

THE RELATIONSHIP BETWEEN PERCEIVED NONVERBAL
BEHAVIOR OF PRINCIPALS AND ORGANIZATIONAL
CLIMATE OF ELEMENTARY SCHOOLS

By

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

Writers in the field of educational administration have long recognized the crucial position of the school principal in setting the tone or climate of the school. The Organizational Climate Description Questionnaire has been utilized in public schools to identify climates. Certain dimensions of principal-teacher interactions are identified by this instrument. An essential determinant of a school's effectiveness as an organization is the principal's ability to create a climate conducive to authentic principal-teacher interaction.

The interaction between the principal and the teacher consists of both verbal and nonverbal behavior. Nonverbal behavior is usually used to communicate feelings, likings, and preferences, and it reinforces or contradicts the feelings that are communicated verbally.

Although communication is both verbal and nonverbal there has been some contradiction as to which method is best perceived during interaction. Albert Mehrabian (1967) explains this perception by indicating from his research that real attitudes are often communicated nonverbally and when there is a contradiction between the two forms of communication people will tend to believe the nonverbal message. The choice of orientation phenomena as instances of nonverbal positive-negative

attitude communicating behavior is not accidental (Mehrabian, 1967, p. 325). This description makes it clear that the wordless language communicates a consistency or inconsistency with what has been voiced verbally.

The significance of nonverbal communication has long been recognized, yet it has only been during the last decade that research has been productive in that field. Much has been written during the last decade about communication, interaction, and the influence of verbal behavior patterns as exhibited by school administrators, and its effect on teachers and the total relationship to organizational climate. It is evident that people communicate with one another through verbal exchange, but little attention has been given to the "silent language," how it is perceived, and the impact it has on those receiving the message.

In the study of administrative behavior it seems important to consider the nonverbal performance of the administrator as well as the organizational setting in which the administrator works.

Statement of Problem and Purpose

There is a lack of knowledge about the perceived congruency of verbal and nonverbal behavior of the principal and the relationship that exists between this behavior and organizational climate.

The purpose of this study is to determine the relationship that exists between the authenticity of the principal's behavior as expressed by the perceived congruence of his nonverbal and verbal behavior, and the authenticity of organizational climate as expressed by teacher-principal and teacher-teacher interaction. An answer to the following

question has been sought. Is there a relationship between the perceived congruence of verbal and nonverbal behavior of the principal and organizational climate?

Definition of Terms

Terms Related to Nonverbal Behavior

Nonverbal Behavior. This term will be used in this text to refer to those nonspoken feelings or attitudes such as observable actions, gestures, positions, and nonverbal expressions that are conveyed to the teacher by the principal during interaction.

Positive Nonverbal Behavior. Positive nonverbal behavior means that the principal's nonverbal behavior is perceived as supportive or congruent with what he is saying verbally.

Negative Nonverbal Behavior. Negative nonverbal behavior means that the principal's nonverbal behavior is perceived as nonsupportive or incongruent with what he is saying verbally.

Perceived Nonverbal Behavior. Perceived nonverbal behavior refers to the reactions of the teachers to the positiveness or negativeness of the nonverbal cue of the principal.

Nonverbal Cues. Nonverbal cues also refer to nonverbal behavior. These cues may be supportive or nonsupportive of what the principal is saying verbally. Some examples of nonverbal cues used in this text are:

Eye Contact. Does he look at you when he talks to you?

Does he tend to stare off into space in the presence of others?

Facial Expression. (a) smiling, frowning, forced expression or showing doubt or surprise; (b) lack of expression, (c) expressions

that show lack of feeling or understanding of others' feelings.

Body Language. (a) Posture - rigid body position perhaps with arms folded close. Also muscle contraction such as might be seen in jaw muscles when person is under stress. (b) Nervousness - can be shown by body language in other ways too, such as tapping of fingers or feet or the fidgeting with artifacts on the desk. (c) Boredom too can be shown in body language. A stifled yawn, a glance at a watch, or glancing out a window or around the room can signal boredom.

Gestures. Includes use of hands, arms, and shoulders, as in the shrug, defiant stance, to make a point or to show relationships; also includes the head in certain patterns of tossing the head and cocking the head.

Voice Inflection. Showing anger or anxiety or the raising or lowering of the voice.

Use of Space. The use of space has special meaning and may permeate the whole atmosphere of an interesting situation in a "turn on-turn off" dichotomy. Positions that people maintain in interacting situations generally maintain a certain territorial imperative that gives insight as to the importance of the interaction and at what level it takes place. Closeness by measured distance can give a person a feeling of acceptance and importance. The key question is whether the principal uses space to approach and to maintain proximity or to invade, withdraw, and avoid confrontation with those with whom he talks.

Terms Related to Organizational Climate

(Halpin and Croft, 1963)

Organizational Climate. The Organizational Climate can be construed as the organizational "personality" of a school. Figuratively, "personality" is to the individual what "climate" is to the organization.

The Open Climate. The Open Climate describes an energetic lively organization which is moving toward its goals, and which provides satisfaction for the group members' social needs. Leadership acts emerge easily and appropriately from both the group and the leader. The members of the group are not overly preoccupied disproportionately with task achievement nor social needs satisfaction; satisfaction on both counts seems to be obtained easily and almost effortlessly. The main characteristic of this climate is the "authenticity" of the behavior that occurs among all the members.

The Closed Climate. The Closed Climate is characterized by a high degree of apathy on the part of all members of the organization. The organization is not "moving"; esprit is low because the group members secure neither social needs satisfaction nor the satisfaction that comes from task achievement. The members' behavior can be construed as "inauthentic," indeed, the organization seems to be stagnant.

Authenticity. This concept refers to the "genuineness" of the relationship between members of the group and between the group and its leader (the principal). The term "genuineness" describes a condition under which members feel that behavior is "for real." Such a description refers to integrity in the most fundamental meaning of the

term: Is the individual all of a piece? Are the verbal messages transmitted concordant with the nonverbal behavior? Or do others feel that the individual transmits a great many "mixed messages" in that what he says and what he does do not appear to coincide? In the open group, the behavior of the group members is genuine, or authentic. The actions of the group members emerge freely and without constraint.

The Subtests. The behavior tapped by each subtest is described below.

Disengagement indicates that the teachers do not work well together. They pull in different directions with respect to the task; they gripe and bicker among themselves.

Hindrance refers to the teachers' feeling that the principal burdens them with routine duties, committee demands, and other requirements which the teachers construe as unnecessary busywork.

Espirit refers to "morale". The teachers feel that their social needs are being satisfied, and that they are, at the same time, enjoying a sense of accomplishment in their job.

Intimacy refers to the teachers' enjoyment of friendly social relations with each other.

Aloofness refers to behavior by the principal which is characterized as formal and impersonal. He "goes by the book" and prefers to be guided by rules and policies rather than to deal with the teachers in an informal, face-to-face situation.

Production Emphasis refers to behavior by the principal which is characterized by close supervision of the staff. He is highly directive and task-oriented.

Thrust refers to behavior marked not by close supervision of the teacher, but by the principal's attempt to motivate the teachers through the example which he personally sets. He does not ask the teachers to give of themselves anything more than he willingly gives of himself; his behavior, though starkly task-oriented, is nonetheless viewed favorably by the teacher.

Consideration refers to behavior by the principal which is characterized by an inclination to treat the teachers "humanly," to try to do a little something extra for them in human terms. (Halpin and Croft, 1963)

Operational Definitions

Perceived Congruency of Verbal and Nonverbal Behavior: The perceived congruency of verbal and nonverbal behavior of the principal is measured by summing the teachers' perception scores on the Nonverbal Reaction Sheet and obtaining a raw mean score for each principal.

Organizational Climate: The Openness score on the Organizational Climate Description Questionnaire.

Significance of the Study

A major breakthrough in the area of research in nonverbal behavior of school administrators was achieved by John S. Reynolds in 1971. The most significant result of this work was the development of an instrument to measure teacher perception of nonverbal cues of administrators which had been prerecorded on video tape. However, these tapes contained only acted out versions of administrator nonverbal behavior.

The Organizational Climate Description Questionnaire has been developed to identify certain aspects of school climate by assessing the interaction between teachers and between teachers and the principal; however, it does not focus on any aspect of nonverbal behavior in this interaction.

The establishment of a relationship between the perceived congruence of the principal's verbal and nonverbal behavior and organizational climate would extend current theory and empirical knowledge about the relationships in question; and would be an important step in establishing a link between the congruency of verbal and nonverbal

behavior of the principal and its impact on teacher-teacher and teacher-principal interaction.

Limitations

This study was intended to be an initial thrust into an area of administrative behavior that had previously been unexplored. Consequently, results should be considered tentative, providing base data for more elaborate research.

Due to the nature of the study the sample population is fortuitous. Generalizations drawn from the findings should be limited to the response population.

The Nonverbal Reaction Sheet was designed to measure only perceptions of the congruency of verbal and nonverbal behavior of the principal. This instrument is subjected to the weaknesses of previously untested measures.

Some of the items of the Organizational Climate Description Questionnaire are no longer useful in identifying dimensions of today's changing social system in which schools function. The instrument is especially limited in the urban area where the sample population was selected.

Lastly, the research is useful for prediction purposes only. The reader should not imply causation and effect from the results of this study.

Hypotheses

This study proposes to establish a basis for testing the following null hypotheses:

- H. 1. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and organizational climate.
- 1a. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and disengagement.
 - 1b. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and hinderance.
 - 1c. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and esprit.
 - 1d. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and intimacy.
 - 1e. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and aloofness.
 - 1f. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and production emphasis.
 - 1g. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and thrust.
 - 1h. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and consideration.

- H. 2. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his perception of organizational climate.
- H. 3. There is no significant relationship between a principal's perception of his congruence of verbal and nonverbal behavior and organizational climate.

Research Questions

In addition to the above hypotheses, the following research questions were also under investigation:

- Q. 1. Is there a significant relationship between a principal's perception of his congruence of verbal and nonverbal behavior and the teachers' perception of his congruence of verbal and nonverbal behavior?
- Q. 2. Is there a significant relationship between a principal's organizational climate score and the school's organizational climate score?
- Q. 3. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the size of the school?
- Q. 4. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his total years experience in the field of education?
- Q. 5. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his total years experience as an administrator?
- Q. 6. Is there a significant relationship between the perceived

congruence of verbal and nonverbal behavior of the principal and his total years experience as a principal at the present school?

