THE RELATIONSHIP BETWEEN LEADERSHIP STYLE AND COMMUNICATION SATISFACTION OF SELECTED PRINCIPALS IN HIGH SCHOOLS WITH AN ENROLLMENT OF 125 TO 265 STUDENTS

DISSERTATION

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by

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The purpose of this study was to determine the relationship between the leadership style of high school principals and their faculties' level of communication satisfaction. The study was also concerned with the relationship of the respondents' biographical data with leadership style and communication satisfaction.

Subjects were selected from a population that consisted of thirty-two high schools in the North Central Texas Area. Each school that participated in the study had its faculty respond to the Communication Satisfaction Questionnaire and a teacher biographical data survey. Each school's principal responded to the Least Preferred Co-Worker Scale, principals' Communication Satisfaction Questionnaire, and a biographical data survey. The results were then analyzed using simple and multiple regression.

Findings of the study indicate there is no relationship between leadership style and the faculties' level of satisfaction with their principals' communication practices. However, it was found that the principals' leadership style
was related to their age. Older principals scored higher on the Least Preferred Co-Worker scale indicating a tendency to be more human relations-oriented than their younger counterparts. The teachers' level of communication satisfaction was related to the number of years they taught in the same school. The longer the tenure in a given school, the more dissatisfied teachers became with the principals' communication practices.

These findings indicate that principals' leadership style does not appear to effect their ability to communicate satisfactorily. They also indicate the principals must improve their communication practices with more tenured teachers, to achieve a higher level of communication satisfaction. In addition, the principals should be aware that as their age increases they tend to be more human relations-oriented. Human relations-oriented leaders have difficulty working with dogmatic individuals who are perceived to be interfering with human relations. Additional findings and conclusions are enumerated in the study.
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CHAPTER I

INTRODUCTION

Administrators are continually concerned with directing the evolution, the coordination, and the achievement of goals. This important task can best be accomplished through effective communication. Barnard (3, p. 89) stated,

The possibility of accomplishing a common purpose and the existence of persons whose desires might constitute motives for contributing toward such a common purpose are the opposite poles of the system of cooperative effort. The process by which the potentialities become dynamic is that of communication.

Communication, be it oral, written, or non-oral, is the primary method administrators have available to encourage faculty members to accomplish organizational objectives. Parsons (15) stated that one of the primary purposes of an organization is to accomplish goals collectively, and the communication process is the process by which goals become known, useful, and dynamic. Barnard (3) postulated that a system of communication is an essential executive function, since communication generates a means for making and executing decisions, obtaining feedback, and correcting organizational objectives and procedures. Barrelas and Barrett (2) surmised that communication is the essence of organizational activity and a requisite to effective administration.
Since communication is tantamount to effective administration, it behooves every administrator to determine how satisfactorily they are communicating. Thayer (21) defined communication satisfaction as the personal satisfaction received when successfully communicating with someone or when someone has successfully communicated with you. Redding (16) questioned whether communication satisfaction is a unitary concept and if it is measurable. Downs and Hazen (6) indicated that communication satisfaction is both measurable and a multidimensional concept.

Another factor to be considered when discussing communication is leadership style. Hoy and Miskel (10, p. 291) discussed this concept, "... communication is everywhere in organizations it is difficult to find as a separate phenomenon. ... The concept merges too easily with leadership." Fiedler (7) defined leadership style as the underlying attitudes toward people that motivates behavior in various leadership situations. Way (24) noted that this definition is related to Adler's definition of life-style as a dominant purpose which determines the individual's behavior. Fiedler's definition of leadership style is two-dimensional: (1) a leader may be task-oriented and derive satisfaction from task accomplishments, or (2) human relations-oriented and derive satisfaction from successful interpersonal actions. A major point of this theory is that the differing need structures of leaders will cause
them to behave differently. Although leaders may exhibit different behaviors in various situations, their leadership style will remain constant.

Volard and Davies (23) stated, "Managerial behavior can be described almost totally in terms of communication characteristics." Thus, it must also be considered that leadership style can affect the communication profile of leaders. Dewey (5) alluded to this fact when he suggested communication as the establishment of cooperation in an activity in which there are partners, and in which the activity of each is modified and regulated by the partnership. Leadership style may be the modifier and regulator of the communication partnership.

Statement of the Problem

This investigation was concerned with the relationship between secondary school principals' leadership style and the perceived communication satisfaction between the faculty and the principal.

Purposes of the Study

The purposes of this study were to

1) determine if there are different styles of leadership present in high schools consisting of 125 to 265 students (class 2A) in the North Central Texas Area;

2) determine if there is a relationship between leadership style and communication satisfaction present in high
schools consisting of 125 to 265 students (class 2A) in the North Central Texas Area;

(3) determine if there is a relationship between communication satisfaction and the teachers' biographical variables;

(4) determine if there is a relationship between leadership style and the principals' biographical variables; and

(5) determine if there is a relationship between communication with subordinates and the principals' biographical variables.

Hypotheses

To carry out the purposes of this study the following hypotheses were tested.

(1) The relationship will vary significantly between the principals' leadership style and the faculties' communication satisfaction.

(2) The relationship will vary significantly between the principals' leadership style and the faculties' communication satisfaction as measured by the following communication satisfaction factors:

(a) General Organizational Perspective;

(b) Personal Feedback;

(c) Organizational Integration,

(d) Communication with Superiors,

(e) Communication Climate,
(f) Horizontal Communication,
(g) Media Quality, and
(h) Communication with Subordinates.

(3) The relationship will vary significantly between one single factor or a subset of the eight factors of communication satisfaction and a particular leadership style.

(4) The relationship will vary significantly in total communication satisfaction among teachers for the following variables:

(a) sex,
(b) age,
(c) training level,
(d) years in the present school system,
(e) total years in teaching profession,
(f) total years under the present high school principal, and
(g) main subject area taught.

(5) The relationship will vary significantly in the leadership style score among high school principals for the following variables:

(a) sex,
(b) age,
(c) training level,
(d) years teaching experience,
(e) years administrative experience,
(f) number of years as an administrator in the present school system, and
(g) major teaching field before becoming an administrator.

(6) The relationship will vary significantly in the communication with subordinates' subtest scores among high school principals for the following variables:

(a) sex,
(b) age,
(c) training level,
(d) years teaching experience,
(e) years administrative experience,
(f) number of years as an administrator in the present school system, and
(g) major teaching field before becoming an administrator.

Limitations

It was assumed that subjects who completed the instrument responded honestly.

This study was limited to thirty-two class 2A high schools in the North Central Texas Area, which consisted of University Interscholastic League districts 11-2A, 13-2A, 14-2A, and 15-2A, and to those principals and faculty members serving in the school district during the 1983-1984 school year. The only attempt at generalizing was limited to the area indicated.
Definition of Terms

The following terms have restricted meanings and are thus defined for this study.

**General Terms**

High school is defined as a campus containing grades nine, ten, eleven, and twelve with a population of not less than 125 students nor more than 265 students. These enrollment figures are utilized by the University Interscholastic League to classify size 2A high schools in the State of Texas.

Principal is defined as the only building supervisor in grades nine, ten, eleven, and twelve.

Teacher is defined as any faculty member who teaches in grades nine, ten, eleven, and twelve.

**Terms Related to Communication Satisfaction**

Communication is defined as the process of sharing the meaning of ideas, messages, or attitudes within the multidimensional construct of general organizational perspective, personal feedback, organizational integration, communication with superiors, communication climate, horizontal communication, media quality and communication with subordinates.

Communication satisfaction is defined as the teachers' level of satisfaction with communication occurring in the high school. For the purpose of this study it was measured
by the total score obtained on the Communication Satisfaction Questionnaire.

**Terms Related to Leadership Style**

Human relations-oriented leaders are defined as leaders who derive need satisfaction from successful interpersonal relationships as measured by the Least Preferred Co-Worker Scale.

Task-oriented leaders are defined as leaders who derive need satisfaction from successful task accomplishment as measured by the Least Preferred Co-Worker Scale.

Leadership style is defined as the underlying attitudes toward people that motivate behavior in various leadership situations. For the purpose of this study it was measured by the total score obtained on the Least Preferred Co-Worker Scale.

**Background and Significance**

In essence, leadership involves accomplishing goals with and through people. Therefore, Fiedler and Halpin (7, 9) believed a leader must be concerned with at least two dimensions: task accomplishment and human relations. Barnard (3, p. 60) identified the essence of leadership when he distinguished between the effectiveness and the efficiency of cooperative action.

The persistence of cooperation depends upon two conditions: (a) its effectiveness and (b) its efficiency. Effectiveness relates to the accomplishment of the
cooperative purpose which is social and non-personal in character. Efficiency relates to the satisfaction of individual motives, and is personal in character. The test of effectiveness is the accomplishment of common purpose; . . . the test of efficiency is the soliciting of individual wills to cooperate.

These leadership concerns reflect the two earliest schools of thought in organizational theory, scientific management and human relations. According to Taylor (19), the function of the leader under scientific management is to establish and enforce performance criteria which can be utilized to meet organizational goals. The leader should focus on the need of the organization and not the need of the individual. This school of thought was de-emphasized in the 1920's and early 1930's by the human relations movement. Mayo (14) stated that under the human relations theory the function of the leader is to facilitate cooperative goal attainment while providing opportunities for growth and development. The leader should focus on the individual's needs and not the needs of the organization.

The recognition of two leadership styles, one emphasizing task and the other stressing relationship, has permeated the literature since the conflict began between the scientific management and the human relations schools of thought. Although different labels have appeared in the literature, the two orientations of leadership concerns remained the same. Examples of this are as follows: (1) Getzel and Guba (8) using nomothetic (task) and idiographic (human relations)
leaders; (2) Bales (1) using task and social leaders; (3) Katz, Maccoby and Morse (11) using production and employee orientation leaders; and (4) Halpin (9) using the two terms which have become the most popular, initiating structure and consideration.

After identifying the two central concerns of leadership, attention was given to the behavior exhibited when a leader is directing an activity. According to Cartwright and Zander (4, p. 496) the behavior of a goal achievement leader is that he or she "initiates action . . . keeps members' attention on the goal . . . clarifies the issue and develops a procedural plan" while the behavior of a group maintenance leader "keeps interpersonal relations pleasant . . . arbitrates disputes . . . provides encouragement . . . stimulates self direction . . . and increases the interdependence among members." Fielder (7) observed that the behaviors of leaders concerned with task accomplishment are autocratic, controlling, directive, and task-oriented in their interaction with group members. On the other hand the behaviors of human relations leaders are democratic, permissive, non-directive, considerate of their members' feelings, and therapeutic in their leadership.

Maher and Piersol (13) stated that in order to be successful, an administrator must thoroughly understand the communication media and must demonstrate adequate communication skills. Barnard (3, pp. 174-175) gave credence to this
point, "... authority depends upon a cooperative personal attitude of individuals on the one hand; and the system of communication ... on the other. Without the latter, the former cannot be maintained." Terry (20, p. 430) concurred with this idea,

Unless people understand the meaning or significance of what we are trying to say, they are not in a position to offer effective cooperation ... the effectiveness of this transition of what the manager knows, thinks, and feels, determines and conditions managerial accomplishment.

Barnard (3, p. 259) magnified the strength of this relationship,

there is no enduring cooperation without the creation of faith, the catalyst by which the living system of human efforts is enabled to continue its incessant interchange of energies and satisfactions. Cooperation, not leadership is the creative process; but leadership is the indispensable fulminator of its force.

A communication process should be developed by administrators to enhance the cooperation of employees and meet their personal needs. Planty and Machaver (16) noted that in the past administrators believed that organizational information was of no concern to employees; therefore, information which could have increased the willingness to cooperate was not shared. Roberts, Walter and Miles (18) stated that this concept is no longer true. Today, it is more common for administrators to realize their responsibility to share information with employees and for employees to think they have the right to know. Timm (22) suggested the power of sharing information, "An individual's satisfaction
at work may readily be effected by the communication interaction he experiences. Communication behavior in an organization can be viewed as valued rewards for employees."

One major factor affecting the communication interaction is the receiver's degree of satisfaction with the message. Lewis (12, p. 29) stated, "members . . . characteristically direct communications toward individuals who make them feel secure and gratify their needs, and direct communications away from people who . . . threaten them." The phenomenon of directing communication toward individuals who satisfy some personal need is known as communication satisfaction. Thayer (21, p. 144) defined communication satisfaction as, "the personal satisfaction inherent in successfully communicating to or in successfully being communicated with (whether a fulfillment of a conscious need or a non-conscious appetite)."

Downs and Hazen (6) proposed that an individual's satisfaction with organizational communication is composed of several indicators. These indicators are (1) explanation of policies, (2) advance notice of changes, (3) freedom to make suggestions, (4) recognition and expression of appreciation for good performance, and (5) adequacy of information on matters regarded as relevant by the employee. Redding (17, p. 433) concluded that "it does seem highly probable that the communications one receives . . . and the manner in
which they are received will be related to the person's attitude."

How leadership style influences communication satisfaction is not known. There is need for a comprehensive study which will permit the evaluation of one leader and the role leadership style plays in the perceived communication satisfaction with the subordinates. The small high school setting was chosen because it is characterized by one leader, the high school principal, and because there has been very little research conducted in small high schools.

This study focuses upon an analysis of leadership style and communication satisfaction to determine which, if any, communication satisfaction components as measured by the Communication Satisfaction Questionnaire (Appendix A) are related to a particular leadership style as measured by the Least Preferred Co-Worker Scale (Appendix B).

This study is significant in that it (1) determines whether a relationship exists between leadership style and communication satisfaction (this allows professors of future school administrators who have ascertained these students' leadership style to inform them of areas in their communication pattern which may need remediation), and (2) provides a rationale for a realistic approach that may be taken by practicing school administrators to facilitate better communication skills and as a result improve their leadership effectiveness.
Organization of the Study

The study was organized into five chapters; Chapter I provides an introduction of the study. Chapter II presents the review of related literature; two general areas are included: (1) leadership and (2) communication. Chapter III consists of the design of the study and outlines the procedures used in collecting and analyzing the data. The population tested is identified and the research instrument is reviewed. Chapter IV contains the analysis of the data and findings of the study. Chapter V presents the discussion, conclusions, implications of the study, and suggestions for further research.


12. Lewis, Phillip V., Organizational Communication: The Essence of Effective Management, Columbus, Ohio, Grid Inc., 1975.


