THE RELATIONSHIP BETWEEN PERCEIVED VERBAL AND NONVERBAL CONGRUENCE OF PUBLIC ELEMENTARY SCHOOL ADMINISTRATORS AND THEIR NOMOTHETIC-IDIOGRAPHIC DIMENSIONS

By

MAXINE BEELEY EMERSON WEBER

Bachelor of Science
Northwestern Oklahoma State University
Alva, Oklahoma
1965

Master of Education
Wichita State University
Wichita, Kansas
1970

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of the Oklahoma State University
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Thesis Approved:

Kenneth St. Clair
Thesis Adviser

[signature]

A. Kenneth Stern

Russell Dobson

Norman N. Durham
Dean of the Graduate College

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INTRODUCTION

Background

The significance of communication to the management of organizations is reflected in all our lives: Social organization without communication is impossible.

One of the most widely-known writers in organization theory, Simon (1957), reflected on the importance of communication to social organization in the following:

> Communication may be formally defined as any process whereby decisional premises are transmitted from one member of an organization to another. It is obvious that without communication there can be no organization (p. 154).

In a broad sense, Simon is arguing that the principal activity of organization is communication. Communication pervades the organizational activity of man. As Barnard (1938, p. 226) suggested: "The first executive function is to develop and maintain a system of communication." Moreover, the achievement of favorable conditions through which communication may take place would seem critical to the educational administrator and his organizational activities.

Nonverbal communication has long been recognized, but it was not until the 1950s that studies began to appear, reporting systematic efforts to transcribe nonverbal behaviors and to understand their

significance in human communication and relations. Much has been written during the last decade about communication and leadership behavior patterns as exhibited by school administrators and the effect on teachers; however, educational literature is not abundant in the description of nonverbal behavior which identifies the determination of the course of interpersonal relations.

The present study was an attempt to provide an understanding according to the Darwinian theory, as reviewed in the literature. Interpersonal relations should exhibit congruence or nonverbal genuineness. Genuineness may be defined as being oneself, honest, real, and authentic. The congruent response is one in which feelings, the verbal response, and: (1) paralanguage, (2) facial expression and visual interaction, (3) kinesic, and (4) proxemic behavior match (Weitz, 1979). Verbal-nonverbal behavior congruence should have a positive effect upon the profession traditionally considered to be teaching, which has been touched by the increasing prevalence and pervasiveness of the administration. The encroachment of administrative organization upon teachers and teaching groups has been commented on by Hoy and Miskel (1978) in an illustration of the generalization which usually occurs when a new administrator meets with the staff. They make a typical verbal statement:

> 'If you have any questions or problems, please come by my office, and we'll discuss the situation. My door is always open.' When a staff member takes the new administrator at his word, the nonverbal messages probably will determine the meaning of the verbal message. If the administrator remains in the chair behind his desk, has the staff member remain standing, and continues to write, the verbal message is contradicted. The result is a semantics problem which is a pervasive hindrance in educational administration. Therefore, the messages carried

> by verbal and nonverbal media must be congruent for effective teacher understanding (p. 248).

Communication is, in large part, nonverbally based (Baird and Wieting, 1979). Richey and Richey (1978, p. 576) stated that "often the nonverbal message is conveyed by omission rather than commission," suggesting that incongruence is an important aspect of nonverbal behavior. Dobson, Hopkins, and Elsom (1973) found that the philosophy of human nature held by the teacher tends to influence nonverbal behaviors in the classroom. Dobson, Sewell, and Shelton (1974) also found that teachers, over an extended period of time, will betray through nonverbal leakage their true feelings. Ekman and Friesen (1969a) found that specific body movements will "leak" and lead to a a more accurate assessment of an individual's true emotional state (p. 89). The messages carried by verbal and nonverbal administrator behavior may be incongruent and ineffective for teacher and pupil understanding. Therefore, as Galloway (1971) has pointed out, teachers as well as children realize the increasing importance of nonverbal cues and their consequences.

Nonverbal cues, whether congruent or incongruent, range from eye contact to furniture arrangement. Livingston (1969, p. 84) claimed that "What seems to be critical in the communication of expectations is not what the boss says so much as the way he behaves." Lipham and Francke (1966) also found that promotable administrators differed from nonpromotable administrators in the way they behaved nonverbally on the job. The study focused on variables of interaction (greeting of others, interaction distance, and interaction termination) and variables of environment (status symbols, working order, and decor).

Even though communication is both verbal and nonverbal, there has been contradiction as to which method is best perceived during an interaction. Mehrabian (1967) explained this perception by indicating from his research that real attitudes are most 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 (implicit actions) as instances of nonverbal positive-negative attitude communication behavior is not accidental (Mehrabian, 1970). Scherer (1979) further clarified the description that nonverbal behavior communicates a congruent or incongruent attitude with what has been voiced verbally. In verbal language the muted notes are added through gestures, inflections of voice, and word choice. In written language the muted messages are transmitted through word choice and writing styles (Halpin, 1960).

The confidence that teachers place in their administrator's utterances, whether oral or written, and the confidence the administrator may develop in himself could be determined by what he has learned about his nonverbal interaction. The administrator's assessment of his perceived nomothetic-idiographic dimensions of leader behavior (Getzels and Guba, 1957), his perceived congruent-incongruent nonverbal behavior, as well as the teacher's asessment of the administrator's perceived nonverbal behavior congruency, seems important to consider. As Halpin (1960, p. 97) declared, "The administrator who believes that he transmits only the literal meaning of what he has spoken or written is operating under a pathetic delusion."

The nomothetic-idiographic dimensions of leadership were developed by theorists Getzels and Guba (1957). To them, concern for

organizational task was known as the "nomothetic dimension" and concern for individual relationship was termed the "idiographic dimension." Other theorists have assigned similar terms for the same dimensions. Halpin (1966) considered the nomothetic term as "initiating structure" and the idiographic term as "consideration" (p. 86). Bales (1969) referred to the dimensions as task leader and social leader. Table I briefly presents 10 well-known sets of theorists whose works all reduce to the fundamental concerns of the nomothetic and idiographic dimensions of leadership behavior. This table identifies the terminology found in the literature and reinforces the idea that there are two general and distinct categories of leader behavior--one concerned with role and task achievement and the other concerned with interpersonal relations and personality. In the study of administrator behavior, it seems important to consider the verbal-nonverbal performance of the administrator as related to nomothetic-idiographic leader behavior dimensions. Determination by the researcher of the degree of congruence between the nonverbal behavior of the administrator and his/her leader dimensions would precipitate effective teacher understanding (Brown, 1967).

Statement of the Problem

> The effective administrator is one who delineates clearly the relationship between himself and the teachers on his staff and establishes well-defined channels of communication. At the same time, his nonverbal behavior reflects friendship and warmth in the relationships between himself and his teachers (Halpin, 1966, p. 118).

Brown (1967) pointed out in his discussion of reactions to leadership that desirable leader behavior is characterized by high scores

TABLE I

DIMENSIONS OF LEADERSHIP: COMPARISONS AND SIMILARITIES

Theorist	Concern for Organizational Tasks	Concern for Individual Relationships
Barnard	Effectiveness	Efficiency
Etzioni and Parsons	Instrumental Activities	Expressive Activities
Cartwright and Zander	Goal Achievement	Group Maintenance
Getzels and Guba	Nomothetic	Idiographic
Halpin	Initiating Structure	Consideration
Kahn	Production Orientation	Employee Orientation
Bales	Task Leader	Social Leader
Bowers and Seashore	Goal Emphasis Work Facilitation	Support Interaction Facilitation
Brown	System Orientation	Person Orientation
Stogdill	Production Emphasis Initiating Structure Representation Role Assumption Persuasion Superior Orientation	Tolerance of Freedom Tolerance of Uncertainty Consideration Demand Reconciliation Predictive Accuracy Integration

Source: W. K. Hoy and C. G. Miskel, Educational Administration: Theory Research and Practice (1978).

in both the nomothetic and idiographic leader behavior dimensions. However, he reiterated that desirable leader dimensions should not be thought of as a verbal communication system alone. Nonverbal communication systems may reinforce the verbal messages or confront the individual with mixed, incongruent messages.

By communication one learns to understand others but, more importantly, one discovers self. Self-discovery leads the leader to "read" the behavior of others and to "read" his own behavior (Halpin, 1966). Leaders, then, are judged by what they communicate to others through their total behavior, both verbal and nonverbal (Halpin, 1966).

Leathers (1976) noted that there is constant interaction between and among the nonverbal and verbal communication systems. When such interaction is congruent, the individual systems function in a compensatory manner. Incongruent interaction occurs when what is communicated by one system is inconsistent with the meaning communicated by another system. Incongruent messages have a highly disruptive impact on communication interaction. Individuals frequently communicate incongruently. When they do, leakage, or true behavior, prevails.

There is a lack of knowledge about the perceived congruency of verbal and nonverbal behaviors of the school administrator and the relationship that exists between these behaviors and the nomothetic-idiographic dimensions of leader behavior.

Significance of the Study

A breakthrough in the area of research in nonverbal behavior of school administrators was the development of an instrument to measure teacher perception of nonverbal cues of administrators which had been

prerecorded on video tape (Reynolds, 1971). Woodard (1974) reworded the nonverbal reaction statements from Reynold's instrument and developed the Nonverbal Reaction Sheet which allowed examination of a relationship between the perceived congruence of the administrator's nonverbal behavior, known as: (1) paralanguage, (2) facial expression and visual interaction, (3) kinesics, and (4) proxemic behavior (Weitz, 1979). The relationship between verbal-nonverbal congruence and the nomothetic-idiographic dimensions of leader behavior was investigated.

The Leader Behavior Description Questionnaire (LBDQ) (Halpin, 1957) was developed to identify the nomothetic and idiographic dimensions. It describes these interactions between teachers and their administrators and between the administrator and him/her self. The instrument does not declare that it focuses on any aspect of nonverbal behavior in the interactions; however, as Halpin (1966) reiterated when discussing the eloquence of behavior: "We communicate to others with all of our behavior, through our total behavior, both verbal and nonverbal" (p. 276).

Studying these relationships would extend empirical knowledge and would be an important step in establishing the congruence of leader behavior dimensions with nonverbal behavior dimensions of the public school administrator. Improved understanding would, perhaps, lead to greater congruence on the part of administrators. This could, in turn, lead to more effective operation of schools.

This study deals with the perceptions of both the elementary school teachers and their administrators relative to verbal-nonverbal congruence of the leader behavior of the administrator.

Purpose of the Study

The purpose of this study was to examine the relationships between the school administrator's verbal-nonverbal congruence (self-reported) and his/her perceptions of leader behavior.

To achieve this purpose, an answer to the following research questions was sought:

1. Is there a relationship between the administrators' self-perceived congruence of verbal-nonverbal behavior and self-perceived leader behavior?

2. Is the teacher perception of administrator verbal-nonverbal congruence related to administrator self-perception of his/her own leader dimensions and congruence?

Limitations of the Study

This study was limited to a total population of public elementary school teachers and their elementary administrators associated with public schools only in the Panhandle of Oklahoma. It was limited to public school listings as found in the Oklahoma Educational Directory (1982-83). Therefore, the results of this study should not be generalized to a population that differs significantly from that of the Panhandle of Oklahoma.

The study included 100% of the population chosen from the elementary public schools in the Panhandle of Oklahoma, geographically known as Cimarron, Texas, and Beaver counties (Figure 1, Appendix A).

CHAPTER II

REVIEW OF LITERATURE

Introduction

Background

The study examined verbal-nonverbal behavior as it related to leader behavior of elementary administrators employed in the public schools of Oklahoma. This chapter presents an extensive review of the literature that will provide an understanding of the major concepts involved.

All areas of nonverbal communication are summarized and contain references to studies undertaken in the field of nonverbal communication, particularly nonverbal behavior, which is germane to the present study.

Nonverbal Communication

The study of nonverbal communication has ancient roots, historically dating back to the Greek philosopher Aristotle, where ancient classical gestures were depicted on vases and other art forms. Key (1977), a linguist, wrote that children's gestures included remnants of gestures which adults used centuries before. The King's X and the "whittling" gestures were examples illustrated.

Until recent times, the study of human communication focused almost entirely of the written and verbal language. Nonverbal communication was not commonly recognized and it was seldom studied. Research on man's ability to effectively interpret and send nonverbal messages was found to be generally inadequate. Nevertheless, several nonverbal communication researchers had suggested that the phenomenon was a significant aspect of human interaction.

The scientific study of nonverbal communication is only a century old, dating back to Darwin's (1872) classic, The Expression of the Emotions in Man and Animals. However, the modern scientific era of investigation was launched around World War II and has been steadily growing ever since (Harrison and Knapp, 1972).

In a review of literature, attention was called to the term "nonverbal communication," noting that Reusch and Kees (1956) appeared to have been the first to use the words in a book title. Other pioneers (for example, David Efron, cited in Harrison and Knapp, 1972) wrote the classic Gesture, Race and Culture, while Birdwhistell's Kinesics and Context became available in book form (Harrison and Knapp, 1972).

In the confusion surrounding the term "nonverbal communication," a general definition of the concept was researched. It was found that definitions of nonverbal communication abound, ranging from very broad to very narrow, rigorous statements. Bosmajian (1971), for example, wrote of the term:

> Everything from the territoriality of animals to the protocol of diplomats. From facial expressions to muscle twitches. From inner, but inexpressible, feelings to outdoor public monuments. From the message of massage to the persuasion of a punch. From dance to drama to music and mime. From the flow of affect to the flow of traffic. From extrasensory perception to the economic policies of

> international power blocs. From fashion and fad to architecture and analog computer. From the smell of roses to the taste of steak. From Freudian symbol to astrological sign. From the rhetoric of violence to the rhetoric of topless dancers (p. 98).

Different writers, especially in the fields of anthropology, psychology, and sociology, tended to use the term in different ways which resulted in a confusing proliferation of concepts.

Duncan (1969) suggested that it was not until the 1950s that studies began to appear, reporting systematic efforts to transcribe gestures and other nonlanguage (or nonverbal behaviors) into meaningful findings, and to understand the culturally prescribed codes that moderate their use and significance in human communication.

The textbook scene designated as texts Argyle's (1972) Human Social Interaction, Mehrabian's (1972b) Silent Messages and his (1972a) Nonverbal Communication, Knapp's (1978) Nonverbal Communication in Human Interaction (which contains over 300 different author citings), and Nonverbal Communication (edited by Hinde, 1972). These major works have organized and synthesized existing data from a variety of fields (Harrison and Knapp, 1972).

Harrison and Knapp (1972) wrote that, in the 1970s, a sharp explosion of new literature dealing with nonverbal communication emerged. The explosion was not confined to professional journals and textbook quality publications alone. Serious research on nonverbal communication surfaced with names like Ekman, Friesen, and Ellsworth (1972); Scheflen (1966); and Davitz (1969) appearing as an explanation of similarity to the social process.

Harrison (1974) simply defined nonverbal communication as "the exchange of information through nonlinguistic signs" (p. 25). In the

attempt to define nonverbal communication boundaries, however, Harrison and Knapp (1972) declared diversity in definition reflected intellectual confusion, particularly when researchers tried to move from speculation to investigation: "To date there has been lack of agreement on where to draw the boundary between verbal and nonverbal and where to chart the far perimeter between communication and noncommunication" (p. 343). On the issue of boundary between verbal and nonverbal communication, the writings of Skinner (1957), Dance (1967), and Dance and Larson (1972) argued that nonverbal behavior elicits verbal mediators. On the other hand, Harper, Wiens, and Matarazzo (1978) wrote that Key noted that "human communication was a body movement. Movement of the vocal apparatus resulted in speech, the verbal act, or paralanguage, a nonverbal act" (p. 2).

According to Harrison and Knapp (1972), Dittman and Rosenfeld, when discussing the concept of nonverbal communication as it is used in modern social actions, went even further and attempted to distinguish the gray area between verbal and nonverbal domains by finding substitutes for vocalizations.

Recent writings have sharpened boundary positions, although the view is much too broad. For instance, Barker and Collins (1970) stated:

> There has been a tendency to use the term nonverbal communication synonymously with the term nonverbal behavior. However, nonverbal communication is much broader than nonverbal behavior. A room devoid of behaving, living things communicates atmosphere and function. Static clothing communicates the personality of the wearer (p. 344).

Consistent with their broad view of nonverbal communication, Barker and Collins (1970) identified 18 nonverbal communication forms.

Other authors, including Eisenberg and Smith (1971), Knapp (1978), Duncan (1969), and Argyle (1969) all agreed that body movements should be included, but they did not agree on what should be fenced in or out of the nonverbal range.

A more recent classificationist, Poyatos (1976) proposed an even broader classification of nonverbal phenomena, identifying channels as verbal-vocal, nonverbal-vocal, nonverbal-nonvocal communication, discussing interaction, and overlapping subcategories.

Other communication researchers have considered nonverbal behavior in somewhat more abstract terms. Reusch and Kees (1972) made an early attempt to organize nonverbal codes by designating them in terms of "action language," "sign language," and "object language" (p. 4), while Harrison (1973) combined nonverbal behavior into categories of "performance codes," "contextual codes," "artifactual codes," and "meditational codes" (p. 97).

Harper, Wiens, and Matarazzo (1978), in their attempt to define nonverbal communication, stated that:

> What is meant by the terms nonverbal communication, nonverbal modality, nonverbal sign, nonverbal act or nonverbal behavior and how they have been used and classified by different authors are real problems in the area of research (p. 4).

So many meanings have been attributed to the concept of nonverbal communication--many of them vague and mystical--that it verges on losing much of its scientific utility. For example, the public was introduced to popular best sellers referring to "body language." Koivumaki (1975) suggested that best sellers such as Body Language "should not be spread around" (p. 28), as the reputation of more scholarly research stood to suffer and that knowledge of nonverbal

communication was an important tool for interaction in the social environment; therefore, the unscholarly way the popular books were written could have caused them to be classified as "fakery" (Koivumaki, 1975, p. 26).

Knapp (1978) agreed with Koivumaki and wrote that the 1970s were serious times for summarizing and synthesizing serious research, citing 20 quality nonverbal studies on one page. He noted that the scientific study of nonverbal communication had never been the province of any particular discipline. Historical fields of psychiatry, dance, psychology, anthropology, philosophy, linguistics, sociology, speech, and animal behavior were important antecedents to the present study. Knapp also asserted the journalists' accounts of such popular books as Fast's (1970) Body Language attempted to make nonverbal findings understandable and usable to the American public. However, in simplifying for readability, the best sellers misrepresented findings, leaving the reader disappointed for not finding "the key to success in any human encounter" (Knapp, 1978, p. 29).

In a review for the Quarterly Journal of Speech, Burhans (1979) praised Ekman's (1973) edited book, Darwin and Facial Expression, as a book of great value to psychologists, sociologists, anthropologists, ethnologists, psychiatrists, psychoanalysts, zoologists, animal behaviorists, and primatologists. Burhans (1979) agreed with Knapp and Koivumaki that a best seller such as Face Language (Whiteside, 1974) was an example of the kind of "nonsense" which frequently rode the crest of an intellectual fad.

In contrast, Manos (1979) stated that publications such as Body Language and Face Language were required reading for classes in speech

communications and English and that Arizona State University had conducted workshops in the area of nonverbal communication with such titles as "People Reading for Job Success" (p. 28). He pointed out that nonverbal communication systems were ingrained into everyone's personality and were a new and growing science related to both written and oral communication.

Other disciplines concerned with communication related to their field have recently reviewed applicable literature. Stewig (1979), in his article, "I See What You Say," suggested that children, in learning to become effective communicators and interpreters of communication, should be introduced to such books as Mother Goose, The Wizard of Oz, and Talking Without Words. Mayo and LaFrance (1978) also demonstrated that children learn to communicate nonverbally as well as verbally. Their review was extensive, citing works of the observations of newborns through nursery school. The bibliography contained 80 articles, most of which had been written during the previous five years.