- Q. 7. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the age of the principal?
- Q. 8. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the mean age of the teachers?
- Q. 9. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the teachers' mean number of total years teaching experience?
- Q. 10. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the teachers' mean number of total years taught under the present principal?
- Q. 11. Is there a significant difference in the perceived congruence of verbal and nonverbal behavior of male and female principals?

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter includes a review of selected sources of information pertaining to the concepts of nonverbal behavior and organizational climate. The review of the literature precedes the rationale which culminates in the statement of hypotheses which guided the study.

Nonverbal Behavior

There have been many attempts to classify and code nonverbal behavior. Although his first work was an attempt to classify and observe communicating elements of animal behavior, Darwin (1955) later turned his attention to the expressions of emotion in both men and animals. His theory concluded that emotions and their expressional referents were everywhere the same.

Ruesch and Kees (1956) have illustrated how actions, space, and objects can be utilized to convey powerful nonverbal messages. Their theoretical argument suggests that nonverbal phenomena are significant to human relationships in that the nonverbal cues function as qualifiers to indicate how verbal statements ought to be understood.

Psychologists, sociologists, and anthropologists have all dealt with nonverbal behavior in their research. Nonverbal observational

approaches have not been developed in educational research as well as they have been developed by these other fields.

Psychologists tend to accept the popular view that nonverbal behaviors are the primary vehicles for expressing emotion. An adequate rationale and set of assumptions concerning this view has been provided by Ekman and Friesen (1968). They state that silent cues whether by face, eyes, or gestures, can be the primary means of expressing such attitudes of intimacy, aloofness, concern, or indifference.

Further support of the view of the behavioral scientists has also been provided by Ekman and Friesen (1969) when they buttressed their previous study by indicating that nonverbal behavior is more likely to reveal true emotions and feelings and is less likely to be deceptive.

Mehrabian had this to say about communication:

You may have noticed that the vocal components of what we say often carry more weight than the words that we use. If a person speaks to you of something which is neutral on the surface, but does so in a negative tone of voice, you are likely to feel that he doesn't like what he is talking about, or is being sarcastic (Mehrabian, 1970, p. 74).

In his book Tactics of Social Influence, Albert Mehrabian gives a formula for the total communicative expression. This formula is:

Total liking = 7% verbal liking + 38% vocal liking + 55% facial liking.

The impact of facial expression is greatest, followed by the impact of the tone of voice and finally that of words. If the facial expression is inconsistent with the words the degree of liking conveyed by the facial expression will determine the impact of the total message (Mehrabian, 1971, p. 43).

Realizing that a person's nonverbal behavior has more bearing than his words on communicating feelings of attitudes to others, Mehrabian

has rewritten his equation for any feeling instead of just liking. To estimate the total feeling communicated it is first necessary to measure the impact of each behavior by itself and on the same scale. The equation is then used to compute the total impact (Mehrabian, 1971, p. 44).

Many of the experimental studies of nonverbal behavior in the field of psychology have tested the impact of inconsistent or incongruent verbal and nonverbal messages to the receiver using Mehrabian's model. The findings of Mehrabian's equation were confirmed by Argyle and Dean (1965). Their findings indicated that a person's nonverbal behavior far outweighs the importance of his words when used with contradictory messages.

Mehrabian and Wiener (1967) investigated the problem of consistent and inconsistent vocal-verbal communications. The results from their study indicated that whenever the vocal component is inconsistent with the verbal one, the total attitude communicated is determined by the vocal portion.

Bugental, Kaswan, and Love contributed to these studies by explaining how contradictory information in verbal and nonverbal channels is interpreted by children and adults. By using brief videotaped messages containing conflicting inputs, verbal, vocal, and visual channels were shown to children and parents. This study revealed that there was a strong interaction between verbal, vocal, and visual channels. A positive input in one channel was discounted if any of the other channels were negative (Bugental, Kaswan, and Love, 1970, p. 647).

Suggestions were made by Mehrabian (1970, p. 199) that the inconsistent attitude of communications can be classified into two

categories--one where the total impact is positive and the other where it is negative. Positive inconsistency is evidenced when someone verbally insults a friend while smiling. An irritated facial expression accompanied by positive vocal and verbal expressions exemplifies negative inconsistency.

Perhaps the greatest finding by Mehrabian was that the verbal portion of inconsistent messages always conveys the attitude toward the action of the addressee, while the nonverbal portion of the message conveys attitudes toward his person. Therefore, when the liking of the addressee is the determiner of message choice, the nonverbal portions of the message carry the burden (Mehrabian, 1970, p. 199).

Experimental studies in nonverbal behavior have also been conducted in the area of counseling psychology. The purpose of one such study was to determine if counselors need to be concerned about how they appear to the counselee. If counselors' verbal and nonverbal impacts are congruent, counselors need not be concerned about their nonverbal behavior. However, if the counselor's nonverbal cues alter the significance of the verbal cues, then the counselor needs to learn to control his nonverbal behavior so as to have a positive effect on the client (Strong, Taylor, Bratton, Loper, 1971, p. 554). The results of this study leave little doubt that a counselor's gestural, postural, and other nonverbal movements have an impact on how he is perceived and described by observers.

Sociologists tend to accept the theory of nonverbal behavior in relation to human identity and role performance. Goffman (1959) reflects this view of sociology when he suggests that nonverbal behaviors can be managed to achieve a desired effect. His view emphasizes the

idea that people in everyday life take on roles for the purpose of achieving proper impressions.

Anthropologists appear to be interested in the cross-cultural studies of gesture and movement, looking for similarities and differences in body language. Two leading anthropologists, Hall (1959) and Birdwhistell (1970), would see the term communication as being synonymous with culture. These two theories written from an anthropological viewpoint would tend to disagree with Darwin's thesis that expressions have the same definitions for all men.

Hall (1959) makes the theory of the anthropologist clear by concluding that all individuals communicate through conventional means of gesture making and idiosyncratic expressions. He feels that what people do is frequently more important than what they say but that we can never be fully aware of what we are communicating to someone else.

The fundamental assumption that undergrids the significance of nonverbal communication in education today is stated by Galloway:

Much of the sensitivity to what is understood occurs without words.....We often express information without words that we would never have the courage to utter verbally.....Whenever human beings come into contact, a reality exists that is understood and shared without words.....(Galloway, 1967, p. 4).

Halpin (1960) supports the contention that a fallacy exists in the minds of school leaders when they believe verbal communication to be the only means of conveying a message. He points out that nonverbal cues determine the course of interpersonal relations, and that highly relevant information is usually communicated nonverbally. In face-to-face interaction he concludes that verbal and nonverbal language may contradict or reinforce each other.

In his research concerning the Organizational Climate Description Questionnaire Halpin again stated that he believed that it is possible to devise methods by which we can determine the perceived congruence between the verbal and the nonverbal messages transmitted by an individual. "We would hypothesize that we would find a greater congruence between these two types of messages with an Open Climate than within a Closed one" (Halpin, 1966, p. 229).

In his book Theory and Research in Administration, Halpin devotes an entire chapter to nonverbal communication. He states:

Communication embraces a broader terrain than most of us attribute to it. Since language is, phylogenetically, one of man's most distinctive characteristics, we sometimes slip into the error of thinking that all communication must be verbal communication. To persist in this narrow view of communication is folly. Yet few executive training programs escape such folly; they ignore the entire range of nonverbal communication, the "muted language" in which human beings speak to each other more eloquently than with words....My point is perhaps old-fashioned, but shockingly simple: actions speak louder than words. (Halpin, 1966, p. 253)

Knowledge regarding administrative behavior, in general, and non-verbal administrative behavior in particular, has been based upon broad generalizations rather than upon systematic analyses of structured observations (Lipham and Francke, 1966, p. 102). Nonverbal behaviors have been assumed to be consistent with verbal behavior. While such an assumption had little or no support from the behavioral scientists in anthropology, sociology, and psychology, educators have found the assumption to be useful.

In spite of the lack of research relating nonverbal behavior to educational administration there have been several attempts to observe administrative behavior. Hemphill (1958) has suggested that an outside observer can be aware of consistent behavior occurring during the

interaction that has not been perceived by the parties of the interaction.

A conclusion was reached at the Midwest Administration Center that certain behavioral data conceivably could be obtained by no other method but observation, but that the difficulties in employee observational techniques had precluded their use in administrative research (Abbot, Henley, Lipham, and Preble, 1959, p. 2). Much of their work was based on the previous assumptions by Zander (1951) and Hemphill (1958).

Francke, in his research adhered to some differences in observed nonverbal behavior of school administrators. He stated:

The conclusions are substantiated by the observations and nonverbal cues of each of the high school environments and especially of the superintendent's administrative behavior. While certain inter-system similarities and differences in nonverbal behavior were observed, it was concluded that no regular and consistent pattern with reference to them was apparent. (Francke, 1965, p. 183)

In a pilot study focusing on nonverbal behavior of school administrators, Lipham and Francke (1966) identified some key elements deemed amenable to systematic observation. These elements were (1) structuring of self (2) structuring of interaction, and (3) structuring of environment. The weaknesses of this study were apparent because of the lack of validity and reliability of the observed nonverbal behaviors. One of the vital recommendations of their preliminary research was that video tape recordings seemed essential for future research done with nonverbal behavior in relation to administrative behavior.

A video tape of administrative nonverbal behavior was developed at the University of Tennessee by Reynolds (1971). He identified certain

frequently appearing nonverbal cues that people recognize and used these cues to write a script for a video tape recording. Teachers and administrators in five Knoxville, Tennessee, city secondary schools reacted to the playing of these tapes by means of an instrument developed by Reynolds. He concluded that the video tape could be utilized to create awareness in people about the power of nonverbal communication.