CHAPTER II

REVIEW OF LITERATURE

Leadership

Leadership appears to be an enigmatic concept. Burns (10) stated that leadership has been observed extensively; however, it is still a poorly understood concept. To understand leadership, it must be defined in terms of a specific concept.

Definitions of Leadership

A commonly appearing concept in leadership literature is that of influence. Yulk (87, p. 10) stated, "The essence of leadership is influence over followers." Koontz and O'Donnell (57) described leadership as the ability to influence other people to follow in the achievement of a goal. Terry (84) added that leadership is influencing people to willingly cooperate for group objectives. Nord (68) intensified the notion of influence by stating that a leader is the individual who most significantly influences others in the group. Katz and Kahn (54) refined the influence notion by stating that leadership was concerned with degrees of influence which was measured by the followers' willingness to cooperate and do more than the routine organizational
objectives. Hersey and Blanchard (45, p. 68) summarized this concept of leadership in the literature,

A review of other writers reveals . . . leadership is the process of influencing the activities of an individual or a group in efforts toward goal achievement in a specific situation . . . the leadership process is a function of the leader, the follower and other situational variables.

Stogdill (79) noted that the concept of influence recognized the fact that individuals differ in the extent to which their behavior affected group outcomes. Influence implies that there is a relationship between leader and follower, but this relationship is generally not characterized by domination, control, or induction of compliance. Influence simply states that leadership has a determining effect on the behavior of group members and group activities.

Bass (5, p. 11) aptly summarized this concept of influence: "When the goal of one member, A, is that of changing another, B, or when B's change in behavior will reward A or reinforce A's behavior, A's effort to obtain the goal is leadership." Therefore, effective leadership is influence by the leader that results in goal attainment by the influenced followers.

**Leadership Theories**

An historical review of the development of leadership theories begins with the "Great Man" theory. Influenced by Galton's (36) historical study of great men, early theorists attempted to explain leadership on the basis of inheritance.
Woods (90), after studying fourteen nations, concluded that the man makes the nation and shapes it with his abilities. Caryle's (12) essays about heroes reinforced the concept about leaders being persons with unique qualities that capture the imagination of the masses. Dowd (16) expressed that individuals possess different degrees of intelligence, energy and moral force. The direction the masses may be lead will always be chosen by these superior few. Herbert (44) summarized that this theory presumed that leadership qualities are inherent. Those individuals who possess these inherent qualities would be leaders under any circumstance because their leadership qualities are recognized and accepted by followers.

The assumption that leaders were endowed with superior traits which differentiate them from their followers gave rise to the possibility that these traits could be identified. This concept led to the trait theory of leadership. House and Baetz (49) stated that the trait approach attempted to identify any distinctive physical or psychological characteristic which could possibly explain the behavior of leaders. Herbert (44) noted that the characteristics or traits thought common to leaders were height, intelligence, aggressiveness, domination, fluency of speech and persuasiveness. These inherent traits were applicable in any situation; consequently, only the few people who possessed these traits should be chosen and trained as future leaders.
Empirical studies did not prove the assumptions of the trait theory. Gibb (37) concluded that numerous studies have failed to find any consistent pattern of traits which identify leaders. Palmer's (71, p. 294) investigation reiterated this conclusion, "the investigation showed no support for the hypothesis that management effectiveness is a function of the personality characteristics of the individual." Nord (68) succinctly summarized the effect these empirical studies had on the trait theory. He concluded that the demise of the trait theory was caused by inadequate personality measures, the absence of consistent traits that could be associated with effective leadership, and situational variables so powerful they may have overshadowed the personality variables.

The next group of theories assumed that the factor which sets a leader apart from others is behavior not physical appearance or ability to think. Gibson, Ivanwich, and Donnally (38) described this group of theories as the "personal-behavior" theories. Hersey and Blanchard (45) grouped the University of Michigan studies, the Ohio State studies, and the Managerial Grid Theory under this concept of leadership.

The impetus for the "personal-behavior theories" was based upon the findings of Lippitt and White (89) concerning the behavior of authoritarian, democratic and laissez-faire groups. Using the findings of this research, Tannebaum and
Schmidt (82) developed a broad range of styles on a continuum moving from authoritarian leader behavior to democratic leader behavior. This recognition of two leadership styles, one concerned with task accomplishment and the other with personal relationships on a single continuum, was given support by the University of Michigan studies.

Gibson and others (38, p. 185) stated that the University of Michigan studies were carried out to discover the principles and methods of effective leadership. The criteria used to determine effectiveness were "group productivity, job satisfaction, turn over, absenteeism, grievance rates, costs, scrap loss, and employee and managerial motivation."

The studies conducted at the University of Michigan identified two concepts which were called employee orientation and production orientation. Katz, Maccoby, and Morse (55) stated that these terms paralleled the authoritarian (task) and democratic (relationships) concepts of the leader behavior continuum. Katz and Kahn (53) stated that the research findings confirm the leadership research of Lippitt and White on leadership style. Reddin (74) summarized that the central idea of the Michigan studies was the Michigan Style continuum. The continuum suggested that leader behavior can usually be viewed as moving from an employee-centered extreme to a production-centered extreme.

Katz and Kahn (53) explained the major findings of the various Michigan State studies, surveys, and experiments.
First, supervisors with better productivity play a more differentiated role. They perform functions typically associated with leadership not functions of rank and file workers. Second, high producing supervisors spend more time supervising but do not supervise as closely as low producing supervisors. Third, the "employee oriented" supervisors created employee motivation by a supportive relationship between them and their work group. Fourth, employees in the higher producing groups tended to express a more favorable opinion of their work group.

Likert (60) attempted to integrate the findings of the Michigan studies and provide a framework to explain them. The results were the "employee centered" theory of management. Studying the behavior of the highly productive and effective groups led Likert (60) to hypothesize: (1) the leader has responsibility as a "linking pin" with the rest of the organization and does not try to make all the decisions; (2) the effective leader maintains a supportive atmosphere; (3) the leader maintains a cohesive group by dealing with all problems within the group; (4) leaders have the technical competency to fulfill their position; (5) the leader helps members become aware of group goals, and more important values; and (6) the leader tries to de-emphasize his own organizational status.

The Ohio State studies revolutionized the measurement of leadership behavior. Stogdill and Coons (80) explained
that the original research, initiated in 1945 at Ohio State University, questioned whether leader behavior should be depicted on a single continuum. Through factor analysis, researchers discovered two basic dimensions of leader behavior—initiating structure and consideration. Halpin (41) defined initiating structure as any leader behavior that delineates the relationship between leader and subordinates while establishing patterns of organization, communication and routine procedures. On the other hand, consideration is behavior that indicates friendship, warmth, trust, interest, and respect in the relationship between the leader and group members. Halpin and Winner (42) found that these two behavior variables accounted for 83 percent of the differences in observed leader behavior.

Yukl (87) stated that based on the results of the initial studies, a questionnaire was constructed to measure consideration and initiating structure. The questionnaire was called the Leadership Behavior Description Questionnaire (LBDQ). The uniqueness of this questionnaire was that leader behavior may be ranked high on both dimensions, low on both dimensions or high on one and low on the other. Reddin (74, p. 21) explained the importance of this system of measurement,

These two factors are described as independent because the extent to which a manager uses one of them does not help predict the amount of the other he is using. Because of their independence the factors may be drawn at right angles.
Thus, the key question asked in 1945 was answered. Leadership should be measured on two continua rather than one.

Korman (58) noted that most of the criticism of the consideration initiating-structure definition was that these variables do not predict conditions which affect work group performance.

Kerr and others (56, p. 63) admitted it was never the original intention in the 1940's and 1950's "to develop a full-blown situational theory of leadership." However, the authors presented ten propositions which according to an extensive review of literature presented a workable theory of situational leadership. The ten propositions stated that the nature of the situation determined the subordinate's tolerance of leader Initiating Structure or Consideration.

Blake and Mouton (6) popularized the Ohio State notion of measuring leadership behavior on two separate and distinct axis. This popularized style of measurement became known as the Managerial Grid. The grid consists of a nine-point system which measures concern for production on the horizontal axis and concern for people on the vertical axis. This format creates the possibility of eighty-one "mixtures" of these two concerns. However, Blake and Mouton (6, 7, 8) placed emphasis on analyzing the corners and mid-point of the grid. Blake and Mouton (6, p. 11) believed, "each of these five theories defines a definite but different set of assumptions
regarding how individuals . . . orient themselves for managing situations of production that involve people."

The five positions have the following basic assumptions and characteristics. (1) The 9,1 style is in the lower right hand corner of the grid. The managerial assumptions in this corner is a contradiction between the production needs of the organization and personal needs. This manager sacrifices personal needs. (2) In the upper left hand corner of the grid is the 1,9 managerial orientation. This managerial style is also based on the assumption that production needs are not in harmony with personal needs. This manager believes personal needs come first. (3) The 1,1 style is located in the lower left hand corner of the grid. Once again, incompatibility is assumed to exist between production requirement and needs of the people. This manager has a low concern for people and minimum concern toward organizational purpose; he is oriented toward messenger carrying, non-involvement, and passing the blame for failure. (4) The middle of the grid is the 5,5 style of management. This approach assumes that people are practical. By "pushing" some for production and considering attitudes and feelings, people will be "satisfied." Rather than integrate production and people, the carrot-and-stick approach is used for supervision. (5) The 9,9 approach is located in the upper right hand corner. Unlike the other approaches, it assumes
that there is no necessarily inherent conflict between the organizational purpose of production and personal needs. This management style involves effective integration of people with production. This is accomplished by involving the workers and their ideas in the process of determining working conditions and the strategies of work.

Blake and Mouton (7) attacked the on-going controversy commonly referred to as "Situational Leadership Theory versus the One Best Style." They claimed that there is one best style. It involves applying the principles of leadership, as they emerge from behavioral sciences. Blake and Mouton believed the 9,9 management style is the one best leadership style. They believed the reason many theorists attack their grid approach is because of misinterpretation. Many theorists see their grid as an additive approach for combining the task and relationship variables, while the grid is in fact an interactive approach.

The 9+9 approach (high task plus high relationship) is high direction coupled with high reward. This is widely recognized as paternalism-maternalism leadership. However, the 9,9 style involves achieving production through shared responsibility, coupled with high participation, involvement, and commitment. Under 9,9 leadership, qualitative differences in thought, feeling and behavior are evidenced from the interaction of the two independent variables.
Blake and Mouton (8) concluded that regardless of the situation the principles of leadership are constant. This point is made by giving an example of goal setting under 9,9 leadership. Regardless of the maturity of the subordinate, goal setting behavior can be accomplished by using different tactics. The immature subordinate needs short-term goals, more coaching, trial runs, and immediate feedback. The mature subordinate needs more complex goals, a wide range of behavioral objectives to accomplish the goals, and a longer interval from start to finish. Thus, the principle of goal setting can consistently be employed in ways that are appropriate. Blake and Mouton (7, 8) believed that this constant application of behavioral principles shows the soundness of the One Best Style, the 9,9 style.

Gibson and others (38), noted that the "personal behaviors" theories had a serious shortcoming. They did not conclusively establish any effectiveness criteria among leadership, achievement, and satisfaction. Therefore, a new group of studies stressed the premise that effective leadership was based on personality, task, power, attitudes and perceptions. This type of contemporary leadership is referred to as the contingency approach. McKague (63, p. 2) stated,

Situational theory does not maintain that personal qualities of leadership are unimportant; neither does it state that situations automatically produce the leadership required. But it does maintain that personal qualities must be examined in the context of a particular situation.
Hoy and Miskel (50, p. 235) stated, "Currently the two most widely held contingency theories are Fiedler's Contingency Model and House's path-goal theory."

House and Mitchell (48) explained that the Path-Goal approach has in its roots a more general motivational theory called the expectancy theory. House (47, p. 322) stated, "The theory . . . is derived from the path-goal hypothesis advanced by Georgopoulos . . . and from . . . the broad class of expectancy theory of motivation." The theory is called Path-Goal because its major concern is how the leader influences the subordinates' perceptions of their work goals, personal goals and paths to goal attainment. The theory suggests that a leader's behavior is motivating or satisfying to the degree that the behavior increases the subordinates' goal attainment and clarifies the paths to these goals.

House (47, p. 322) advanced the following prediction,

the individual makes probability estimates with respect to two linking points connecting behavior with its outcome, and subjectively places values on the outcomes. The magnitude of these probability estimates indicates the degree of path instrumentality of his behavior for work goal accomplishment and valence.

House (47) suggested that the leader's strategic functions are to enhance (1) subordinates' motivation to perform, (2) satisfaction with the job, and (3) acceptance of the leader. Therefore, it can be inferred that leaders must exhibit specific behaviors to accomplish this task. First, the leader can control the extent to which work-goal
accomplishments will be recognized as a contribution and the type of personal reward that will be linked with the accomplishment. This allows the leader to control the magnitude of the personal satisfaction associated with the outcome. Second, if the leader consistently rewards work-goal achievement, it will create subordinate awareness of the link connecting work-goal behavior with its outcome—personal reward. Third, through supportive behavior, the leader can influence the probability that the effort expended will result in work-goal achievement. Fourth, the leader can increase personal satisfaction by giving the subordinate greater opportunity to influence the goal setting procedure and to control the appropriate task-directed behavior. Finally, the leader can reduce the personal reward barriers associated with goal-directed behavior by being supportive in times of stress, permitting involvement in a task, and being considerate of the subordinates' needs. The leader must choose the type of behavior that is most appropriate for the situation.

The variables which moderate the relationship between leader behavior and subordinate satisfaction are the contingency factors. The two contingency factors are explained by House and Mitchell (48, p. 85) as "personal characteristics of the subordinates and the environmental pressures and demands . . . to accomplish the work goals and satisfy their needs." Assessment of the environmental
conditions makes it possible to predict the kind and amount of influence that specific leader behaviors will have on the motivation of subordinates. Thus, the Path-Goal Theory not only suggests what type of leader style may be most effective in a given situation, but also attempts to explain why it is effective.

Fiedler's Contingency Model

Fiedler (24, p. 362) summarized his fifteen-year research program into what he called the Contingency Model of Leadership.

1. The effectiveness of a group is contingent upon the appropriateness of the leader's style to the specific situation in which he operates. Most people are effective leaders in some situations and ineffective in certain others.
2. The type of leadership style that will be most effective depends upon the degree to which the group situation enables the leader to exert influence.
3. If leadership effectiveness depends not only upon leadership style but also the group situation, we can either make the leader fit a specific group situation by selection or training or we can engineer the group situation to fit the leader. Since it is extremely difficult to change a man's personality and leadership style, but relatively easy to change his work situation, we will examine an organizational engineering approach to leadership and management development.