In his annotated bibliography on a collection of nonverbal communication research, Rasberry (1979) divided the research into the following: (1) reference works comprised of primary and secondary books, periodical reviews, and computer software programs; (2) human nonverbal communication--articles with emphasis on body movement, facial expressions, eye contact, gestures, and paralinguistics. Wilbur and Wilbur (1980) stated that from a professional perspective, "approximately 75% of the references concerning nonverbal communication and the helping process have appeared only during the last 10 years" (p. 197). The review categorized the areas typically included

within definitions of nonverbal communication and nonverbal behavior, citing literature references.

Finally, in an attempt at the broad definition of nonverbal communication, Knapp (1972) stated:

> Traditionally, educators, researchers, and laymen have used the following definition when discussing nonverbal communication--nonverbal communication designates all those human responses which are not described as observable clear words (either spoken or written) (p. 57).

Nonverbal Behavior

When investigating the relationship of administrator to his/her nomothetic and idiographic dimensions of leadership behavior (Getzels and Guba, 1957), one must also consider his/her verbal-nonverbal behavior. There is some uniformity in the way in which nonverbal communication or verbal-nonverbal behavior is conceived, in spite of the fact that virtually few of those who use the expression "nonverbal behavior" acknowledge that they do so under the influence of Darwin. Darwin's understanding of human nature and its relationship to the structural (behavior which operates according to a set of rules, socially learned) and psychological (any stimulus can elicit a response) approach was his basis for verbal-nonverbal behavior. His understanding of nonverbal behavior in conjunction with his understanding of the nature of man can be described by his theory on the continuity of the species as related in his book, On the Origin of Species by Means of Natural Selection (Darwin, 1972). The theory was based on three general principles which "account for most of the expressions and gestures involuntarily used by man and the lower animals, under the influence of various emotions and sensations"

(Ekman, 1973, pp. 228-229). These principles are:

1. the principle of serviceable associated habits where the reflexes are transmitted as inherited facial expressions and represent the total primitive reaction our forbearers made to objects arousing the emotions.

2. the principle of antitheses where certain states of mind lead to certain habitual actions.

3. the principle of actions due to the constitution of the nervous system, independently from the first of the will, and independently to a certain extent of habit. Actions are triggered when the sensorium is strongly excited, nerve-forces directions, depending on the connection of the nerve cells and partly on habit. . . . Effects are thus produced which we recognize as expressive (Darwin, 1899, pp. 28-29).

Darwin (1899) stated certain gestures were apparently learned, such as turning the eyes upward in prayer, while most were innate or inherited. Determination of will and consciousness did come into play in the development of various movements of expression performed during the early years of life, only then it becomes a habit. This determination of the will or consciousness voluntarily performed was so limited, with a far greater number of movements (all the more important ones), innate or inherited, that dependence on the will, he declared, had become obsolete (Darwin, 1899). Due to his work on evolution, which revolutionized thinking for scientists and which had been published 13 years earlier, his The Expression of the Emotions in Man and Animals has had little influence on the scientific community for the last 100 years. Ghiselin (1969) alluded to the lack of influence in his appraisal of all of Darwin's work:

> That The Expression of the Emotions has not been well understood is clear from the fact that it was a historical dead end. Nobody took up the train of reasoning and developed it, although the work was widely read, and although it did become an element in various controver-

> sies . . . there is little evidence that the real merits of the work have come to be appreciated (pp. 187-188).

Complementary Understandings of Human Behavior

The confusion surrounding the conceptualization of nonverbal communication and nonverbal behavior in particular has been traced to two major sources of the current usage: The Darwinian concept of physiology and anthropology (Ekman, 1973) and the Freudian concept of social psychology and psychiatry (Hall, 1954). Duncan (1969) maintained that underlying these two approaches to the concept of nonverbal communication are two mutually facilitating and complementary understandings of human nature. However, there is a difference between the proponents of structural studies and the external variable studies in basic conception of nonverbal communication; therefore, the two distinctions have evolved. Darwin's philosophy supported the structural or anthropological approach in which an underlying system or set of rules somewhat analogous to those for languages is sought for verbal-nonverbal behaviors. Both Darwin and Freud's philosophy extended the concepts related to the external variable or psychological approach where, for example, "If any stimulus impinges on an organism, and if it elicits a response, that is communication and becomes a personality characteristic" (Harrison, 1974, p. 30).

The use of the term "nonverbal communication" in sociological literature is consistent with the structural approach in that its emphasis on rule following is similar to Darwin's philosophy; thus, where the structural-linguistic approach is concerned with the rules which nonverbal communication must follow to coordinate with speech

and to communicate, the sociological approaches are concerned with the rules, at a more macroscopic or Freudian approach level, governing styles of behavior and sequences of events in particular situations and settings. This explanation in terms of rules is quite different from explanations by empirical laws. Behavior, then, may also be Freudian when people think that this is the proper thing to do, or if they are shocked when the rule is broken. There are different rules in a given situation, for behavior at a lecture, a seminar, and a party. Goffman (1963) has analyzed in detail some of the rules governing nonverbal communication in American middle class society and suggested that all or most of social behavior can be explained in terms of these rules.

Sociologists have also emphasized the subjective meanings given to nonverbal signals by the culture and by particular groups. For example, in his account of "self preservation," Goffman (1959) maintained that people manipulate the impressions others form of them by clothes and gestures which have certain meanings. Goffman referenced Becker's "Social Class Variations in the Teacher-Pupil Relationship" as an example of nonverbal acts which have culturally defined and publicly shared meanings, as shown in rituals and ceremonies:

> You can't ever let them get the upper hand on you or you're through. So I start out tough. The first day I get a new class in, I let them know who's boss. . . . You've got to start off tough, then you can ease up as you go along. If you start out easy-going, when you try to get tough, they'll just look at you and laugh (p. 12).

While this approach emphasizes the meanings given in a particular culture, there is no reason why it should not be able to accommodate meanings of a universal biological origin. On the other hand, Goffman

has tended to emphasize the different meanings which the same act may have in different social settings (Argyle, 1972).

Although it is not difficult to generalize about the use of the term "nonverbal communication," Scheflen (1966) noted that structuralists have dealt with pattern and natural structure where co-ocurrence is not probabilistic. He wrote: "We do not bother to assess the probabilities that human beings have hearts or that the word heart has an A in it" (p. 273). Accordingly, the various elements of a structural unit ". . . occur together every time. They will have consistent arrangement and appear invariably in the same context" (Scheflen, 1966, p. 273).

The external variable studies can turn up recurrent behavior patterns which are suggestive to the investigator of structure, while structural studies may discover regularities which can be related to external variables of interest. Further, there is overlap, in that the same problems can be studied by both methods and as a multidimensional concept of the group (Kendon, 1970).

It is not within the scope of this study to sort out the theoretical confusion and empirical chaos surrounding the many conceptualizations and applications of these two approaches. An excellent summary of the more recent scholarly attempts to establish both the structural and external variable domains is provided by Duncan (1969).

Since this study centered on administrators and their verbal-nonverbal behaviors, the review of literature was limited to the theoretical and empirical aspects as it related to administrator verbal-nonverbal behavior and his/her leader dimensions. It must be

reiterated, however, in light of the above discussion, that nonverbal behavior is a specific type of nonverbal communication.

Darwinian Formulation

Darwin's formulation of nonverbal behavior is important, primarily because it is with Darwin that behavior first becomes a psychological rather than an anthropological or structural concept (Ekman, 1973). Consequently, the pendulum has swung back during the last 10 years to the re-establishment of the proposition that there is innate or genetic contribution to behavior with nongenetic determinants as well. This suggests that most studies on nonverbal communication, and verbal-nonverbal behavior in particular, use Darwin's formulation.

In his treatise concerning the expression of the emotions, Darwin distinguished only the facial expression of animals in order to discover the origins of expressive movements in man. He distinguished three aspects related to behavior which can best be examined under categories: (1) descriptive (what the expressions look like); (2) functional (the utility of the expressions to the animals); and (3) causal (the determinants and origins of the expressions). Facial expressions, according to Darwin's descriptions, were based on his own observations as well as on descriptions from the literature and from other observers. His principle descriptive finding was that some expressions made by nonhuman primates were similar to those of men (Ekman, 1973). With respect to particular expressions, Darwin deduced that certain expressions were associated with particular affect or feeling states. These are the states of pleasure, joy, affection, pain, anger, and astonishment or terror (Ekman, 1973).

The adherence to the deductive method was not a popular approach to phenomena at that time. Thus, Ghiselin (1969) explained as follows:

> Turning to the ethnologists or oriented students of animal behavior, one has little difficulty in seeing why they have failed to give Darwin the credit he deserves. . . . They have relied on more primitive forms of induction, simply gathered facts, put behavior patterns together and superimposed a historical rationalization. Thus, Lorenz states: 'It is an inviolable law of inductive natural science that it has to begin with pure observation, totally devoid of any preconceived theory and even working hypotheses.' A more pernicious fallacy could scarcely be enunciated. Darwin, in all of his work, including that on behavior, proceeded with a diametrically opposite methodological assumption. Small wonder that he has not received the recognition he deserves (p. 212).

Darwin also used the deductive investigation to discover the determinants and origins of the expressions which he understood in terms of the three principles alluded to, and known as the "theory of continuity" (Skolnikoff, 1973). Simply stated, habit causes unconsciously performed behaviors associated with certain states of the mind, which become acquired innate tendencies or "instincts" that, under opposite states of mind (fear rather than anger), actions opposite in form will be performed involuntarily. Antithesis becomes habit; therefore, the behavior is association through habit and subsequently becomes inheritance. Thirdly, an excited nervous system acts directly and involuntarily upon the body (for example, one monkey hitting another monkey on the hand generates a nerve force upon a habit and produces bodily reactions such as withdrawal of the hand), consequently becoming independent of habit. Darwin speculated that these three mechanisms work together in determining expressions and that it is not generally possible to tell the extent that each

mechanism contributes to producing a particular nonverbal behavior (Ekman, 1973).

Freud's Formulation

Darwin had a tremendous impact upon Freud's intellectual development (Hall, 1954). Freud emphasized biological orientation, taking an instinctive position in his psychoanalytic approach (Hall, 1954). A subject's affective state could be reliably obtained from nonverbal materials. As, for example:

> When I set myself the task of bringing to light what human beings keep hidden within them, not by the compelling power of hypnosis, but by observing what they say and what they show, I thought the task was a harder one than it really is. He that has eyes to see and ears to hear may convince himself that no mortal can keep a secret. If the lips are silent, he chatters with his finger tips; betrayal oozes out of him at every pore. And thus the task of making conscious the most hidden recesses of the mind is one which is quite possible to accomplish (Freud, 1905, pp. 77-78).

Freud, however, was less concerned with nonverbal behavior and more concerned with the intricacies of verbal behavior and such forms of verbal and nonverbal leakage as slips of the tongue and psychoanalysis. On the other hand, Darwin (1955) proposed that nonverbal behavior may escape efforts to deceive through verbal-nonverbal leakage, may evade self-censoring, or may betray dissimulation:

> Some actions ordinarily associated through habit with certain states of mind may be partially repressed through the will, and in such cases the muscles which are least under the separate control of the will are the most liable still to act, causing movements which we recognize as expressive. In certain other cases the checking of one habitual movement requires other slight movements, and these are likewise expressive (pp. 48-49).

Darwin did not clearly specify which movements are susceptible to

control of the "will," and which escape such control or are themselves a product of the control (Weitz, 1974). Although Darwin first considered nonverbal behavior from a psychological viewpoint, Freud's psychological approach can be mutually acceptive in that the id is complementary to Darwin's discussion of instincts (biological component); the ego (psychological component) is associated with Darwin's feeling states, which Darwin believed were unconsciously learned very early in life, becoming habit. The superego (social component), which suggests a relationship of internalization for Freud through rewards and punishment, would complement Darwin in that he would choose to declare that stimulus particular to body reactions were related to nerve cells and muscle contractions which operate independently of will and habit. Both Darwin's and Freud's theories may be thought of as biological, psychological, and social components of personality. Information generated in either one of these two philosophies should be facilitating to the other one. Darwin's evolutionary doctrine made it possible to study man along naturalistic lines as an object of scientific study, as well as Freud and others, who studied the mind and measured it quantitatively.

With the original Darwinian concept of nonverbal behavior or expression clarified, the various approaches analyzing this phenomenon in the nonverbal communication environment can now be reviewed. The review is limited to those empirical studies purporting to measure nonverbal behavior in Darwinian terms.

Current Formulation

Many scholars, including Birdwhistell (1966) Trager (1969), Hall

(1966), and Scheflen (1967) have pointed out that nonverbal studies are predominantly communicative; that is, concerned with the meanings ascribed to designated nonverbal behaviors by observers, whereas Darwin's formulation emphasized indicative studies which are designed to designate nonverbal behaviors and other variables of interest (Ekman and Friesen, 1968).

Harper, Wiens, and Matarazzo (1978) categorized the major studies on nonverbal behavior (nonverbal communication, nonverbal cues or signs), using different formulations of the term. They listed five broad categories as: (1) paralanguage and formal characteristics of speech, (2) facial expression, (3) kinesics, (4) eye and visual behavior, and (5) proxemics (the study of space). On the other hand, the major studies which directly pertain to this study are highlighted by Weitz (1979). Facial expression and visual interaction were combined as one major area of study by Weitz (1979), while body movement (kinesics), paralanguage (tone, pitch, tempo), and proximity behaviors were complementary categories, as compared to Harper, Wiens, and Matarazzo. Each of the formulations employed for nonverbal behavior was always compared with Darwin's original formulation of the concept. Those formulations and/or operational definitions most nearly approximating the Darwinian approach were considered as more appropriate and used as guides for the study. Current authors which espouse Darwin were also used. Current formulations will be presented in the following categorical order:

1. Paralanguage
2. Facial Expression and Visual Interaction

3. Kinesics

4. Proxemic Behavior

Paralanguage

1. It began with Darwin, as does so much in the nonverbal communication field. He wrote: "With many kinds of animals, man included, the vocal organs are efficient in the highest degree as a means of expression" (Weitz, 1979, p. 221). He was talking about the field of study we call paralanguage, which is the study of such nonsemantic aspects of speech as tone and pitch. Darwin (1965) was not able to tie his observations into any coherent theory of the evolution of sound usage and even concluded on a self-deprecatory note:

> The whole subject of the differences of the sounds produced under different states of the mind is so obscure that I have succeeded in throwing hardly any light on it; and the remarks which I have made have but little significance (p. 93).

Since Darwin's time, considerable advances have been made, both in the study of animal sounds and of human paralanguage. From these studies have come a wealth of speculation about the possible universality of association between certain vocal patterns and emotional expression. Scherer and Oshinsky's (1977) examination of the affective state of a speaker on the basis of nonlinguistic auditory cues independent of the verbal content upon amplitude; pitch and tempo are notable and confirm in general the findings of natural-voice studies: paralanguage and formal characteristics of speech. Although Scherer and Oshinsky maintained that this type of paralanguage can be compared with Darwin's natural-expression studies in primitive emotional displays, the above statement about paralanguage clearly emphasizes the feeling states of

verbal-nonverbal behavior which may be elicited with regard to paralanguage.

Expectations can indeed be developed into two major directions: voice as indicator of personality and voice as indicator of the state of the interaction (Weitz, 1979). Scherer's (1979) parameters of paralanguage consisted of the following:

1. Amplitude variation (moderate, extreme)
2. Pitch variation (moderate, extreme)
3. Pitch contour (up, down)
4. Pitch level (low, high)
5. Tempo (slow, fast)
6. Duration/shape of the signal (round vs. sharp attack and decay of the signal)
7. Filtration or lack of overtones (moderate, extreme) (p. 252)

As Weitz (1979) has pointed out, Scherer's index and definition of paralanguage is conceived in terms of nonverbal rather than nonsemantic; however, the meaning of paralanguage is not consensually-agreed upon. The psycholinguists and sociolinguists concern themselves with semantic aspects of speech or the words themselves, where cognitive processes through verbal interactions indicate the structure of affective content. The paralinguist is happy with the "leavings" of the psycho- and sociolinguists--the nonsemantic aspects of speech--everything but the words themselves. Paralinguists set great store by how something is said and not on what is said. Ekman and Friesen (1971) found evidence to support Darwin's theory of innate mechanisms in emotional expressions and feelings. They suggested that there was justification in speculating about the existence of unlearned neural

programs for vocal expression and recognition of emotion. Weitz (1979), as well as Williams and Stevens (1972), argued persuasively that acoustical correlates can determine emotional dimensions (Table II).

Thus, the finding of Scherer (1972) that paralanguage is more prominent in determining acoustical dimensions as a conveyer of emotion seems to be noteworthy in determining the direction of verbal-nonverbal behavior with leader behavior dimensions.

Facial Expression and Visual Interpretation

2. Chevalier-Skolnikoff (1973) found that the effects of various patterns of voice on different types of face is representative of Weitz's second category: facial expression and visual interaction. Chevalier-Skolnikoff built on Darwin's intimately related expression in primates as related to man. Thus, sadness leads to a certain facial configuration and a characteristic intonational pattern which can be readily distinguished from other states, such as joy and anger (Ekman, 1973). Chevalier-Skolnikoff reiterated that after 100 years, Darwin's theory that human facial expressions have evolved from those of man's nonhuman primate ancestors is still the most significant contribution to the investigation of the determinants of facial displays. However, an equally-noted study by Eibl-Eibesfeldt (1972), which analyzed the similarities and differences between cultures in expressive movements of emotion of face, is more representative of Weitz's (1979) category. He built on Darwin's biological basis of the facial displays as identified in the literature, which is the dominant position in the field today. Eibl-Eibesfeldt (1972, p. 299) defined

TABLE II

CONCOMITANTS OF ACOUSTICAL DIMENSIONS

Amplitude	Moderate	Pleasantness, Activity, Happiness
Variation	Extreme	Fear
Pitch Variation	Moderate	Anger, Boredom, Disgust, Fear
	Extreme	Pleasantness, Activity, Happiness, Surprise
Pitch Contour	Down	Pleasantness, Boredom, Sadness
	Up	Potency, Anger, Fear, Surprise
Pitch Level	Low	Pleasantness, Boredom, Sadness
	High	Activity, Potency, Anger, Fear Surprise
Tempo	Slow	Boredom, Disgust, Sadness
	Fast	Fear, Happiness, Surprise
Duration (Shape)	Round	Potency, Boredom, Disgust, Fear, Sadness
	Sharp	Pleasantness, Activity, Happiness, Surprise
Filtration (Lack of Overtones)	Low	Sadness
		Pleasantness, Boredom, Happiness
	Moderate	Potency, Activity
	Extreme	Anger, Disgust, Fear, Surprise
Tonality	Atonal	Disgust
	Tonal-Minor	Anger
	Tonal-Major	Pleasantness, Happiness
Rhythm	Not rhythmic	Boredom
	Rhythmic	Activity, Fear, Surprise

Source: K. R. Scherer, "Acoustic Concomitants of Emotional Dimensions: Judging Affect From Synthesized Tone Sequences," S. Weitz, Ed., Nonverbal Communication (1979).

facial expressions as "inborn" or "innate" releasing mechanisms "which result in inborn, cultural variation patterns in slightly different ways." He appeared initially to be investigating the relationship of people of different cultures to a universal expressive pattern of face in a manner consistent with the Darwinian formulation. Work for Leach (1972), however, in contrast to Eibl-Eibesfeldt's position, took the position of "culture" (a transmissible tradition of learned behavior), stating that "elaborately ritualized anthropological systems of communication which occur among nonhuman animals are only in part genetically determined" and that ". . . carried to extremes this thesis leads to the position that man is no more than a naked ape" (p. 315). Current thinking reflects Eibl-Eibesfeldt's position, which is in agreement with Darwin, although written a century after The Expression of the Emotions in Man and Animals (Weitz, 1979). Both Eibl-Eibesfeldt and Leach's approach are examples of overlapping, as determined earlier by Duncan (1969).