The comparison of the perceptions of people with two basic inputs (verbal and nonverbal) with those with only one input (nonverbal) was done by Sweet (1972), using the Leadership Behavior Description Questionnaire (LBDQ) as the measuring instrument. The LBDQ was given to a staff of teachers. A film clip was made of the principal and shown without sound to an outside group who then rated the principal on the LBDQ. Both groups were in agreement on the consideration dimension. Sweet concluded that the nature of initiating structure may lie in the verbal process but that its presentation is nonverbal.

This review has attempted to highlight the function nonverbal messages play in interaction between teachers and administrators. The importance of the nonverbal message has been recognized by both teachers and administrators. Because of the importance of nonverbal communication in a teacher-principal interaction, researchers are constantly seeking new ways to more accurately measure this phenomenon.

Organizational Climate

Educators tend to explain the feeling which results from the interactions among role participants in an organization as "organizational climate" (Null, 1967, p. 1).

This terminology was first utilized in 1955, by Cornell when he

referred to the organizational climate of a school as a

. . . delicate blending of interpretations or (perceptions as social psychologists would call it) by persons in the organization of their jobs or roles in relationship to others and their interpretations of the roles of others in the organization. (Cornell, 1955, p. 222)

Five variables were listed by Cornell in his research concerning the organizational climate of schools. These five variables are listed as follows:

1. A "Teacher morale" measure, more specifically a measure of satisfaction of teachers with their relationships to the organization.
2. Teachers' perception of the degree of deconcentration of administrative power in the school system. (The extent to which teachers expect administration to share in policy making.)
3. The extent to which teachers feel they are given responsibility when they participate in policy making.
4. The extent to which teachers feel that their contribution to policy making is taken into account in final decisions.
5. The extent to which teachers interact directly with administrative personnel with respect to general school problems. (Cornell, 1955, p. 220)

By using these measures of organizational variables Cornell found that there was a statistically significant difference among school districts with respect to organizational climate.

Argyris in a case study of a bank conceptualized the term "organizational climate" as a method of ordering the complex, reciprocal network of variables that comprise organizations. In his research he was concerned with interpersonal variables in the determination of the climate. These variables were identified as (1) the formal policies, procedures, and positions of the organization; (2) personality factors including individual needs, values, and abilities; and (3) the

complicated pattern of variables associated with the individual's efforts to accommodate his own ends with those of the organization (Argyris, 1959, p. 501).

A major break through in the area of organizational climate was achieved in 1963, when Halpin and Croft developed an instrument to measure organizational climate called the Organizational Climate Description Questionnaire (OCDQ) (Halpin and Croft, 1966, p. 148). The OCDQ is composed of 64 Likert-type items which can be divided into eight subtests. Four of the subtests are related to the behavior of the principal, while the other four relate to the behavior of the teachers. The OCDQ identifies six patterns of climates arranged on a continuum as follows: Open, Autonomous, Controlled, Familiar, Paternal, and Closed.

The significance of the research by Halpin and Croft is evidenced by the long list of research studies and dissertations relating organizational climate or some dimension of climate to other variables within the school. A review of the research concerning the relationship of organizational climate with the principals' behavior is reported below.

One of the first studies to investigate the relationship between organizational climate and selected personal variables of school principals was done by Anderson (1964). He concluded that teacher perceptions of the principal's behavior in his interpersonal relationships are among the most important determiners of organizational climate.

Although no overall relationships were found between a principal's personality and climate, Andrews (1965) and Plaxton (1965) did find many relationships between personality types and OCDQ subtest scores.

The relationship of leader behavior and organizational climate

was buttressed by Flagg (1965) and Schmidt (1965) when they concluded that the characteristics of principals as leaders largely determine the climates of the schools over which they have control.

Emma (1964) investigated the relationships between administrative fusion and the type of climate found in the schools. His findings indicated that no significant relationship between these two variables existed.

A study to determine a relationship between a principal's empathy and his acceptance of self and others with climate was conducted by Ernst (1965). His conclusions indicated that there were no significant relationships between these two variables and organizational climate.

Evidence of socialization was found by Wiggins (1969) in his research study. He concluded that there were significant relationships between the interpersonal orientation of the principal and organizational climate. He found that the principal's leader behavior became more significantly related to organizational climate as the length of his incumbency increased.

One of the most recent and pertinent studies has been reported by Helwig (1971) in which he proposed to determine the correlation between organizational climate and the frequency of principal-teacher communications. Although no significant correlations were found he did conclude that principal-teacher communications might involve characteristics other than oral or written attributes.

A similar study was conducted by Goodworth and Walker (1971) in which they proposed to investigate the communication process in relation to organizational structure and organizational climate. Their findings indicated a significant relationship between the communication

characteristic of flow and the organizational climate of school district central offices.

Since Halpin and Croft first developed the Organizational Climate Description Questionnaire, increasing research attempts have been made to clearly define the dimensions and the climate types. This review has attempted to highlight the significant research concerning the relationship of organizational climate with the principal's behavior.

A Rationale

Halpin and Croft have reported that the chief consequence of their study of organizational climate was the identification of the pivotal importance of authenticity in organizational behavior (Halpin, 1966, p. 207). They state:

As we looked at the schools in our sample, and as we reflected about other schools in which we had worked, we were struck by the vivid impression that what was going on in some schools was for real, while in other schools the characters on stage seemed to have learned their parts by rote, without really understanding the meaning of their roles. In the first situation the behavior of the teachers and the principal seemed to be genuine, or authentic, and the characters were three-dimensional. In the second situation the behavior of the group members seemed to be thin, two-dimensional, and stereotyped; we were reminded of papier-mache characters acting out roles in a puppet show. Something in the first situation made it possible for the characters to behave authentically---that is, "for real," or genuinely. (Halpin, 1966, p. 204)

It has been reported that during interaction with a subordinate one's nonverbal behavior will be more authentic and the "real" self will be portrayed (Lipham and Francke, 1966, p. 108).

Mehrabian has indicated from his research that real attitudes are communicated nonverbally and when there is a contradiction between the two forms of communication people will tend to believe the nonverbal

message (Mehrabian, 1967, p. 325).

Recall that nonverbal behavior is more likely to reveal true emotions and feelings and is less likely to be deceptive (Ekman and Friesen, 1969). In fact, Ekman and Friesen (1969) indicate that nonverbal behavior gives away how one feels while verbal behavior can be easily disguised in expressing feelings.

Halpin has indicated that it is possible to determine the perceived congruence between the verbal and nonverbal messages transmitted by an individual and there would be a greater congruence between these two messages within an Open Climate than within a closed one (Halpin, 1966).

The concept of authenticity in organizational behavior seems to be compatible with the authenticity of the behavior of the school principal. Authentic behavior of the principal would be characterized by the congruency between his verbal and nonverbal behavior.

If the principal's nonverbal behavior is authentic then it appears reasonable to assume that authenticity would also prevail in the interactions among teachers and between teachers and the principal.

Further, a principal with congruent verbal and nonverbal behavior in a school would appear to facilitate authentic interactions within the climate of that school.

Predictions

Based on the foregoing review of literature and rationale, the researcher expected the following structure of interaction between the principal and the teachers: The more congruent the perceived verbal

and nonverbal behavior of the principal by the teachers, the more open the climate of the school.

Hypotheses

To test the above expectation empirically, the following null hypotheses were derived for statistical treatment:

- H. 1. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and organizational climate.
 - 1a. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and disengagement.
 - 1b. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and hinderance.
 - 1c. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and esprit.
 - 1d. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and intimacy.
 - 1e. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and aloofness.
 - 1f. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and production emphasis.

- lg. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and thrust.
 - lh. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and consideration.
- H. 2. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his perception of organizational climate.
- H. 3. There is no significant relationship between a principal's perception of his congruence of verbal and nonverbal behavior and organizational climate.

Research Questions

There is a lack of knowledge about much of the demographic data as related to this study. The knowledge gained from this ancillary data should prove helpful not only in explaining the significant findings of this study but in determining areas for future research.

In addition to the hypotheses previously mentioned, the following research questions were also under investigation:

- Q. 1. Is there a significant relationship between a principal's perception of his congruence of verbal and nonverbal behavior and the teachers' perception of his congruence of verbal and nonverbal behavior?
- Q. 2. Is there a significant relationship between a principal's organizational climate score and the school's organizational climate score?

- Q. 3. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the size of the school?
- Q. 4. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his total years experience in the field of education?
- Q. 5. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his total years experience as an administrator?
- Q. 6. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his total years experience as a principal at the present school?
- Q. 7. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the age of the principal?
- Q. 8. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the mean age of the teachers?
- Q. 9. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the teachers' mean number of total years teaching experience?
- Q. 10. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the teachers' mean number of total years taught under the present principal?
- Q. 11. Is there a significant difference in the perceived congruence of verbal and nonverbal behavior of male and female principals?

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

This chapter describes the instruments used in the study, the sample selection, the collection of data, the scoring of the instruments, and a description of the statistical treatment of the data.

Development of the Nonverbal Reaction Sheet

A critical problem in this research was the identification of an instrument which would measure perceived congruence of verbal and nonverbal behavior of the principal. An extensive examination of the literature revealed no standardized instruments which would measure this variable.

A review of the literature did reveal a nonverbal reaction sheet which was developed by Reynolds (1971) and which measured teacher perceptions of six administrator nonverbal cues that had been pre-recorded on video tape. This instrument used a Likert difference type scale ranging from very positive to very negative with a weight of one for very negative and a weight of six for very positive. The nonverbal cues included in this reaction sheet were those cues that teachers had identified previously as most frequently appearing in day-to-day routine. The nonverbal cues included were eye contact, facial

expression, gestures, posture, voice inflection, and use of space. One of the questions measured the overall impact of the reaction of the teacher.

The nonverbal reaction sheets and the video tapes were presented to an Educational Administration Seminar at the University of Tennessee and to two judges who had had previous experience in working on studies in nonverbal communication. Using Kendall's Coefficient of Concordance, W , it was found that the group's reactions to the positive scenes had a W of .82 and a X^2 of 17.5 which was significant at the .001 level of confidence. The group's reactions to the negative scenes showed a W of .73 and a X^2 of 15.25 which was significant at the .05 level of confidence. On the basis of these findings Reynolds concluded that there would be agreement among individuals as to their rankings of the positive and negative scenes.