Fiedler's (23, 24, 34) Contingency Model postulated that relating the Least Preferred Co-Worker Scale (hereafter called the LPC) to situational variables in a contingency approach, a pattern of results could be predicted. The results indicated that in very favorable situations and unfavorable situations the task-oriented leaders performed
more effectively. In situations of moderate favorableness, the relationship-oriented leaders performed more effectively.

The LPC is the key factor in predicting results. McMahon (64, p. 700) stated, "The LPC score may be considered the most crucial variable in the model since it purports to measure leadership style." The LPC measures the leader's orientation style by using an eight-point bipolar scale modeled after Osgood's (70) Semantic Differential Scale. The LPC measures a leader's style not a leader's behavior. This is a key concept. Fiedler (23) stated that one must distinguish between leader behavior and leadership style: (1) leader behavior refers to specific acts in which a leader engages while directing or coordinating the work of his group; (2) leadership style refers to the underlying needs of the leader that motivates his behavior. Therefore, a leader's action or behavior may change but his style (needs) remain the same. Based on this theory, Fiedler (23, 34) placed leaders into categories measured by the sum of their scope on the LPC. The categories are termed high, moderate and low-LPC. These categories label the leadership style of an individual.

Fiedler (23, 34) noted that the high-LPC individual has as his basic goal the desire to be "related." The individual seeks to have strong emotional and affective ties with others in the work situation. Fishbein's (35) study showed that
high-LPC individual seemed to experience the most difficulty in working with a stubborn, dogmatic individual who would tend to disrupt the smooth interpersonal relations of the group. Fiedler (34, p. 10) summarized the behavior of high-LPC individuals.

Although high-LPC leaders are concerned with doing a good job, their primary motivation or goal is to have good interpersonal relations with others. Their self-esteem depends to a large extent on how other people relate to them. They are therefore likely to pay particular attention to their group members and be concerned about their feelings. When they find themselves in stressful or anxiety-arousing situations, they seek the support of their group and are eager to maintain good group morale. They are able to see different viewpoints, and tend to deal effectively with complex problems which require creative and resourceful thinking.

Fiedler (23, 34) noted that once a high-LPC individual achieves his basic goal, good interpersonal relations, he or she will seek his or her secondary goals of status and esteem. The leader will achieve these secondary goals through status-enhancing activities such as bossing people around, assigning tasks, and assuming responsibility.

The low-LPC person has a different hierarchy of need satisfaction. Fishbein (35) found that low-LPC individuals seem to have the most difficulty working with people they describe as lazy and unintelligent. In other words, low-LPC individuals were primarily concerned with the effect people had on accomplishing the task. Fiedler (34, pp. 11-12) explained the behavior of the low-LPC individual,
low-LPC leaders are strongly motivated to accomplish successfully any task to which they have committed themselves. They do this through clear and standardized work procedures and a no-nonsense attitude about getting down to work. Although they want to get the job done, they will care about opinions and feelings of subordinates as long as everything is under control. But in low control situations they will tend to neglect the feelings of group members in an effort to get the job done--business before pleasure!

Fiedler, Chemer and Mahar (34) noted there is a group which falls between high- and low-LPC individuals. These moderate-LPC individuals do not have a consistent personality sketch. Mai-Dalton (61, p. 7) explained that the small number of individuals who fall in the moderate range "tend to be more independent by neither requiring pleasant relationships nor successful task completion. They tend to be less punitive, more open to suggestions, and more flexible in their judgments."

The Contingency Model of Leader Effectiveness maintains that the relationship of leadership style (LPC score) to group effectiveness is dependent upon the situational favorableness. Fiedler (23) defined the situational favorableness variable as the degree to which the situation itself provides the leader with potential power and influence over the group's behavior. Fiedler (26, p. 148) stated, "Field and laboratory studies extending the model supported the prediction that the situational favorableness dimension moderates the relationship between leadership style and group organizational performance." Fiedler (30) identified three major
determinants of situational favorableness and ranked them in order of importance: (1) leader-member relations—the acceptance of the leader by his followers, (2) task structure—the degree to which requirements are known and goals are defined, and (3) position power—the degree to which the position itself enables the leader to persuade group members to accept his direction or leadership. Fiedler (23, 26, 30, 34) has viewed these three elements as the important situational characteristics that control the leader's influence over the group.

Fiedler (23) explained that a leader-member relation represents the leader's evaluation of the member's reaction toward him and his reaction toward the role of the leader. Fiedler (30, p. 64) stated that the leader-member relations component, "is likely to be the most important single variable which determines his power and influence." Many factors are involved in this very complicated component of control including leader personality, member personalities, respect or lack of it for former leaders, jealousy or support for the present leader, and many others. Also important is the leader's relationship with the boss. A well supported leader is more likely to be supported by the group. This dimension was rated by Fiedler (30) as having twice the importance of task structure and four times the importance of position power. Ashour (2) stated that the method most
frequently used to determine the favorableness of leader-member relations is the leader's rating of group atmosphere.

The task structure factor represents the extent to which the task is programmable and structured. It is defined operationally by Fiedler (31) in terms of a task scaling method developed by Shaw (77). Four factors which measured task structure on the rating scale were (1) goal clarity—the degree to which the goal is clearly stated or known to the group members; (2) decision variability—the degree to which correctness of the solution or decision can be demonstrated by appeal to authority, by logical procedure, or by feedback; (3) solution specificity—the degree to which there is more than one correct solution; and (4) goal path multiplicity—the degree to which a variety of procedures may be used to solve the task. An eight-point scale is used to rate the task and a mean scale score of five is used to dichotomize task structure. Succinctly stated, leaders of structured tasks have relatively more control than leaders with less structured tasks. Fiedler (30, p. 66) stated that leaders in situations of high structure have more "authority to give instructions and evaluate performance."

Position power is the last and least important of the three components. It is the extent to which the leader possesses reward, coercive and legitimate power, as well as
having special knowledge or skill not available to the group members. Position power is used to obtain compliance from subordinates. Fiedler, Chemer and Mahar (34) have developed a **Position Power Rating Scale** to assess reward, punishment, promotion, and special authority designation. This scale determines leader position power. Fiedler (30) stated that there is little need to try to classify each leadership situation because positions are so similar within an industry. In relation to the range or extent of one's power, no one has absolute power. The leader is limited by the willingness of subordinates to follow and the limitations of the organization. Therefore, Fiedler (30, p. 75) postulated, "Practically all leadership power is . . . exercised by common consent." Leaders tended to overestimate the power of others and underestimate their own power.

Fiedler, Rice, and Chemer (22, 23, 24, 34, 73) used each of the previous situational dimensions and dichotomized them into a high and low half. Each group-task situation can now be rated on each of the three dimensions. This procedure creates eight situational types that vary in favorableness from high to moderate to low. By using this procedure, it can be ascertained whether the correlations between leadership style and group performance within each of these eight octants will prove the assumptions of Fiedler's Contingency Model.
The Contingency Model attempts to predict leadership effectiveness based on performance by the group on its major assigned task. Thus, the measure most frequently used in rating is group performance. Fiedler (22, 23, 34) stated that the order of the eight octants represents decreasing degrees of situational favorableness. Fiedler, Rice, and Chemer (23, 26, 34, 73) predicted that groups lead by low-LPC leaders perform best in situations of both high and low control. High-LPC leaders have better performing groups in moderate control situations.

Validation of the Contingency Model

Fiedler (23), in a laboratory experiment, and Chemer and Skrzypek (13), in a field experiment, tested all eight octants of the Contingency Model as they were specified. The studies provided strong support for the model. Other studies have been directed toward specific octants of the model. These studies conducted by Hunt (51) and Michaelson (66) have also provided strong support for the contingency model. However, one of the most recent and comprehensive investigations of Fiedler's model was a meta-analysis conducted by Strube and Garcia (81, pp. 309-316).

A review of the literature was undertaken using Psychological Abstracts, Social Science Citation Index, and previous reviews as the main reference sources. The study included the 33 tests that Fiedler used . . . and 145 subsequent tests of the validity of that model. . . . The model as a whole was overwhelmingly supported. Given that
it took 13 years to generate the present validation evidence consisting of 145 hypothesis tests, it is unlikely that the model will be disconfirmed in the near future.

Another form of validation was the research conducted on leadership training and experience. Fiedler (25) concurred with previous research that leadership training or experience did not necessarily mean increased leadership effectiveness as measured by group productivity. Fiedler (28) noted that untrained and inexperienced leaders performed as well as trained and experienced leaders in certain situations. The Contingency Model provided a meaningful framework for understanding these results. Fiedler and Chemer (31, p. 129) explained a more effective method for utilizing leadership experience and training programs in the future.

While most leadership training programs assume that the leader will perform better with more influence and control, the contingency model shows that task motivated people perform best if they have either a great deal of or very little control or influence; relationship motivated people perform better if their control and influence are moderately high. This extremely important point leads to the curious prediction that leadership training and experience, by increasing the leader's control and influence and hence the favorableness of his situation, may in fact decrease his performance under certain conditions.

Fiedler, Chemer, and Mahar (32, 34) brought a more practical application to leadership training and experience by engineering the situation to fit the LPC style. Fiedler (27, 29) stated that training and experience can be interpreted as improving situational favorableness by
increasing leader power, control and influence. Experience is viewed as on-the-job training and provided the leader with a more effective way of handling the task to be performed. The leaders' responsibilities and the means to carry out their functions become clearer as they acquaint themselves with the job and organization. Training and experience, therefore, have the effects of improving the leaders' relations with their group and providing the leaders with a better working knowledge of their job. Fiedler, Chemer, and Mahar (34) noted that by keeping good performance records one will be able to judge the most appropriate time to move a leader. Fiedler (30, p. 75) stated,

> the old adage calling for the right man for the right job is not as simple as it once appeared. . . . certain types of leaders will reach a burn-out point. . . . A rotation policy obviously must be designed to rotate these leaders at the appropriate time . . . the other types of leaders, . . . the task-motivated leaders should be permitted to remain on the job so that they can become maximally efficient.

This will enable the organization to engineer the situation to fit the LPC leadership style and improve leadership effectiveness. This predictive quality of matching the situation and the leader is the essence of the Contingency Model.

The successful predictability of the model is well documented. Strube and Garcia (81, p. 318) stated, "Efforts at applying the model should be continued given the results of this review and the success of the Leader Match training
program reported by Fiedler." Fiedler (30, p. 79) also endorses the success of his model: "It is clear at this point that the theory not only predicts leadership performance in field and laboratory experiments, but also that it serves as a very important and fruitful source of new hypotheses in the area of leadership."

Communication

Definition of Communication

Attempts to define communication for universal application are difficult. Goldhaber (39, p. 107) stated, "Definitions . . . by the dozen exist and yet even experts cannot agree concerning the nature and limits of the discipline." Many authors limited the nature of communication by defining it simply as the sharing of information. Redding and Sanborn (76) defined communication as the sending and receiving of messages. Allen (1, p. 9) also believed that, "communication is simply sharing information with others."

The scope of the discipline is widened when authors include the concept of shared meaning. Lewis (59) postulated that communication means sharing ideas, messages, or attitudes that produce a degree of understanding between sender and receiver. O'Connell (69, p. 4) stated, "communication is the process of creating and sharing messages." Tortoriello, Blatt, and Devine (86, p. 9) defined communication as, "an interactional process in which meaning is stimulated through
Finally, the scope and nature of communication is granted its greatest latitude when it is defined as a complex process that incorporates many facets of sharing messages. Thayer (85) shared this belief when he stated that communication is a complex process which underlies the existence, growth, change and behavior of all living systems from the individual to the organization. Carlin (11, p. 4) also emphasized the complexity of communication when he wrote, "Communication is a complex and dynamic process. Communication is understanding. It is rapport ... communication requires a permissive climate, sensitive listening, and a willingness to credit others for their contributions."

Rather than debate the scope of the multifaceted nature of communication, a precise definition is used for application in this study. Communication is defined as the process of sharing the meaning of ideas, messages, or attitudes within the multidimensional construct consisting of general organizational perspective, personal feedback, organizational integration, communication with superiors, communication climate, horizontal communication, media quality and communication with subordinates.
Formal communication system.—Goldhaber (39, p. 2) believed that the system of communication is, "the glue that binds the organization, the oil that smooths the organization's functions, the force that pervades the organization, and the binding agent that cements all relationships." Thayer (85, p. 103) stated that communication enables the organization to establish and maintain itself with its environment and amongst its parts. Farace, Monge, and Russell (21) postulated that it is the organizational network that provides the mechanism by which communication is transmitted from member to member and permits leadership to control and coordinate individuals and groups within the organization. To accomplish the objective of maintaining the organization, organizational communication is viewed by Thayer (85) as having four primary functions: informing someone, instructing or directing someone, evaluating someone or something, and influencing another's thought or behavior.

Barelas and Barrett (3) noted that organizational systems of communication are usually created by setting up formal systems of responsibility and explicit delegations of duties, such as implicit statements of the nature, content, and direction of communication which is necessary for the performance of the group. Allen (1, p. 51) is more emphatic about the scope of the communication system; "since
communication is dynamic, it must flow through all levels of an organization. For this to happen management must establish policies which encourage the unrestricted flow of ideas, up, down, and horizontally." Goldhaber (39, p. 134) explained the unrestricted flow of messages in the formal network relationship.

When messages follow official paths dictated by the organizational hierarchy or by job function, they flow in accordance with formal network relationships. These messages usually flow up or down the organization if the scalar principle of authority and hierarchy is employed and across the organization if the functional principle of job classification is adhered to. Thus, the direction of the messages is an indicator of the network relationship.

Lickert (60) concurred with the formal network relationship when he pointed out that it included three dimensions: downward communication, upward communication, and horizontal communication.

Downward communication refers to messages which flow from superiors to subordinates. Tortoriello and others (86) noted that the classic view of downward communication was that of a tool for transmitting orders. Smith, Richetto, and Zima (78) postulated that authority, tradition, and prestige were implemented through downward communication. Lewis (59, p. 38) expanded the function of downward communication to include opportunities for management to spell out objectives, change attitudes and mold opinions, diminish fear and suspicion arising from misinformation, prevent misunderstandings from lack of information, and prepare for and adjust to change.
Allen (1) has stated that surveys indicate that employees want to know management's position on issues that effect the organization. Downward communication makes employees more effective by telling them what is expected of them and by explaining the freedoms and limits permitted by management to accomplish specific duties.