The tension between the biological and cultural approach to the origin and transmission of nonverbal behavior is basic to all channels, but nowhere is it more clearly seen than in the area of facial expression which is comparable with Darwin's original formulation (Weitz, 1979). Schwartz, Fair, Salt, Mandel, and Klerman's (1976) study, which analyzed affective states of facial expression on several different types of emotions, followed the classic studies of Ekman, Friesen, and Ellsworth (1972) and Izard (1971), who documented that at least six different overt facial expressions are universally observed and labeled cross-culturally as distinct emotions: joy, sadness, anger, fear, contempt, and shame. Schwartz et al. built on the

significance of these data which, interestingly enough, were reported over 100 years ago by Darwin in his classic observations of expressions of the emotions. Darwin hypothesized that not only could emotions be differentiated by the facial expressions exhibited, but also that these patterns of muscle responding were, in large part, innate and therefore universal. Schwartz et al. appeared to be investigating the relationship of emotion to the specific pattern of feedback resulting from the facial and bodily expressions of emotion. They speculated that imagery does elicit covert patterns of facial muscle activity and that these patterns can be accentuated when the person attempts to self-regulate the specific emotion. The study stated that there may be some biological truth to the old saying "put on a happy face" (Schwartz et al., 1976, p. 337).

An additional form, that of visual interaction, directly pertains to Weitz's (1979) second category of facial expression, combined with visual behavior, which plays a major role in interpersonal communication. Eibl-Eibesfeldt described a pattern of greeting behavior that is apparently universal. This pattern consists of a very brief (one-third of a second) series of acts: the direction of gaze toward another person, a smile, eyebrow lift, and a quick head nod. The behavior apparently acts as a "releaser"; that is, it elicits the same behavior from others which is universal. Other researchers have argued that this is an innate response. Eibl-Eibesfeldt additionally described a slow lowering of the eyelid which interrupts eye contact for about one-half second. This, he contended, serves as an "appeasing function" (Harper, Wiens, and Matarazzo, 1978, p. 181). Cook (1979) as well as Eibl-Eibesfeldt, argued persuasively that what seems

both to the looker and the looked at to be a steady gaze, is actually a series of rapid, repeated scans of the face which are influenced by a variety of universal factors. In particular, the way one person looks at another says a lot about his opinion of the other, about his interpersonal attitudes, as social psychologists tend to put it (Cook, 1979). Cook's research showed that looking someone in the eye is, in fact, actual fixes on many different points of the face. Darwin (1872) noted that people who were ashamed or embarrassed looked down. Exline, Thibaut, Hickey, and Gumpert (1970), in an experiment to prove the observation experimentally, concluded that evidently there were some people who could control their nonverbal behavior so as to convey a desired impression and who were quite prepared to do so. The observations of facial expressions and visual interaction related to feeling states such as joy, sadness, and patterns of specific visual acts are so closely entwined that they have been consummated into the second broad category of nonverbal behavior.

Kinesics

3. The study of body movement and gesture is at the heart of nonverbal communication research. For better or worse, the study of kinesics has caught the public eye and is often identified with what might be termed a "detective" approach to nonverbal signals. The concept of meaning itself, when applied to the area of body movement and gesture, is problematic and has in itself created the central controversy of the field. The Freudian formulation of human nature has emerged in this area as well.

Birdwhistell (1970) utilized the nonexperimental movement in the holistic quality of the combined verbal and nonverbal domain. He saw each movement as part of a greater whole but did not seek to attach any externally-based meaning--particularly any psychological meaning--as Darwin's formulation designates, to any single movement or combination of movements. In this sense, the nonexperimental movement is far removed from the popularized "body language" approach. This position, however, has been actively advanced by Scheflen (1967) and Condon and Ogston (1967), among others. Birdwhistell worked with large portions of interaction, such as conversation, with analysis based on the descriptive linguistic model. He has isolated body, face, and head; in fact, he does not see the verbal-nonverbal dichotomy as valid. The Birdwhistell holistic, nonexperimental tradition is negative in that it is much like literary analysis where one can impose one's own structure on the material and never really be certain that it is the best-fitting model or the correct one (Weitz, 1979). It is important to note that Birdwhistell explicitly repudiates the idea that there are any universalities to the affective meaning of nonverbal signals. Dittman (cited in Harper, Wiens, and Matarazzo, 1978), assessed Birdwhistell's work and the structural approach:

> Communication by means other than language is a field of a number of diverse topics and the types of information encountered by the research are also diverse. . . . Theories and methods appropriate to all these different kinds of information are needed. Birdwhistell has given a theory, resting on untenable premises, which would confine investigators to only one method (p. 126).

The Freudian approach is closer in spirit to the popular image of the field. The studies of Ekman and Friesen (1969a), Mehrabian (1972a), Loeb (1968), Mahl (1968), and Freedman (1977) are prime

examples of studies falling into Harper, Weins, and Matarazzo's (1978) third category of nonverbal communication: A seeking to anchor the meaning of body movement to some external reference system, usually a psychological one. These authors adhere the closest to the original Freudian formulation (Hall and Lindzey, 1967).

Ekman and Friesen (1969b) categorized and discussed four separate conceptualizations and uses of nonverbal behavior: usage, origin, coding, and classification. They did not suggest that their categories constituted an exhaustive taxonomy of nonverbal behavior; however, they stated that silent cues, whether by face, gesture, and so forth are primary means of expressions. Indeed, there have been other studies providing alternate ways of organizing the formulations of nonverbal behavior. None, however, has been as influential or has inspired the number of empirical studies that Ekman and Friesen have. Of the five types of nonverbal behavior designated by Ekman and Friesen, the one most closely approximating Darwin's formulation is "adaptors" (Ekman and Friesen, 1969b, p. 85). Adaptors are that aspect of self or object manipulations related to individual need or emotional state, a theoretical part of the classification scheme which conveys meaning about individuals. Freud (1905), of course, came to the same conclusion.

Work similar in orientation to Ekman and Friesen's has been done by Mehrabian (1972a). Mehrabian's work is characterized by the manipulation of nonverbal, psychological, and environmental variables in the style that has come to be identified with experimental social psychology.

In a subsequent study, Ekman and Friesen (1972) further elaborated on the notion of nonverbal behavior as an interest in how nonverbal behavior functions in social interactions which required measuring in terms of molar units of behavior. The idea of social interactions measured in these molar units is closely allied to Freud's formulation of the superego.

Loeb, in his 1968 study on the function of a recurrent behavioral pattern in a psychotherapeutic session, preceded Ekman and Friesen, and thus alluded to the Freudian tradition by interpretation of a recurrent gesture in a patient, that of a clenched fist, to denote anger. He found that gestures retain a primitive reality in the representation of emotion and can substitute for words when personality mechanisms (for example, the superego) will not permit direct conscious verbal displays of the emotion. The patient will not be consciously aware of the emotion, but it will "leak" out, so to speak, through the body. In the case Loeb analyzed, anger was the repressed emotion as displayed through the fist.

An important study of the holistic view which, of course, is psychoanalysis, as witness to Loeb's (1968) remarks quoted above, is that of Mahl (1979), in his article "Body Movement, Ideation, and Verbalization During Psychoanalysis." Mahl also followed Loeb's lead and pointed out that temporal sequencing of movement and verbalization is often not contiguous but sequential, so that one's movements may signal an emotional reaction to some event happening much earlier in the interaction. This conceptualization and measure of the holistic approach to language and movement is explicitly chosen by Mahl because it recalls and corresponds to the Freudian formulation of personality

of remembering, repeating, and working through. Freud (1958) proposed that such actions were instances in which the analyzed:

> . . . does not remember anything of what he has forgotten and repressed but acts it out. He reproduces it not as a memory but as an action; he repeats it, without, of course, knowing that he is repeating it and . . . in the end we understand that this is his way of remembering (p. 150).

Freud added that this repetition was a function of resistance.

Furthermore, Mahl (1979) went beyond Freud and suggested that his findings were not only alternative ways of remembering but appeared to be integral to recollection and verbalization. Mahl used an A--B phenomenon paradigm where all components of the personality may be expressed in the A--actions: id--impulses, ego--defenses, and central superego attitudes or developmental experiences. Mahl's study then, is particularly appropriate because he logically related his concept to Freud's and also clearly distinguished it by means of empirical paradigms.

Proxemic Behavior

4. Pedersen and Shears' (1973) examination between two types of space behavior in a research framework exemplified the utilization of the fourth category of nonverbal behavior: proxemic behavior. They described and characterized proxemics as: (1) personal space and (2) group space. Pedersen and Shears described the person system as ". . . the individual as a system, the individual responds emotionally and physiologically vis-a-vis another person, thing, or place," while in the group system the "movements of individuals and the patterns of their interaction yield information which is used to maintain a steady state of social relationships within the group system" (p. 367). This

type of nonverbal behavior can be compared with Freud's psychoanalytic theory, where the id, ego, and superego relate to the social interactions of Pedersen and Shears' system theory as the system performs three distinct functions: "input" (sensing changes in the environment), "throughput" (evaluating sensed changes against internal criteria that yield a decision concerning their acceptability, and "output" (acting to alter the external state if it is unacceptable). Pedersen and Shears described open and closed systems consisting of information communicated by feelings and attitudes conveyed by the person's use of his body and the space occupied by it and his possessions. The term "steady state" is used to determine whether a system is open or closed. An "open" system has the ability to maintain itself, while the "closed" system does not have all the mechanisms needed to sense or assess change in its surroundings (Pedersen and Shears, 1973).

As noted by Hayduk (1978), Sommer, an early investigator of personal space, distinguished personal space from territorial behavior consisting of the following four guidelines:

(a) personal space is portable, whereas territory is relatively stationary

(b) the boundaries of territory are usually marked, whereas those of personal space are invisible

(c) personal space has the person's body at its center, whereas territory does not

(d) intrusion into personal space usually leads to withdrawal, whereas territorial intrusion usually leads to threats or fights (p. 117).

Sommer's (1974) work has presented evidence to support a spatial theory of leadership by focusing upon the arrangement of individuals

in face-to-face groups. Although he followed the research tradition dealing chiefly with the meaning of space to the individual in terms of the effects of crowding, territoriality, and architectural design and was only peripherally concerned with intercultural variations, his approach personified the external variable or clinical approach. Sommer, however, is one investigator who has studied behavior within naturally-occurring contexts in order to detect the effect of variations of such contexts on interactions and psychological states.

Perhaps the most noted author of proxemics, Hall (1963), linked proxemic behavior to anthropology. To Hall, the meaning and use of space in different cultures was a primary focus of study; however, his vision encompassed a much larger area than just the measure of distance and its comparison across cultures. Hall integrated proxemic and kinesic information into a general view of the culturally-defined behavior setting for interpersonal interactions with naturalistic methods of observation generally used. Hall's major contributions are the delineation of four social distances (intimate, personal, social, and public) which seem to be present in all cultures. Even though Hall hypothesized that it is the nature of animal and man to exhibit behavior which is termed territory, he also believed that individual feeling states depended on territorial rights.

On the other hand, Hayduk (1978), in his definition, departed from Hall (1966) in that he defined personal space as an area individual humans actively maintain around themselves into which others cannot intrude without arousing discomfort. Hall's definition of personal space was ". . . a small protective sphere or bubble that an organism maintains between itself and others" (p. 120). The latter,

however, is the crucial consideration for Darwin in his delineation of the concept of the principle of antithesis (inheritance) related to the power of intercommunication between members of the same community as being of the highest importance to social animals (Darwin, 1955). Although Darwin confined himself almost exclusively to the lower animals, Hayduk, as well as Sommer, restricted their definitions to human populations in the area of proxemic behavior. Hall's definition referred to all noncontact animal species, in contrast to Hayduk and Sommer. Hayduk also disagreed with the term "protective," which he believed was not necessarily an inherent characteristic of personal space. Hayduk did comment that most definitions of personal space were consistent with that of Hall or of his own.

This concept brings up one of the most active research areas in the personal space tradition, closely allied to concerns about urban environment, environmental psychology, and to the debate over territoriality. Human territoriality divides the proxemic world into opposing biological and cultural camps. The findings of Vine (1973) concerning the biological basis of territoriality seems noteworthy. Vine pointed out that the concept of territoriality has been most successfully applied to birds, especially during the breeding season. Mammals do use territories, but the overlap of ranges without rigid boundaries is a more common occurrence. When territorial behavior does occur in mammals, and particularly in primates, it is most often practiced by males. Vine concluded that true territorial behavior may be rare and that interaction distance, which might be considered an index of territory, is enormously variable, depending on the situation, personality variables, sex, social status, and so forth.

Lyman and Scott (1967, p. 236) called territoriality "a neglected sociological dimension" and distinguished four types of territories in human societies: body territories, interaction territories, home territories, and public territories. Body territory covers the area that Sommer (1974) called personal space (the area immediately around the person). The others referred to various types of marked-off areas, where encroachment is possible and will be reacted to. Lyman and Scott enumerated three types of territorial encroachment--violation, invasion, and containment--which is referred to as the body buffer zone and in Sommer's work is referred to as relatively stationary marked boundaries which, when invaded, leads to threats or fights.

As Weitz (1979) pointed out, a concept allied to territoriality is that of privacy, the need to avoid interaction, and close physical proximity. It was interesting to note that, although privacy involved erection of physical barriers utilizing cultural conventions, it was found that many women in our society find that their privacy is violated by shouted comments, whistles, and stares directed toward their physical persons, whereas a similarly situated male would not be subjected to such treatment (Weitz, 1979). Evans and Howard (1973) pointed out that demographic studies including sex and age have reported political and cultural factors on personal space behavior.

Two remaining variables in the study of proxemic behavior include touch and smell. Touch, like other channels of nonverbal communication, is subject to complex interpretations, depending on many factors in the person and environment; however, once two people touch they have eliminated the space between them. Henley (1973, p. 421) termed the process "the politics of touch," indicating that status differences

are reinforced by greater tactile accessibility of the lower-status partner. Henley's contention was that in opposite-sex interaction, male dominance is partially established by touching the female. Perhaps more than any other nonverbal channel, touch is subject to social regulation and sanction; therefore, considering touch would probably be unproductive in administrator-teacher relations. It is mentioned only as a variable of proxemic behavior.

On the other hand, smell would probably be ranked high in the American society. Any form of body odor offends, but could possibly play an important role in interpersonal interaction. Animals and humans, according to Gleason and Reynierse (1969), surely have smells and use them in some known and unknown ways to synchronize behavior and facilitate communication. Russell (1976) indicated that adults could detect their odor and reliably discriminate between typical male and female armpit odors. Despite the differences in olfactory skills, it was not reasonable to suppose that administrator-teachers do use this channel to the extent they are able to, probably in combination with other verbal and nonverbal information. Although in our own culture one may have strong associations with odors known as "odor memories" (Weitz, 1979, p. 289) which linger in the consciousness (or unconsciousness) of the visual or oral realm, the outer reaches of smell were not considered in this study.

Verbal-Nonverbal Review

Although Darwin's first work was to attempt to classify and observe elements of animal behavior as the structuralists proclaim, he later turned his attention to deduction of the expressions in both men

and animals. His theory of continuity concluded that feeling states and their expressional referents were everywhere the same (Darwin, 1899). The literature disclosed that nonverbal behavior is likely to reveal the true feeling states of the individual.

The determinants of most expressions result in unconsciously associated behaviors identified with certain states of mind developing into habit. Darwin pointed out that habit becomes more efficient during use and in this way acquired habits become inherited.

Barbour (1977) agreed with Darwin in that man is not all that much further evolved than other animals. This theory evolving from lower forms of life reiterates that from birth until 18 months a child is unable to speak and yet communicates without language. When a human finally achieves verbal language, however, the nonverbal instincts which have been a part of primates for 40 million years are still the nonverbal part of one's natural makeup.

Freud's (1905) psychological approach, as found to be overlapping in the review of literature, can be described in the psychologists' definition of role as that which allows a person to evaluate him/herself as a social object in interaction with others. This theory holds that we are in role most of the time, acting our role for others and they for us (Barbour, 1977). The approach gives a broad framework for looking at nonverbal behavior in particular.

Freud complemented Darwin and found that feeling states could be effectively diagnosed by forms of nonverbal leakage. Leakage, which is observable through nonverbal cues, is an example of nonverbal incongruence.

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

> All the world's a stage
> and the men and women merely players.
> They have their exits and their entrances,
> And one man in his time plays many parts.
> William Shakespeare
> As You Like It (Act II, Scene 7)

Moreno (1934) stated that role precedes self and that there are three kinds of role to be concerned about: The psychosomatic, the psychodramatic, and the social. He declared that the psychosomatic component of role behavior refers to the experiences and impulses of a newborn child. The psychodramatic involves practicing a behavior, acting it out and integrating it into his role repertoire. Self grows out of the roles we experience. Moreno would declare that as role playing leads to role taking, practice leads to identity. Darwin would declare that behavior leads to habit which becomes instinct and is inherited. The social component which establishes stability in social relationships would declare that one knows who one is and what one is expected to do and is comfortable in it. These interpersonal relationships would communicate a "sameness" in meaning between verbal-nonverbal behavior which would emerge as genuineness.

Goffman (1963) and others have pointed out that one does not separate the nonverbal from the verbal. Therefore, behavior is referred to as verbal-nonverbal in the literature review. He declared that one presents a performance with parts or routines, saying one

knows others and himself by the masks he wears and the parts he plays. Nonverbal behavior may be observed as a social interaction, not only with the player and himself but also with the player and others.

By describing the two mutually accepted perspectives (that of Darwin and Freud) in the literature from which nonverbal behavior may be viewed, one need not argument nurture vs. nature, heredity vs. environment, or instinct vs. education. One may take into account that the manifestations of nature are not black and white. When does a bush become a tree? Where does a cheek become a chin? Both theories simultaneously explain the various phenomena of human verbal-nonverbal behavior. When the theories are in conflict one needs only to look to the one which best fits what is already known (Barbour, 1977).

The Darwinian approach explains that much of nonverbal behavior can be traced to primate heritage. It would explain eyebrow raising, touching, and so forth, while the Freudian approach tells us that life is like a theater where humans are preoccupied with impressions and are behaving in order to give information to an audience. This perspective explains the verbal-nonverbal behavior of persons when they present themselves to others. Both perspectives are required to explain the behavior of the human being.

Ardrey (1970) held that primate behavior is strictly instinctive. He stated that there is no animal species that does not have some stratification which marks those with more influence and those with less. There are leaders and followers in every animal society and a sorting process determines which is which. This may account for the old cliche that leaders are born, not made. Saunders, Phillips, and

Johnson (1966, p. 54) noted that "people are constantly striving to improve their well-being and their effectiveness in their work." Therefore, verbal-nonverbal congruence would prevent leakage and enhance leader behavior.

In the review of literature, the nonverbal categories of: (1) paralanguage, (2) facial expression and visual interaction, (3) kinesics, and (4) proxemic behavior were explored. Throughout these categories, nonverbal behavior seemed to reveal true feelings and give way to how one felt (Ekman and Friesen, 1969b). These true feelings evolved primarily from the unconscious state, according to Darwin (1899). Dittmann and Llewellyn (1969) established that there was a significant relationship between paralanguage rhythm and body movement. They believed the relationship was one in which the communicator was not conscious of the movement, which seems to be habitual and an unthinking accompaniment of speech. Leathers (1976) described this effect as a balance theory of human communication. The theory applied to the relationship between verbal and nonverbal behavior. For example, individuals with very little facial expression may use emotive language. This generates a balance in a homeostatic fashion. Another example cited by Leathers was the individual who spoke fluently using few gestures, finding himself beginning to pause and grope for words. He would probably, in a crisis, lean forward (proxemic behavior), touch the person with whom he was attempting to communicate (tactile behavior), and begin gesturing (kinesic behavior) in a very explicit way in order to regain his verbal effectiveness. This probability suggests that when in need, the other communicative behavior systems seem to become dominant in a compensatory way that results in

verbal-nonverbal congruence. When nonverbal behavior systems are functioning in the congruent state (communicating essentially the same or supplemental meanings), communication is apt to be of high quality (Leathers, 1976).