The video tape was shown to five different school staffs numbering 212 teachers. The reactors viewed the scenes and responded to the reaction sheet which was composed of the nonverbal cues previously mentioned. The Mann Whitney U was used to determine if there would be a significant difference between positive and negative responses of the 212 teachers tested. There were significant differences between positive and negative responses at all schools at the .01 level of confidence.

For the purpose of this study, the nonverbal reaction statements from Reynold's instrument were reworded so that teachers could rate their principals as to the positiveness or negativeness of the principal's overall congruence of verbal and nonverbal behavior. The last

statement concerning the overall impact of the teacher's reaction was omitted.

The next step was to determine whether or not the nonverbal reaction sheet was functional and realistic enough to be used in the study. For this purpose the nonverbal reaction sheet was presented to five judges who were selected from the graduate faculty of Oklahoma State University. These judges were from the areas of educational administration, personnel and guidance, educational statistics, higher education, and sociology. At least three of the judges had served on committees of graduate students doing research on nonverbal communication.

Kerlinger (1964, p. 445) has stated that a test or scale is valid for the scientific or practical purpose of its user and that content validation is basically judgmental. Therefore, the judges were asked to rate each item on the nonverbal reaction sheet as follows: (A) valid under most contexts (B) invalid under most contexts (C) can't respond. Each judge was also asked to give criticisms and suggestions as to improvement of the reaction sheet. The responses of the judges to the items of the nonverbal reaction sheet are listed in Table I.

The comment mentioned most by the judges was that they felt a global rating would be difficult to obtain and that the rating instrument may have more meaning if teachers were rating their principal in a given situation. Two of the judges listed very helpful comments as to the improvement of the nonverbal instruction sheet. With the input from the judges the necessary changes were made to the nonverbal reaction sheet.

TABLE I
SUMMARY OF RESPONSES OF JUDGES TO
THE NONVERBAL REACTION SHEET

Item	Valid Under Most Contexts	Invalid Under Most Contexts	Can't Respond
1	4	1	0
2	4	1	0
3	3	2	0
4	3	2	0
5	4	1	0
6	3	2	0

The revised nonverbal reaction sheet was then administered to two elementary schools in a pilot study. The objective of this pilot study was (1) to determine if teachers understood the instrument and could rate their principal on a congruency scale of verbal and nonverbal behavior; (2) to determine the reliability of the instrument. One of the schools had thirteen teachers and a full time principal while the other school had eight teachers and a teaching principal. Most of the teachers felt that they could give a global rating of the congruency of verbal and nonverbal behavior of their principal easier than they could give a situational rating. The teachers concurred that the nonverbal reaction sheet was well done and realistic; however, they did feel that teaching principals would be difficult to rate due to their dual capacity as an administrator and teacher.

Reliability is the accuracy or precision of a measuring instrument according to Kerlinger (1964, p. 430). He also states that a reliable instrument more or less measures the true scores of individuals according to the reliability of the instrument, and that true scores can only be inferred from the true differences between individuals. Kerlinger suggests that the reliability coefficients be determined by the following formula:

$$r_{tt} = 1 - \frac{V_e}{V_{ind}}$$

V_e is the variance resulting from error, and V_{ind} is the variance resulting from individual differences. The results of this calculation utilizing pilot school data show the reliability coefficient for the instrument to be 0.88. This accounts for 77 percent of the total variance of the two variables in common.

Based on the information received from the judges, teachers in the pilot study, and the results of the reliability study, it was decided that the nonverbal reaction sheet could be utilized as a functional, realistic, and reliable instrument.

Organizational Climate Description Questionnaire

The Organizational Climate Description Questionnaire (OCDQ) was constructed by Andrew W. Halpin and Don B. Croft to portray the organizational climate of an elementary school. The OCDQ is composed of 64 Likert-type items and is divided into eight subtests. Four of the subtests measure the characteristics of the teachers as a group, while the other four pertain to the characteristics of the principal as a leader.

Responses to the OCDQ can be obtained by giving the questionnaire in a group situation. The time of administration is approximately thirty minutes.

Six patterns of organizational climate were identified by Halpin and Croft in the development of the OCDQ. These patterns were termed Open, Autonomous, Controlled, Familiar, Paternal, and Closed. After these patterns or climates were defined they were ranked along a climate continuum. The key subtest for describing a school's organizational climate is the Esprit subtest. The classification of schools with respect to organizational climate was done by computing the absolute difference between each subtest score in a school's profile and the corresponding score in the first prototypic profile (Halpin, 1966, p. 186). This computation was repeated for each of the prototypic profiles. Each of the 71 schools in the original study was assigned to a set for which its profile-similarity score was lowest.

A different method of ranking schools on the climate continuum was utilized by Null (1967) and Appleberry (1969). Each of the schools in these studies was placed on a continuum from most open to most closed by summing the school's raw mean scores on the Esprit and Thrust subtest, and subtracting its raw mean Disengagement subtest score. Although this method does not identify schools in the six original climate classifications previously mentioned it does allow the ranking of a school on a climate continuum from open to closed.

OCDQ Validity Studies

To test the OCDQ for validity, Andrews (1965, p. 318) administered the instrument to 165 Alberta schools. The method utilized in this

study was the construct validity approach. Andrews concluded that the subtests of the OCDQ provided reasonably valid measures of important aspects of the school principal's leadership, in the perspective of interaction with his staff. Andrews did regard the vagueness of the concept "organizational climate" and of the six climate types as a detractor from the validity of the OCDQ. A large number of significant relationships with other variables was found which indicated the theoretical importance of the concepts measured and to the internal consistency of the subtests.

A replication of the original work by Halpin and Croft was conducted by Brown (1965). The results of Brown's investigation indicated that the OCDQ was a well constructed, reliable instrument which should be utilized in administrative theory and in the theory of social organizations. Brown did conclude, however, that the dividing of the climate continuum into discrete climates may cause researchers to become overly dependent on these classifications.

McFadden (1966) used judges' ratings of the dimensions of climate as criteria for the validity of the OCDQ measures. The results of his study showed little agreement between the ratings of the judges and the scores derived from the OCDQ.

The discrete climate types were also questioned by Watkins (1968). He concluded that the middle climate designations more or less developed out of a chaos of perception rather than from any clearly perceived organizational climate.

The most recent validation study was conducted by Hayes (1973). Specifically, the purpose of his study was to determine the current usefulness of the items that compose the OCDQ and to determine the

extent to which the OCDQ is currently useful for supporting a conceptualization of the organizational climate of schools. Hayes' research revealed that the OCDQ in its present form would measure all of the dimensions identified by Halpin and Croft except Aloofness. His research also identified dimensions of Logistical Support and Object Socialization which were not a part of the original study. He did recommend a revision of the OCDQ with a deletion of items no longer pertinent to the measure of a subtest.

Sample Selection

Twenty elementary schools in four school districts in metropolitan Oklahoma County comprise the population of the sample of this study. Since these schools were not selected at random, the sample is fortuitous. Conclusions drawn from the analysis of the data can safely be applied only to those schools comprising the sample.

The schools selected for this study were chosen because of the familiarity of the investigator with the geographic location of the schools and because of the willingness of the administration to participate actively in this research.

Data Collection

Each of the superintendents of the respective schools was contacted by letter in September, 1973, asking for permission to use their elementary schools in the research. Following this letter the investigator personally met with each superintendent to explain the project to him. The superintendents were then asked to discuss the project with their principals to secure final approval. In all instances the

investigator then met with the principals in a group or individually to explain further the project. Any principal who did not want to participate had permission to withdraw at this time. Final arrangements for the administration of the instruments were then made with the twenty principals who agreed to be a part of the study.

The instruments were administered in faculty meetings before and after school at the twenty sample schools during November and the first week of December, 1973. At each faculty meeting copies of the Non-verbal Reaction Sheet along with the nonverbal instruction sheet were given to each faculty member and to each principal. A copy of the Organizational Climate Description Questionnaire was also given at the same time along with appropriate instructions. An information sheet was also passed out with these two instruments for the collection of demographic data. The principal was instructed to go to his office to complete his copy. Following the completion of the instruments the teachers and the principals turned their completed instruments to the investigator. The number of teachers completing these instruments at each school along with percentages are shown in Table II. The total response at each school ranges from 64 percent at school number twelve to 94 percent at schools 19 and 20. From a total number of teachers of 511 a total of 414 or 81 percent completed the instruments. Principals from each of the twenty schools also completed the instruments.

Data Analysis

The Nonverbal Reaction Sheet was scored by hand. Each of the six scales was assigned a weight of one for very negative to a weight of six for very positive. These six weights were tabulated for each

TABLE II
NUMBER OF TEACHERS COMPLETING INSTRUMENTS

School	Number of Teachers	Number Completing Instruments	%
01	43	35	81
02	14	13	93
03	27	22	81
04	14	11	79
05	21	17	81
06	21	19	90
07	28	25	89
08	15	13	87
09	14	12	86
10	15	13	87
11	14	13	93
12	33	21	64
13	9	8	89
14	34	26	76
15	33	23	70
16	37	25	68
17	37	26	70
18	40	34	85
19	31	29	94
<u>20</u>	<u>31</u>	<u>29</u>	<u>94</u>
20	511	414	81

teacher and a raw mean score was tabulated for each school. The school principals were then placed on a continuum. The higher the score the more positive or congruent the verbal and nonverbal behavior was perceived by the teacher. Each principal's Nonverbal Reaction Sheet was also tabulated and placed on a continuum. The higher the score the more positive or congruent the principal perceived his own verbal and nonverbal behavior.

The response of the Organizational Climate Description Questionnaire were punched on IBM cards along with other pertinent identification and demographic data. The cards were scored by the OCDQ Scoring Service at the University of North Carolina. Using the alternate method of ranking, the schools were placed on a climate continuum. This was done by summing each school's Esprit and Thrust subtest scores and subtracting the Disengagement subtest score. The higher the score the more open the climate of the school. The principal's climate scores were scored separately and placed on a climate continuum. The higher the score the more open the principal perceived the climate of his school.