Katz and Kahn (54) have identified five categories of messages that generally flow in a downward communication relationship: (1) job instructions--communication which attempts to explain how an assigned task is accomplished; (2) job rationale--communication which attempts to explain how organizational tasks are interrelated; (3) procedures and practices--communication which attempts to acquaint workers with practices, regulations and benefits of the organization; (4) feedback--communication which attempts to tell the worker how he is performing on the job; and (5) indoctrination--communication which attempts to motivate the worker to support organizational objectives.

Although there is a definite need for downward messages, communicators must be alert to the problems that effect these downward flowing messages in an organization. Goldhaber (39) pointed out the problems of over publication, the sending of messages at ill-advised times, and the "filtering" effect that occurs as the message moves through the communication system.
To help alleviate downward communication problems, Harriman (43) suggested that superiors should only send selective signals downward and should listen carefully to signals being sent upward.

Allen (1) explained the importance of effective downward communication when he stated that it not only makes employees happy, but also increases productivity.

The second dimension of a formal communication system is upward communication. Lewis (59) stated that upward communication is communication from a subordinate to a superior. It provides feedback for management and stimulates participation from employees in formulating operating policies.

O'Connell (69) explained that an effective upward communication program is that which produces a feeling that management is listening and wants the opinions of employees. Thus, management can learn the concerns of its employees and provide an outlet for employee frustration.

Goldhaber (39) believed management should encourage upward communication. Communication in this direction indicates the receptivity of the environment for downward communication, facilitates acceptance of decisions, provides feedback as to understanding of downward communication, and encourages the submission of valuable ideas. Wendlinger (88, p. 208) explained that upward communication produced a receptive environment because employees have learned, "there
are logical explanations for policies and procedures, supervisors are human and can make mistakes and correct them, and management will respond to reasonable questions and criticism offered with good will."

Harriman (43) stated that upward communication is inefficient in most organizations because the perception downward was poorer than the perception upward. Additionally, the occurrence of "message filtering" through the levels of management diluted upward communication. This dilution caused the message to get garbled, edited, or even worse eliminated.

Planty and Machaver (72) believed the most effective procedure with which to avoid inefficient upward communication was that of good listening. Listening must be objective and listening must imply action. Management must act on the basis of what employees think, not what managers think, or what managers wish employees would think. This is essential to realistic management. Planty and Machaver (72, pp. 218-219) stated the rewards management would receive as a result of good listening.

The manager who encourages a free flow of information upward will reap some immediate rewards: he will get an improved picture of the work, accomplishments, problems, plans, attitudes, and feelings of his employees. He can spot individuals, policies, actions, or assignments which are likely to cause trouble. He strengthens the only device he has for tapping the ideas and help of his employees, receives a better answer to his problems, and eases his own responsibility. He, also, helps the easy flow and acceptance of his downward communication, because good listening makes good listeners.
Tortoriello and others (86) explained that an effective upward communication program gives management an improved picture of the work accomplishments, problems, plans, attitudes, and feelings of subordinates. However, the participated styles associated with upward communication has often been stifled, misused, and ignored by management. To prevent this from happening, management should incorporate activities such as grievance procedures, counseling sessions, attitudes questionnaires, an open door policy, and "rap sessions."

The third dimension of a formal communication system is horizontal communication, also known as lateral or across-lines communication. This method allows two employees to converse with each other rather than go through the scalar hierarchical network. Because messages only go through one relay, accuracy and speed are increased.

Tortorillo and others (86, p. 58) believed that horizontal communication was critical to the modern business; "It provides task coordination and socio-emotional support because it is easier to talk to a peer than a superior." Allen (1) emphasized this view when he explained that the Hawthorne studies revealed that employees, even at the lowest levels of the organizational chain of command, talk to each other and achieve levels of understanding and coordination that challenge the organizational authority.
Goldhaber (39) reported that horizontal communication typically occurs between people on the same organizational level of authority, and messages usually relate to task coordination, problem solving, information sharing, conflict resolution, and interpersonal rapport.

Smith, Richetto, and Zima (78, p. 6) believed horizontal communication is indispensable to coordination and essential to the proper functioning of vertical-communication flow because,

members play a leading role in communication far beyond . . . assigned roles. . . . In many instances, communication is their primary activity. They perform such functions as gathering data, issuing reports, preparing directives, coordinating activities, and advising management.

Goldhaber (39) reported that the degree to which members were encouraged for communicating with their peers was not sufficient among managers. Smith, Richetto, and Zima (78, p. 14) theorized that this phenomena occurred because, "in the organization setting there may be greater reward for vertical sensitivity than for horizontal sensitivity. Organizational 'payoff' may result from sensitivity to superiors and subordinates rather than to peers."

Informal communication system.—Tortoriello and others (86, p. 59) explained the informal system as, "messages that do not follow either scalar or functional lines." Farace, Monge, and Russell (21, p. 159) postulated that the informal system is a critical component of the organizational network:
many people believe that most organizations would cease to act if their members were constrained to formally prescribed interaction. Hence the widely known "informal" network . . . the network of interaction that can (and does) range broadly across different content areas, use various communication modes, and performs much broader functions than the formal network.

Goldhaber (39) stated that the most used synonym for the informal network is the term grapevine. Davis (14) explained that the term "grapevine" arose during the Civil War. The telegraph wires which transmitted intelligence data were strung loosely from tree to tree in the manner of a grapevine. Many of the transmitted messages were often garbled; hence, any rumor was said to be from the grapevine.

Davis (14) studied the operation of the grapevine and discovered that it traveled in clusters. One person tells three or four other people. Only one of those receivers will pass on the information, and they will tell more than one person. Then as the proportion of people who know the information becomes larger and the information gets "old," it dies out because the receiver no longer repeats it. Thus, it is a cluster chain because each individual in the chain tends to inform a group of people rather than one person.

Goldhaber and others (40) believed that the grapevine exists because it has the following characteristics: (1) it can satisfy the communication and information needs of the organization not being met by the formal system, (2) it uncovers "juicy" gossip, (3) it is a more flexible system
than the formal system. It can take shortcuts through the organizational communication lines and deliver messages more rapidly, and (4) it is the inherent nature of employees to want to receive "inside" information.

Davis (15, p. 46) dispelled many rumors about the characteristics of the grapevine and explained its advantages.

Under normal business conditions between 75-95 percent of grapevine information is correct. The grapevine is fast; it is predicated upon social relationship and is faster than formal downward channels in disseminating information. Since formal horizontal channels are inadequate in most organizations, the informal network is used to coordinate horizontal activities.

Davis (14) concluded that an informal system arises in organizations from the social relationships of the employees and is neither required nor controlled by management. The activity of the grapevine measured a company's spirit and vitality because it reflected the deep psychological need of people to talk about their jobs and their company as a central life interest.

McMormack (65) emphasized that the informal system has the power to determine if formal authority will be accepted. Therefore, a wise manager will be an effective communicator in both the formal and informal system if he wants to be an effective leader.

Communication Satisfaction

Redding (75) wrote that the term communication satisfaction was first used by Level in his 1959 Purdue dissertation
to describe, under a single category, the generalized feel-
ings about communication events and attitudes encountered
by employees in an organizational environment. Thayer (85)
agreed with this unitary concept of communication satisfac-
tion. However, he also pointed out the following character-
istics about communication satisfaction: (1) that satisfaction
in a communication episode does not mean effectiveness in
message sending or receiving and (2) communication satisfac-
tion is not a "packaged" message intended to satisfy the
receiver.

Redding (75) reviewed the literature about communication
satisfaction and questioned whether or not it was a unitary
concept. The specific components of communication had varied
from investigator to investigator. Redding (75, p. 431)
found that the term had been used to include the following
components:

--explanation of policies, in answer to employee
question;
--understanding what is expected of one in performing
his job;
--advance notice of changes, through official sources;
--freedom to make suggestions to superiors;
--adequacy of information on those company matters
regarded by the receiver as relevant to him;
--extent to which important information is obtained from
sources or media preferred by the receiver;
--freedom to make complaints, to "sound off";
--accessibility or approachability of superiors;
--degree to which supervisor makes an effort to under-
stand feelings and problems of subordinate;
--degree to which supervisors express appreciation of
good performance by subordinates; and
--degree to which higher officers or managements are
open, willing to initiate communication.
Research in two different countries has indicated that communication satisfaction is a multi-dimensional concept. Downs (17) wrote that Wiio's work in Finland has demonstrated that communication satisfaction consists of four dimensions: (1) job satisfaction, (2) message content, (3) improvement in communication, and (4) channel efficiency. Downs and Hazen's (18, pp. 67-69) research has indicated that there are eight stable factors of communication. A description of each factor is below.

1. **Satisfaction with Communication Climate** reflects communication on both the organizational and personal level. On one hand, it includes items such as the extent to which communication in the organization motivates and stimulates workers to meet organizational goals and the extent to which it makes them identify with the organization. On the other, it includes estimates of whether or not people's attitudes toward communicating are healthy in this organization. There is some indication that climate is the strongest dimension and that workers tend to think of it when they respond to general questions about communication.

2. **Satisfaction with Superiors** includes both upward and downward aspects of communicating with superiors. Three of the principal items deal with the extent to which he is open to ideas, the extent to which he listens and pays attention, and the extent to which he offers guidance for solving job-related problems.

3. **Satisfaction with Organizational Integration** revolves around the degree to which individuals receive information about the immediate work environment. Workers want to know about departmental plans, the requirements of their jobs, and some personnel news. Such information makes them feel a part of the organization.

4. **Satisfaction with Media Quality** is similar to Wiio's Channel Efficiency. Of particular concern here is the extent to which meetings are well organized, written directives are short and clear, and the amount of communication in the organization is about right.

5. **Satisfaction with Horizontal and Informal Communication** concerns the degree to which the grapevine is active and the extent to which horizontal and informal communication is accurate and free flowing.
6. Satisfaction with Organizational Perspective concerns the broadest kind of information about the organization as a whole. It includes the notification about changes, about the organizations' financial standing, and the overall policies and goals of the organization.

7. Satisfaction with Subordinates focuses on upward and downward communication with subordinates. They are expected to be responsive to downward communication and also to anticipate the supervisor's needs and initiate upward communication which will be helpful to him.

8. Satisfaction with Personnel Feedback is one of the strongest dimensions in that workers in general have a need to know how they are being judged and how their performance is being appraised.

Downs and Hazen (18, p. 72) concluded, "the various dimensions of communication satisfaction can provide a barometer of organizational functioning, and . . . can be a useful tool in the audit of organizational communication."

Recent dissertations have explored the relationship of communication satisfaction and job satisfaction in the educational setting. Nicholson (67) and Jones (52) discovered that (1) there was a significant relationship between job satisfaction and each of the communication satisfaction components; and (2) a majority of both urban and rural school teachers were satisfied with communication in the school system. However, Duke (19), when researching communication satisfaction among business education teachers, found that while there was a high correlation with job satisfaction, only 38 percent of the business teachers reported satisfaction with communication.
One omission in these education findings is the relationship of communication satisfaction to leadership style. One of the goals of this research was to test this relationship by investigating how the communication satisfaction dimensions relate to leadership style.

**Relationship Between Leadership Style and Communication**

McMormack (65) postulated, "Through cooperation people can achieve desired goals. The persuasion to accomplish cooperation requires communication. Communication is vital not only to transmit authority but also to cooperation." Tannebaum, Weschler and Massarik (83) confirmed this concept when they stated that leadership is influence directed through the communication process toward the attainment of goals in specific situations.

Likert (60) aptly explained the relationship between leadership and communication in his Casual Sequence Organizational Model. In this model, leadership behavior is a causal variable, communication is an intervening variable, and labor-management relationship is an end result. Likert (60, p. 26) explains the three broad classes of variables as follows:

The causal variables are independent variables which determine the course of developments within an organization and the results achieved by the organization. Causal variables include leadership strategies, skills and behaviors. The internal variables reflect the state and health of the organization, e.g., the attitudes,
motivation . . . perceptions of all members and communication.

The end result variables are the dependent variables which reflect the achievements of the organization.

The importance of this model lies in the fact that leadership communication strategy is shown to be an important variable in establishing better superior-subordinate relationships. Thus, it identifies goals for which organizational communication may be used by management—the establishment of a better working relationship with subordinates through communication satisfaction. McCallister (62, p. 77) confirmed this strategy when she postulated, "the success of . . . programs is dependent upon the supervisor-subordinate relationship, and the parameters of that relationship are defined through day-to-day communication of the interactants."

The literature reveals an important relationship between leadership and communication. Brown (9, p. 53) stated this relationship: "in human organizations leadership depends upon communication." Barlow and others (4, p. 529) believed one point in this crucial relationship needs to be emphasized. "The leader's verbal style seems to have an effect on process. . . . While we may wish to understand how leader variables affect outcome, we must also learn how one process variable affects other process variables."
One way to accomplish this feat is to determine how one variable, communication satisfaction, is affected by leadership style.
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CHAPTER III

METHOD OF STUDY

Introduction

This chapter identifies the population and the selection of the sample. The procedure for conducting the study is explained and the instruments which were used to collect the data are discussed. Finally, the statistical treatment of the data is provided.

Population

University Interscholastic League districts 11-2A, 13-2A, 14-2A, and 15-2A consist of thirty-two high schools in the North Central Texas Area. The schools are located within a 100 mile radius of Denton, Texas, and contain 50 percent of all the class 2A high schools in Region Two of the University Interscholastic League. Region Two is classified by the University Interscholastic League as the North Central Texas Area.

A class 2A high school consists of 125 to 265 students in grades nine through twelve. The faculties range from eight to twenty-two teachers. All high schools used in this study had one principal for grades nine through twelve.
Selection of the Sample

A letter explaining the study, a copy of the teachers' Communication Satisfaction Questionnaire, a copy of the Least Preferred Co-Worker Scale, a copy of the principals' Communication Satisfaction Questionnaire (Appendix A), a copy of the biographical data sheet (Appendix C), a statement agreeing to participate in the study (Appendix D), and a return addressed envelope were mailed to each of the thirty-two superintendents. A follow-up letter or telephone call was made to non-respondents.

Twenty-two high schools agreed to participate. The schools accepting included six schools from district 11-2A, seven schools from district 13-2A, seven schools from district 14-2A, and two schools from district 14-2A.