A possible incongruent state of verbal and nonverbal behavior may be prevalent during interpersonal communication which, for this purpose, would be the relationship between the administrator and teacher in his school. An example of incongruence during interpersonal communication could evolve when two or more ego-involved individuals attempt to communicate on matters of psychological value for them, such as parent-child, husband-wife, and administrator-teacher interaction. A message is transmitted which: (1) asserts something, (2) asserts something about its own assertion, and (3) says that these two assertions are mutually exclusive. The recipient could be tied to his own frame of reference and be unwilling to seek clarification as to the intended meaning of the message; therefore, incongruence could emerge (Leathers, 1976).

According to Leathers (1976), Mehrabian (1972a), the foremost student of incongruent communication arrived at the following conclusions:

1. When there is inconsistency in meaning associated with interpersonal communication, the communicator typically relies on nonverbal behavior systems rather than verbal for the source of meaning.

2. Congruent communication is preferred over incongruent and negatively inconsistent messages are preferred over positively inconsistent ones.

3. The facial system of nonverbal behavior is the most important source of meaning. In fact, when subjects were instructed to say something negative with positive vocal expression, they actually spoke with a neutral vocal expression but assumed a positive facial expression so that audio recordings of their statements did not reflect substantial inconsistency (Mehrabian, 1972a).

4. Communicators found incongruent messages more offensive in formal than informal settings.

5. The verbal portion of incongruent messages conveyed attitudes toward the actions of the addressees, while the nonverbal portion conveyed attitudes toward the addressee himself (Mehrabian, 1972a). An example cited might be when Richard Nixon asserted in the debates that he was absolutely confident of the correctness of his position on foreign policy (while beads of perspiration were clearly visible on his upper lip). What conclusion could be drawn? (Leathers, 1976).

Halpin (1966) further discussed the importance of incongruence, which he defined as words saying one thing, but through some strange intuition, one feels behavior says just the opposite. Incongruence or leakage can be detected nonverbally, since nonverbal cues cannot be successfully suppressed. Concentration on the parts of the body which are rarely under conscious control is appropriate when one reviews the literature and considers Darwin and his theory.

It is believed that educational administrators, whether they be nomothetically or idiographically oriented (Getzels and Guba, 1957), will have an explicit awareness of the subtleties of their own verbal and nonverbal communication behavior. As Halpin (1966) stated:

> Man cannot be a successful administrator unless he is highly skilled in reading muted language and is also sensitive to the nuances of meaning which he transmits to others through his own muted language (p. 271).

Rationale

Saunders (1966) stated that a need exists to identify those elements of leader behavior which are indicative of successful leadership behavior in the elementary school setting. Halpin (1966) indicated that it is possible to determine the perceived congruence between verbal-nonverbal messages transmitted by an individual. He has reported that research on leader behavior shows that:

> By measuring the behavior of leaders on the Initiating Structure and the Consideration dimensions, we can determine by objective and reliable means how specific leaders differ in leadership style. However, effectiveness in respect to Initiating Structure, is not necessarily correlated with effectiveness in regard to Consideration. For example, the behavior of a leader who is effective in maintaining high morale and good human relations within the group is not necessarily effective in accomplishing high production and goal achievement. Therefore, leadership behavior is an essentially innate capacity of an individual manifested with equal facility regardless of the situation in which the leader finds himself (p. 88).

Mehrabian (1967) indicated in his research that real attitudes are communicated nonverbally and when there is a contradiction between verbal and nonverbal communication, people will tend to believe the nonverbal message. Therefore, during interaction with a subordinate, one's nonverbal behavior will be more authentic and the "real" self will be portrayed (Lipham and Francke, 1966).

Darwin (1899) believed that most behavior is innate or inherited. Skolnikoff (1973) supported Darwin's theory that innate or instinctional behavior is acquired, becomes habit, and is inherited. Further

research by Barbour (1977), in explaining nonverbal behavior, reinforced Darwin's theory in that animal nature causes one to behave the way he does nonverbally.

The concept of authenticity in leader behavior seems to be compatible with the authenticity of the verbal-nonverbal behavior of the elementary school administrator. Authentic leader behavior of the administrator was measured by the Leader Behavior Description Questionnaire (Ideal) (Halpin, 1957) dimensions which have been devised to show the true nature of the administrator.

Authentic verbal-nonverbal behavior of the administrator could be characterized by his/her congruence. If the administrator's verbal-nonverbal behavior is authentic, then the researcher could assume that authenticity would also facilitate leader-perceived administrator verbal-nonverbal congruence.

Elementary administrators with congruent verbal-nonverbal behavior would facilitate authentic leader behavior in their schools. Teachers would also perceive their administrators as having congruent behavior.

Finally, according to Halpin (1966, p. 271): "Those with whom one deals will read what one really is from the host of nonverbal cues and will discount words whenever they run counter to behavior."

Hypotheses

From the literature review and rationale, the researcher expected leader behavior of the administrator to be congruent with administrator-perceived verbal-nonverbal behavior. Furthermore, the more congruent

the teacher-perceived verbal-nonverbal behavior of the administrator, the more the administrator would enjoy successful leader behavior.

To test the above predictions empirically, the following research hypotheses were derived for statistical treatment:

HI: Administrator self-perceived verbal-nonverbal congruence will be positively related to self-perceived leader behavior dimensions.

HIA: Verbal-nonverbal congruence will be positively related to self-perceived administrator, nomothetic leader behavior.

HIB: Verbal-nonverbal congruence will be positively related to self-perceived administrator idiographic leader behavior.

HII: Administrator self-perceived verbal-nonverbal congruence will be positively related to teacher-perceived administrator verbal-nonverbal congruence.

Summary

In the previous literature review, nonverbal behavior was examined from the perspective of its theoretical formulation by Darwin. The most prestigious studies have been cited denoting authentic research. The literature suggests that verbal-nonverbal behavior is an important phenomena in leader behavior. Therefore, a need exists to identify the administrator's leader behavior dimensions with his/her verbal-nonverbal congruence, which may be indicative in assuming successful administrator/teacher relationships.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this research was to examine the relationships between the school administrator's verbal-nonverbal congruence (self-reported) and his/her perceptions of leader behavior.

The relationship between teacher-perceived congruence of administrator verbal-nonverbal behavior and the administrator self-perceived congruence was also investigated. Demographic data were examined.

This chapter states the research questions and hypotheses, defines the major terms, identifies the population, describes its selection, and describes the instruments. The data collection procedures, time schedule, and statistical procedure used in data analysis are also described.

Research Questions and Hypotheses

Research Questions

The following research questions guided this study:

1. Is there a relationship between the administrator's self-perceived congruence of verbal-nonverbal behavior and self-perceived leader behavior?

2. Is the teacher perception of administrator verbal-nonverbal congruence related to administrator self-perception of his/her own verbal-nonverbal congruence?

Research Hypotheses

The following sets of hypotheses were tested in order to determine the relationships stated by the research questions:

Set I

HI: Administrator self-perceived verbal-nonverbal congruence will be positively related to self-perceived leader behavior dimensions.

HIA: Verbal-nonverbal congruence will be positively related to self-perceived administrator nomothetic leader behavior.

HIB: Verbal-nonverbal congruence will be positively related to self-perceived administrator idiographic leader behavior.

Set II

HII: Administrator self-perceived verbal-nonverbal congruence will be positively related to teacher-perceived administrator verbal-nonverbal congruence.

Definition of Terms

The following terms are defined to provide clarity in conjunction with their use in this study:

Administrator. The chief executive in charge of each public elementary school, otherwise known as the principal.

Communication. Defined as a message which attempts to communicate specified information, attitudes, or values to specified audiences.

Dependent Elementary School. Defined as any public grade school in Oklahoma, including grades kindergarten through sixth or eighth, led by a county superintendent. (Dependent districts do not operate a high school.)

Facial Expression Behavior. Defined as a smile, frown, furrow, squint, and so forth.

Idiographic. Refers to Getzels and Guba's (1957) concern for individual relationships, social orientations and consideration, or personality-orientated behavior.

Independent Elementary School. Defined as any public school in Oklahoma, including grades kindergarten through sixth, part of a K-12 district, with a superintendent as chief administrator.

Innately Programmed. Defined as the acquisition of expressive movements that have been guided by phylogenetic adaptations involving specific learning dispositions, "innate releasing mechanisms," biasing the perception of the individual, or drive mechanisms channeling behavior in particular ways.

Kinesics. Defined as body language and gesture. External variable (Ekman, 1973) approach--psychological, any stimulus can elicit a response. Structural (Birdwhistell, 1966) approach--defined as a behavior which operates according to a set of rules (socially learned).

Leader Behavior Description Questionnaire (LBDQ). Developed to measure the nomothetic and idiographic dimensions of leader behavior.

Negative Nonverbal Behavior. Negative nonverbal behavior is defined as nonsupportive or incongruent with verbal behavior.

Nomothetic. Refers to Getzels and Guba's (1957) concern for organizational tasks, production orientations and initiating structure, or role-oriented behavior.

Nonverbal Behavior. Used in this research to refer to nonspoken feelings or attitudes such as observable actions, gestures, expressions, paralinguistic amplitude, pitch variation, tempo, and positions which are communicative, informative, and interactive.

Nonverbal Communication. Defined as a broad range of phenomena: Everything from facial expression to status symbols.

Nonverbal Cues. Refers to nonverbal behavior. Nonverbal cues are not what is expected by what is verbalized but by the way one behaves.

Nonverbal Emphasis. Defined as innate programming where inherited habit is unconsciously performed. The form (what a behavior is perceived to be) and the function (signals related to the behavior) have been selected to act together during the process of evolution. Therefore, examining them separately would be considered artificial.

Nonverbal Reaction Sheet. Defined as a questionnaire to measure perceived congruence of verbal-nonverbal behavior of the administrator using nonverbal cues.

Panhandle of Oklahoma. Defined geographically by counties, including Cimarron, Texas, and Beaver counties. The whole population of dependent and independent elementary schools in these counties was utilized.

Paralanguage. Verbal behavior not associated with language itself--tone and pitch, intensity, pauses and noises--not having the structure of language.

Perceived Nonverbal Behavior. Defined as the perceived reactions of the administrators and teachers to the positiveness or negativeness of the nonverbal cues of the administrators.

Personality. Defined as the dynamic organization within the individual of the need-dispositions that govern his unique reactions to the environment.

Positive Nonverbal Behavior. Defined as supportive or congruent with verbal behavior.

Proxemic Behavior. Defined as use of physical space in interaction with others.

Public School Teachers in Oklahoma. Any instructor employed by the school district who holds a valid teaching contract with the district.

Role. Defined as that which allows a person to evaluate him/herself as a social object in interaction with others.

Verbal Communication. Any form of spoken, written, or printed communication.

Visual Interpretation. Defined as gaze direction, gaze movement, duration of glances, eye contact, or mutual looking.

Design of the Study

Identification of Population

This study was limited to a population of public elementary

school teachers and their administrators in the Oklahoma Panhandle, as listed in the Oklahoma Educational Directory (1982-83). The entire Panhandle elementary school population was included.

Description of the Population

"The defined population has at least one characteristic which differentiates it from other groups" (Gay, 1976, p. 67). This study was limited to a population of public elementary school teachers and their administrators located in a three-county area in the northwest corner of Oklahoma, commonly known as the Panhandle of Oklahoma (Cimarron, Texas, and Beaver counties). Public elementary schools in the Panhandle are sparsely located, homogeneous, and rural. The entire Panhandle school population was included, with a teacher enrollment of approximately 240, and with 21 elementary administrators. Therefore, no attempt should be made to generalize the findings of this study to a population that differs significantly from elementary schools in the Panhandle.

Selection of the Subjects

The Oklahoma Educational Directory (1982-1983), issued by the State Department of Education, Oklahoma City, Oklahoma, was used to identify the public elementary schools as defined above. There were, according to this directory, 15 public elementary schools, in 14 independent school districts and 6 dependent public schools in the entire Panhandle area. The Oklahoma Educational Directory contained the school name, district, number, post office, telephone number, and county superintendent's name and telephone number.

For the purpose of verification of teacher and administrator identification and to secure permission for every elementary school in the Panhandle to be included in the study, the county superintendent in each of the three counties was contacted by telephone. Current administrator-teacher directories were then obtained from either the county superintendent or the superintendent of each district.

Since the sample and population were one of the same, the study was composed of 14 independent districts and 6 dependent districts. The final number of schools participating were: 15 independent schools with 202 teachers and 15 administrators. Five dependent schools with 30 teachers and 5 administrators participated. The responding group consisted of 232 (97%) teacher and 20 (95%) administrator participation of the total population.

Demographic Data

Demographic data are presented in Table III. The characteristics of the respondents generally reflected the characteristics of the population of administrators and teachers.

The population and sample were classified as elementary or acting elementary administrators and teachers (full-time and part-time). All classroom teachers (K-6) were included in the study, as well as special teachers such as speech therapists, developmental reading specialists, and counselors.

Of the 252 administrators and teachers who responded, female teachers comprised a large majority (88%). Male administrators were predominant by 85%. Teachers between the ages of 20 and 39 comprised

TABLE III

DEMOGRAPHIC DATA OF THE SAMPLE OF ELEMENTARY ADMINISTRATORS AND TEACHERS

Variable	Administrators (n)	Response Code	Frequency	%	Teachers (n)	Frequency	%
Sex of Respondents	20	male	17	85.0*	232	27	11.6
		female	3	15.0		205	88.4*
Age of Respondents	20	20-29	1	5.0	232	39	16.8*
		30-39	3	15.0		87	37.5*
		40-49	6	30.0		67	28.9
		50-59	8	40.0*		34	14.7
		60-69	2	10.0		5	2.2
		70	0	0		0	0
Experience in School System	20	0-3 years	5	25.0*	232	67	28.9*
		4-6 years	1	5.0		44	19.0
		7-10 years	4	20.0		46	19.8
		11-15 years	4	20.0		38	16.4
		15 plus years	6	30.0*		37	15.9*
Tenure in System	20	yes	15	75.0*	232	165	71.1*
		no	5	25.0		67	28.9
Respondents' Experience in Other Systems	20	yes	17	85.0*	232	137	59.1
		no	3	15.0		95	40.9*
Respondents' Total Years of Experience	17	0-3 years	1	5.9	139	13	9.4
		4-6 years	1	5.9		27	19.4
		7-10 years	3	17.6		27	19.4
		11-15 years	2	11.8		26	18.7
		15-19 years	10	58.8*		25	18.0
		over 19 years	0	0		21	15.1

TABLE III (Continued)

Variable	Administrators (n)	Response Code	Frequency	%	Teachers (n)	Frequency	%
Respondents' Job Descriptions	20	administrator (principal), full-time	5	25.0	232		
		administrator (principal), part-time administrator and part-time teacher	15	75.0*			
		teacher, full-time employment				224	96.6*
		teacher, part-time employment				8	3.4
Respondents' Levels Education	20	B.S.	5	25.0*	230	137	59.6*
		B.A.	3	15.0		38	16.5
		M.S.	4	20.0		24	10.4*
		M.A.	0	0		12	5.2
		M.E.	6	30.0*		17	7.4
		Ed.D.	0	0		2	0.9*
		Ph.D.	0	0		0	0
		Ed.S.	2	10.0*		0	0
Respondents' Undergraduate Majors	20	elementary education	11	55.0*	231	177	76.6*
		special education				7	3.0
		secondary education				5	2.2
		other (biological science, languages, home economics, etc.)	9	45.0		42	18.2
Respondents' Graduate Majors	20	none listed	8	40.0	232	140	60.3*
		elementary education	3	15.0		42	18.1
		special education		0		31	13.4
		secondary education		0		10	4.3
		administration	8	40.0*		0	0
		other	1	5.0		9	3.9
Respondents' Salary Levels	19	$4,999 or less	0	0	128	1	0.4
		$5,000-9,999	0	0		5	2.2
		$10,000-14,999	0	0		39	17.1
		$15,000-19,999	4	21.1		135	59.2*
		$20,000-24,999	6	31.6		43	18.9*
		$25,000-29,999	7	35.8*		5	2.2
		more than $30,000	2	10.5*		0	0

TABLE III (Continued)

Variable	Administrators (n)	Response Code	Frequency	%	Teachers (n)	Frequency	%
System Affiliated With OEA	19	yes	16	84.2	232	221	95.3
		no	3	15.8		11	4.7
Member of OEA	19	yes	7	36.8	232	142	61.6
		no	12	63.2		90	38.8
Official Negotiating Team in System	20	yes	0	100.0	232	26	11.2
		no	20			206	88.8
Member of Negotiating Team	0	yes	0		232	3	1.3
		no	0			229	98.7
Ever Been a Member	0	yes	0		232	11	4.7
		no	0			221	95.3
Respondents' Committee Assignments (last three years)	20	served on official committees in your building? yes	17	85.0	232	135	58.2
		no	3	15.0		97	41.8
		served on system-wide committees with teachers or administrators from other buildings? yes	10	50.0		93	40.1
		no	10	50.0		139	59.9
		been chairman any of the time? yes	9	45.0		64	27.6
		no	11	55.0		168	72.4
Number of Classroom Teachers in Building	20	1-15	16	80.0	232	121	52.2
		16 or more	4	20.0		111	47.8
Administrators in Building	20	1	18	90.0	232	230	99.1
		2	1	5.0		2	0.9
		3	1	5.0		0	0

TABLE III (Continued)

Variable	Administrators (n)	Response Code	Frequency	%	Teachers (n)	Frequency	%
Administrators' Job Titles	20	administrator (principal)	20	100.0	232	231	99.6
		assistant (principal)	0	0		1	0.4
		other	0	0		0	0
Respondents Graduated From High School in County Presently Teaching	20	yes	6	30.0*	232	83	35.8*
		no	14	70.0		149	64.2
Respondents' Relatives Teaching in System	20	yes	9	45.0*	232	67	28.9*
		no	11	55.0		165	71.1
Respondents' Parental Occupation/Profession	20	business, managerial	5	25.0	232	29	12.5
		skilled labor	1	5.0		37	15.9
		white collar	1	5.0		8	3.4
		farm	9	45.0*		115	49.6*
		professional	2	10.0		14	6.0
		other	2	10.0		29	12.5
Respondents' Verbal Communication With Superintendent	19	every day	6	31.6*	230	36	15.7*
		several times a week	8	42.1*		46	20.0*
		several times a month	5	25.3*		35	15.2*
		every one or two months				22	9.6*
		several times a year				34	14.8*
		not more than once or twice a year				52	22.6*
		have never talked with him				5	2.2*

TABLE III (Continued)

Variable	Administrators (n)	Response Code		Frequency	%	Teachers (n)	Frequency	%
Respondents' Social Communication With Board of Education Members	20	I am on a first-name basis with at least one of them	yes	20	100.0*	232	181	78.0*
			no	0	0		51	22.0
		at least one of them has visited in my home	yes	13	65.0*		65	28.0
			no	7	35.0		167	72.0*
		one of them is related to me	yes	0	0		3	1.3*
			no	20	100.0*		229	98.7
		at least one of them is a member of a club, lodge, or other social organization to which I belong	yes	7	35.0		65	28.0
			no	13	65.0*		167	72.0*

*Quoted in the discussion of demographic data.

Note: When N ≠ 20 for administrators or N ≠ 232 for teachers, nonrespondents constitute the difference.

54% of the sample, while 40% of the administrators were between 50 and 59 years of age.

Twenty-five percent of the administrators and 29% of the teachers had three or less years of experience in the current school system. However, 30% of the administrators and 16% of the teachers had over 15 years of experience in the system. Forty-one percent of the teachers had no experience in other systems, although 85% of the administrators had experience elsewhere. Seventy-one percent of the teachers and 75% of the administrators were tenured.

Seventeen of 20 administrators and 139 of 232 teachers responded to the questionnaire which asked their total years of experience. Fifty-nine percent of the administrators reported 15 to 19 years of experience, while teachers were rather evenly dispersed from 4 to over 19 years of experience.

A study of Table III reveals job description, degrees, and academic majors of the respondents. Seventy-five percent of the administrators were part-time. Ninety-seven percent of the 232 teachers were full-time. Twenty-five percent of the administrators held B.S. degrees, 30% M.E.'s, and two administrators held Ed.S. degrees. Sixty percent of the teachers held B.S. degrees, 10% held M.S.'s, and two teachers held Ed.D. degrees. Administrators reported elementary education as their undergraduate major (55%) and administration as a graduate major (40%). Seventy-seven percent of the teachers reported elementary education as their undergraduate major; however, 60% of the teachers did not list a graduate major.