The statistical test to determine the relationships between the perceived congruence of verbal and nonverbal behavior of the principal and organizational climate was Spearman rho (Runyan and Haber, 1968, pp. 88-89). The level of confidence was set at the .05 level. The formula for Spearman rho is:

$$\text{rho} = 1 - \frac{6\sum D^2}{n(n^2-1)}$$

The statistical test to determine the differences in the perceived

congruence of verbal and nonverbal behavior for male and female principals was Mann Whitney U (Runyan and Haber, 1968, p. 216). The level of confidence was set at the .05 level. The formula for Mann Whitney U is:

$$U = N_1 N_2 + \frac{N_1(N_1+1)}{2} = R_1$$

and

$$U = N_1 N_2 + \frac{N_2(N_2+1)}{2} = R_2$$

where

R_1 = the sum of ranks of group assigned to N_1

R_2 = the sum of ranks of group assigned to N_2 .

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

Presented in this chapter are the statistical analyses of the hypotheses and research questions which guided the investigation. Interpretation and discussion of the results are reserved for Chapter V.

Hypotheses and Research Questions

The hypotheses and research questions which guided the investigation were tested using the Spearman rho statistical test for significant relationships and the Mann Whitney U statistical test for significant differences. For the hypotheses and the research questions, a rho of .45 was required for the .05 level of significance. For the research question using the Mann Whitney U statistic, a U of 14 or less was required for the .05 significance level.

Hypotheses

- H.1. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and organizational climate.

To test this hypothesis the principal's perceived congruence score

of verbal and nonverbal behavior was ranked from highest to lowest. The school's organizational climate score was ranked from highest to lowest. Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table III.

TABLE III

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND ORGANIZATIONAL CLIMATE

$\Sigma D^2 = 408.50$	$1 - \frac{6(408.50)}{20(20^2 - 1)}$	
rho = .69	n = 20	P < .05

The rho for testing hypothesis one was .69. With an n of twenty the value was significant at the .05 level. Therefore, hypothesis one was rejected.

H. 1a. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and disengagement.

H. 1b. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and hinderance.

- H. 1c. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and esprit.
- H. 1d. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and intimacy.
- H. 1e. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and aloofness.
- H. 1f. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and production emphasis.
- H. 1g. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and thrust.
- H. 1h. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and consideration.

To test hypotheses 1a through 1h, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. Each school's disengagement, hinderance, aloofness, and production emphasis score on the OCDQ was ranked from lowest to highest. Each school's esprit, intimacy, thrust, and consideration score on the OCDQ was ranked from highest to lowest. Spearman rho was utilized to analyze the relationships between the rankings. The relevant data appears in Table IV.

TABLE IV
SUMMARY OF THE DATA FOR SPEARMAN RHO TEST OF RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND
NONVERBAL BEHAVIOR OF THE PRINCIPAL AND THE
DIMENSIONS OF ORGANIZATIONAL CLIMATE

Climate Dimensions	ΣD^2	n	rho	Probability
Disengagement	839	20	.37	>.05
Hinderance	381	20	.71	<.05
Esprit	816	20	.39	>.05
Intimacy	1336.50	20	-.005	>.05
Aloofness	1234.50	20	.08	>.05
Production Emphasis	1022.50	20	.23	>.05
Thrust	280.25	20	.79	<.05
Consideration	335.50	20	.75	<.05

Based on the .05 level of confidence, the values of hypotheses 1b, 1g, and 1h, were significant; therefore, these hypotheses were rejected. The values of hypotheses 1a, 1c, 1d, 1e, and 1f, were not significant; therefore, these hypotheses were accepted.

H. 2. There is no significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his perception of organizational climate.

To test this hypothesis the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. The principal's organizational climate score was ranked from highest to

lowest. Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table V.

TABLE V

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE ORGANIZATIONAL
CLIMATE SCORE OF THE PRINCIPAL

$\Sigma D^2 = 1235.50$	$1 - \frac{6(1235.50)}{20(20^2 - 1)}$	
rho = .07	n = 20	P > .05

The rho for testing hypothesis two is .07. With an n of twenty the value was not significant at the .05 level. Therefore, hypothesis two was accepted.

H. 3. There is no significant relationship between a principal's perception of his congruence of verbal and nonverbal behavior and organizational climate.

To test this hypothesis the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. The school's organizational climate score was ranked from highest to lowest. Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table VI.

TABLE VI
SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN A PRINCIPAL'S PERCEPTION OF HIS PERCEIVED
CONGRUENCE OF VERBAL AND NONVERBAL BEHAVIOR
AND ORGANIZATIONAL CLIMATE

$\Sigma D^2 = 1094.50$	$1 - \frac{6(1094.50)}{20(20^2 - 1)}$	
rho = .18	n = 20	P > .05

The rho for testing hypothesis three was .18. With an n of twenty the value was not significant at the .05 level. Therefore, hypothesis three was accepted.

Research Questions

R. Q. 1. Is there a significant relationship between a principal's perception of his congruence of verbal and nonverbal behavior and the teachers' perception of his congruence of verbal and nonverbal behavior?

To test research question one, each principal's responses on the Nonverbal Reaction Sheet were totaled and ranked from highest to lowest. The principal's perceived congruence score of verbal and non-verbal behavior was ranked from highest to lowest. Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table VII.

TABLE VII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN A PRINCIPAL'S PERCEPTION OF HIS CONGRUENCE OF
 VERBAL AND NONVERBAL BEHAVIOR AND THE TEACHERS'
 PERCEPTION OF HIS CONGRUENCE OF VERBAL
 AND NONVERBAL BEHAVIOR

$\Sigma D^2 = 760$	$1 - \frac{6(760)}{20(20^2 - 1)}$	
rho = .43	n = 20	P > .05

The rho for testing research question one was .43. With an n of twenty the value was not significant at the .05 level.

R. Q. 2. Is there a significant relationship between a
 principal's organizational climate score and the
 school's organizational climate score?

To test research question two, the principal's organizational climate score was ranked from highest to lowest. The school's organizational climate score was ranked from highest to lowest. Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table VIII.

TABLE VIII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN PRINCIPALS' ORGANIZATIONAL CLIMATE SCORES
AND SCHOOLS' ORGANIZATIONAL CLIMATE SCORES

$\Sigma D^2 = 1235.50$	$1 - \frac{6(1235.50)}{20(20^2 - 1)}$	
rho = .07	n = 20	P > .05

The rho for testing research question two was .07. With an n of twenty the value was not significant at the .05 level.

R. Q. 3. Is there a significant relationship between the
perceived congruence of verbal and nonverbal behavior
of the principal and the size of the school?

To test research question three, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. Schools were ranked by size according to the total number of teachers on the staff from the smallest to the largest. Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table IX.

TABLE IX

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE SIZE OF THE SCHOOL

$\Sigma D^2 = 969.50$	$1 - \frac{6(969.50)}{20(20^2-1)}$	
rho = .30	n = 20	P>.05

The rho for testing research question three was .30. With an n of twenty the value was not significant at the .05 level.

R. Q. 4. Is there a significant relationship between the
perceived congruence of verbal and nonverbal behavior
of the principal and his total years experience in
the field of education?

To test research question four, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. Each principal's total years of experience in education was ranked from highest to lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table X.

TABLE X
SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE TOTAL YEARS
EXPERIENCE OF THE PRINCIPAL IN THE
FIELD OF EDUCATION

$\Sigma D^2 = 550.50$	$1 - \frac{6(550.50)}{20(20^2 - 1)}$	
rho = .60	n = 20	P < .05

The rho for testing research question four was .60. With an n of twenty the value was significant at the .05 level.

R. Q. 5. Is there a significant relationship between the perceived congruency of verbal and nonverbal behavior of the principal and his total years experience as an administrator?

To test research question five, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. Each principal's total years of experience as an administrator was ranked from highest to lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table XI.

TABLE XI

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
 BEHAVIOR OF THE PRINCIPAL AND THE TOTAL YEARS
 EXPERIENCE OF THE PRINCIPAL AS AN
 ADMINISTRATOR

$\Sigma D^2 = 791$	$1 - \frac{6(791)}{20(20^2 - 1)}$	
rho = .41	n = 20	P > .05

The rho for testing research question five was .41. With an n of twenty the value was not significant at the .05 level.

R. Q. 6. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his total years experience as a principal at the present school?

To test research question six, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. Each principal's total years experience as a principal at the present school was ranked from highest to lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table XII.

TABLE XII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
 BEHAVIOR OF THE PRINCIPAL AND HIS TOTAL YEARS
 EXPERIENCE AS A PRINCIPAL AT THE
 PRESENT SCHOOL

$\Sigma D^2 = 1012.50$	$1 - \frac{6(1012.50)}{20(20^2 - 1)}$	
rho = .24	n = 20	P > .05

The rho for testing research question six was .24. With an n of twenty the value was not significant at the .05 level.

R. Q. 7. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the age of the principal?

To test research question seven, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. The age of the principals was ranked from oldest to youngest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table XIII.

TABLE XIII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE AGE OF THE PRINCIPAL

$\Sigma D^2 = 705$	$1 - \frac{6(705)}{20(20^2 - 1)}$	
rho = .47	n = 20	P < .05

The rho for testing research question seven was .47. With an n of twenty the value was significant at the .05 level.

R. Q. 8. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the mean age of the teachers?

To test research question eight, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. The mean teacher's age for each school was ranked from oldest to youngest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table XIV.

TABLE IV

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE MEAN AGE OF TEACHERS

$\Sigma D^2 = 1196.50$	$1 - \frac{6(1196.50)}{20(20^2 - 1)}$	
rho = .10	n = 20	P > .05

The rho for testing research question eight was .10. With an n of twenty the value was not significant at the .05 level.

R. Q. 9. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the teachers' mean number of total years teaching experience?

To test research question nine, the principal's perceived congruence score of verbal and nonverbal was ranked from highest to lowest. The mean number of total years teaching experience for each school was ranked from highest to lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table XV.

TABLE XV

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE MEAN NUMBER OF TOTAL
YEARS TEACHING EXPERIENCE OF THE TEACHERS

$\Sigma D^2 = 958$	$1 - \frac{6(958)}{20(20^2 - 1)}$	
$\rho = .28$	$n = 20$	$P > .05$

The rho for testing research question nine was .28. With an n of twenty the value was not significant at the .05 level.