Data Collection Procedures

Prior to the collection of data the following tasks were completed: (1) permission was obtained to use the copyrighted Communication Satisfaction Questionnaire from one of its authors (Appendix E), (2) permission to collect data in each participating school district was received from the superintendent (Appendix D), and (3) cooperation in arranging the time and date for administration of the instruments was obtained from the participating high school principals.
The primary researcher or his representative administered the Communication Satisfaction Questionnaire, the Least Preferred Co-Worker Scale, and the biographical data sheet to the faculty and the high school principal in all twenty-two schools electing to participate in this study. The test administrators were given instructions regarding administering the instruments and were provided with a prepared statement to read to the potential respondents (Appendix F). This was done to standardize the administration of the instruments. All teachers in the school district were asked to respond to the Communication Satisfaction Questionnaire and complete a biographical data sheet. These instruments were administered without administrative personnel present. Each principal was asked to respond to the Least Preferred Co-Worker Scale and five questions on the Communication Satisfaction Questionnaire concerned with communication with subordinates. The principals also completed a biographical data sheet. These tasks were performed without faculty members present, and principals were read the same prepared statement that was read to the faculty.

Instruments

The instruments chosen for this study were the (1) Communication Satisfaction Questionnaire—to assess perceptions of communication satisfaction within the high school faculty and (2) the Least Preferred Co-Worker Scale—to access the leadership style of the high school principal.
Communication Satisfaction Questionnaire

Downs and Hazen (2) determined by factor analysis that communication satisfaction consists of eight components. The eight components are (1) general organization perspective—reflects information relating to the overall functioning of the organization; (2) personal feedback—relates to personal achievement and work and how they are recognized by the organization (3) organizational integration—reflects the individual's satisfaction with the information that he or she receives about the organization and the immediate work environment; (4) communication with superiors—reflects two-way communication with superiors; (5) communication climate—reflects communication at the organizational and personal levels or the extent to which communication motivates and stimulates workers to meet goals; (6) horizontal communication—reflects the extent of informal communication among fellow employees; (7) media quality—reflects the degree to which employees perceive the major forms of communication (memos, bulletins, publications) as functioning effectively; and (8) communication with subordinates—reflects the two-way communication with subordinates.

(Since principals were the only management in the building, they were the only individuals who responded to this component. It was termed the Principals' Communication Satisfaction Questionnaire.) Crino and White (1, p. 834) stated that the eight-factor solution is reasonable. While the
intrascale internal consistency is not as strong as it could be, the scales are still useful. They concluded, "The Downs and Hazen instrument appears to provide a sound empirical method for analyzing satisfaction in communication within an organization."

Downs and Hazen (2) used the following criteria for item selection: (1) each item had a primary loading of .40 or above on one of the eight components and (2) the item discriminated between satisfied and dissatisfied subjects. Five items were then selected to measure each communication satisfaction component. A component score, which may range from five (5) to thirty-five (35), is computed by summing the scores of the responses to the five items. Responses to each component are interpreted as follows: five to fifteen indicates dissatisfaction with the component measured, sixteen to twenty-four indicates indifference to the component measured, and twenty-five to thirty-five indicates satisfaction with the component measured.

Reliability of the questionnaire is reported by the authors to be .94. Downs and Hazen (1) found evidence of the factorial validity of the Communication Satisfaction Questionnaire. Factor analysis of the instrument, when administered in four organizational settings, produced great stability in the way the items clustered along the same eight factors. Hecht (8, p. 363) concluded, "The thoroughness of the construction of this satisfaction measure is apparent. . . . the strategies
employed in this study are exemplary. Input into initial item construction was obtained from a wide variety of sources and items were tested and factor analyzed for a variety of scaling styles."

The Communication Satisfaction Questionnaire is a Likert-type scale. Each respondent is asked to indicate his or her level of satisfaction on a particular item. The response is indicated on a one to seven point scale ranging from 1—very dissatisfied to 7—very satisfied. The midpoint, four, is used to indicate indifference.

Revision of the Communication Satisfaction Questionnaire for this study includes the following:

(a) Jean Hagewood Nicholson's (10) adaptation of the Communication Satisfaction Questionnaire for use in schools. Hoy and Miskel (9, p. 300) stated that Nicholson's adaptation is "useful for research in the educational setting. The instrument's reliability is high. The eight factors have been stable for several groups; and validity is strong."

(b) Question number one, which is concerned with job satisfaction, and is not representative of any of the eight communication factors, has been removed.

Least Preferred Co-Worker Scale

To classify leadership style, the instrument used was the Least Preferred Co-Worker Scale. This scale is a semantic differential scale consisting of seven to twenty-two bipolar
It requires respondents to describe their least preferred co-worker on an eight-point continuum (one representing the negative pole and eight presenting the positive pole).

There have been several different interpretations of the Least Preferred Co-Worker Scale (LPC) over the years. It has been interpreted as a measure of social distance (Fiedler, 3), personal needs (Fiedler, 4), cognitive complexity (Foa, Mitchel, and Biedler, 7), and motivational hierarchy (Fiedler, 5). However, all these interpretations have one common theme: a distinction between people primarily concerned with task performance (low-LPC individuals) and those concerned with interpersonal relations (high-LPC individuals). Those concerned with task performance describe their least preferred co-worker in a negative, rejecting manner saying in effect that the person with whom they cannot work is uncooperative, not proficient, unfriendly, and so forth. Those people concerned with interpersonal relations make a distinction between the person and the way he or she works. High LPC people describe the person with whom they are least able to work on a common task with adjectives such as cooperative, proficient, and friendly. Rice (11) supports this task-interpersonal interpretation. Based on 2,000 empirical findings in more than 100 studies, Rice concluded that high LPC persons place primary value on interpersonal success while low LPC persons place primary value on task success.
There is no standard version of the Least Preferred Co-Worker Scale. Since most of the research employing its use analyzes whether an individual is either task-oriented (low LPC) or relationship-oriented (high LPC), it is imperative to study the item content of the scale. Rice and Seaman (12) factor analyzed a twenty-two-item Least Preferred Co-Worker Scale. They found two distinct and independent subscales. One subscale loads heavily on a "task" factor and consists of seven items. Another subscale loads heavily on a "social" factor and consists of eleven items. Four items did not load on either scale. Because the scales are relatively independent, accounting for only 12 percent common variance, classification of leadership style could differ depending on the content of the Least Preferred Co-Worker Scale items. Rice and Seaman (12) found that consideration of item content used in the scale is of greatest importance in research which uses subjects spread across the full range of scores (rather than using only subjects scoring in the extremes). This was made apparent when a contingency table was created to compare the frequency of classification decisions based on a full range of scores for each subscale. Only 61 percent of the respondents were classified similarly on both subscales while 39 percent were classified as lows on one dimension but highs on the other.

In light of such results, there appear to be two major options. One is to decide, a priori, to include only one
subscale, and the other is to include both the social and task subscales and separately analyze results for three scores: task subscale, social subscale, and total. This research uses the a priori approach for the following reasons. Fiedler (6) has proposed this approach in his most recent study. Data suggest that the task score is more strongly related to measures this study is researching than is either the total score or a social score. Yuki (15) reported stronger correlations in studies involving "consideration" and "initiating structure" as measured by the Leader Behavior Description Questionnaire with the task scores. Rice, Seaman, and Garvin (12) found that predictions regarding the attitudinal correlates of the scale were more strongly supported when the task subscale is used to classify a task-oriented respondent than when the social subscale is used for this purpose. Each of these studies gives strength to the validity of the task subscale to measure leadership style, a primary consideration in this study.

The reliability of the task subscale is reported by Rice and Seaman (13) to have an alpha coefficient of .92.

Statistical Treatment

The data collected from the instruments administered to the teachers (N = 329) and principals (N = 22) were analyzed through the use of the Statistical Package for the Social Sciences (14).
Frequencies were obtained for both the teachers' and principals' biographical responses. The mean teacher subscale scores and mean total Communication Satisfaction Questionnaire (CSQ) scores for each school were determined. The principals' total scores on the LPC and the five-item communication with subordinates component of the CSQ were calculated.

Using the faculties' mean total CSQ score for each school, the relationship between principals' leadership style and the faculties' communication satisfaction was found through the use of simple linear regression. The relationship between principals' leadership style and each mean subscale score on the teachers' CSQ was determined through the use of multiple regression. Program Regression (14) from the Statistical Package for the Social Sciences was employed for all regression analyses.

Incremental partitioning of the variance through multiple linear regression was utilized to determine whether any of the eight teacher CSQ subscale scores contributed a significant proportion of the variance in the principals' LPC scores.

Multiple linear regression was also utilized to determine the relationship between teachers' CSQ scores and their biographical responses, between principals' LPC scores and their biographical responses, and between principals' CSQ scores and their biographical responses.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

ANALYSIS OF THE DATA

The results of this study of the relationship between principal leadership style and teacher communication satisfaction are presented in this chapter.

The method of analyzing the data collected from the twenty-two participating school districts incorporated the use of both simple and multiple linear regression. The Statistical Package for the Social Sciences (SPSSX) was utilized for all computer statistical analysis of the data.

Huck (2) explained that the simple linear regression formula contains only two variables. The variable being predicted, $Y$, is termed the criterion or dependent variable. The variable used to make the prediction, $X$, is called the predictor or independent variable. Simple linear regression is used when two variables, a dependent and an independent variable are present.

Cohen and Cohen (1) explained that multiple linear regression is a statistical tool that incorporates both regression and correlation and is used to determine the relationship between some dependent variable ($Y$) and a set of independent variables ($X_1, X_2, X_3, X_{etc.}$). Multiple linear regression has the ability to measure the relationship
of each independent variable to the total variance of the dependent variable. Cohen and Cohen (1) stated that the ability to separate the relationship of each variable and determine the total variance associated with a given variable is most important. Cohen and Cohen (1, p. 9) stated that the "capability for assessing unique variance, and the closely related measures of partial correlation and regression it provides is perhaps its most important feature."

Huck (2) explained that the correlation between a dependent variable and two or more independent variables is called the coefficient of multiple correlation, or multiple R. The multiple R signifies the relationship between the predicted score and the actual scores. It does not tell anything about the contribution of each independent variable to the total variance.

The contribution each independent variable makes upon the total variance is determined by using $R^2$. That is, the square of the multiple R is equal to the percent of variance in the dependent variable based on the information of the independent variable. Both $R^2$ and multiple R are generally given on multiple regression computer printouts.

Other important items of information given by the multiple regression equation are the Beta Weights. Beta Weights are regression coefficients which are standardized. This procedure allows raw data which are measured in
differing, noncomparable units to be standardized, i.e., changed into units that are on the same scale and therefore comparable. The predictor with the largest Beta Weight, whether positive or negative, can then be determined to be the best predictor.

Finally, a test of significance is needed to generalize to the population from the sample of data. For this purpose, the SPSSX program routinely provides an F statistic. The F statistic determines whether the multiple R correlation is far enough away from zero to allow rejection of the null hypothesis. A .05 level of significance was set for acceptance of the hypotheses.

The various descriptive statistics for the Least Preferred Co-Worker Scale and Communication Satisfaction Questionnaire are presented in Table I. The mean score on the principals' Least Preferred Co-Worker Scale was 27 with scores ranging from 7 to 50. The lowest attainable score on the Least Preferred Co-Worker Scale is 7 (extremely-task oriented) while the highest score is 56 (extremely human relations-oriented). The mean score on the teachers' Communication Satisfaction Questionnaire was 185 with the individual teachers' scores ranging from 75 to 245. The lowest attainable score on the Communication Satisfaction Questionnaire is 35, while the highest possible score is 245. The standard deviations of the Least Preferred Co-Worker
Scale and Communication Satisfaction Questionnaire were 10.7 and 32.7, respectively. These scores represent the amount of dispersion of the Least Preferred Co-Worker Scale scores and Communication Satisfaction Questionnaire scores about their respective means. The mean Communication Satisfaction Questionnaire score for each school and its principal's corresponding Least Preferred Co-Worker Scale score can be found in Appendix G.

TABLE I

<table>
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<th>Variable</th>
<th>Cases</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
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<td>22</td>
<td>27</td>
<td>10.7</td>
<td>7-50</td>
</tr>
<tr>
<td>CSQ</td>
<td>329</td>
<td>185</td>
<td>32.5</td>
<td>75-245</td>
</tr>
</tbody>
</table>

The Communication Satisfaction Questionnaire uses a seven-point scale ranging from one point for "Very Dissatisfied" to seven points for "Very Satisfied." A mean score on the total Communication Satisfaction Questionnaire ranging from 35 to 105 indicates dissatisfaction, scores ranging from 106 to 174 indicate indifference, and scores ranging from 175 to 245 indicate satisfaction.

Table II displays the mean subscale scores and the mean total Communication Satisfaction Questionnaire score for the
teachers within each school. For the purpose of description, the schools were labeled numbers 1 through 22, and the subscales were labeled A through G. The Communication Satisfaction Questionnaire consists of seven subscales: general organization perspective, personal feedback, organizational integration, communication with superiors, communication climate, horizontal communication, and media quality. A subscale score ranging from 5 to 15 indicates dissatisfaction, scores ranging from 16 to 24 indicate indifference, and scores ranging from 25 to 35 indicate satisfaction. The range of mean scores for the seven subscales was 25 to 28, indicating satisfaction with each component.

Examination of Table II, column A, reflects the teachers' responses to the five general organizational perspective items on the Communication Satisfaction Questionnaire. General organizational perspective items relate to the overall functioning of the organization through policies, goals, and changes. Responses to items 1, 9, 10, 13, and 14 measured the teachers' perceptions of general organizational perspective.

A summary of the mean score for each school reveals that schools 2, 3, 7, 9, 10, 11, 12, 17, 19, and 20 were indifferent toward general organizational perspective, while schools 1, 4, 5, 6, 8, 13, 14, 15, 16, 18, 20, and 22 were satisfied with this facet of communication.
Table II, column B, reflects the teachers' responses to the five personal feedback items on the Communication Satisfaction Questionnaire. Personal feedback relates to personal achievement and work, and how it is recognized by the organization. Items 4, 5, 6, 11, and 15 measured the teachers' perceptions of personal feedback.

A summary of the mean scores in column B reveals that schools 2, 3, 5, 7, 9, 10, 11, 12, 16, 17, and 19 were indifferent toward the personal feedback component of communication satisfaction, while schools 1, 4, 6, 8, 13, 14, 15, 18, 20, 21, and 22 were satisfied with the personal feedback they received.