Table III also reveals the salary level. Thirty-six percent of the administrators' salaries were between $25,000 and $30,000.

Fifty-nine percent of the teachers received salaries of between $15,000 and $20,000, with 19% receiving up to $25,000. Two administrators received more than $30,000.

Other less pertinent information is also included in Table III, such as affiliation with the Oklahoma Education Association (OEA), committee assignments, number of teachers in individual buildings, and the number of administrators and their titles in individual buildings.

Table III contains additional demographic data concerning the homogeneousness of the respondents. Thirty percent of the administrators and 36% of the teachers graduated from high school in the county in which they were presently teaching.

Forty-five percent of the administrators and 29% of the teachers had relatives teaching in the system. Farming was the parental occupation of 45% of the administrators. Fifty percent of the teachers' parents were farmers.

Verbal communication occurrence with the superintendent for administrators was every day (32%), several times a week (42%), or several times a month (25%). Teachers' face-to-face communication with the superintendent occurred every day (16%), several times a week (20%), several times a month (15%), every one or two months (10%), several times a year (15%), only once or twice a year (23%), or never (2%). All 20 (100%) of the administrators were on a first-name basis with at least one board member, while 78% of the teachers were on a first-name basis. Sixty-five percent of the administrators had at least one board member visit them in their homes. Seventy-two percent of the teachers reported no board members had ever visited them in

their homes. Administrators were not related to board members. Only one percent of the teachers were related to a board member.

The final variable contained in Table III revealed the respondents' social communication with a board of education member. Sixty-five percent of the administrators and 72% of the teachers were not members of a club, lodge, or other social organization to which a board member belonged. The 20 sample schools constituting the Panhandle of Oklahoma were found to be similar in size, and in numbers of tenured personnel. They were essentially homogeneous.

Data Collection Procedure

With the cooperation of elementary administrators, data were obtained by means of two self-administered questionnaires. Administrators completed two (white colored) questionnaires. One questionnaire contained the Ideal Leader Behavior Description Questionnaire (Halpin, 1957). The questionnaire is designed to determine the administrator's leader behavior. Variables measured were initiating structure and consideration. The other questionnaire contained the Nonverbal Reaction Sheet (Woodard, 1974) and demographic data, including sex, age, salary level, and so forth, describing the characteristics of the population. The Nonverbal Reaction Sheet portion of the questionnaire conveyed the interaction situations of administrators in their nonspoken feelings or attitudes toward their teachers.

Teachers completed a (blue colored) questionnaire containing the Nonverbal Reaction Sheet and demographic data. Teachers' perceptions of the administrators' nonverbal interactions were reflected. The

variables surveyed were eye contact, facial expression, body language, gestures, voice inflections, and use of space.

On January 26, 1983, the researcher telephoned 14 district superintendents and three county superintendents requesting permission to send each a sample packet including a brief explanation of the study design, copies of cover letters to the administrators and teachers (Appendix B), and copies of the instruments (Appendix C) for both teachers and administrators. In addition, the researcher asked the superintendent to check the appropriate box on a self-addressed, stamped postcard to be returned to Oklahoma State University indicating participation in the research project (Tables IV, V, and VI).

On February 1, 1983, sample packets were sent to all 14 district superintendents and the three county superintendents who represented the total population of the Panhandle of Oklahoma. The return postcard and the request for school directories were included in the packet.

On February 22, 1983, the researcher telephoned the remaining superintendents who had not responded to the postcard or sent school directories, requesting their participation again in the research study.

On March 8, 1983, all superintendents had responded and had indicated to whom the instruments were to be sent. The researcher then telephoned the elementary administrators and discussed the cover letters and instruments that were sent on March 8 through 14, 1983, to all 21 participating schools. A cover letter, questionnaires, and a stamped, return-addressed envelope were included in the packet sent to the administrators. The questionnaires were coded for the purpose

TABLE IV

TIME LINE FOR DATA COLLECTION (1983)

January 26 Called three county superintendents and 14 district superintendents requesting permission to participate and to send each a sample packet of the study.	February 1 Sent 17 sample packets to superintendents for approval. February 22 Called superintendents who had not responded.	March 8 Called all administrators who would be distributing questionnaires.
March 8-14 Sent packets, including cover letters, questionnaires, and stamped envelopes to all 21 participating schools.	April 5-8 Sent a second cover letter to administrators and faculty with questionnaires and stamped envelopes for the 80 nonresponding teachers and 3 nonresponding administrators.	April 6 Called all administrators to inform them of second questionnaire and stamped envelope for nonrespondents, along with cover letter to administrator, giving information on nonrespondents in the packet.
May 3-6 Called administrators. Sent third mailing to administrators with questionnaires, stamped envelopes, and a personal, handwritten letter to the remaining 17 nonrespondents in an addressed (open) envelope to be hand-delivered by administrator.	June 14 Sent fourth mailing to two nonrespondents. Sent one personal, handwritten letter to respondent's home address and one to the school, in care of the administrator, as school was not in session at this time.	June 21 Received 100% return of data from 15 independent schools and 100% return of data from 5 dependent schools. One dependent school chose nonparticipation.

TABLE V

TOTAL POPULATION AND ADMINISTRATOR-RETURNED QUESTIONNAIRES (1983)

Variable / School	No.	First Mailing March 8-14 No.	Returned	%	Second Mailing April 5-8 No.	Returned	%	Third Mailing May 3-6 No.	Returned	%	Fourth Mailing June 14 No.	Returned	%	June 21 Percentage
Administrators (Independent Schools)														
B	1	1	1	100										100
E	1	1	1	100										100
T	1	1	1	100										100
R	1	1	1	100										100
P	1	1	1	100										100
D	1	1	1	100										100
S	1	1	1	100										100
H	1	1	1	100										100
M	1	1	1	100										100
A1	1	1	1	100										100
A2	1	1	1	100										100
I	1	1	0	0	1	1	100							100
J	1	1	1	100										100
K	1	1	1	100										100
L	1	1	0	0	1	1	100							100
Total	15	15	13	86.7	2	2	100							
Administrators (Dependent Schools)														
F	1	1	1	100										100
G	1	1	1	100										100
C	1	1	1	100										100
N	1	1	1	100										100
O	1	1	1	100										100
U	1	1	0	0	1	0	Chose not to participate							0
Total	6	6	5	83.3	1									

TABLE VI

TOTAL POPULATION AND TEACHER-RETURNED QUESTIONNAIRES (1983)

Variable Teachers (Independent Schools) School	No.	First Mailing March 8-14 No.	Returned	%	Second Mailing April 5-8 No.	Returned	%	Third Mailing May 3-6 No.	Returned	%	Fourth Mailing June 14 No.	Returned	%	Total Returned Questionnaires June 21 Percentage
B	7	7	6	85.7	1	1	14.3	0	0	0	0	0	0	100
E	24	24	24	100.0	0	0	0	0	0	0	0	0	0	100
T	10	10	5	50.0	5	5	50.0	0	0	0	0	0	0	100
R	15	15	11	73.3	4	1	6.7	3	3	20.0	0	0	0	100
P	20	20	13	65.0	7	7	35.0	0	0	0	0	0	0	100
D	4	4	4	100.0	0	0	0	0	0	0	0	0	0	100
S	6	6	0	0	6	3	50.0	3	2	33.3	1	1	16.7	100
H	8	8	5	62.5	3	3	37.5	0	0	0	0	0	0	100
M	6	6	5	83.3	1	1	16.7	0	0	0	0	0	0	100
A1 & 2	67	67	52	77.6	15	11	16.4	4	3	4.5	1	1	1.5	100
I	5	5	4	80.0	1	1	20.0	0	0	0	0	0	0	100
J	15	15	9	60.0	6	3	20.0	3	3	20.0	0	0	0	100
K	7	7	3	43.0	4	1	14.0	3	3	43.0	0	0	0	100
L	8	8	0	0	8	8	0	0	0	0	0	0	0	100
Total	202	202	141	69.8	61	45	73.8	16	14	87.5	2	2	100.0	
Teachers (Dependent Schools)														
F	10	10	5	50.0	5	4	40.0	1	1	10.0	0	0	0	100
G	5	5	3	60.0	2	2	40.0	0	0	0	0	0	0	100
C	5	5	4	80.0	1	1	20.0	0	0	0	0	0	0	100
N	7	7	4	57.0	3	3	43.0	0	0	0	0	0	0	100
O	3	3	3	100.0	0	0	0	0	0	0	0	0	0	100
U	8	8	0	0	8	0	0	Chose not to participate						0
Total	38	38	19	50.0	19	10	52.6	1	1	100.0				

Note: The number of teachers participating was 232 (96.66%); there was 3.34% teacher nonparticipation. The number of elementary administrators participating was 20 (95.23%); there was 4.77% administrator nonparticipation. There were 20 of 21 total schools in the Panhandle of Oklahoma who participated.

of following up on nonrespondents. Individual names were kept confidential.

Within one month, 87% of the administrators and 70% of the teachers had completed and returned the questionnaires. On April 5 through 8, 1983, follow-up letters were sent to the superintendents or administrators identifying faculty who had not responded, along with second cover letters, coded questionnaires, and stamped, return-addressed envelopes. This mailing brought completed and returned questionnaires to 74%.

On May 3 through May 6, 1983, the researcher sent a third mailing to the administrators with handwritten, personal letters, cover letters, questionnaires, and stamped envelopes enclosed in individual, addressed envelopes. The administrator was asked by telephone to deliver the remaining 17 letters to the teachers personally. This mailing produced an 88% return.

During the third mailing, one school who had not responded to the first or second mailing was contacted by telephone. The administrator of the school felt that the questions on the LBDQ "did not make sense." He stated that the questions "were trite" and that the study was "a waste of time for both his teachers and for himself." Although the researcher assured him that all schools in the Panhandle had participated, he declined to participate in the study.

By June 14, 1983, there were only two participants in the remaining 20 schools who had not responded. Handwritten letters, questionnaires, and stamped, return-addressed envelopes were sent to the two remaining nonrespondents. One letter was sent to the nonrespondent's home address. The other was sent to the school, in care of the

administrator, as school had recessed for the year. Both questionnaires were returned by June 21, 1983. The researcher was successful in obtaining 232 teacher questionnaires and 20 administrator questionnaires (100%) of the 20 participating schools during the five month period (see Tables IV, V, and VI).

Instrumentation

Questionnaires

A questionnaire used in this study was the 30-item, four-page LBDQ (Halpin, 1966) constructed to gather the following data: The self-perceived, nomothetic and idiographic leader behavior dimensions of the administrator himself.

A second questionnaire, the Nonverbal Reaction Sheet (Woodard, 1974) was used to obtain perceived verbal-nonverbal reaction to the verbal-nonverbal categories of: (1) paralanguage, (2) facial expression and visual interaction, (3) kinesics, and (4) proxemic behavior. Perceived verbal-nonverbal congruence data were gathered from the administrator and the teachers on his/her staff; demographic data were gathered from both the administrators and their teachers.

LBDQ

The LBDQ was chosen as the instrument to be used in measuring the leader behavior of the administrators. This instrument offers an objective and reliable means by which one can determine how specific leaders are perceived to differ in leader behavior in terms of two dimensions: Initiating Structure (nomothetic) and Consideration

(idiographic). "The LBDQ offers a means of defining these two leader behavior dimensions operationally, making it possible to submit to empirical test specific hypotheses about leader behavior" (Halpin, 1966, p. 88).

The LBDQ was originally developed by Hemphill and Coons (1950) and later refined by Halpin and Winer (1952). The questionnaire is composed of a series of 30 short, descriptive statements indicating ways in which leaders perceive they might behave. The leader measures his own leadership ideology by checking a five-point frequency scale. This form is known as the LBDQ-Ideal, Self, using the same 30-item statements; however, each item is worded to indicate how the respondent believes a leader should behave. Halpin (1966) noted the LBDQ could be adapted readily to different group requirements without altering the meaning of the items. For example, with educational administrators, "staff" is substituted for "crew." Similarly, minor changes in wording can be made in each item according to the nature of the group with which the questionnaire is used.

The LBDQ is divided into two subtests. One subtest, Initiating Structure, measures concern for organizational task and is system-oriented. Halpin (1966) defined Initiating Structure as leader behavior that delineates the relationship between the leader and his subordinates and at the same time endeavors to establish well-defined patterns of organization, communication, and methods of procedure. Consideration measures concern for individual relationships and is person-oriented. Halpin referred to Consideration as leader behavior that indicates friendship, trust, respect, and warmth in the relationship between the leader and the members of his/her staff.

In the LBDQ-Ideal, Self, each dimension of 15 items was scored on a scale from 4 to 0. Consequently, the theoretical range of scores on each dimension was from 0 to 60. The items which define the two dimensions are reported in Appendix C. This instrument was found to be applicable to the study in that it determined two important categories of the administrators' self-perceived dimensions of leader behavior (Halpin, 1966). Reliability for the LBDQ was established at .93 for the 15 items of consideration and .86 for the initiating structure key (Halpin, 1966). Since the development of the LBDQ, the instrument has been used in numerous studies, research projects, and doctoral dissertations, establishing validity which has already been established by different authorities in the field (Schriesheim, House, and Kerr, 1976).

Nonverbal Reaction Sheet

The Nonverbal Reaction Sheet measures perceived congruence of the verbal-nonverbal behavior of the administrator. A critical problem in the research of nonverbal behavior is to find a standardized paper and pencil instrument which measures this variable (Galloway, 1983).

Woodard (1974) reported that a nonverbal reaction sheet had been developed by Reynolds (1971). It measured teacher perceptions of nonverbal cues, including all areas of nonverbal behavior identified in the review of literature; however, the cues were recorded on video tape. Woodard proposed to develop a questionnaire instrument that could be used in conjunction with variables of organizational climate and could be used with other variables of interest.

Reynolds (1971) used video tapes depicting positive (congruent) and negative (incongruent) scenes of administrator nonverbal behaviors. These scenes included: (1) eye contact, (2) facial expression, (3) gestures, (4) posture, (5) voice inflection, and (6) use of space. The tapes were presented to two judges who had previous experience working on nonverbal studies at the University of Tennessee. The judges presented the tapes to an Educational Administration Seminar. Using Kendall's Coefficient of Concordance, it was found that the reactions of the group to the positive (congruent) scenes were significant at the .001 level of confidence. The reactions of the group to the negative scenes were significant at the .05 level of confidence. Reynolds concluded that there was agreement among individuals as to their rankings of positive (congruent) and negative (incongruent) video tape scenes of nonverbal behavior cues.

Woodard (1974) developed the nonverbal reaction questionnaire using Reynold's (1971) instrument; however, he reworded the instrument so that teachers could rate their administrators as to the degree of congruence of verbal-nonverbal behavior. The reworded form was presented to a panel of five judges who were selected from the graduate faculty of Oklahoma State University. Kerlinger (1964) has stated that a test or scale must be 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, and (C) can't respond. Each judge responded and, with the input from the judges, the necessary changes were made to the Nonverbal Reaction Sheet (Woodard, 1974).

The revised Nonverbal Reaction Sheet was then administered to teachers from two elementary schools in a pilot study. The objectives of the pilot study were to: (1) determine if the teachers understood the instrument and could rate their administrator on a congruency scale of verbal-nonverbal behavior and (2) to determine the reliability of the instrument.

According to Kerlinger (1964), the reliability is the accuracy or precision of a measuring instrument. He also stated that an 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. Based on Kerlinger's formula for reliability coefficients, Woodard (1974) found the reliability coefficient for his instrument to be 0.88.

Based on the information received from the judges, the teachers, and the results of the reliability study, it was determined that the Nonverbal Reaction Sheet could be utilized as a functional, realistic, and reliable paper and pencil instrument. Each dimension of nonverbal communication was scored on a scale from 0 to 6. Items of the dimensions are reported in Appendix C.

Demographic data were presented in Table III. Frequencies for the sample of administrators and teachers are given in percentages. It was hoped that the demographic data received from the Panhandle of Oklahoma would reveal certain characteristics not found in more populated areas in the state of Oklahoma, due to geographical isolation, which would differentiate this population from other populations. The researcher believed the population to be unique in such characteristics as level of education, salary, secondary certificate from system presently

employed, relatives teaching in system, and social communication with superintendents and board of education members. Demographic data may reveal that the Panhandle of Oklahoma could be distinguished from groups known to be homogeneous and rural. Thus, generalization with groups similar in size may be an idealistic, not a realistic choice.

Data Analysis

Statistical Procedures

The returned Nonverbal Reaction Sheets, which contained six scales, were coded. Each of the six scales was assigned a weight of one (very negative), two (negative), three (mildly negative), four (mildly positive), five (positive), and six (very positive). These six weights were tabulated for each administrator's self-perceptions on the continuum, ranging from incongruence (1) to congruence (6). The six weights were also assigned to the teachers' perceptions of their administrators' verbal-nonverbal congruence. The higher the score, the more congruent the administrators' verbal-nonverbal behavior was perceived by the teacher. The higher the score, the more positive or congruent the administrator perceived his own verbal-nonverbal behavior.

The data collected with the LBDQ were coded and scored. A weight of zero to four, ranging from options of never, seldom, occasionally, often, and always, were tabulated for each administrator to determine the administrators' leader behavior.

Data were keypunched and verified on the IBM 370 model 58 computer at the Oklahoma State University Computer Center. The software

package, the Statistical Package for the Social Sciences (SPSS), was the component used in interpreting the data submitted by Fortran batch-controlled cards.

The statistical technique to determine the relationship between perceived congruence of verbal-nonverbal behavior of the administrator and leader behavior was the Pearson Product Moment Correlation. Data were measured against the .05 level of confidence. The formula for Pearson Product Moment Correlation is as follows:

$$r = \frac{\sum XY - \frac{(\sum X)(\sum Y)}{N}}{\sqrt{\left[\sum X^2 - \frac{(\sum X)^2}{N}\right]\left[\sum Y^2 - \frac{(\sum Y)^2}{N}\right]}}$$

$$df = N-2$$

The correlation was utilized to assess the degree of relationship between the hypothesized variables. "The statistical correlation refers to a quantifiable relationship between two variables. Furthermore, it is a measure of the strength and direction of that relationship" (Popham and Sirotnik, 1973, p. 80).

A crosstabulation was used to determine whether two quantitative variables would indicate whether high values in one series would tend to go with high values in the other, or whether high values in one series tended to go with low values in the other, or whether no such tendencies were present (Muellar, Schuessler, and Costner, 1977).

A computer-frequencies output was included to summarize the demographic characteristics of the population of administrators and teachers in the Panhandle of Oklahoma (see Table III).

Summary

The purpose of this research was to examine administrator leader behavior with administrator verbal-nonverbal congruence. Chapter III has provided information concerning the method of conducting the study, including the description of the population, data collection procedure, description of the design, instruments, and statistical procedures utilized for data evaluation of the study.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

Of the 252 administrators and teachers surveyed, 100% responded. One entire school chose, late in the data-collecting month, not to participate. Thus, 95% of the administrators and 97% of the teachers were used in the analysis.

Testing the Hypotheses

Since it is common statistical practice to accept hypotheses supported at the .05 level of significance, that level of confidence was adopted for this study. For the correlation coefficients, only those correlations attaining the $\leq$.05 level of significance were used. The analysis of data was organized around the two research hypotheses formulated in Chapter II.

Set I

The first set of hypotheses predicted the relationship between administrator-perception of leader behavior and verbal-nonverbal congruence. Hypotheses IA and IB were tested using the Pearson Product Moment Correlational Technique (Table VII). The stated hypotheses are as follows:

TABLE VII

CORRELATION COEFFICIENTS FOR THE RELATIONSHIP BETWEEN SELF-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND SELF-PERCEIVED ADMINISTRATOR LEADER BEHAVIOR

	Eye Contact	Facial Expression	Body Language	Gestures	Voice Inflection	Use of Space
Nomothetic Dimension	-.2560 (17) P = .160	-.0621 (17) P = .406	.1382 (17) P = .298	.0289 (17) P = .456	-.1332 (17) P = .305	.2310 (17) P = .185
Idiographic Dimension	.0373 (17) P = .443	-.0466 (17) P = .429	.2845 (17) P = .134	.4016 (17) P = .055	.1262 (17) P = .315	.1991 (17) P = .222

Note: $P \leq .05$ is required for significance.

