial feedback have been the subject of studies in creative leadership styles (Cummings and Mize, 1968 and Gibb and Gibb, 1967).

Leadership research has clearly indicated that effective leadership behavior depends on adapting to the demands of a particular situation and, if necessary, changing those demands (Shallcross, 1973; Shepard, 1967; and Wilson, 1969). Participants in the program were involved in methods of assessing a variety of demands and in the selection of appropriate managerial styles for each situation.
The final element of the program synthesized the study of other leadership variables. This eighth element helped each participant design a self-directed personal development program. Feedback, peer counseling, and self-examination were all exercised in this part of the program. Personal values were examined and clarified. Through the process of interpreting and categorizing information collected through these processes, participants discovered what they did, what they enjoyed, and what was considered important in life. Personal goals were established and used as guides for immediate planning and decision-making. Group feedback and interaction contributed to each participant's personal development.
APPENDIX B

SELF-RATING SCALE

DIRECTIONS

On the following pages are listed a number of items concerned with things you may do on your job. For each item you will be asked to give three ratings:

a. How often do you do this on your job?

b. How often should you do this on your job?

c. How important is it to achievement of organizational objectives?

Each rating will be on a seven point scale which will look like this: (minimum) 1 2 3 4 5 6 7 (maximum)

Circle the number on the scale that best represents where you feel you stand on that item. Low numbers represent low or minimum amounts, and high numbers represent high or maximum amounts. If you think you do "very little" or "none" of the things on your job, you should circle number "1". If you think you do "just a little" you would circle number "2" and so on. If you think you do "a great deal but not the maximum amount," you should circle number "6". If you do the maximum amount, you should circle the number "7". For each scale, circle only one number. Do not circle between numbers. Please do not omit any scales.

After each item a space has been left for any comments you might want to make. If you feel that any item needs comment, please use the space provided.
SELF-RATING SCALE

1. The extent to which you establish ways of providing your subordinates with information regarding their performance:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________

2. The extent to which you compare the results of your actions against the goals you set:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________

3. The extent to which you involve your subordinates in establishing methods for measuring progress toward the goals you set:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________
4. The extent to which you identify causes of problems:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________

5. The extent to which you try to state problems in new or unusual ways:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________

6. The extent to which you implement solutions in accordance with your planning:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________

7. The extent to which you establish ways of measuring progress toward achieving the goals you set:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________
8. The extent to which you gather information relevant to the problem:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ........................................................................

9. The extent to which you set measurable goals:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ........................................................................

10. The extent to which you compare the results of your actions against the way things were before you started:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ........................................................................

11. The extent to which you involve your subordinates in implementing methods of measuring progress toward goals:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ........................................................................
12. The extent to which you examine several problems in terms of their inter-relationships:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________ 

13. In trying to solve problems, the extent to which you search for analogies:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________ 

14. The extent to which you implement solutions that lead to additional worthwhile projects:

(a) How often do you do it? (min) 1 2 3 4 5 5 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________ 

15. The extent to which you determine the human resources available to achieve the goal:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________ 

16. The extent to which you establish goals which are realistic in terms of current level of operation and resources:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ___________________________________________

17. The extent to which you are open to a wide variety of sources of information:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ___________________________________________

18. The extent to which you determine your own needs:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ___________________________________________

19. The extent to which you use the results of your actions as the basis for what you will do in the future:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ___________________________________________
20. The extent to which you gather objective data to measure progress toward the goals you set:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

21. The extent to which you state problems clearly:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

22. In trying to solve a problem, the extent to which you restate it by changing its emphasis:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

23. The extent to which you not merely solve a problem, but bring about changes which are seen by others as highly satisfying:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________
24. The extent to which you outline the things which must be done to achieve the goals you set:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

25. The extent to which you determine the physical resources (money, equipment, space, etc.) available to achieve the goals you set:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

26. The extent to which the goals you establish take into account all aspects of the problem:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

27. The extent to which you are open to a wide variety of opinions:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________
28. The extent to which you examine your own feelings and use this information in setting goals:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

29. The extent to which you evaluate the effects of your actions in your entire organization:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