Table II, column C, reflects the teachers' responses to the five organizational integration items on the Communication Satisfaction Questionnaire. Organizational integration recognizes the satisfaction with the information that is received concerning the organization and the immediate work environment. Items 1, 2, 7, 8, and 12 measured the teachers' perception of organization integration.

A summary of the mean scores in column C reveals that schools 7, 12, and 17 were indifferent toward the information they received about organizational integration, while schools 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 16, 18, 19, 20, 21, and 22 were all satisfied with the information they received regarding organizational integration.
Table II, column D, reflects the teachers' responses to the five communication with superiors' items on the Communication Satisfaction Questionnaire. Communication with superiors refers to the two-way communication with the superior; it includes the extent to which the superior listens, pays attention, and is open to ideas. Items 17, 19, 22, 26, and 31 measured the teachers' perceptions of communication with superiors.

A summary of the mean scores of column D reveals that schools 2, 7, and 17 were indifferent toward the two-way communications with their principals, while schools 1, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, and 22 were all satisfied with the subordinate-superior communication process in their school.

Table II, column E, reflects the teachers' responses to the five items which measure communication climate on the Communication Satisfaction Questionnaire. Communication climate refers to the communication at the organizational and personal levels and the extent to which it motivates employees to meet goals. Items 16, 18, 20, 23, and 24 measured the teachers' perceptions of communication climate.

A summary of the mean scores in column E reveals that schools 2, 7, 12, 16, and 17 were indifferent toward the communication climate in their schools, while schools 1, 3, 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 18, 19, 20, 21, and 22
were all satisfied with the communication climate in their school.

Table II, column F, reflects the teachers' responses to the five items which measure horizontal communication. Horizontal communication relates to the informal communication among fellow employees; it includes the extent to which the "grapevine" is active, accurate, and free flowing in the organization. Items 25, 27, 28, 30, and 34 measured the teachers' perception of horizontal communication.

A summary of the mean scores in column F reveals that school 12 is the only school that was indifferent toward the activity of the informal communication channels. Schools 1 through 11 and 13 through 22 were all satisfied with the informal communication channels in their schools.

Table II, column G, reflects the teachers' responses to the five items which measure media quality. Media quality reflects the degree to which employees perceive the major forms of communication, like memos and publications, as functioning effectively. Items 21, 30, 32, 33, and 35 measured the teachers' perception of media quality.

A summary of the mean scores in column G reveals that schools 2, 7, 12, 16, and 17 were indifferent toward the media quality component of communication satisfaction, while schools 1, 3, 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 18, 19, 20, 21, and 22 were all satisfied with media quality.
<table>
<thead>
<tr>
<th>School</th>
<th>Subscale*</th>
<th>Total</th>
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<td>3</td>
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<tr>
<td>Mean</td>
<td>25 25 27 28 26 27 26</td>
<td>185</td>
</tr>
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</table>

*Subset A = general organization perspective, B = personal feedback, C = organizational integration, D = communication with superiors, E = communication climate, F = horizontal communication, and G = media quality.
Hypothesis One

There will be a significant relationship between the principals' leadership style and the faculties' communication satisfaction.

The first predictive relationship was tested by simple linear regression. It asserts that the faculties' communication satisfaction can predict or be associated with the principals' leadership style. The principals' leadership style, which is defined as the score received on the Least Preferred Co-Worker Scale, served as the dependent variable. The Least Preferred Co-Worker Scale was regressed upon the independent variable, the faculties' total Communication Satisfaction Questionnaire, for the corresponding school district. The effect of the faculties' Communication Satisfaction Questionnaire scores upon the principals' Least Preferred Co-Worker Scale scores was found to be negatively correlated \( r = -0.057 \). This small correlation was not significant \( F = 0.006, p = 0.8003 \), therefore, hypothesis one was rejected.

Hypothesis Two

There will be a significant relationship between the principals' leadership style and the faculties' communication satisfaction as measured by the following communication satisfaction factors: (a) General Organization Perspective, (b) Personal Feedback, (c) Organizational Integration, (d) Communication with Superiors, (e) Communication Climate, (f) Horizontal Communication, and (g) Media Quality.

The predictive relationship to be tested by multiple correlation analysis is that pertaining to leadership style.
It is hypothesized that the total score of the seven sub-scales of the Communication Satisfaction Questionnaire can predict or be associated with the principals' leadership style.

For this analysis and discussion, the Least Preferred Co-Worker Scale scores served as the dependent variable and the seven subscale scores served as the independent variables in the multiple regression equation. The multiple correlation between the seven subscales of the Communication Satisfaction Questionnaire and the principals' Least Preferred Co-Worker Scale score was .47, indicating that the seven subscale scores on the Communication Satisfaction Questionnaire account for 22 percent of the variance in the principals' Least Preferred Co-Worker Scale score. The relationship between the seven Communication Satisfaction Questionnaire subscales and the Least Preferred Co-Worker Scale scores was not significant ($F = .585$, $p = .757$), therefore, hypothesis two was rejected. The results of this multiple regression procedure are shown in Table III.

An examination of Table III raises an interesting question which was not asked in the hypothesis—the possibility of multicollinearity among the independent variables. The size of the standard error, 11.54772, and the negative adjusted $R^2$ raised the possibility of severe multicollinearity among the independent variables. To
TABLE III
MULTIPLE REGRESSION LEAST PREFERRED CO-WORKER SCALE USED AS DEPENDENT VARIABLE AND TOTAL COMMUNICATION SATISFACTION QUESTIONNAIRE USED AS INDEPENDENT VARIABLE

<table>
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<th>SCQ Subscale</th>
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<td>-.386</td>
<td>-.330</td>
<td>.746</td>
</tr>
</tbody>
</table>

ascertain if there was multicollinearity, Pearson product moment correlation coefficients were calculated among the independent variables, Communication Satisfaction Questionnaire subscale scores, and these coefficients are presented in Table IV. The seven subscales were found to be highly correlated with each other. The correlation coefficients ranged from .73 to .92. Variables with correlations of .70 or higher are usually considered too highly correlated to appear in the same regression model.
TABLE IV
CORRELATION MATRIX COMMUNICATION SATISFACTION QUESTIONNAIRE SUBSCALES

<table>
<thead>
<tr>
<th>Subscales*</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.00</td>
<td>.80</td>
<td>.88</td>
<td>.77</td>
<td>.83</td>
<td>.82</td>
<td>.73</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>1.00</td>
<td>.90</td>
<td>.90</td>
<td>.88</td>
<td>.76</td>
<td>.76</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td>1.00</td>
<td>.90</td>
<td>.87</td>
<td>.82</td>
<td>.92</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.92</td>
<td>.76</td>
<td>.31</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.81</td>
<td>.91</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
<td>.78</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

*Subscale A = general organizational perspective, B = personal feedback, C = organizational integration, D = communication with superiors, E = communication climate, F = horizontal communication, and G = media quality.

Hypothesis Three

There will be a significant relationship between one single factor or a subset of the seven factors of communication satisfaction and a particular leadership style.

To ascertain whether any of the subscales of the teachers' Communication Satisfaction Questionnaire contributed a significant amount of the variance in the principals' Least Preferred Co-Worker Scale score, incremental partitioning of the variance through multiple linear regression was utilized. Again, severe multicollinearity among the independent variables presented a problem. The amount of variance contributed by
each subscale was found by constructing a full model and seven restricted models. The full model regression equation consisted of the dependent variable and the seven independent variables. To construct each restricted model seven new regression equations were created with one dependent variable (that being measured) omitted. The difference between the full model and each restricted model, in turn, represents the amount of unique variance contributed to the regression equation by each independent variable.

The amount of unique variance contributed by each of the seven Communication Satisfaction Questionnaire subscales is presented in Table V. General organizational perspective had 1.6 percent unique variance, personal feedback had 0 percent unique variance, organizational integration had 1.2 percent unique variance, communication with superiors had 1.6 percent unique variance, communication climate had .6 percent unique variance, horizontal communication had 1.4 percent unique variance, and media quality had .8 percent unique variance. None of the subscales' $F$ ratios was significant at the .05 level ($F = 4.60, df = 1, 14$). The multicollinearity among the dependent variables is evidenced in the extremely small amounts of unique variance displayed by the variables. The subscales are working together, not uniquely or separately in their relationship with the principals' Least Preferred Co-Worker Questionnaire scores.
TABLE V
INCREMENTAL PARTITIONING OF THE VARIANCE COMMUNICATION SATISFACTION QUESTIONNAIRE SUBSCALE SCORES

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Variance Contribution</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Organizational Perspective</td>
<td>0.026</td>
<td>0.683</td>
</tr>
<tr>
<td>Personal Feedback</td>
<td>0.000</td>
<td>0.002</td>
</tr>
<tr>
<td>Organizational Integration</td>
<td>0.012</td>
<td>0.306</td>
</tr>
<tr>
<td>Communication with Superiors</td>
<td>0.016</td>
<td>0.438</td>
</tr>
<tr>
<td>Communication Climate</td>
<td>0.006</td>
<td>0.170</td>
</tr>
<tr>
<td>Horizontal Communication</td>
<td>0.014</td>
<td>0.374</td>
</tr>
<tr>
<td>Media Quality</td>
<td>0.008</td>
<td>0.224</td>
</tr>
</tbody>
</table>

*Significant at .05. **Significant at .01.

Hypothesis Four

There will be a significant relationship in the total communication satisfaction among teachers for the following variables: (a) sex, (b) age, (c) training level, (d) years in the present school system, (e) total years in teaching profession, (f) total years under the present high school principal, and (g) main subject area taught.

The relationship between the teachers' Communication Satisfaction Questionnaire scores and their responses to the biographical variables was investigated through the use of multiple linear regression and the results of the analysis are shown in Table VI. The raw data from the biographical variables can be found in Appendix J.
### TABLE VI


<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years Teaching</td>
<td>.727</td>
<td>.438</td>
<td>.181</td>
<td>1.657</td>
</tr>
<tr>
<td>Age</td>
<td>3.481</td>
<td>2.869</td>
<td>.103</td>
<td>1.214</td>
</tr>
<tr>
<td>Years Under Principal</td>
<td>.812</td>
<td>.689</td>
<td>.081</td>
<td>1.178</td>
</tr>
<tr>
<td>Years in School</td>
<td>- .978</td>
<td>.441</td>
<td>- .216</td>
<td>-2.220*</td>
</tr>
<tr>
<td>Training</td>
<td>2.615</td>
<td>3.980</td>
<td>.040</td>
<td>.657</td>
</tr>
<tr>
<td>Teaching Area</td>
<td>4.421</td>
<td>3.076</td>
<td>1.437</td>
<td>.152</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple R</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.2283</td>
<td>.0521</td>
<td>2.252*</td>
</tr>
</tbody>
</table>

*Significant at .05. **Significant at .01.

The biographical variables accounted for 5 percent of the variance in the teachers' Communication Satisfaction Questionnaire scores. Table VI reveals the following effects of each biographical variable on the Communication Satisfaction Questionnaire score: (1) as the number of years in teaching increases .727 years, the Communication Satisfaction Questionnaire score increases one point; (2) as the age of the respondent increases 3.481 years, the Communication Satisfaction Questionnaire score increases one point; (3) as
the years spent teaching under the same principal increase .812 years, the Communication Satisfaction Questionnaire score increases one point; and (4) as the years spent teaching in the school system decrease -.978, the Communication Satisfaction Questionnaire scores increase one point. The total variance contribution of these variables was significant ($F = 2.52, p < .05$). As the number of years in the school system increased, the satisfaction with the communication practices within the school decreased.

Hypothesis Five

There will be a significant relationship in the leadership style score among high school principals for the following variables: (a) sex, (b) age, (c) training level, (d) years teaching experience, (e) years administrative experience, (f) number of years as an administrator in the present school system, and (g) major teaching field before becoming an administrator.

The relationship between the principals' leadership style and their responses to the biographical variables (see Appendix K) was examined through the use of multiple linear regression. The results of this analysis can be found in Table VII.

As shown in Table VII the relationship between the principals' Least Preferred Co-Worker Scale scores and their collective biographical variables was statistically significant ($F = 3.623, p < .05$) with the latter accounting for 59 percent of the variance in the Least Preferred Co-Worker Scale scores. Table VII reveals the following effects of each biographical variable on the Least Preferred Co-Worker
TABLE VII
MULTIPLE REGRESSION OF PRINCIPALS' LEAST PREFERRED CO-WORKER SCALE SCORES ON AGE, YEARS IN SCHOOL SYSTEM, ADMINISTRATIVE EXPERIENCE, YEARS TEACHING, TEACHING FIELD, AND TRAINING

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>11.186</td>
<td>3.700</td>
<td>.741</td>
<td>3.023**</td>
</tr>
<tr>
<td>Years in School</td>
<td>.297</td>
<td>.370</td>
<td>.181</td>
<td>.436</td>
</tr>
<tr>
<td>Administrative Experience</td>
<td>-.748</td>
<td>.558</td>
<td>-.358</td>
<td>-1.341</td>
</tr>
<tr>
<td>Years Teaching</td>
<td>-.198</td>
<td>.332</td>
<td>-.117</td>
<td>-.598</td>
</tr>
<tr>
<td>Teaching Field</td>
<td>1.375</td>
<td>2.514</td>
<td>.101</td>
<td>.547</td>
</tr>
<tr>
<td>Training</td>
<td>-26.545</td>
<td>9.803</td>
<td>-.528</td>
<td>-2.708*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple R</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.76924</td>
<td>.5917</td>
<td>3.623*</td>
</tr>
</tbody>
</table>

*Significant at .05.  **Significant at .01.

Scale score: (1) as the age of the principal increases 11.186 years, the Least Preferred Co-Worker Scale score increases one point; (2) as the number of years a principal spends in a school system increases .297 years, the Least Preferred Co-Worker Scale score increases one point; (3) as the number of years of administrative experiences decreases -.748 years, the Least Preferred Co-Worker Scale score decreases one point; and (4) as the years spent teaching
decreases -.198 years, the Least Preferred Co-Worker Scale score decreases one point.

When the relationships between the Least Preferred Co-Worker Scale scores and the individual biographical variables were examined, only two variables, age (p < .01) and training level (p < .05), were found to be significantly related to the Least Preferred Co-Worker Scale scores. An increase in the principals' Least Preferred Co-Worker Scale scores was associated with an increase in their age and a decrease in their level of training.

Hypothesis Six

There will be a significant relationship in the communication with subordinates' subtest scores among the high school principals for the following variables: (a) sex, (b) age, (c) training level, (d) years teaching experience, (e) years administrative experience, (f) number of years as an administrator in the present school system, and (g) major teaching field before becoming an administrator.