R. Q. 10. Is there a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the teachers' mean number of total years taught under the present principal?

To test research question ten, the principal's perceived congruence score of verbal and nonverbal behavior was ranked from highest to lowest. The mean number of total years taught by the teachers under the present principal were ranked from highest to lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data appears in Table XVI.

TABLE XVI

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR OF THE PRINCIPAL AND THE MEAN NUMBER OF TOTAL
YEARS TAUGHT BY THE TEACHER UNDER THE
PRESENT PRINCIPAL

$\Sigma D^2 = 1029.50$	$1 - \frac{6(1029.50)}{20(20^2-1)}$	
rho = .23	n = 20	P > .05

The rho for testing research question ten was .23. With an n of twenty the value was not significant at the .05 level.

R. Q. 11. Is there a significant difference in the perceived congruence of verbal and nonverbal behavior of male and female principals?

To test research question eleven, the principal's perceived congruence of verbal and nonverbal behavior was ranked from highest to lowest. The principals were separated into two groups of males and females and Mann Whitney U was utilized to test for differences between the male and female ranks. The relevant data appears in Table XVII.

TABLE XVII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT DIFFERENCE
IN THE PERCEIVED CONGRUENCE OF VERBAL AND NONVERBAL
BEHAVIOR FOR MALE AND FEMALE PRINCIPALS

U = 21	$N_1 = 5$	
	$N_2 = 15$	$P > .05$

The U for testing research question eleven was 21. With an N_1 of 5 and an N_2 of 15, the value was not significant at the .05 level.

The three major null hypotheses, as well as the eleven research questions were tested and the results were reported in this chapter.

Chapter V presents the findings of the study, the conclusions drawn from the findings, and recommendations of areas for further research.

CHAPTER V

FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

Chapter V attempts to draw together the major findings of this research, attach meaning to the presentation of data in the preceding chapters, discuss the instrumentation of the study, and derive issues which warrant further investigation.

Instrumentation

Nonverbal Reaction Sheet

One should ask the question: Is there a better way to measure the variable of perceived congruence of verbal and nonverbal behavior? If there is not a better way to measure this variable then painstaking care should be taken to eliminate as much rating error as possible in the instrument. The Nonverbal Reaction Sheet could contain a major limitation, that of the "halo effect." Kerlinger (1964, p. 516) states that this is the tendency to rate an object in the constant direction of a general impression of the object. A teacher may assess the congruence of verbal and nonverbal behavior of the principal higher than he should because he likes the principal, or lower if he dislikes the principal. However, there is also the possibility that how a teacher perceives that principal is how he really is; therefore, a positive,

congruent or negative, incongruent verbal and nonverbal behavior on the part of the principal could influence the teacher's like or dislike for that particular person. Recall that Mehrabian (1970, p. 74) had liking as the end result for his formula for communicative expression.

Organizational Climate Description Questionnaire

Validation studies have been previously mentioned in Chapter III. Throughout all of the attempts to validate the OCDQ, to determine its reliability, to discredit it, or to manipulate the items, the instrument remains in its original form. Some recent studies by Hayes (1973) indicate that some items of the OCDQ are no longer useful indicators of the dimensions of climate. Over a decade has passed since the OCDQ items were selected. During this period of time many changes in schools and in the social system in which schools function have taken place. This is especially evident in the urban schools where teachers are commuting from as high as 50 miles to work and teachers' unions and organizations have taken the administration to the bargaining table.

More specifically this study has tried to relate the variable of perceived congruence of verbal and nonverbal behavior to organizational climate. This research would be more legitimate if the climate types were more "pure", however, the OCDQ does not lend itself to these categorical classifications.

Significant Findings

The statistically significant findings of this study were as follows:

- 1) There was a significant relationship between the perceived

congruence of verbal and nonverbal behavior of the principal and organizational climate. In schools where the principal's nonverbal behavior was perceived as more congruent with his verbal behavior, the tendency was for the organizational climate to be more open.

- 2) There was a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and hinderance. In schools where the principal's nonverbal behavior was perceived as more congruent with his verbal behavior, the tendency was for the teachers to have a lower hinderance score.
- 3) There was a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and thrust. In schools where the principal's nonverbal behavior was perceived as more congruent with his verbal behavior, the tendency was for the principal to have a higher thrust score.
- 4) There was a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and consideration. In schools where the principal's nonverbal behavior was perceived as more congruent with his verbal behavior, the tendency was for the principal to have a higher consideration score.
- 5) There was a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the total years experience of the principal in the field of education. Principals whose nonverbal behavior was

perceived as more congruent with his verbal behavior had the tendency to have more years experience in the field of education.

- 6) There was a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and the age of the principal. Principals whose nonverbal behavior was perceived as more congruent with his verbal behavior had the tendency to be older.

Implications

The rationale from which the hypotheses guiding the study were deduced stressed the concept of authenticity of organizational behavior and principal behavior. It was assumed that if the perceived congruence of verbal and nonverbal behavior of the principal was authentic then authenticity would also pervade in the interactions among teachers and between teachers and the principal.

The rejection of the major hypothesis that there would be no significant relationship between the perceived congruence of verbal and nonverbal behavior and organizational climate supported this assumption. The evidence seems to suggest that a principal whose nonverbal behavior is perceived as more congruent with his verbal behavior will facilitate authentic interactions within the climate of the school.

The findings of significant relationships between the perceived congruence of verbal and nonverbal behavior of the principal and the subtests of Hinderance, Thrust, and Consideration also support the rationale underlying the study. The evidence in this study seems to imply that a principal whose nonverbal behavior is perceived as more

congruent with his verbal behavior will facilitate authentic interactions among the teachers and the principal. These interactions will be characterized by the feeling that the principal does not burden the teachers with routine duties, committee demands, and other busywork requirements. The principal will be viewed by the teachers as one who motivates them by the example he sets and one who treats teachers with humanism.

Failure to find significant relationships between the perceived congruence of verbal and nonverbal behavior of the principal and the subtests of Disengagement, Esprit, and Production Emphasis raises some interesting questions. Although these dimensions of climate were not significantly related to perceived congruence when measured as a single variable, the subtests of Disengagement and Esprit do tend to support the rationale of the study since they were utilized in measuring the total openness score. The findings do imply that although these two dimensions are important, the dimension of Thrust is more important in establishing the tone or climate of the school.

The findings of significant relationships of perceived congruence of verbal and nonverbal behavior of the principal with the subtests of Hinderance and Consideration point to some implications of using the openness score to identify climate. Perhaps these findings would suggest a modification of the openness formula which adds the subtests of Thrust and Esprit and subtracts the subtest of Disengagement.

The statistical correlation for Disengagement and perceived congruence was .37, and for Esprit was .39. With these relationships clearly in the predicted direction, further investigation of these subtests is indicated.

All of the sample schools were urban in nature. With teachers living all over Oklahoma County and some commuting from as far away as 50 miles, social relationships between the faculty would not be great. This could in itself account for the low relationships between perceived congruence of verbal and nonverbal behavior of the principal and Intimacy. This would have implications for future research in that a sample should be provided that would allow for this urban variable. Kenny and Rentz (1970) conducted a factor-analytic study of OCDQ data from a large sample of respondents from urban schools, and they could identify only four dimensions of organizational climate, and Intimacy was not one of these identified. Further support for this implication is gained from factor analysis of data from urban, unionized schools (Ames, et al., 1972). The investigators in this study were unable to replicate the original dimensions of organizational climate.

Failure to find significant relationships between the perceived congruence of verbal and nonverbal behavior of the principal and the subtest of Aloofness can best be accounted for by Hayes (1973, p. 50) who states that the Aloofness dimension could not be identified from the current data. The fact that this dimension could not be identified would imply either that it doesn't exist or that the sample needs to be improved.

Failure to find a significant relationship between the perceived congruence of verbal and nonverbal behavior of the principal and his perception of organizational climate does not support the rationale of the study; however, this can perhaps be accounted for by the fact that there is very little relationship between how a principal perceived his school climate and how the teachers perceive it. A closer look at the

data in Appendix D suggests that principals see their school climate as more open than the teachers. This finding would imply that the organizational climate is how the teachers perceive it to be.

Failure to find a significant relationship between a principal's perception and teachers' perception of his congruence of verbal and nonverbal behavior does not support the rationale of the study; however, this can best be accounted for by the fact that there is not a significant relationship between how teachers and principals perceive congruence of this behavior. Several of the principals had perception scores that were tied. This would suggest that the Nonverbal Reaction Sheet would have serious shortcomings for use as a self perception instrument.

An analysis of the research questions did reveal some interesting and significant relationships.

- 1) The findings indicate that the principals who had more total years of experience in education were perceived as being more congruent in their verbal and nonverbal behavior. This finding supports the finding by Wiggins (1969) that the principal's leader behavior became more significantly related to organizational climate as length of his incumbency increased.
- 2) The significant relationships between the age of the principal and the perceived congruence of verbal and nonverbal behavior would imply that older principals are inclined to be less extreme in their negative nonverbal behavior.

The fact that teachers can and do perceive the congruence of verbal and nonverbal administrator behavior has implications for not only the administrators working in the field but also for the educators

of administrator training institutions. It would seem that as a result of this study that administrators would take a closer look at their nonverbal behavior with more knowledge about how teachers perceive them, and armed with this knowledge be able to make some improvements in their communication patterns. Educators in administrator training institutions need to recognize the impact of nonverbal communication and incorporate more study of nonverbal communication in the administrator training programs. Video tapes could be utilized as a useful training tool in this area.

The fact that there is a significant relationship between organizational climate and congruence of verbal and nonverbal behavior of the principal implies that the principal facilitates the kind of climate for the school. Principals as a result of this study should make themselves aware of the type of climate within their school, realizing that they can possibly improve it.