30. The extent to which you make clear to your subordinates the criteria to be used in measuring progress toward the goals you set:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

31. The extent to which you work with underlying problems rather than their manifestations:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________
32. The extent to which you restate problems into forms that allow for better solutions:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________

33. The extent to which you implement changes that are relevant to your goals:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________

34. The extent to which you establish a time frame for achieving goals:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________

35. The extent to which you investigate alternative methods before proceeding:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: _____________________
36. Before attempting a solution to a problem, to what extent do you establish a measure of the existing situation against which you can later compare changes achieved:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________

37. The extent to which you reassess the situation if you have not achieved your goal:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________

38. The extent to which you establish the criteria of evaluation and measurement before beginning the project:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________

39. The extent to which you take the time to research a problem:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________
40. The extent to which you use groups to "brainstorm" problems:
(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: _____________________________

41. The extent to which you implement changes in an original way:
(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: _____________________________

42. The extent to which you establish goals which take into account your needs and the needs of your subordinates:
(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: _____________________________

43. The extent to which you consider time constraints:
(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: _____________________________
44. The extent to which you determine the feelings of your subordinates:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________________________________

45. The extent to which you determine your willingness to take risks as it affects how you look at problems:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________________________________

46. The extent to which you provide for reassessment of the desirability of the goal:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________________________________

47. The extent to which you establish a system of measurement of progress toward the goal which allows you to detect unexpected outcomes:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ____________________________________________
48. The extent to which you persist in examining problems until you determine their causes:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________

49. The extent to which you are willing to stop work on an existing problem area of interest to pursue a problem of higher potential benefit:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________

50. The extent to which you plan activities in a way which will overcome resistance on the part of your superiors:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________

51. The extent to which you implement changes that are seen by those involved as beautiful in their simplicity:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________
52. The extent to which you consider the organizational factors which may help (or hinder) achieving a goal:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

53. The extent to which you set goals which are original and imaginative:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

54. The extent to which you determine the needs of your subordinates:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

55. The extent to which you determine the external constraints (social, political, moral, etc.) which exist in a situation:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)

(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)

(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________
56. The extent to which you establish ways of providing your subordinates with information regarding progress toward goal achievement:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

57. The extent to which you establish a measurement system which enables you to evaluate the total effects of what you have done:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

58. The extent to which you unify the factors you have been considering into a central problem:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________

59. The extent to which you plan your activities in a way which will ensure acceptance by your superiors:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments:__________________________________________________________
60. The extent to which you implement changes that are received by those involved enthusiastically:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ____________________________

61. The extent to which you consider the human factors (vested interests, potential threat, resistance to change, etc.) which may help or hinder achieving a goal:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ____________________________

62. The extent to which you feel bound by practical considerations and tradition in setting goals:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ____________________________

63. The extent to which you avoid drawing conclusions prematurely:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
Comments: ____________________________
64. The extent to which you determine the capabilities of your subordinates:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ________________________________

65. The extent to which you establish ways of providing your subordinates with information regarding their performance:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ________________________________

66. The extent to which your attempts to solve a problem deal with all of the complexities involved in the problem:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ________________________________

67. The extent to which you allow others to participate in goal-setting when appropriate:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)
   Comments: ________________________________
The extent to which you establish a flexible approach to achieving goals:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________

The extent to which you determine your capabilities:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________

The extent to which you implement changes in a way which lets you alter your method of implementation if necessary:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________

The extent to which you establish a method of gathering information on how your behavior is affecting goal achievement:

(a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
(b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
(c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________________________
72. The extent to which you convey to your subordinates the way in which their job performance contributes to the satisfaction of their personal needs:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________

73. The extent to which you implement changes in a coordinated manner:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 5 7 (max)

Comments: ____________________________________________

74. The extent to which you determine the organizational constraints which exist in a situation:
   (a) How often do you do it? (min) 1 2 3 4 5 6 7 (max)
   (b) How often should you do it? (min) 1 2 3 4 5 6 7 (max)
   (c) How important is it? (min) 1 2 3 4 5 6 7 (max)

Comments: ____________________________________________