HI: Administrator self-perceived verbal-nonverbal congruence will be positively related to self-perceived leader behavior dimensions.

HIA: Verbal-nonverbal congruence will be positively related to self-perceived administrator nomothetic leader behavior.

HIB: Verbal-nonverbal congruence will be positively related to self-perceived administrator idiographic leader behavior.

In order to determine whether relationships existed among administrator self-perceived verbal-nonverbal congruence variables and the nomothetic leader behavior variable, the Pearson Product Moment Correlation was employed.

Correlation coefficients were determined for each of the six verbal-nonverbal congruence variables, as they related to the nomothetic leader behavior variable.

The Pearson Product Moment Correlation determined that:

1. The correlation between eye contact and nomothetic administrator leader behavior was -.2560 and was nonsignificant at the .05 level of confidence.

2. The correlation between facial expression and nomothetic administrator leader behavior was -.0621 and was nonsignificant at the .05 level of confidence.

3. The correlation between body language and nomothetic administrator leader behavior was .1382 and was nonsignificant at the .05 level of confidence.

4. The correlation between gestures and nomothetic administrator leader behavior was .0289 and was nonsignificant at the .05 level of confidence.

5. The correlation between voice inflection and nomothetic administrator leader behavior was -.1332 and was shown to be nonsignificant at the .05 level of confidence.

6. The correlation between use of space and nomothetic administrator leader behavior was .2310 and was shown to be nonsignificant at the .05 level of confidence.

The six verbal-nonverbal congruence values indicated negative correlations for eye contact, facial expression, and voice inflection. These six values indicated positive correlations for body language, gestures, and use of space with administrator nomothetic leader behavior. However, in all six variables the obtained positive and negative correlations were not significant at the .05 level.

To determine whether relationships existed among administrator self-perceived verbal-nonverbal congruence variables and the idiographic leader behavior variable (HIB), the descriptive statistic (Pearson r) was calculated.

Correlation coefficients were determined for each of the six administrator verbal-nonverbal congruence variables as they related to the administrator idiographic leader behavior variable.

The Pearson Product Moment Correlation procedure determined that:

1. The correlation between eye contact and idiographic administrator leader behavior was .0373 and was nonsignificant at the .05 level of confidence.

2. The correlation between facial expression and idiographic administrator leader behavior was -.0466 and was shown to be nonsignificant at the .05 level of confidence.

3. The correlation between body language and idiographic administrator leader behavior was .2845 and was nonsignificant at the .05 level of confidence.

4. The correlation between voice inflection and idiographic administrator behavior was .1262 and was shown to be nonsignificant at the .05 level of confidence.

5. The correlation between use of space and idiographic administrator behavior was .1991 and was shown to be nonsignificant at the .05 level of confidence.

6. The correlation between gestures and idiographic administrator leader behavior was .4016 and was shown to be nonsignificant at the .05 level of confidence.

The six verbal-nonverbal congruence values indicated that facial expression was a negative correlation. Gestures, body language, and use of space indicated positive correlations; however, they were nonsignificant at the .05 level of confidence.

There was a tendency toward significance in the relationships between gestures and administrator idiographic leader behavior. This relationship indicated that administrators who perceived themselves considerate (idiographic variable) tended to perceive that they exhibited more congruent gestures.

Summary: Set I

The first set of hypotheses addressed the first research question posed in the study by examining the relationship between perceived verbal-nonverbal congruence and leader behavior dimensions for all administrators. These hypotheses predicted that for each of the six

verbal-nonverbal variables examined, congruence would increase as leader behavior was perceived to increase. Both hypotheses were examined at the .05 level of confidence. Only one variable (gestures) approached the level of confidence as indicated. Thus, the prediction of the relationship between gestures (congruent vs. incongruent) and idiographic leader behavior showed some tendency toward a significant relationship.

Set II

The hypothesis in the second set predicted that the above relationship between administrator perceptions of verbal-nonverbal congruence would also vary according to the teacher perceptions of his/her administrator verbal-nonverbal congruence. Thus, it was expected that the higher the administrator verbal-nonverbal congruence, the higher the teacher's perception of his/her administrator verbal-nonverbal congruence (Table VIII).

HII: Administrator verbal-nonverbal congruence will be positively related to teacher-perceived administrator verbal-nonverbal congruence.

HII was tested using the Pearson r to determine whether there was a significant relationship between administrator-perceived verbal-nonverbal congruence and the teacher's perception of his/her administrator's verbal-nonverbal congruence.

The response categories of the six-item verbal-nonverbal congruence scale ranged from incongruence to congruence. The factors tested indicated the relationship between administrator-perceived teacher

TABLE VIII

CORRELATION COEFFICIENTS FOR THE RELATIONSHIP BETWEEN SELF-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND TEACHER-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE

	Teachers					
Administrators	Eye Contact	Facial Expression	Body Language	Gestures	Voice Inflection	Use of Space
Eye Contact	.6120 (17) P = .004					
Facial Expression		.6010 (17) P = .005				
Body Language			.1335 (17) P = .305			
Gestures				-.0409 (17) P = .438		
Voice Inflection					.4488 (17) P = .035	
Use of Space						.3423 (17) P = .089

Note: $P \leq .05$

perception of his/her verbal-nonverbal congruence and the teacher's perception of the administrator's verbal-nonverbal congruence.

The Pearson Product Moment Correlation determined that:

1. The correlation between teacher perception of the administrator's eye contact and the administrator's perception of his/her eye contact with his/her teachers was .6120 and was significant at the .05 level of confidence.

2. The correlation between teacher perception of the administrator's facial expression and the administrator's perception of his/her facial expression with his/her teachers was .6010 and was significant at the .05 level of confidence.

3. The correlation between teacher perception of the administrator's voice inflection and the administrator's perception of his/her voice inflection with his/her teachers was .4488 and was shown to be significant at the .05 level of confidence.

4. The correlation between teacher perception of the administrator's body language and the administrator's perception of his/her body language with his/her teachers was .1335 and was nonsignificant at the .05 level of confidence.

5. The correlation between teacher perception of the administrator's use of space and the administrator's perception of his/her use of space among his/her teachers was .3423 and was shown to be nonsignificant at the .05 level of confidence, although the relationship shows a positive correlation.

6. The correlation between teacher perception of the administrator's gestures and the administrator's perception of his/her gestures

with his/her teachers was -.0409 and was nonsignificant at the .05 level of confidence.

Summary: Set II

The second hypothesis addressed the second research question posed in the study by examining the above relationship between perceived administrator verbal-nonverbal congruence in relation to teacher perception of his/her administrator's verbal-nonverbal congruence. This hypothesis predicted that the more positive the administrator verbal-nonverbal congruence, the more positive the teacher perception of administrator verbal-nonverbal congruence.

The correlation between teacher perception and administrator perception for body language (.1335) and use of space (.3423) were positive correlations. However, they were not significant at the .05 level of confidence. One negative correlation, gestures (-.0409), was also nonsignificant at the .05 level of confidence. Eye contact (.6120), facial expression (.6010), and voice inflection (.4488) were determined to be significant at the .05 level of confidence.

Additional Analysis of Data

The researcher intentionally included one verbal item on the demographic, professional, and personal information portion of the teacher and administrator verbal-nonverbal questionnaire. It was predicted that once verbal (speaking) communication was introduced, a relationship between verbal communication and verbal-nonverbal congruence would emerge. The question posed to the teachers was: "How often do you talk face-to-face with your superintendent?"

Although these data were not a primary part of the study, analyses were performed using the Pearson r correlation. Several significant negative correlations were found at the .05 level of significance. These correlations are presented in Table IX (Appendix D).

It was expected that administrators' self-perceptions of their verbal-nonverbal congruence would be higher than the teachers' perceptions of their administrators' verbal-nonverbal congruence. Data which were appropriate to compare administrator perception of his/her verbal-nonverbal congruence scores are presented in Table X (Appendix D).

Scores ranged from one to six. Administrators from schools A1, B1, C1, D1, G1, M1, N1, O1, S1, and T1 rated themselves as either "positive" or "very positive" on all questions. Teachers' mean scores for school A1 rated the administrator's gestures and use of space as "mildly positive." Teachers' mean scores in school B1 were consistent with administrator scores. Although the administrator from school C1 rated himself as "very positive," (congruent) in all items, teachers' means ranged from "positive" to "mildly positive." The administrator from school D1 rated himself as "positive." Teachers rated him as "mildly positive" on all items. Teachers in school G1 perceived their administrator to be "mildly positive" in body movements, gestures, and voice inflection. The facial expression and body movement mean scores were perceived by teachers in school M1 to be "mildly positive." However, in school N1, only the eye contact mean score was consistent with administrator perception. All other means fell into the "mildly positive" category. In school O1, the administrator perceived his voice inflection to be "positive," while the teacher mean was perceived to be "very positive." Teacher mean scores for all other

administrator variables were found to be "positive," although the administrator perceived himself as "very positive" on these items.

Teachers' means in school S1 perceived their administrator to be "mildly positive" in body language and gestures and "positive" in all other items. The administrator perceived himself to be "positive" in use of space and "very positive" on all other items.

Although the school T1 administrator perceived himself to be "positive" on all items, teachers' means for that school indicated that only eye contact was consistent. All other means fell into the "mildly positive" category.

In general, administrators from schools A2, F1, H1, I1, K1, and R1 rated themselves as more positive than the teachers' means indicated. However, school J1 indicated the teachers' perceptions of the administrator's verbal-nonverbal congruence was "more positive" than the administrator's self-perception.

Administrators from schools E1, L1, and P1 did not mark the Nonverbal Reaction Sheet portion of the questionnaire; however, they did complete the demographic information included with the questionnaire (see Table X, Appendix D).

Additionally, a crosstabulation was performed to examine high values in the teachers' perceptions of their administrators' verbal-nonverbal behavior--whether high values in one tended to go with low values in the other, or whether no such tendencies were present (Muellar, Schuessler, and Costner, 1977). The cross-tabulations are presented for selected variables (Appendix D). The researcher had speculated that teachers' perceptions of their administrators' verbal-nonverbal eye contact congruence might be associated with the teachers'

total years of teaching experience (see Table XI, Appendix D). Both males and females were positive toward most administrator verbal-nonverbal items (see Table X, Appendix D). In addition, Appendix D shows cross-tabulation of verbal-nonverbal congruence items with sex, highest degree earned, undergraduate major, and salary.

Summary

The analysis of data which were collected as part of the study have been presented in Chapter IV. The first hypothesis (IA) of the study was not supported at the .05 level of significance. Hypothesis IB was not supported at the .05 level. The verbal-nonverbal item (gestures) approached a tendency toward significance with the idiographic dimension of administrator-perceived leader behavior. Hypothesis II was supported with three variables--eye contact, facial expression, and voice inflection--significant at the .05 level of confidence. Demographic variables were shown to have "positive" to "very positive" crosstabulation values between verbal-nonverbal congruence items and demographic items.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This research study examined verbal-nonverbal congruence as perceived by public elementary school administrators with their leader behavior dimensions. Specifically, the study focused upon the relationship between perceived nomothetic and idiographic dimensions of leader behavior and perceived variables of verbal-nonverbal congruence. The relationship between administrator verbal-nonverbal congruence and teacher-perceived administrator verbal-nonverbal congruence was also investigated.

A review of the literature on verbal-nonverbal behavior led to the proposition that verbal-nonverbal behavior plays an integral part in leader-behavior dimensions. Therefore, the proposition led to the development of a conceptual framework and rationale for two research questions. In the conceptual framework, the researcher indicated that an elementary administrator is employed in a leadership role and that the influence of verbal-nonverbal behavior expectations prevail over an administrator's personality characteristics. It was argued that regardless of administrator leader behavior exhibited, whether it be task oriented or human relations oriented behavior, the administrator's verbal-nonverbal congruence would emerge. The administrator

would "be what he shows" (Freud, 1905, p. 77). If administrators perceived themselves as high in the nomothetic leader behavior dimension, verbal-nonverbal behavior would be congruent with that dimension.

It was further argued that words are not the only messages sent between people, and that nonverbal cues convey important meanings. The researcher believed that teachers, as professionals, are capable of making valid judgments about the congruence of their administrator's verbal-nonverbal behavior.

If administrators were verbally-nonverbally congruent, then teachers would also perceive their administrator as being verbally-nonverbally congruent. Thus, Darwin's theory of innateness or inheritance in understanding verbal-nonverbal behavior in conjunction with understanding the nature of man would apply. This rationale formed the framework for the investigation of the leader behavior dimensions of elementary administrators and their verbal-nonverbal congruence.

The methodological procedures for data collection and data analysis were presented in Chapters III and IV, respectively. The design of the study identified the population of public school elementary administrators and their respective teachers located in the Oklahoma Panhandle. The entire Panhandle school population was included, with a total teacher enrollment of approximately 240 and with 21 total elementary administrators.

The subjects were selected from 15 public independent elementary schools and 6 dependent public schools. The final number of schools participating were: 15 independent schools with 202 teachers and 15 administrators. Five dependent schools with 30 teachers and 5 administrators also participated. The final sample consisted of 232 (97%)

teachers and 20 (95%) administrators participating from the total population.

The population and sample were classified as elementary or acting elementary administrators and teachers (full-time and part-time). All classroom teachers (K-6) were included in the study, as well as special teachers such as speech therapists and counselors.

Data were collected by means of two self-administered paper-and-pencil questionnaires. Administrators completed two questionnaires--one contained the LBDQ, which is designed to determine the administrator's leader behavior. The Nonverbal Reaction Sheet questionnaire conveyed the interaction situations of administrators in their nonspoken feelings or attitudes toward their teachers. Teachers completed the Nonverbal Reaction Sheet questionnaire also.

During a five-month period, data were collected (see Table IV). By June of 1983, the researcher was successful in obtaining 232 teacher questionnaires and 20 administrator questionnaires (100%) of the 20 schools who participated.

The data collected were scored. The statistical technique to determine the relationship between perceived congruence of verbal-nonverbal behavior of the administrator and his/her leader behavior was the Pearson Product Moment Correlation. Data were measured against the .05 level of confidence.

The purpose of Chapter V is to summarize the findings, discuss the conclusions, and to make recommendations concerning further research.

Summary of Findings

Each of the two research questions and respective hypotheses which guided the study will be considered. The first set of hypotheses addressed the first research question by examining the relationship between perceived verbal-nonverbal congruence and leader behavior dimensions. This set of hypotheses predicted that the variables of verbal-nonverbal congruence would be positively related to leader behavior dimensions.

Research Question 1

1. Is there a relationship between the administrator's self-perceived congruence of verbal-nonverbal behavior and self-perceived leader behavior?

Research Hypothesis I

Hypothesis I was tested to determine the relationships stated by the research questions:

Set I

HI: Administrator self-perceived verbal-nonverbal congruence will be positively related to self-perceived leader behavior dimensions.

HIA: Verbal-nonverbal congruence will be positively related to self-perceived administrator nomothetic leader behavior.

HIB: Verbal-nonverbal congruence will be positively related to self-perceived administrator idiographic leader behavior.

The data on the nomothetic leader dimension with the verbal-nonverbal congruence variables considered did not support this predicted relationship:

1. It was found that there was a negative nonsignificant relationship between perceived eye contact and administrator nomothetic leader behavior.

2. It was found that there was a negative nonsignificant relationship between perceived facial expression and administrator nomothetic leader behavior.

3. It was found that there was no relationship between perceived body language and administrator nomothetic leader behavior.

4. It was found that there was a nonsignificant relationship between perceived gestures and administrator nomothetic leader behavior. While there was not a significant relationship between task oriented administrators and gestures, the relationship was positive. The relationship between gestures and leader behavior dimensions will be addressed in the discussion section.

5. It was found that there was a negative nonsignificant relationship between perceived voice inflection and administrator nomothetic leader behavior.

6. It was found that there was no relationship between perceived use of space and administrator nomothetic leader behavior.

The data on the idiographic leader dimension with the verbal-nonverbal congruence variables considered did not support the predicted relationship in general. However, the correlation between gestures and idiographic leader behavior showed a tendency toward significance at the .05 level of confidence:

1. It was found that there was no relationship between perceived eye contact and administrator idiographic leader behavior.

2. It was found that there was a negative nonsignificant relationship between perceived facial expression and administrator idiographic leader behavior.

3. It was found that there was no relationship between perceived body language and administrator idiographic leader behavior.

4. It was found that there was no relationship between perceived voice inflection and administrator idiographic leader behavior.

5. It was found that there was no relationship between perceived use of space and administrator idiographic leader behavior.

6. It was found that there was a nonsignificant relationship between perceived gestures and administrator idiographic leader behavior.

The first part of this set of hypotheses, dealing with the relationship between the administrator's perception of his/her verbal-nonverbal congruence and the nomothetic leader behavior dimension, showed no correlation.

> It is conventional in behavioral science research to use the .05 and .01 levels of significance. These are the significance levels usually reported in research literature. Although there are different schools of thought, all agree that the level of significance should be set by the researcher prior to gathering and testing the data. Post facto decisions regarding significance levels offer too much opportunity for the researcher to let his biases color his judgment; however, few researchers actually practice it (Popham and Sirotnik, 1973, p. 50).

The second part of this set of hypotheses did not confirm the prediction that administrators with high idiographic leader behavior would exhibit a high, verbal-nonverbal congruent behavior. All six of

the verbal-nonverbal congruence variables were found to be nonsignificant. Although there was no relationship between the variable (gestures) and the idiographic dimension, there was a tendency toward significance (.4016).

Encouraged by the positive correlation of the variable (gestures) and the relatedness of this variable to the variables of eye contact, body language, paralanguage, and proxemics which were a measure of verbal-nonverbal congruence, one might conclude from these findings that elementary administrators do make a continued effort to improve the quality of their verbal-nonverbal behavior by movement through not only the variable (gestures) but through the other verbal-nonverbal variables as well (Weber, 1986).

The second hypothesis addressed the second research question by predicting a relationship between perceived administrator verbal-nonverbal congruence manifested to his/her teachers and the teacher's perception of his/her administrator's verbal-nonverbal congruence.

Research Question 2

2. Is the teacher perception of administrator verbal-nonverbal congruence related to administrator self-perception of his/her own verbal-nonverbal congruence?

Research Hypothesis II

Hypothesis II was tested to determine the relationships stated by the research question:

Set II

HII: Administrator self-perceived verbal-nonverbal congruence will be positively related to teacher-perceived administrator verbal-nonverbal congruence.

The second hypothesis addressed the second research question posed in the study by examining the relationship between perceived administrator verbal-nonverbal congruence and the teacher's perception of his/her administrator's verbal-nonverbal congruence. This hypothesis predicted that for each verbal-nonverbal variable there would be congruence. The higher the administrator verbal-nonverbal congruence, the higher the teacher's perception of the administrator's verbal-nonverbal congruence. It was found that the relationship between self-perceived administrator verbal-nonverbal congruence which was manifested to teachers with the teacher's perception of his/her administrator's verbal-nonverbal congruence was significant for the variables of eye contact, facial expression, and voice inflection. Use of space showed a positive correlation. Gestures showed a negative nonsignificant correlation.

1. It was found that there was a significant relationship between perceived administrator eye contact and teacher perception of administrator eye contact.

2. It was found that there was a significant relationship between perceived administrator facial expression and teacher perception of administrator facial expression.

3. It was found that there was no relationship between perceived administrator body language and teacher perception of administrator body language.

4. It was found that there was a significant relationship between perceived administrator voice inflection and teacher perception of administrator voice inflection.

5. It was found that there was no relationship between perceived administrator use of space and teacher perception of administrator use of space.