A closer look at the sample schools reveals that the seven elementary schools that were involved with teacher negotiations were in the lower ten schools in both climate and perceived congruence of verbal and nonverbal behavior. In school systems where teachers are affiliated with the Classroom Teachers' Association, the administrator-behavior dimensions of climate may no longer be useful in defining the climate of the school. It has been the experience of the present investigator that teachers in the labor organized schools in the sample might have responded to both instruments according to the contractual role of the administrator rather than to his leadership characteristics and his perceived congruence of nonverbal and verbal behavior.

The major implications of this investigation lies not so much in

the hypotheses which were confirmed, but in establishing the fruitfulness of the relationships for future study. The value of this study may very well be determined by the extent to which these findings stimulate further research in the area.

Recommendations for Further Research

One of the most important characteristics of a research study is the questions that it generates. As in the case of most research, this study generates more questions than it answered. The following seems to be some of the more pertinent topics which could be answered by additional research.

- 1) Additional research can substantiate the validity of the results of this study. A similar study with improved instrumentation of nonverbal behavior seems to be warranted.
- 2) Since cause and effect relationships can only be implied by this study, research should be done to investigate cause and effect relationships between these two variables.
- 3) What other organizational variables relate to the perceived congruence of verbal and nonverbal behavior?
- 4) This study was limited to a small geographic area plus an entirely urban sample. Future research should improve the sample by including both rural and urban areas.
- 5) The method used in this study to measure perceived congruence of verbal and nonverbal behavior can be improved. Observational instruments using the methods of direct observation and the medium of video tape appear to be fruitful areas for future research in administrator nonverbal communication.

- 6) The significant findings in this study regarding the principal's age and years of experience would suggest rich areas for future investigation.
- 7) Some future investigations should attempt to determine the relationships between school size, total years experience of the principal as an administrator, and congruence of verbal and nonverbal behavior. Although these relationships were not significant in this study, the correlations were definitely in the predicted direction.
- 8) This study should be replicated using the current sample of data recommended by Hayes (1973) for the OCDQ. This data has been collected within the past three years and lends itself more to normative data than the original Halpin and Croft data.
- 9) It appeared to this investigator as the data was collected that there were differences in teacher attitudes and climate in schools where teacher negotiations were taking place. There should be future research to determine the effects of negotiated contracts on the organizational climate and on perceived congruence of verbal and nonverbal behavior of the principal.
- 10) The present study examined only the organizational belief systems of teachers concerning climate and nonverbal behavior. Some investigations should attempt to determine the relationships, if any, between an administrator's belief system and his nonverbal communication patterns.
- 11) The near significant findings in this study of differences in the perceived congruence of verbal and nonverbal behavior

of male and female principals indicates a rich area for future study.

Although these suggestions are only a few of the many raised by this study, they do indicate the fruitfulness of the concepts of non-verbal behavior and organizational climate for future study. Making administrators aware of how their teachers perceive them is extremely important in personal growth and development and through this awareness changes can be made in communication patterns.

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APPENDIX A

INSTRUMENTS

Information

On the following pages a number of statements about the school setting and your principal's nonverbal behavior are presented. My purpose is to gather information regarding the actual attitudes of educators concerning these statements.

You will recognize that the statements are of such a nature that there are no correct or incorrect answers. I am interested only in your frank opinion of them.

Your responses will remain confidential, and no individual or school will be named in the report of this study. Your cooperation is greatly appreciated.

Instructions for Completion of
Nonverbal Reaction Sheet

Please read these instructions before going on to the next page.

Nonverbal behavior for the purpose of the completion of the following reaction sheet are those nonspoken feelings or attitudes conveyed to you by your principal in interaction situations. These nonverbal cues can be supportive or nonsupportive of what the principal is saying verbally. These cues can be transmitted by the use of eye contact, facial expression, body language, gestures, voice inflection, and use of space.

Some examples about which I am speaking might be as follows:

Eye Contact - Does he look at you when he talks to you? Does he tend to stare off into space in the presence of others?

Facial Expression - (a) Smiling, frowning, forced expression or showing doubt or surprise. (b) Lack of expression. (c) Expressions that show lack of feeling or understanding of others' feelings.

Body Language - (a) Posture - Rigid body position perhaps with arms folded close. Also muscle contraction such as might be seen in jaw muscles when person is under stress. (b) Nervousness - Can be shown by body language in other ways too, such as tapping of fingers or feet or the fidgeting with artifacts on the desk. Boredom too can be shown in body language. A stifled yawn, a glance at a watch, or glancing out a window or around the room can signal boredom.

Gestures - Includes use of hands, arms, and shoulders, as in the shrug, defiant stance, to make a point or to show relationships; also includes the head in certain patterns of tossing the head and cocking the head.

Voice Inflection - Showing anger or anxiety or the raising or lowering of the voice.

Use of Space - The use of space has special meaning and may permeate the whole atmosphere of an interesting situation in a "turn on-turn off" dichotomy. Positions that people maintain in interacting situations generally maintain a certain territorial imperative that gives insight as to the importance of the interaction and at what level it takes place. Closeness by measured distance can give a person a feeling of acceptance and importance. The key question is whether the principal uses space to approach and to maintain proximity or to invade, withdraw, and avoid confrontation with those he talks to.

With what I have said in mind would you please respond to the enclosed reaction sheet concerning your principal's nonverbal behavior.

As you respond to each statement you are to react to the interactions that have taken place between you and your principal. Make all of your reactions according to your perception as to the Positiveness or Negativeness of the Interaction for each nonverbal cue.

Positive nonverbal behavior means that the principal's nonverbal behavior is supportive or congruent with what he is saying verbally.

Negative nonverbal behavior means that the principal's nonverbal behavior is nonsupportive or incongruent with what he is saying verbally.

Nonverbal Reaction Sheet

1. Place an X in the area that best depicts the eye-contact manifested by your principal as you perceive it.

Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
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2. Place an X in the area that best depicts the facial expression manifested by your principal as you perceive it.

Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
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3. Place an X in the area that best depicts the body language manifested by your principal as you perceive it.

Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
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4. Place an X in the area that best depicts the gestures manifested by your principal as you perceive it.

Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
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5. Place an X in the area that best depicts the use of voice inflection (raising or lowering) by your principal as you perceive it.

Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
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6. Place an X in the area that best depicts the use of space (nearness or distance of people from each other in interacting situations) by your principal as you perceive it.

Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
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Form IV¹

Instructions:

Following are some statements about the school setting. Please indicate the extent to which each statement characterizes your school by circling the appropriate response at the right of each statement.

RO--Rarely Occurs, SO--Sometimes Occurs, OO--Often Occurs, VFO--Very Frequently Occurs

- | | | | | |
|---|----|----|----|-----|
| 1. Teachers' closest friends are other faculty members at this school..... | RO | SO | OO | VFO |
| 2. The manerisms of teachers at this school are annoying..... | RO | SO | OO | VFO |
| 3. Teachers spend time after school with students who have individual problems..... | RO | SO | OO | VFO |
| 4. Instructions for the operation of teaching aids are available..... | RO | SO | OO | VFO |
| 5. Teachers invite other faculty members to visit them at home..... | RO | SO | OO | VFO |
| 6. There is a minority group of teachers who always oppose the majority..... | RO | SO | OO | VFO |
| 7. Extra books are available for classroom use... | RO | SO | OO | VFO |
| 8. Sufficient time is given to prepare administrative reports..... | RO | SO | OO | VFO |
| 9. Teachers know the family background of other faculty members..... | RO | SO | OO | VFO |
| 10. Teachers exert group pressure on nonconforming faculty members..... | RO | SO | OO | VFO |
| 11. In faculty meetings, there is the feeling of "let's get things done"..... | RO | SO | OO | VFO |
| 12. Administrative paper work is burdensome at this school..... | RO | SO | OO | VFO |

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13.	Teachers talk about their personal life to other faculty members.....	RO	SO	00	VFO
14.	Teachers seek special favors from the principal.....	RO	SO	00	VFO
15.	School supplies are readily available for use in classwork.....	RO	SO	00	VFO
16.	Student progress reports require too much work.....	RO	SO	00	VFO
17.	Teachers have fun socializing together during school time.....	RO	SO	00	VFO
18.	Teachers interrupt other faculty members who are talking in staff meetings.....	RO	SO	00	VFO
19.	Most of the teachers here accept the faults of their colleagues.....	RO	SO	00	VFO
20.	Teachers have too many committee requirements.....	RO	SO	00	VFO
21.	There is considerable laughter when teachers gather informally.....	RO	SO	00	VFO
22.	Teachers ask nonsensical questions in faculty meetings.....	RO	SO	00	VFO
23.	Custodian service is available when needed...	RO	SO	00	VFO
24.	Routine duties interfere with the job of teaching.....	RO	SO	00	VFO
25.	Teachers prepare administrative reports by themselves.....	RO	SO	00	VFO
26.	Teachers ramble when they talk in faculty meetings.....	RO	SO	00	VFO
27.	Teachers at this school show much school spirit.....	RO	SO	00	VFO
28.	The principal goes out of his way to help teachers.....	RO	SO	00	VFO
29.	The principal helps teachers solve personal problems.....	RO	SO	00	VFO
30.	Teachers at this school stay by themselves...	RO	SO	00	VFO

31.	The teachers accomplish their work with great vim, vigor, and pleasure.....	RO	SO	OO	VFO
32.	The principal sets an example by working hard himself.....	RO	SO	OO	VFO
33.	The principal does personal favors for teachers.....	RO	SO	OO	VFO
34.	Teachers eat lunch by themselves in their own classrooms.....	RO	SO	OO	VFO
35.	The morale of the teachers is high.....	RO	SO	OO	VFO
36.	The principal uses constructive criticism....	RO	SO	OO	VFO
37.	The principal stays after school to help teachers finish their work.....	RO	SO	OO	VFO
38.	Teachers socialize together in small select groups.....	RO	SO	OO	VFO
39.	The principal makes all class-scheduling decisions.....	RO	SO	OO	VFO
40.	Teachers are contacted by the principal each day.....	RO	SO	OO	VFO
41.	The principal is well prepared when he speaks at school functions.....	RO	SO	OO	VFO
42.	The principal helps staff members settle minor differences.....	RO	SO	OO	VFO
43.	The principal schedules the work for the teachers.....	RO	SO	OO	VFO
44.	Teachers leave the ground during the school day.....	RO	SO	OO	VFO
45.	Teachers help select which courses will be taught.....	RO	SO	OO	VFO
46.	The principal corrects teachers' mistakes....	RO	SO	OO	VFO
47.	The principal talks a great deal.....	RO	SO	OO	VFO
48.	The principal explains his reasons for criticism to teachers.....	RO	SO	OO	VFO
49.	The principal tries to get better salaries for teachers.....	RO	SO	OO	VFO