Multiple linear regression was utilized to determine the relationship between principals' Communication Satisfaction Questionnaire scores and their responses to the biographical variables with the Communication Satisfaction Questionnaire scores serving as the dependent variable. The raw data are presented in Appendix K. The results of this analysis are presented in Table VIII.

The biographical variables had the following effects on the principals' Communication Satisfaction Questionnaire score: (1) as the age of the principal decreased -2.497 years, the
TABLE VIII
MULTIPLE REGRESSION OF PRINCIPAL COMMUNICATION SATISFACTION QUESTIONNAIRE SCORES ON AGE, YEARS IN THE SCHOOL SYSTEM, ADMINISTRATIVE EXPERIENCE, YEARS TEACHING, TEACHING FIELD, AND TRAINING

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-2.497</td>
<td>1.748</td>
<td>-.448</td>
<td>- .174</td>
</tr>
<tr>
<td>Years in School</td>
<td>.015</td>
<td>.175</td>
<td>.025</td>
<td>.087</td>
</tr>
<tr>
<td>Administrative Experience</td>
<td>.535</td>
<td>.263</td>
<td>.695</td>
<td>2.033</td>
</tr>
<tr>
<td>Years Teaching</td>
<td>.190</td>
<td>.157</td>
<td>.304</td>
<td>1.214</td>
</tr>
<tr>
<td>Teaching Field</td>
<td>.842</td>
<td>.187</td>
<td>.167</td>
<td>.709</td>
</tr>
<tr>
<td>Training</td>
<td>-3.034</td>
<td>4.630</td>
<td>-.163</td>
<td>- .655</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multiple R</th>
<th>R²</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.5767</td>
<td>.3326</td>
<td>1.246</td>
</tr>
</tbody>
</table>

*Significant at .05. **Significant at .01.

Communication Satisfaction Questionnaire score decreased one point; (2) as the number of years spent in the school system increased .015 years, the Communication Satisfaction Questionnaire score increased one point; (3) as the principal's administrative experience increased .535 years the Communication Satisfaction Questionnaire score increased one point; and (4) as the number of years the principal spent teaching increased .190, the Communication Satisfaction Questionnaire score increased one point.
None of the biographical variables contributed a significant proportion of the variance in the Communication Satisfaction Questionnaire scores. Examination of the Beta Weights reveals that the variable, number of years experience as an administrator, contributed the largest proportion of variance among the biographical variables; however, the amount was not significant. Years in the school district had the least effect on the principals' Communication Satisfaction Questionnaire scores. The total amount of variance, 33 percent, contributed by these variables collectively was also not significant ($F = 1.24$, $p = .34$).
CHAPTER BIBLIOGRAPHY


CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary, findings, and conclusions of this study. Recommendations for further research are also enumerated.

Summary

This study investigated the relationship between the principals' leadership style and the perceived communication satisfaction of their faculties in selected high schools with an enrollment of 125 to 265 students. The selected principals and high schools were all located in North Central Texas. The study utilized seven components of communication satisfaction to determine if the faculties' perceived communication satisfaction varied with the principals' leadership style.

Twenty-two of the thirty-two size 2A high schools in the North Central Texas area chose to participate in the study. The Communication Satisfaction Questionnaire and a biographical data survey were administered to the faculties by the author or one of his representatives during a faculty meeting. Responses to the Communication Satisfaction Questionnaire were used to determine the teachers' communication
satisfaction as designated by the following components: (1) general organization perspective, (2) personal feedback, (3) organizational integration, (4) communication with superiors, (5) communication climate, (6) horizontal communication, and (7) media quality. An examination of the level of communication satisfaction among the faculties in this study revealed that five faculties were indifferent and seventeen faculties were satisfied with the total communication practices of their principal. However, each component of the Communication Satisfaction Questionnaire showed differing levels of satisfaction.

The teachers also responded to the following biographical variables, number of years teaching, age, number of years under present principal, number of years in the present school system, training level, and teaching area.

The principals responded to the Least Preferred Co-Worker Scale, the principals' Communication Satisfaction Questionnaire, and a biographical data form. Responses to the Least Preferred Co-Worker Scale were used to determine leadership style. The principals' scores ranged from a low of 7 to a high of 50, indicating that there were varying degrees of task-oriented and human relation-oriented leaders in the twenty-two schools. The Communication Satisfaction Questionnaire was used to determine the principals' perception of one particular communication satisfaction component, communication with subordinates. This component measured
communication to and from subordinates, the extent to which subordinates felt responsible for initiating upward communication, and the extent to which the principal thought there was a communication overload. The results indicated that nineteen principals were satisfied, two were indifferent, and one was dissatisfied with this communication component. The principals also responded to a survey which included the following biographical variables: age, number of years in the present school system, administrative experience, number of years spent as a teacher, teaching field, and training level.

Leadership style was used as the dependent variable and placed in a regression equation with the communication satisfaction components serving as the independent variables to test hypotheses 1, 2, and 3. These three hypotheses were concerned with the relationship between leadership style and any factors of the Communication Satisfaction Questionnaire scores or the total Communication Satisfaction Questionnaire scores. Testing of these three hypotheses revealed that the relationship was not significant at the .05 level.

Multiple regression was used to statistically analyze the relationship between the teachers' responses to the Communication Satisfaction Questionnaire and the biographical data survey, the principals' responses to the Least Preferred Co-Worker Scale and the biographical data survey, and the principals' responses to the Communication Satisfaction
Questionnaire and the biographical data survey. Hypothesis 4 tested the relationship between the teachers Communication Satisfaction Questionnaire scores and their biographical variables. This relationship was significant at the .05 level, with the biographical variables accounting for 5 percent of the variance in the teachers' Communication Satisfaction Questionnaire scores. Hypothesis 5 tested the relationship between the principals' Least Preferred Co-Worker Scale scores and the biographical variables. This relationship was significant at the .05 level with the biographical variables accounting for 59 percent of the variance in the principals' Least Preferred Co-Worker Scale scores. Hypothesis 6 tested the relationship between the principals' Communication Satisfaction Questionnaire scores and their biographical variables. This relationship was not significant at the .05 level.

Findings

The following findings resulted from the study.

1. No significant relationship was found between the principals' leadership style, as measured by the Least Preferred Co-Worker Scale, and the faculties' communication satisfaction level, as measured by the faculties total Communication Satisfaction Questionnaire score ($p = .80$). Hypothesis 1 was rejected.
2. No significant relationship was found between the principals' leadership style, as measured by the Least Preferred Co-Worker Scale, and the seven Communication Satisfaction Questionnaire subscales, as measured by the faculties' perception of the following communication satisfaction factors: (a) general organization perception, (b) personal feedback, (c) organizational integration, (d) communication with superiors, (e) communication climate, (f) horizontal communication, and (g) media quality \((p = .75)\). Hypothesis 2 was rejected.

3. No significant relationship was found between one single factor or a subset of the seven factors of communication satisfaction, as measured by the seven factors of communication satisfaction and a particular leadership style \((F = 4.60, p > .05)\). Hypothesis 3 was rejected.

4. A significant relationship was found between the total communication satisfaction among teachers, measured by the total Communication Satisfaction Questionnaire scores, and the following biographical variables: (a) sex, (b) age, (c) training level, (d) years in the present school system, (e) total years in teaching profession, (f) total years under the present high school principal, and (g) main subject area taught \((p < .05)\). Hypothesis 4 was accepted.

5. A significant relationship was found between the principals' leadership style, as measured by the Least
Preferred Co-Worker Scale, and the following biographical variables: (a) sex, (b) age, (c) training level, (d) years teaching experience, (e) years administrative experience, (f) number of years as an administrator in the present school system, and (g) major teaching field before becoming an administrator ($p < .05$). Hypothesis 5 was accepted.

6. No significant relationship was found between the principals' Communication Satisfaction Questionnaire scores, as measured by the Communication Satisfaction Questionnaire subscale, communication with subordinates and the following biographical variables: (a) sex, (b) age, (c) training level, (d) years teaching experience, (e) years administrative experience, (f) number of years as an administrator in the present school system, and (g) major teaching field before becoming an administrator ($p = .34$). Hypothesis 6 was rejected.

Additional Findings

A review of the data revealed the following additional findings.

1. Each communication satisfaction component, measured by the teachers' Communication Satisfaction Questionnaire scores, had a differing level of satisfaction. The results of each of the communication components follows by order of the percentage of satisfaction levels, starting at the lowest percentage and continuing to the highest level of satisfaction.
Personal feedback.—The communication satisfaction component with the lowest level of satisfaction was personal feedback. The study indicated that only 50 percent of the school systems were satisfied with this component. Items in this component measured the teachers' perceptions of how they were judged and how they were recognized for their efforts in the school system.

General organization perspective.—The study indicated that 55 percent of the school systems were satisfied with this communication satisfaction component. Items in this component measured the teachers' perceptions of the overall functioning of the school, including the implementation of specific policies, goals, and changes in the school system.

Communication climate.—The study indicated that 77 percent of the school systems were satisfied with this communication satisfaction component. Items in this component measured the teachers' perceptions of the principals' ability to motivate and stimulate teachers to meet school goals and handle conflicts through proper channels.

Media quality.—The study indicated that 77 percent of the school systems were satisfied with this communication satisfaction component. Items in this component measured the teachers' perceptions of the extent to which written communications were well-written, helpful, and did not create an information overload.
Organizational integration.—The study indicated that 86 percent of the school systems were satisfied with this communication satisfaction component. Items in this component measured the teachers' perceptions of how information relating to department policies and plans, the requirements of the job, and personnel news was disseminated to the faculty.

Communication with superiors.—The study indicated that 86 percent of the school systems were satisfied with this communication satisfaction component. Items in this component measured the teachers' perceptions of both upward and downward communication with the principal.

Horizontal communication.—The communication satisfaction component with the highest level of communication satisfaction was found in the area of horizontal communication. The study indicated that 95 percent of the school systems were satisfied with this communication satisfaction component. Items in this component measured the teachers' perceptions of how accurate and free flowing were the horizontal and informal communication networks.

2. The mean communication satisfaction score (185) for all twenty-two schools revealed that faculties were generally satisfied with the communication practices in their districts.

3. The principals' scores on the Communication Satisfaction Questionnaire revealed that 86 percent of the
principals were satisfied with the communication practices
to and from their subordinates.

4. The principals' **Least Preferred Co-Worker Scale**
scores indicated that there is no dominant type of leadership style among the twenty-two high school principals.

5. There was a significant relationship between the teachers' communication satisfaction scores and one biographical variable, number of years in the school system. As the number of years in the school system increased, the satisfaction with the communication practices within the school decreased.

6. There was a significant relationship between the principals' **Least Preferred Co-Worker Scale** scores and two of the principals' biographical variables, age and level of training. An increase in the principals' **Least Preferred Co-Worker Scale** score was associated with an increase in their age and a decrease in their level of training.

**Major Conclusions**

The following major conclusions were drawn based upon the findings of the study. These conclusions apply only to the subjects of this study. They can be generalized only to the population studied.

1. Principals' leadership style, whether task-oriented or human relationship-oriented, does not effect the level of
the teachers' communication satisfaction within the school system.

2. The seven components of communication satisfaction, general organization perspective, personal feedback, organizational integration, communication with superiors, communication climate, horizontal communication, and media quality, can not predict a particular leadership style.

3. No single subscale or a subset of subscales of communication satisfaction can predict a particular leadership style.

4. The teachers' biographical variable, number of years in the school, can be used to predict the level of satisfaction they have with their principal's communication practices as measured by the Communication Satisfaction Questionnaire.

5. The principals' biographical variable, age, can be used to predict their leadership style as measured by the Least Preferred Co-Worker Scale.

6. The principals' level of communication satisfaction with subordinates can not be predicted from the biographical variables age, years in the present school system, administrative experience, years teaching, teaching field, and training.
Additional Conclusions

Additional conclusions which were reached from the findings of the study follow. As in the preceding section, it is necessary to restate that these conclusions apply only to the subjects of this study. They can be generalized only to the population studied.

1. Faculties in class 2A high schools in the North Central Texas area are least satisfied with two particular components of communication satisfaction, personal feedback and general organizational perspective.

2. Faculties in class 2A high schools in the North Central Texas area are most satisfied with the horizontal communication component of communication satisfaction.

3. Faculties in class 2A high schools in the North Central Texas area are satisfied with the general communication practices exhibited by their principals.

4. Principals in class 2A high schools in the North Central Texas area are satisfied with communication practices to and from subordinates in their schools.

5. Principals in class 2A high schools in the North Central Texas area do not exhibit one dominant type of leadership style, but instead are equally distributed between task-oriented and human relation-oriented leaders.
Recommendations for Further Research

The following recommendations for further research are made based on the findings and conclusions of this study.

1. The study should be replicated involving other populations to confirm the findings and conclusions. Specific recommendations include (a) replicating the study in larger and smaller high schools, (b) replicating the study in elementary schools, and (c) replicating the study in other areas of Texas.

2. Since the faculty of 50 percent of the school districts involved in the study were either indifferent to or dissatisfied with the items measured in the personal feedback component, additional research should be conducted to determine the reasons for this high percentage.

3. Since the faculty of 45 percent of the school districts involved in the study were either indifferent to or dissatisfied with the items measured in the general organizational perspective component, additional research should be conducted to determine the reasons for this high percentage. A specific research question might be, "How could 2A high school principals improve the communication process of communicating the policies, goals, and methods of change more effectively?"

4. The study of organizational communication within educational organizations needs further study. A specific
topic recommended for future research is the relationship 
between communication satisfaction and effective school 
leaders.

Recommendations

Specific recommendations for the school districts 
studied include the following.

1. The administrative personnel of these districts 
should recognize that a high percentage of their faculties 
are not satisfied with personal feedback. Principals should 
initiate efforts to improve the communication process for 
information flow related to personal achievement, work and 
recognition of faculty members in the organization.

2. Another area of needed improvement is that of 
general organizational perspective. The high school princi-
pals should make an effort to study the communication process 
by which information concerning policy, goals, and changes 
occurs.

3. High school principals should be aware that the 
more tenure teachers have in the school district, the more 
dissatisfied they become with the communication process. 
The principals should implement methods to improve communica-
tion between themselves and "older" faculty members.

4. High school principals should be aware that there 
is a relationship between age and leadership style. There 
is a tendency for older principals to be more human
relations-oriented. Human relation-oriented leaders have more difficulty working with dogmatic and stubborn individuals. Principals should be aware of this when they are hiring new personnel for their school.