6. It was found that there was a negative nonsignificant relationship between perceived administrator gestures and teacher perception of administrator gestures.

Hypothesis I

It may be concluded that there were no significant relationships between verbal-nonverbal congruence variables and the nomothetic-idiographic dimensions of leader behavior (self-perceived by the administrator). However, the variable gestures (.4016) showed a positive tendency toward significance.

Hypothesis II

Eye contact (.6120), facial expression (.6010), and voice inflection (.4488) were found to be significant at the .05 level of confidence. Body language (.1335) was not significant; however, use of space (.3423) showed a positive correlation. The variable gestures (-.0409) was found to be nonsignificant. This finding led the researcher to further discussion.

Conclusions

The analysis of the first set of hypotheses did not support the

idea that administrators who had a high degree of consideration for their teachers perceived themselves as positively related to the verbal-nonverbal factor (gestures). Although this variable did not achieve significance, there was a strong tendency toward significance and therefore it is worthy of discussion. Gestures, as referred to in the literature, is the heart of the body and known as "kinesics" (Leathers, 1976, p. 20).

> Kinesics is touching, eye contact, posturing, muscle twitch, and subvocalism. The way a person walks, the manner in which people touch, how a person stands or sits, the tensing of muscles, the 'A-OK' gesture, the emphasis placed on particular nonwords such as 'uh' and 'ah' and distancing (the closeness one allows another person without feeling uncomfortable) can give the perceptive individual an insight into what another person really means when he or she does talk (Gratz and Gratz, 1979, p. 39).

Although all six factors (eye contact, facial expression, voice inflection, use of space, body language, and gestures) were nonsignificant, all these factors are intertwined with gestures, known as kinesic behavior, showing positiveness toward significance.

Gestural behavior conveys different meanings and serves different functions. Type and duration of eye contact can be considered as gestures and will have a great impact on movement as it conveys the dimensions of meaning such as activation, evaluation, dynamism, and control (Beebe, 1974). Body language or postural behavior is useful in communicating immediacy (responsiveness or unresponsiveness, agreement or disagreement, and power or status). Use of space will be perceived as being more socially active or desirable as a friend if one does not approach another too closely or does not stand too far away (Patterson and Sechrest, 1970).

Although rapid changes of facial expression are used to accompany speech, slow changes of facial expression indicate emotions and interpersonal attitudes that are innate (Argyle, 1972), just as voice inflection or guttural language was originally innate.

The analysis of hypothesis IA did not support the idea that when administrators perceived themselves as nomothetic in their leader behavior, high degrees of verbal-nonverbal congruence were found. When administrators perceived themselves to be effective, task oriented, or role related (Hoy and Miskel, 1978), they saw themselves as "actors" in institutions. If institutions carry out their prescribed goals, these human agents must be concerned with people, not in a personalistic sense, but in the actuarial sense. Since institutions are structural, tasks to achieve goals are specified and organized into roles. Roles are assigned certain responsibilities and are "set up" in terms of actors. "The real person may or may not exactly fit the given role" (Getzels and Guba, 1957, p. 425). The actor becomes a person and fills the role with his/her own expressive behavior. Therefore, the researcher believed that the administrator's biological component (instinct), psychological component (habits) which were unconsciously learned very early in life, and social component (stimulus) which is related to body reaction, would naturally emerge as he/she perceived him/herself as verbally-nonverbally congruent.

The administrator (nomothetic) role-related leader behavior dilemma then, is a viable concept that could pose problems for some administrators. The real person may or may not exactly fit his/her given role. The question of fitness may be posed and may be related to verbal-nonverbal incongruence. If administrators perceive

themselves to be only actors, critical dilemmas in administration could be anticipated (Getzels and Guba, 1957) as incongruence emerges.

The investigation which dealt with the idiographic dimension of administrator verbal-nonverbal congruence showed a strong tendency toward supporting the idea that a relationship between administrator self-perceived idiographic dimensions and the verbal-nonverbal congruence variable (gestures) was significant at the .05 level of confidence. This strong support does not necessarily impute causal relationships. In fact, it may be caused by the other verbal-nonverbal congruence variables which were indirectly responsible for the relationship between idiographic administrator-perceived behavior and verbal-nonverbal congruence (Popham and Sirotnik, 1973).

The researcher would argue that those administrators who perceived themselves as idiographic, supportive, person-oriented or considerate may be nonverbally congruent, as one strength of this study was found between the variable (gestures) or kinesics and idiographic leader behavior in Hypothesis IB. As has been previously discussed, kinesics is the heart of verbal-nonverbal behavior and is communicable by all other variables of interest.

> During the course of the day we blush, sweat, gasp, choke, cough, twitch, squirm, scratch, blink, fidget, and wiggle. A lifted eyebrow or a wrinkling of the nose can serve as a barometer of how the speaker feels about what he is saying or how he is reacting to what is being said (Feinberg, 1971, p. 23).

The above description describes Darwin's theory on the continuity of the species where habits become facial expressions, where stimulus such as sweating becomes the principle of actions, and where the principle of antitheses leads to actions such as blushing. This

theory is the proponent of true congruence which is exhibited by genuineness, self-awareness, and self-disclosure (Wright, 1983). Since genuineness relates to Darwin's natural-expression studies where pitch and tempo denote emotional expression, it is demonstrated by paralanguage where tone, pitch, and form response matches with what is happening inside the individual. Those lacking in genuineness appear phony or shallow to others. Therefore, although paralanguage or voice inflection which the administrator manifested to his/her teachers was not found to be related, it could be argued that paralanguage plays a significant part in (gesture) congruence.

Self-awareness, simply stated, requires that a person be willing to look at his/her own emotional responses to others by simply "letting oneself be" (Wright, 1983, p. 18). Visual interaction and facial expression adheres to Darwin's principle of actions, which is triggered when the sensorium is strongly excited and is recognized as expressive. Examples of such facial expressions which are innate in nature and universally observed with distinct inherited habits are: sadness, anger, fear, contempt, and shame. Visual interaction, a pattern which consists of a series of rapid, repeated scans or movements, is influenced by one's own emotional responses. Visual interaction was found to relate to the honesty factor of speaker credibility, along with the other nonverbal variables such as vocal inflection and gesture (Beebe, 1974). Honesty or congruence, then, refers to the entire range of human emotions, including states of mind which portray, through facial expressions and visual interaction, real emotional responses to others which we are experiencing.

According to Wright (1983), the third level in the understanding of the meaning of congruence can be facilitated by thinking of self-disclosure. Self-disclosure involves revealing to another how one is reacting to the present situation, sharing a feeling, or relating to another how one's behavior is affecting others. Proxemic behavior alludes to Darwin's principle of antitheses where certain states of mind lead to certain habitual actions. Darwin discovered that dogs wagged their tails when certain persons approached them. On the other hand, their fur would bristle when approached by certain others. Thorpe (1961) put a bird alone and it sang strangely, although it sang. He concluded that the bird's singing was the inherited part of song and that early experience affected adult behavior. Hall (1966) noted that there were dimensions of proxemics unconsciously patterned and arranged for utilitarian and aesthetic purposes. The patterning of informal space which would involve administrators and teachers involves how individuals maneuver space patterns while they are relating to one another. Individuals use informal space within the categories of intimate, personal, social, and public distances (Hall, 1963). When administrators practice social distance of four to seven feet or conduct serious discussions seminar-fashion, or when they are seated in a circle, they are making good use of social distance (Blake, 1973). Obviously, proxemic behavior, kinesics, and paralanguage, is appropriated by all members of a culture. Therefore, self-disclosure is congruent and is intertwined with all variables of verbal-nonverbal behavior.

The second hypothesis predicted support for the idea that the relationship between administrator and teacher verbal-nonverbal

congruence would be significant. The contention that the more positive the administrator verbal-nonverbal congruence, the more positive the teacher perception of administrator verbal-nonverbal congruence was significant at the .05 level of confidence for the variables eye contact, facial expression, and voice inflection. A surprising negative nonsignificant correlation was found for the variable (gestures). This correlation led the researcher to question the reason for the negative correlation. Although there were no significant relationships, the administrator and teacher-perceived administrator verbal-nonverbal variable (gestures) should be questioned.

Several explanations or further interpretations of these results are possible. Halpin (1966) stated that training programs for school teachers "ignore the entire range of nonverbal communication, the muted language in which human beings speak to one another more eloquently than with words" (p. 253). Koch (1971) found, however, that the majority of teachers themselves who were task-oriented and in command, used positive signals of eye contact, adequate voices, and frequent smiles. He further reiterated that in case of nonagreement between a sender's verbal and nonverbal communication, the nonverbal would be believed. Kaul (1971) verified this in experiments at Ohio State Unversity.

Perhaps the nonsignificant relationships found in this hypothesis, along with the negative nonsignificant relationships concerning (gestures) may result from differences in sex and role. In a review of nonverbal behaviors of women and men, it was determined that sex-role expectations call for women to be reactive and responsive. In contrast, men are expected to be self-confident, objective, less tuned

to socioemotional aspects of human relationships and are more concerned with getting the job done (LaFrance and Mayo, 1979). Jourard (1974) found that sex-role barriers to verbal-nonverbal expression by males have been linked to a variety of psychological woes. In the present study, males were predominant in the role of elementary administrator (17 to 3). Teachers were predominantly female (205 to 27).

Darwin, as far back as 1372, found that animals signaled clearly by facial expression whether their intentions were aggressive, affiliative, or fearful. According to Frijda (1969), studies today ascertain information the face transmits about the emotional state:

1. The face communicates evaluative judgments through pleasant and unpleasant expressions

2. The face communicates interest or disinterest in other people or the surrounding environment

3. The face communicates intensity and involvement in a situation

4. The face communicates control over individuals' own expressions

5. The face communicates the intellectual factor of understanding or the lack of it

Studies which asked men and women to express specific emotions generally found a greater capacity in women than in men to produce facial expressions (Buck, Miller, and Wilson, 1974). These findings may be related to the negative perception of administrator (predominantly male) perceived facial expression with both dimensions of leader behavior. Other studies have found that there are differences in expressivity among men. Men who were asked about their sex-role

attitudes and who were found to hold more liberal views were rated as being nonverbally "warmer" when interacting with both men and women. Men holding more traditional sex-role attitudes were judged to be "less warm" (Weitz, 1976). Perhaps female teachers are cognizant of administrator evaluative judgments and intensity and therefore are aware of administrator interest and understanding.

Visual interpretation provides a constant channel of communication for verbal-nonverbal behavior. Eyes both send and receive; they confirm awareness between male and female. They are a way of saying "I acknowledge your existence." In male-female conversation, the nonverbal behavior of women was found to be more submissive with more dominent men and more dominant with submissive men (Weitz, 1976).

Eye contact occurs when one wants to signal that the channel is open and can be used to indicate aggressiveness or anxiety. Exline, Thibaut, Hickey, and Gumpert (1970) found that men decreased their eye contact when interacting with nonpreferred interviewers. On the other hand, research consistently shows that women look more at others than do men. Women use the visual channel as a primary source of information about others (Argyle and Cook, 1976). Congruence in administrator eye contact with female teachers in particular is possibly effective because visual interaction emerges from the intuitive feeling of the sender (the administrator). As a result, the observable behavior of the sender is genuine and easily detected by the receiver (the teacher).

Paralanguage or voice inflection may also be sex-linked. Research has shown that intense emotional display (anger and so forth) is associated with high pitch and tone (Davitz, 1964). However, listeners

react differently to the same pitch characteristics in men and women. Davitz and Davitz (1961) found that the human voice produced feelings such as joy by a vocally high pitch. They also discovered that low pitch sounds produced boredom. Males with throatier voices were described as mature and well-adjusted, while deep-voiced women were seen as boorish, ugly, and lazy (Addington, 1968). Such research findings indicate that there are social norms for the way women and men ought to sound. Perhaps paralinguistic tone and timbre of the predominantly male elementary administrators have produced socially inherited feelings to their teachers. Therefore, congruence is achieved.

In a study concerning use of space (Mehrabian, 1972b) has shown that women generally take up less space than men as the direct result of the way they position themselves. Women sit with arms close to their sides and legs crossed at very small angles. Men sprawl more, drape arms over backs of chairs, and stretch legs out in front of themselves. Men seem to create larger personal space zones and do not change their conversational distance in response to different people. However, women seem to exhibit opposite territorial rights. Miller (1962) found, in a study of elementary teachers' movements concerning use of space, that a teacher who is insecure and anxious tends to establish a "territory" around the desk because it represents a symbol of authority. A teacher confident in teaching shows a travel pattern, including every place in the classroom. Miller also pointed out that distance is considered a negative determinant and closeness a positive determinant of affective interaction. Women also were found to stand closer to each other in pairs than men do, and women friends stood

very close. Perhaps sex-role does play a part in teachers' perceptions of their administrator's use of space.

Body language and gestures which encompass the whole realm of verbal-nonverbal behavior caused an unexpected reversal in the area of kinesics, according to the results. Could it be possible that, although body movement and gestures have been the major area of nonverbal behavior research, its consequences have not penetrated America's predominantly female teachers? Do body positions and movements seem to help us indicate liking and disliking for other communicators? Are smiles, head nodding, and a generally higher level of gestural activity characteristics more of women than of men? According to Reece and Whitman (1962), a "warm" person's nonverbal behavior was perceived as a shift in posture toward the other person--a smile, direct eye contact, and hands remaining still. Does status or role seem to be associated with certain body movements and positions, or do female teachers ignore the entire range of nonverbal communication? Jecker Maccoby, Breitrose, and Rose (1964) found that experienced teachers were little better than novices in judging whether children understood their lectures, on the basis of facial expression and gestural cues. However, Rosenthal and DePaulo (1979) found that women showed superiority at decoding nonverbal cues. They also found that women were superior over men when judging the degree of honesty (congruence) or dishonesty (incongruence) in truthful and deceptive sendings. The conclusion drawn from these negative results is that the research design for ascertaining verbal-nonverbal behavior needs to be improved. The design should be revised and the hypothesis tested again before any concrete conclusions are drawn concerning administrator-

perceived congruence manifested to teachers and the teachers' perceptions of their administrators' verbal-nonverbal congruence, based on the data presented for Hypothesis II.

The researcher has explained and interpreted possible evaluation and reinterpretation as the variable for (gestures) reflected some degree of negativeness. This negative nonsignificant relationship variable must be more fully explored before these explanations could be accepted.

The statistical procedures for this study were limited in that a mean could not be established for the perceptions of each of the administrators. The administrator-perceived score for each variable was available. Teacher mean scores were calculated. The comparison of teacher mean scores and administrator scores in Table X (Appendix D) would indicate that in most schools, administrators perceived themselves as being congruent with their teachers, while teachers perceived their administrators as being congruent.

More attention, then, ought to be placed on the study of verbal-nonverbal behavior. Role relationships with verbal-nonverbal behavior should be investigated. Sex relationships with verbal-nonverbal behavior should also be investigated. The variables of proxemics, kinesics, and paralinguistics are vital to group interaction (Littlefield, 1983). Therefore, the training of school teachers and administrators in expressive nonverbal behavior such as use of space, gestures, and body movement should be mandatory. Results of such training show evidence of nonverbal sensitivity when observing a target audience. Finally, the importance of verbal-nonverbal communication is clear when one realizes that 90% of the total impact of a

message comes from the nonverbal elements of that message (Garrison, 1984). The study of verbal-nonverbal behavior is by no means an exact science. Although this area of behavior is as rich, unlimited, and varied as mankind itself, educators could be on the threshold of discovering its infinite variety.

Recommendations for Further Study

The following recommendations were developed as a result of this study:

1. Arising immediately out of this particular study is the recommendation that, in addition to the Nonverbal Reaction Sheet originally developed by Reynolds (1971) and converted from videotaped scenes to a paper-and-pencil test by Woodard (1974), other alternative paper-and-pencil measures for the determination of verbal-nonverbal congruence variables should be devised. There are many devices such as the electromyograph, tests providing semantic-differential scales, still photograph tests, videotapes, color slides, and tally sheets. According to Galloway (1983), there have been no paper-and-pencil tests developed to measure administrator-perceived verbal-nonverbal congruence or teacher-perceived administrator verbal-nonverbal congruence. A search of the literature on May 13, 1985, for paper-and-pencil tests measuring verbal-nonverbal congruence did not prove to be fruitful.

2. Further research on the Nonverbal Reaction Sheet instrument would be beneficial, even though reliability and validity were considered acceptable. This could be accomplished by utilizing the instrument in additional research and subjecting the instrument to more

rigorous statistical procedures, thus eliminating the "halo effect" which could be a major limitation discussed by the test developer (Woodard, 1974).

3. The possibility of discovering material for future dissertations was brought to the surface when analyzing the demographic data concerning gender, with teachers' perception of their administrators' verbal-nonverbal congruence. Further study into role-sex variables as they relate to verbal-nonverbal behavior is strongly recommended.

4. Needless to say, the whole host of demographic variables, in addition to gender (age, academic rank, tenured vs. nontenured, salary, marital status) could be considered when examining verbal-nonverbal behavior.

5. Since the number of school districts involved in the present study was small and the study was confined to the northwestern corner of the state of Oklahoma (known as the Oklahoma Panhandle), a study larger in scope would provide a higher degree of accuracy for generalization.

6. Another area for further research might be a study of teacher verbal communication with their superintendents and with teacher perception of their administrators' verbal-nonverbal congruence. Could it be possible that as teachers become more familiar with their superintendents, they perceive their administrators to be less verbally-nonverbally congruent?

Concluding Remarks

It is hoped that this study has shed some light on verbal-nonverbal behavior of administrators. While the results of this

particular study showed that considerate administrators exhibited a tendency toward congruence with the variable (gestures), it is important to point out that there is danger in dividing verbal-nonverbal behavior variables into separate channels. Interpersonal communication and behavior is not viewed separately (face, voice, eye, space, movement), but is a multichannel phenomenon. Although it may not be the best way to organize the material, the researcher believed that categorizing the variables would provide the reader of this dissertation with a clearer view. Certainly attitudes, internal psychological states, and social interaction involve face, voice, and paralinguistic variables, as a relationship was established for these variables between the administrator's perceptions and those of his/her teachers. Although the use of space, body language, and gestures was found to be not related, the variables occur simultaneously and are not considered independent of one another.

Because verbal-nonverbal behavior is especially critical in the administrator-teacher relationship, it should be an area in which administrators become more knowledgeable and sensitive. As administrators learn to perceive their own verbal-nonverbal accuracy, they will be more attuned to those around them and will be able to recognize that expressive cues transmit emotions and feelings more quickly than speech, and that nonverbal messages confirm the credibility of intent. Learning to communicate well, both verbally and nonverbally, would be a profound contribution to the area of management in the field of education.