50.	Extra duty for teachers is posted conspicuously.....	RO	SO	OO	VFO
51.	The rules set by the principal are never questioned.....	RO	SO	OO	VFO
52.	The principal looks out for the personal welfare of teachers.....	RO	SO	OO	VFO
53.	School secretarial service is available for teachers' use.....	RO	SO	OO	VFO
54.	The principal runs the faculty meeting like a business conference.....	RO	SO	OO	VFO
55.	The principal is in the building before the teachers arrive.....	RO	SO	OO	VFO
56.	Teachers work together preparing administrative reports.....	RO	SO	OO	VFO
57.	Faculty meetings are organized according to a tight agenda.....	RO	SO	OO	VFO
58.	Faculty meetings are mainly principal-report meetings.....	RO	SO	OO	VFO
59.	The principal tells teachers of new ideas he has run across.....	RO	SO	OO	VFO
60.	Teachers talk about leaving the school system.....	RO	SO	OO	VFO
61.	The principal checks the subject-matter ability of teachers.....	RO	SO	OO	VFO
62.	The principal is easy to understand.....	RO	SO	OO	VFO
63.	Teachers are informed of the results of a supervisor's visit.....	RO	SO	OO	VFO
64.	The principal insures that teachers work to their full capacity.....	RO	SO	OO	VFO

Information Sheet

Instructions:

Please complete this form by checking the appropriate boxes and filling in blanks where indicated.

1. Sex

☐ Male ☐ Female

2. Present grade level assignment

<input type="checkbox"/> K	<input type="checkbox"/> 5
<input type="checkbox"/> 1	<input type="checkbox"/> 6
<input type="checkbox"/> 2	<input type="checkbox"/> 7
<input type="checkbox"/> 3	<input type="checkbox"/> 8
<input type="checkbox"/> 4	<input type="checkbox"/> Principal
<input type="checkbox"/> Secondary _____	<input type="checkbox"/> Other _____

(If special area or level, please specify.)

If secondary specify grade level

3. Marital status

<input type="checkbox"/> Single	<input type="checkbox"/> Widowed
<input type="checkbox"/> Married	<input type="checkbox"/> Divorced

4. Education

☐ Less than Baccalaureate
☐ Baccalaureate Degree
☐ Graduate Work (no advanced degree)
☐ Master's Degree (or equivalent)
☐ Graduate work beyond Master's (no advanced degree)
☐ Sixth Year Degree
☐ Graduate work beyond Sixth Year Degree (no advanced degree)
☐ Doctorate

5. What is your average class size

☐ less than 15; ☐ 16-20; ☐ 21-25; ☐ 26-30;
☐ 30 -

6. Age (Nearest birthday): _____.

7. Number years teaching experience in this district (including this year): _____.

8. Total number years teaching experience (including this year): _____.

9. Number of children (your own):_____.
10. How many years have you taught under the present principal
(including this year):_____.

APPENDIX B

OCDQ SCORES FOR TWENTY SCHOOLS

OCDQ Subtest Scores for Twenty Schools

<u>School No.</u>	<u>Dis</u>	<u>Rank</u>	<u>Hin</u>	<u>Rank</u>	<u>Esp</u>	<u>Rank</u>	<u>Int</u>	<u>Rank</u>
1	51	7.5	54	14.5	47	7.5	52	10.5
2	47	2	51	8.5	42	16	49	16
3	49	4	48	4	43	15	48	17
4	50	6	45	2	54	1	58	1.5
5	55	12	53	12	48	5	51	13.5
6	55	12	46	3	45	10	58	1.5
7	56	15.5	50	6	48	5	51	13.5
8	45	1	43	1	51	2.5	47	18
9	55	12	60	18	38	19	42	20
10	49	4	51	8.5	44	13	54	5.5
11	51	7.5	50	6	41	17	45	19
12	56	15.5	53	12	37	20	51	13.5
13	60	19	60	18	39	18	52	10.5
14	63	20	60	18	44	13	51	13.5
15	49	4	54	14.5	47	7.5	53	8
16	58	18	57	16	45	10	54	5.5
17	55	12	53	12	45	10	53	8
18	53	9	52	10	44	13	53	8
19	55	12	62	20	51	2.5	56	3
20	57	17	50	6	48	5	55	4

<u>School No.</u>	<u>Alo</u>	<u>Rank</u>	<u>Prd</u>	<u>Rank</u>	<u>Thr</u>	<u>Rank</u>	<u>Con</u>	<u>Rank</u>
1	42	1	53	18	45	9	48	10
2	43	2	50	14.5	47	5	45	16.5
3	49	7	45	7	44	10	47	13.5
4	51	11	48	12.5	54	1	54	4
5	53	15	44	5	46	7.5	55	3
6	52	13	43	4	49	2.5	56	1.5
7	50	9	46	9.5	47	5	56	1.5
8	49	7	45	7	49	2.5	51	6
9	58	19.5	50	14.5	38	17	40	20
10	54	17	46	9.5	36	18	41	19
11	51	11	47	11	42	13	53	5
12	58	19.5	59	20	39	16	48	10
13	48	4.5	52	16.5	33	20	47	13.5
14	55	18	54	19	34	19	45	16.5
15	49	7	41	2.5	41	14	43	18
16	53	15	48	12.5	40	15	47	13.5
17	51	11	40	1	43	11.5	48	10
18	48	4.5	45	7	47	5	47	13.5
19	47	3	41	2.5	43	11.5	50	7.5
20	53	15	52	16.5	46	7.5	50	7.5

OCDQ Openness Scores for Twenty Schools

<u>School No.</u>	<u>Openness Score</u>	<u>Rank</u>
1	41	4
2	42	3
3	38	10.5
4	58	1
5	39	7
6	39	7
7	39	7
8	55	2
9	21	17
10	31	15
11	32	14
12	20	18
13	12	20
14	15	19
15	39	7
16	27	16
17	33	13
18	38	10.5
19	39	7
20	37	12

APPENDIX C

PERCEIVED NONVERBAL AND VERBAL CONGRUENCE

SCORES FOR TWENTY PRINCIPALS

Perceived Nonverbal and Verbal Congruence

Scores for Twenty Principals

<u>School No.</u>	<u>Perceived Congruence \bar{X} Score</u>	<u>Rank</u>
1	28.37	10
2	29.15	5
3	29.14	6
4	31.00	1
5	29.59	2
6	29.21	4
7	28.70	7
8	28.69	8
9	25.92	18
10	26.00	17
11	29.55	3
12	27.91	12
13	23.38	19
14	22.28	20
15	26.39	16
16	26.40	15
17	27.08	14
18	27.79	13
19	28.31	11
20	28.44	9

APPENDIX D

PRINCIPAL'S PERCEPTION SCORES AND
DEMOGRAPHIC DATA

Principal's Perception Scores

<u>School No.</u>	<u>Openness Score</u>	<u>Rank</u>	<u>Perceived Congruency Score</u>	<u>Rank</u>
1	67	3.5	26	17.5
2	49	15	27	12
3	59	9	29	9
4	66	5.5	30	4.5
5	65	7	32	1.5
6	35	17	21	20
7	23	20	30	4.5
8	51	13	29	9
9	28	19	26	17.5
10	75	2	27	12
11	66	5.5	30	4.5
12	50	14	30	4.5
13	36	16	29	9
14	67	3.5	25	19
15	81	1	27	12
16	55	11	27	12
17	63	8	32	1.5
18	52	12	29	9
19	56	10	29	9
20	30	18	27	12

Principal's Demographic Data

<u>School No.</u>	<u>Age</u>	<u>Sex</u>	<u>Total Yrs. Exp. in Education</u>	<u>Total Yrs. Exp. in Administration</u>	<u>Total Yrs. Admin. at Present Sch.</u>
1	33	M	11	6	3
2	34	M	9	4	3
3	42	M	15	5	1
4	61	F	39	9	7
5	62	F	34	8	4
6	62	M	37	32	4
7	50	M	25	12	6
8	40	M	13	4	3
9	50	F	9	3	3
10	57	M	35	34	4
11	62	F	28	17	17
12	59	F	27	14	2
13	29	M	4	2	2
14	31	M	9	4	4
15	47	M	24	16	8
16	40	M	15	2	2
17	48	M	11	5	5
18	46	M	11	5	4
19	43	M	18	4	2
20	32	M	8	6	5

Teacher's Demographic Data for Twenty Schools

<u>School No.</u>	<u>Number of Teachers</u>	<u>Mean Age</u>	<u>Mean Number of Total Years Teaching Experience</u>	<u>Mean Number of Total Yrs. Taught Under Present Principal</u>
1	43	30.46	5.27	2.00
2	14	40.00	7.54	2.20
3	27	34.09	8.90	1.09
4	14	50.81	19.72	5.63
5	21	34.88	8.17	2.70
6	21	40.68	11.94	3.15
7	28	41.00	13.08	4.56
8	15	38.92	7.46	2.61
9	14	35.75	8.33	2.25
10	15	37.69	6.92	3.53
11	14	38.92	13.53	6.23
12	33	35.00	7.95	3.31
13	9	42.12	10.50	2.00
14	34	38.03	9.76	3.07
15	33	35.21	6.17	3.60
16	37	41.52	11.56	1.92
17	37	39.96	9.84	3.42
18	40	38.82	11.20	3.11
19	31	31.31	4.34	1.55
20	31	37.65	9.82	3.72

~

VITA

Audie Wayne Woodard

Candidate for the Degree of

Doctor of Education

Thesis: THE RELATIONSHIP BETWEEN PERCEIVED NONVERBAL BEHAVIOR OF
PRINCIPALS AND ORGANIZATIONAL CLIMATE OF ELEMENTARY SCHOOLS

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