5. Institutions which prepare educational administrators should make future principals aware that personal feedback and general organizational perspective components of communication satisfaction are two areas which show the greatest potential for dissatisfaction in 2A high schools in the North Central Texas area.
Appendix A

COMMUNICATION SATISFACTION QUESTIONNAIRE
(For Teachers)

Through this study we hope to find out how satisfactory are the communication practices of your high school principal and what suggestions you have for improving them. Your answers are completely confidential so be as frank as you wish. This is not a test—your opinion is the only right answer. Do not sign your name; I do not wish to know who you are. The answers will be combined into groups for reporting purposes.

Listed below are several kinds of information often associated with a person's job. Please indicate how satisfied you are with the amount and/or quality of each kind of information by circling the appropriate number at the right.

1 = Very Dissatisfied (VD)
2 = Dissatisfied (D)
3 = Somewhat Dissatisfied (SD)
4 = Indifferent (I)
5 = Slightly Satisfied (SS)
6 = Satisfied (S)
7 = Very Satisfied (VS)

1. Information about my progress in my job                    | VD | D  | SD | I  | SS | S  | VS |
2. Personnel news                                            | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
3. Information about school system policies and goals         | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
4. Information about how my job compares with others          | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
5. Information about how I am being judged                    | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
6. Recognition of my efforts                                  | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
7. Information about departmental policies and goals          | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
8. Information about the requirements of my job               | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
9. Information about government action affecting my school system | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
10. Information about relations with teachers' associations   | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
11. Reports on how problems in my job are being handled       | 1  | 2  | 3  | 4  | 5  | 6  | 7  |
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<td>Information about school system's financial standing</td>
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<tr>
<td>14</td>
<td>Information about accomplishments and/or failures of the school system</td>
</tr>
<tr>
<td>15</td>
<td>Extent to which my superiors know and understand the problems faced by subordinates</td>
</tr>
<tr>
<td>16</td>
<td>Extent to which school communication motivates and stimulates an enthusiasm for meeting its goals</td>
</tr>
<tr>
<td>17</td>
<td>Extent to which my supervisor listens and pays attention to me.</td>
</tr>
<tr>
<td>18</td>
<td>Extent to which the people in my organization have great ability as communicators</td>
</tr>
<tr>
<td>19</td>
<td>Extent to which my supervisor offers guidance for solving job-related problems</td>
</tr>
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<td>20</td>
<td>Extent to which the school system's communication makes me identify with it or feel a vital part of it</td>
</tr>
<tr>
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<td>Extent to which the school system's publications are interesting and helpful</td>
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<tr>
<td>22</td>
<td>Extent to which my supervisor trusts me</td>
</tr>
<tr>
<td>23</td>
<td>Extent to which I receive on time the information needed to do my job</td>
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<td>24</td>
<td>Extent to which conflicts are handled appropriately through proper communications channels</td>
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<tr>
<td>25</td>
<td>Extent to which the grapevine is active in our organization</td>
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<tr>
<td>26</td>
<td>Extent to which my supervisor is open to ideas</td>
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<td>27</td>
<td>Extent to which horizontal communication with other employees is accurate and true-flowing</td>
</tr>
<tr>
<td>Number</td>
<td>Item</td>
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<tr>
<td>--------</td>
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<td>28.</td>
<td>Extent to which communication practices are adaptable to emergencies</td>
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<td>29.</td>
<td>Extent to which my work group is compatible</td>
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<td>30.</td>
<td>Extent to which our meetings are well organized</td>
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<td>31.</td>
<td>Extent to which the amount of supervision given me is about right</td>
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<tr>
<td>32.</td>
<td>Extent to which written directives and reports are clear and concise</td>
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<tr>
<td>33.</td>
<td>Extent to which the attitudes toward communication in the school system are basically healthy</td>
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<tr>
<td>34.</td>
<td>Extent to which informal communication is active and accurate</td>
</tr>
<tr>
<td>35.</td>
<td>Extent to which the amount of communication in the school system is about right</td>
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**COMMUNICATION SATISFACTION QUESTIONNAIRE**  
*(For Administrators)*

Through this study we hope to find out how satisfactory the communication practices of your high school staff are and what suggestions you have for improving them. Your answers are completely confidential so be as frank as you wish. This is not a test—your opinion is the only right answer. Do not sign your name; I do not wish to know who you are. The answers will be combined into groups for reporting purposes.

Listed below are several kinds of information often associated with a person's job. Please indicate how satisfied you are with the amount and/or quality of each kind of information by circling the appropriate number at the right.

1 = Very Dissatisfied  
2 = Dissatisfied  
3 = Somewhat Dissatisfied  
4 = Indifferent  
5 = Slightly Satisfied  
6 = Satisfied  
7 = Very Satisfied

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>1. Extent to which my subordinates are responsive</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>2. Extent to which my subordinates anticipate my needs for information</td>
<td></td>
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<tr>
<td>3. Extent to which I do not have a communication overload</td>
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<tr>
<td>4. Extent to which my subordinates are receptive to evaluation, suggestions, and criticisms</td>
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<td>5. Extent to which my subordinates feel responsible for initiating accurate upward communication</td>
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Downs and Hazen  
1971
Appendix B

THE LEAST-PREFERRED CO-WORKER SCALE

(LPC)

People differ in the ways they think about those with whom they work. Please give your immediate, first reaction to the items which follow.

Following are pairs of words which are opposite in meaning, such as Very Neat and Not Neat. You are asked to describe someone with whom you have worked by placing an "X" in one of the eight spaces on the line between the two words.

Each space represents how well the adjective fits the person you are describing, as if it were written:

Very Neat : _ _ _ _ _ _ _ _ Not Neat

8 = Very Neat
7 = Quite Neat
6 = Somewhat Neat
5 = Slightly Neat
4 = Slightly Untidy
3 = Somewhat Untidy
2 = Quite Untidy
1 = Very Untidy

FOR EXAMPLE: If you were to describe the person with whom you are able to work least well and you ordinarily think of him/her as being quite neat, you would put an "X" in the second space from the words Very Neat.

Very Neat : _ X _ _ _ _ _ _ Not Neat

If you ordinarily think of the person with whom you can work least well as being only slightly neat, you put your "X" in the space as follows:

Very Neat : _ _ _ _ _ _ X _ _ _ _ _ _ _ _ _ _ _ _ _ _ Not Neat

If you would think of the person as being very untidy, you would use the space nearest the words Not Neat:

Very Neat : _ _ _ _ _ _ _ _ X _ _ _ _ _ _ Not Neat

Look at the words at both ends of the line before you put in your "X." Please remember that there are no right or wrong answers. Work rapidly; your first impression is likely to be the best. PLEASE DO NOT ommit any items, AND MARK EACH ITEM ONLY ONCE.
Now, think of the person with whom you can work least well. He/She may be someone you work with now, or he/she may be someone you knew in the past. He/She does not have to be the person you like least well, but should be the person with whom you had the most difficulty in getting the job done. Describe this person as he/she appears to you.

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<td>1 2 3 4 5 6 7 8</td>
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</table>
Appendix C

PLEASE COMPLETE ALL THE FOLLOWING ITEMS:

PERSONAL DATA
(Teachers)

SEX : (1) Male   (2) 

AGE : (1) 20-29 years
      (2) 30-39 years
      (3) 40-49 years
      (4) 50-59 years
      (5) 60+ years

TRAINING LEVEL : (1) Bachelor Degree 
                 (2) Master's Degree 
                 (3) Doctorate 

TEACHING EXPERIENCE : (1) years in this school system
                      (2) total years in teaching
                      (3) total years under present high school principal

MAJOR AREA IN WHICH YOU PRESENTLY TEACH : (Please check one)

(1) _____ SCIENCE (5) _____ P.E.   (9) _____ FOREIGN LANGUAGE
(2) _____ MATH    (6) _____ HEALTH  (10) _____ BUSINESS
(3) _____ HISTORY (7) _____ ART     (11) _____ HOME ECONOMICS
(4) _____ ENGLISH (8) _____ MUSIC   (12) _____ GUIDANCE
(13) _____ SPECIAL EDUCATION
PLEASE COMPLETE ALL THE FOLLOWING ITEMS:

PERSONAL DATA
(Administrators)

SEX : (1) Male (2) __________

AGE : (1) ______ 20-29 years
(2) ______ 30-39 years
(3) ______ 40-49 years
(4) ______ 50-59 years
(5) ______ +60 years

TRAINING LEVEL : (1) Bachelor's Degree ______
(2) Master's Degree ______
(3) Doctorate ______

ADMINISTRATIVE BACKGROUND INFORMATION :
(1) Years teaching experience ______
(2) Years administrative experience ______
(3) Number of years at present school ______

MAJOR TEACHING FIELD PRIOR TO BECOMING AN ADMINISTRATOR : (Please check one)
(1) ______ SCIENCE (5) ______ P.E. (9) ______ FOREIGN LANGUAGE
(2) ______ MATH (6) ______ HEALTH (10) ______ BUSINESS
(3) ______ HISTORY (7) ______ ART (11) ______ HOME ECONOMICS
(4) ______ ENGLISH (8) ______ MUSIC (12) ______ GUIDANCE
(13) ______ SPECIAL EDUCATION
(14) ______ OTHER, PLEASE SPECIFY ____________________________
Appendix D
Letter to Superintendents

Dear Sir:

Your school has been chosen as one of the school districts in the North Central Texas area to participate in a study of communication and leadership style of administrators in small schools. I am a principal from a small high school and a doctoral student at North Texas State University, and I believe this study is of potential significance in investigating a field where little research has taken place; namely, educational leadership in small high schools. The project will be under the supervision of Dr. Gary Anderson and North Texas State University. The school districts chosen for the study are University Interscholastic League districts 11-2A, 13-2A, 14-2A, and 15-2A.

This research project will take a minimum of time to be completed by your high school faculty (grades 9-12) and the high school principal. Your only task will be to arrange a twenty (20) minute period for the high school faculty to complete the survey. It is recommended that this survey be administered before or after a regularly scheduled faculty meeting during the months of January, 1984 through March, 1984. This would avoid calling a special meeting and disrupting your normal procedures. However, the choice is yours. Either I, or one of my representatives will come to your school to administer the survey. (Enclosed is a copy of both instruments. This is to ensure you of their simplicity and brevity.)

Every school district, principal and teacher will have complete anonymity. Results will be based on the aggregate of all information received from all school districts. An abstract of the study will be made available to all participating school districts.

Enclosed is a letter to confirm your acceptance in this study. Please return this letter in the self-addressed stamped envelope by December 21, 1983.

Please remember, the maximum time commitment to complete this survey is only twenty (20) minutes. If you have any questions, please feel free to call me. I may be reached at Home: 817-387-7946, Work: 817-365-2433. Your district's participation is greatly appreciated.

Yours in education,

James A. Monaco

Dr. Gary Anderson
December, 1983

James A. Monaco  
Principal Aubrey High School  
Aubrey, Texas 76227

Dear Mr. Monaco:

I hereby grant my permission to use the information my school district is furnishing in your doctoral study. Please call our school district to finalize the procedure for administration of the instruments prior to coming.

I understand that this information will be kept confidential and that neither the name of my school district nor any of its employees will be used in any published reports. I further understand that when the scientific usefulness of the data has been expended, it will be destroyed.

Sincerely,

Signature of Superintendent

Date

School and School Phone Number

Date and time I would like to have the instruments administered in my district.
September 1, 1983

James A. Monaco
Aubrey I.S.D.
Route 2, Box 63
Aubrey, TX 76227

Dear Mr. Monaco:

You have my permission to use the ComSat Questionnaire and to make the word substitutions which you requested. I am enclosing a copy of the score sheet also.

Many people have used the questionnaire now, and I have asked each one to give me a copy of the study and a copy of the data cards. This is my way of keeping abreast of developments.

Listed below are some other works which might be of interest to you.


2) C. Downs, "Communication and Satisfaction" in Richard Huseman's 3rd edition of Readings in Interpersonal and Organizational Communication.


4) Dissertations by Jean Jones (Vanderbilt), Peggy Duke (Vanderbilt), Jean Nicholson (Vanderbilt), James Kio (KU) and Roberta Thiry (KU).

5) Phil Clamptt, just finished his dissertation, Communication & Productivity this summer at K.U. Phil, who teaches at Univ. of Wisconsin-Green Bay, has a good summary.

If I can be of additional help, please write or call.

Sincerely yours,

Cal W. Downs
Professor
Organizational Communication

CWD:rh

Enclosures
Appendix F
Prepared Statement

Explanation

The purpose of this instrument is to ascertain your perceptions regarding the communication practices of your principal. DO NOT WRITE YOUR NAME ANYWHERE ON THE INSTRUMENT. I DO NOT WISH TO KNOW WHO YOU ARE. All answers will be combined in groups for reporting purposes. All the data collected will be used for a doctoral dissertation, concerned with leadership style and communication satisfaction, and then the data will be destroyed. I will remain until everyone has completed the instrument, and then will remove the data from the school district. No school personnel will ever see any individual data or the group data of any one school district. Your data will be combined with the data of the other thirty-two schools participating in the study. An abstract of the study will be made available to your school district.

Instructions

Please answer all questions on both instruments. You will first be asked to complete a biographical data sheet. Simply check the appropriate response. Next you will complete a thirty-five question communication satisfaction questionnaire. Your opinion is the only right answer, so please do not skip any questions and choose only one response per
question. Simply circle the number which corresponds to your choice. Thank you for your cooperation in this study.
Appendix G

Additional Tables

TABLE IX
SCORES BY SCHOOL ON PRINCIPALS' LEAST PREFERRED CO-WORKER SCALE AND FACULTIES' COMMUNICATION SATISFACTION QUESTIONNAIRE

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TABLE X
TEACHER BIOGRAPHICAL INFORMATION
SEX, AGE, TRAINING, AND TEACHING FIELD

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<td>Percent</td>
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## TABLE XII

TEACHER BIOGRAPHICAL INFORMATION
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N = 329

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TABLE XIII
TEACHER BIOGRAPHICAL INFORMATION
NUMBER OF YEARS UNDER THE
PRESENT PRINCIPAL
N = 329

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TABLE XIV

PRINCIPAL BIOGRAPHICAL INFORMATION
SEX, AGE, TRAINING, AND
TEACHING FIELD
N = 22

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PRINCIPAL BIOGRAPHICAL INFORMATION
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