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APPENDIXES

APPENDIX A

MAP OF GEOGRAPHICAL AREA

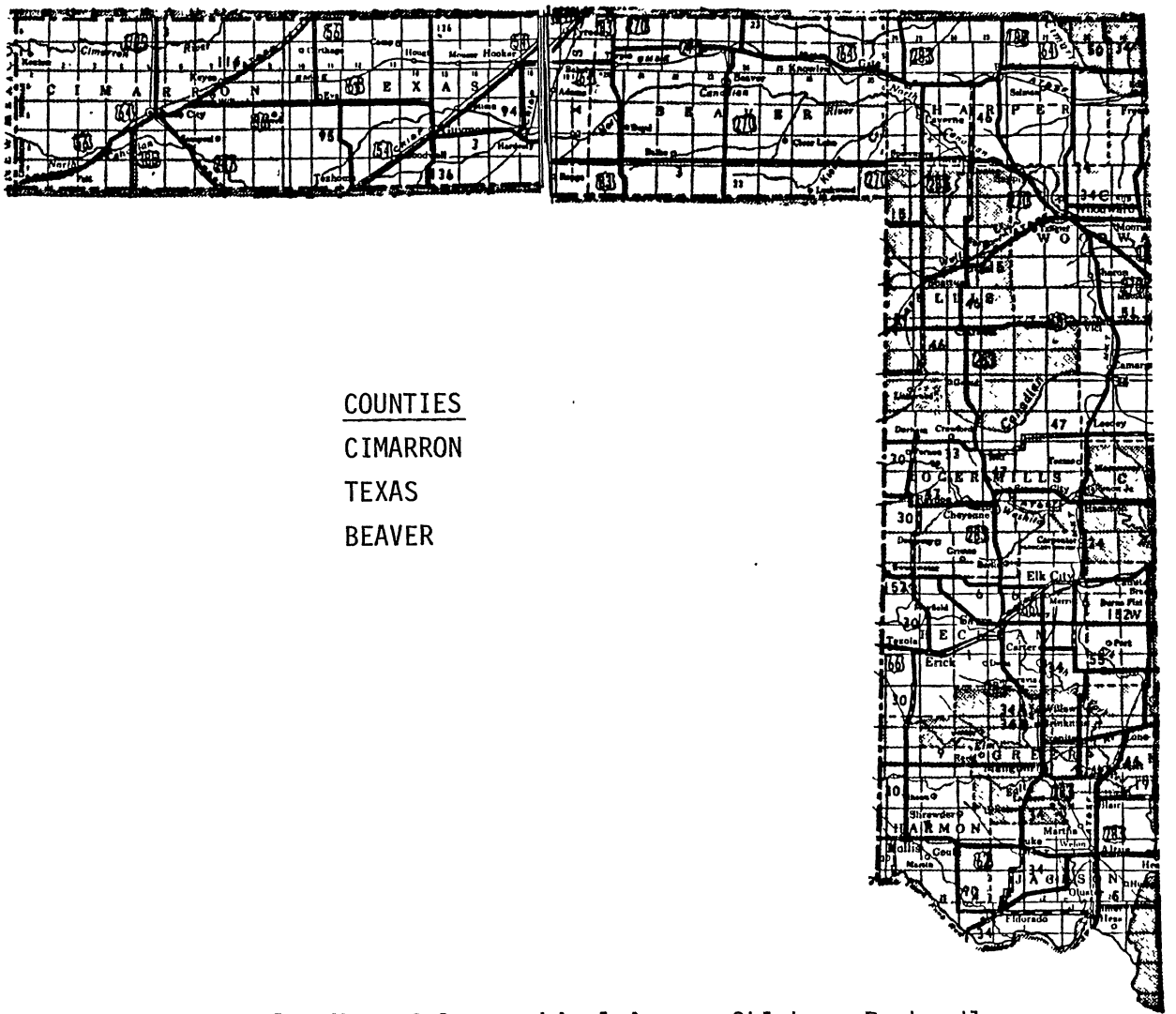

Figure 1. Map of Geographical Area: Oklahoma Panhandle

APPENDIX B

CORRESPONDENCE

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

January 29, 1983

, Supt.
Public Schools, Dist.
, OK 73931

Dear Mr. :

I am a public school administration doctoral student at Oklahoma State University, currently working on a research project examining the aspects of communication in elementary schools.

The study is designed to identify whether elementary school principals feel they are congruent verbally and nonverbally. The nonverbal portion administered to the teachers may also identify teacher perceived verbal-nonverbal principal congruence. Information gathered from the study may be of value to your office.

I am sending copies of the questionnaires designed to gather the data necessary. I would like to seek your support to distribute the questionnaires to your elementary school principals and the teachers in their respective schools. Each questionnaire is developed for quick completion and will be treated with professional confidentiality. Copies of cover letters are enclosed.

I am enclosing a self-addressed, stamped, brown envelope. Please send me your 1982-1983 elementary school directories at your earliest convenience so that I may code the entire faculty anonymously for follow up purposes.

In addition, please check the appropriate box on the enclosed self addressed, stamped postcard and return, indicating your preference in distributing the instruments and your interest in receiving a summary of the study.

Thank you in advance for your cooperation and assistance.

Sincerely,

Dr. Patrick Forsyth
Professor
Department of Educational
Administration and Higher
Education
Oklahoma State University

Maxine B. Weber
Department of Educational
Administration and Higher
Education
Oklahoma State University

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

January 29, 1983

, Principal
Elementary School Dist.
, OK 73931

Dear Mr. :

The purpose of this letter is to request your cooperation in securing data for a research study examining the aspects of communication in elementary schools. You are being asked to participate in your capacity as a professional. This study has the approval and support of your superintendent.

Each questionnaire and all responses will be treated confidentially, and the anonymity of each individual is assured. The questionnaires are coded for purposes of following up on non-respondents only. Your name will not be entered on the questionnaires and no one will know how you have responded individually to these questions.

PLEASE ANSWER ALL ITEMS IN THE (2) WHITE QUESTIONNAIRES and return them in the enclosed self-addressed stamped envelope.

Please give each teacher in your building (listed in your elementary school directory) the blue cover letter, questionnaire and envelope to be completed and returned.

The questionnaires are organized for quick answering and should take less than 15 minutes to complete.

Thank you in advance for your cooperation and assistance.

Sincerely,

Dr. Patrick Forsyth
Professor
Department of Educational
Administration and Higher
Education
Oklahoma State University

Maxine B. Weber
Department of Educational
Administration and Higher
Education
Oklahoma State University

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

Dear Faculty Member:

I am a public school administration doctoral student at Oklahoma State University, currently working on a research project examining the aspects of communication in elementary schools. I have permission from your superintendent to ask for your assistance in responding to this questionnaire.

Each questionnaire and all responses will be treated confidentially, and the anonymity of each individual is assured. The questionnaire is coded for purposes of following up on non-respondents only. Your name will not be entered on the questionnaire and no one will know how you have responded individually to these questions.

PLEASE ANSWER ALL ITEMS IN THE QUESTIONNAIRE. The questionnaire is organized for quick answering and should take approximately 15 minutes for principals and 5 minutes for teachers to complete.

Enclosed is a self-addressed stamped envelope for your convenience in returning the completed questionnaire.

Your participation in this study is greatly appreciated.

Sincerely,

Dr. Patrick Forsyth
Professor
Department of Educational Administration and Higher Education
Oklahoma State University

Maxine B. Weber
Department of Educational Administration and Higher Education
Oklahoma State University

State [illegible]
OFFICIAL MAIL
PRIVATE USE ILLEGAL
HB 17[illegible] (1978)

GODWELL, OK MAR 22 PM 1983 73939

NO POSTAGE STAMP NECESSARY
POSTAGE HAS BEEN PREPAID BY

Oklahoma State University
Dept of Educ. Admin. & Higher Ed
309 Gundersen Hall
Stillwater, OK 74078

c/o Dr. Patrick Forsyth
Maxine Weber

Please check the appropriate boxes:

☐ 1. Send instruments to superintendent and I will distribute to principals

☑ 2. I suggest you approach the principals directly

☑ 3. I would like a summary of this research project

Superintendent
, OK 73933

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

April 6, 1983

, Supt.
Public Schools, Dist.
, OK 73931

Dear Mr. :

On March 11, 1983 I sent you (8) questionnaires to be completed by your elementary teachers and (2) questionnaires to be completed by your elementary principal, concerning a research study being conducted at Oklahoma State University.

I am pleased to have received (6) teacher questionnaires back. However, I have not received from your elementary principal the (2) white questionnaires nor have I received the (2) remaining questionnaires from your teachers.

May I respectfully request your assistance again in distributing the (2) teacher questionnaires and the (white) principal questionnaires I have enclosed.

Thank you for your cooperation.

Sincerely,
Melissa B. Weber
Department of Educational Administration and Higher Education
Oklahoma State University

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER OKLAHOMA 74078
309 GUNDERSEN HALL
405) 624-7244

April 5, 1983

, Principal
Elementary School, Dist.
, Okla. 73950

Dear Mr. :

On March 14, 1983 I sent you (16) questionnaires to be completed by your elementary teachers concerning a research study being conducted at Oklahoma State University.

You did not send your teacher directory to me therefore, I have no way of knowing who did not return the teacher questionnaires. However you did return one teacher questionnaire (R184) advising me that it was an extra questionnaire which was not needed. I am pleased to have received (11) teacher questionnaires back. There are (4) teachers who have not responded. They are coded as:

R-188
R-190
R-192
R-195

May I respectfully request your assistance again to find out who has not responded and to distribute these (4) questionnaires to them?

Thank you for your cooperation.

Sincerely,
Marjine B. Weber
Department of Educational Administration and Higher Education
Oklahoma State University

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

Dear Faculty Member:

Recently you received my doctoral dissertation questionnaire pertaining to perceived verbal-nonverbal congruence of public school administrators. Your participation is important and can make a difference in the outcome of this research.

If you have misplaced the first questionnaire PLEASE take a few minutes required to complete the questionnaire I have enclosed with the self-addressed stamped envelope.

I will be grateful for your cooperation.

Sincerely,

Maxine B Weber

Maxine B. Weber
Department of Education
Administration and Higher
Education
Oklahoma State University

Oklahoma State University

DEPARTMENT OF EDUCATIONAL ADMINISTRATION
AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

Dear Faculty Member:

Recently you received my doctoral dissertation questionnaire pertaining to perceived verbal-nonverbal congruence of public school administrators. Your participation is important and can make a difference in the outcome of this research.

If you have misplaced the first (or 2nd) questionnaire PLEASE take a few minutes required to complete the questionnaire I have enclosed with the self-addressed stamped envelope.

I will be grateful for your cooperation.

Sincerely,

Maxine B. Weber

Maxine B. Weber
Department of Education
Administration and Higher
Education
Oklahoma State University

Oklahoma State University
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND HIGHER EDUCATION

STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

May 2, 1983

Dear Mrs.

I am writing you to ask you to complete the questionnaire I have enclosed so that your school will have participated in this research 100 %.

I have received questionnaires back from the ( ) other teachers in your school.

Please assist me in this project.

Thank you for your cooperation.

Maxine B. Weber
Dept. of Ed. Admin.
Oklahoma State University

P.S. I have filled out one of your surveys before, but am sending this one to you completed. The other one must have been lost in the mail

Sincerely,

Oklahoma State University
DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND HIGHER EDUCATION
STILLWATER, OKLAHOMA 74078
309 GUNDERSEN HALL
(405) 624-7244

June 14, 1983

Dear Mr.

Please forgive me for writing you one more time, I have checked all questionnaires and find that your questionnair has not been returned to me - or perhaps you have sent it and it has been lost.

Of the elementary school faculty you are the only one who has not returned the questionnaire. Please take 3 minutes of your time and mark the questionnaire so that will have participated 100%.

I will be sending a summary to all superintendents in the Panhandle Counties. Your superintendent has been very cooperative and I'm hoping to chart his school as participants.

Maybe, I mailed the second one you sent me

Thank you,
Marjorie B. Weber

APPENDIX C

DATA COLLECTION INSTRUMENTS

THIS SURVEY FOR ADMINISTRATORS ONLY

IDEAL LEADER BEHAVIOR DESCRIPTION QUESTIONNAIRE

INFORMATION:

Please indicate on this questionnaire how you believe administrators SHOULD behave as leaders. Each item describes a specific kind of leader behavior. Mark the frequency with which you believe ideal leaders SHOULD engage in each kind of behavior.

The research staff will preserve the anonymity of your answers. Thank you.

DIRECTIONS:

1. READ each item carefully.
2. THINK about how frequently the administrator SHOULD engage in the behavior described by the item.
3. DECIDE whether administrators SHOULD always, often, occasionally, seldom, or never act in the manner described by the item.
4. DRAW a circle around one of the five letters (A, B, C, D, or E) following the item to show the answer you have selected.

Mark your answers as shown in the examples below:

The administrator often acts as described.	A (B) C D E
The administrator never acts as described.	A B C D (E)
The administrator occasionally acts as described.	A B (C) D E

Please precede each statement with, "The IDEAL administrator SHOULD. . ."	Always	Often	Occasionally	Seldom	Never
1. Do personal favors for teachers.	A	B	C	D	E
2. Speak in a manner not to be questioned.	A	B	C	D	E
3. Work without a plan.	A	B	C	D	E
4. Be easy to understand.	A	B	C	D	E
5. Do little things to make it pleasant to be a teacher on his or her staff.	A	B	C	D	E
6. See to it that the work of teachers is coordinated.	A	B	C	D	E
7. Maintain definite standards of performance.	A	B	C	D	E
8. Make his or her attitudes clear to the teachers.	A	B	C	D	E
9. Keep to himself or herself.	A	B	C	D	E
10. Criticize poor work.	A	B	C	D	E
11. Be willing to make changes.	A	B	C	D	E
12. Find time to listen to teachers.	A	B	C	D	E
13. Rule with an iron hand.	A	B	C	D	E
14. Try out his or her new ideas with the teachers.	A	B	C	D	E
15. Refuse to explain his or her actions.	A	B	C	D	E
16. Encourage the use of uniform procedures.	A	B	C	D	E
17. Get teacher approval on important matters before going ahead.	A	B	C	D	E
18. Make sure that his or her part in the organization is understood by all teachers.	A	B	C	D	E

Please precede each statement with, "The IDEAL administrator SHOULD. . ."		Always	often	Occasionally	Seldom	Never
19.	Let teachers know what is expected of them.	A	B	C	D	E
20.	Look out for the personal welfare of individual teachers.	A	B	C	D	E
21.	Act without consulting the teachers.	A	B	C	D	E
22.	Treat all teachers as his or her equal.	A	B	C	D	E
23.	Assign teachers to particular tasks.	A	B	C	D	E
24.	Put suggestions made by the teachers into operation.	A	B	C	D	E
25.	Ask that the teachers follow standard rules and regulations.	A	B	C	D	E
26	Be slow to accept new ideas.	A	B	C	D	E
27.	Be friendly and approachable.	A	B	C	D	E
28.	Emphasize the meeting of deadlines.	A	B	C	D	E
29.	Make teachers feel at ease when talking with them.	A	B	C	D	E
30.	See to it that teachers are working up to capacity.	A	B	C	D	E

Thank you for your participation. Please return the completed questionnaire(s) in the enclosed, stamped, self-addressed envelope to:

Maxine B. Weber
c/o Patrick Forsyth Ed.D.
Department of Educational Administration
and Higher Education
Oklahoma State University
309 Gundersen Hall
Stillwater, Oklahoma 74078

THIS SURVEY FOR ADMINISTRATORS ONLY

NONVERBAL REACTION SHEET

INFORMATION:

Nonverbal behaviors for the purpose of the completion of the following reaction sheet are: those nonspoken feelings or attitudes conveyed by the administrator in interaction situations. Nonverbal cues can be supportive or non-supportive of what the administrator 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.

As you respond to each statement you are to react to the interactions that have taken place between yourself as the administrator and your teachers.

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 administrator's nonverbal behavior is supportive or congruent with what the administrator is saying verbally.

Negative Nonverbal Behavior means that the administrator's nonverbal behavior is nonsupportive or Incongruent with what the administrator is saying verbally.

DIRECTIONS:

1. Read each item carefully.
2. Think about how freqently you (as an administrator) engage in the behavior described by the item.
3. Decide whether you (as an administrator) are very positive, positive, mildly positive, mildly negative, negative, or very negative in the manner described by the item.
4. Draw a circle around one of the six numbers (6, 5, 4, 3, 2, 1) following the item to show the answer you have selected.

Mark your answers as shown in the examples below:

Example:	As the administrator my eye contact is very positive with my teachers.	(6)	5	4	3	2	1
Example:	As the administrator my eye contact is very negative with my teachers.	6	5	4	3	2	(1)
Example:	As the administrator my eye contact is mildly positive with my teachers.	6	5	(4)	3	2	1

Congruent <---------> Incongruent

	Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
1. The number that best depicts eye contact manifested to my teachers as I perceive it.	6	5	4	3	2	1
2. The number that best depicts facial expression manifested to my teachers as I perceive it.	6	5	4	3	2	1
3. The number that best depicts body language manifested to my teachers as I perceive it.	6	5	4	3	2	1
4. The number that best depicts gestures manifested to my teachers as I perceive it.	6	5	4	3	2	1
5. The number that best depicts use of voice inflection (raising or lowering) manifested to my teachers as I perceive it.	6	5	4	3	2	1
6. The number that best depicts use of space (nearness or distance of people from each other in interacting situations) manifested to my teachers as I perceive it.	6	5	4	3	2	1

DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION

DIRECTIONS: Please check (✓) the appropriate answer.

1. I am:

_____ male _____ female

2. My age is:

_____ 20 - 29	_____ 50 - 59
_____ 30 - 39	_____ 60 - 69
_____ 40 - 49	_____ 70 - --

3. I have been employed by this school district:

_____ 0 - 3 years	_____ 11 - 15 years
_____ 4 - 6 years	_____ 15 plus years
_____ 7 - 10 years	

	Yes	No
4. Do you have tenure?	☐	☐

5. Have you ever taught in a school system other than your present one?

Yes	No
☐	☐

If yes, how many <u>total</u> number of years teaching experience have you had?

_____ 0 - 3	_____ 11 - 15
_____ 4 - 6	_____ 15 - 19
_____ 7 - 10	_____ other

6. I am:

_____ administrator (principal), full time

_____ administrator (principal), part-time administrator and part-time teacher

_____ teacher, full-time employment

_____ teacher, part-time employment

7. My highest degree earned:

_____ B.S.	_____ M.E.
_____ B.A.	_____ Ed.D
_____ M.S.	_____ Ph.D
_____ M.A.	

8. My major in undergraduate work was:

   _____ elementary education

   _____ special education

   _____ other (such as biological science, languages, home economics, etc.)
   please list: _____

9. My major in graduate work was:

   please list: _____

10. My salary level is:

   _____ $4,999 or less
   _____ $5,000 - 9,999
   _____ $10,000 - 14,999
   _____ $15,000 - 19,999
   _____ $20,000 - 24,999
   _____ $25,000 - 29,999
   _____ more than $30,000 or higher

	Yes	No
11. Is there an OEA organization in your school system?	☐	☐
If so, do you belong?	☐	☐
12. Is there an official negotiating team in your school system?	☐	☐
If so, are you presently a member?	☐	☐
have you ever been a member?	☐	☐
13. Considering only the last three years, have you:		
served on official committees in your building?	☐	☐
served on system-wide committees with teachers or administrators from other buildings?	☐	☐
been chairman any of the time?	☐	☐

14. Approximately how many classroom teachers are in your building? ☐

15. How many administrators are in your building? |___|

16. What are the job titles?

_____ administrator (principal)

_____ assistant (principal)

_____ other

	Yes	No
17. Were you graduated from high school in the district or county in which you are now teaching?	|___|	|___|
18. Do you have relatives teaching in your school system?	|___|	|___|

19. What kind of work did your father (or head of household) do while you were growing up?

_____ business, managerial

_____ skilled labor

_____ white collar

_____ farm

_____ professional

_____ other _____

20. How often do you talk face-to-face with your superintendent?

_____ every day

_____ several times a week

_____ several times a month

_____ every one or two months

_____ several times a year

_____ not more than once or twice a year

_____ have never talked with him

21. Considering the members of the school board which is true?

_____ I am on a first name basis with at least one of them.

_____ At least one of them has visited in my home.

_____ One of them is related to me.

_____ At least one of them is a member of a club, lodge, or other social organization to which I belong.

Thank you for your participation. Please return the completed questionnaire in the enclosed, stamped, self-addressed envelope to:

Maxine B. Weber
c/o Patrick Forsyth, Ed.D.
Department of Educational Administration
and Higher Education
Oklahoma State University
309 Gundersen Hall
Stillwater, OK 74078

THIS SURVEY FOR TEACHERS ONLY

NONVERBAL REACTION SHEET

INFORMATION:

Nonverbal behaviors for the purpose of the completion of the following reaction sheet are: those nonspoken feelings or attitudes conveyed by the administrator in interaction situations. Nonverbal cues can be supportive or non-supportive of what the administrator 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.

As you respond to each statement you are to react to the interactions that have taken place between (your administrator and yourself) as one of his or her teachers.

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 administrator's nonverbal behavior is supportive or congruent with what the administrator is saying verbally.

Negative Nonverbal Behavior means that the administrator's nonverbal behavior is nonsupportive or Incongruent with what the administrator is saying verbally.

DIRECTIONS:

1. Read each item carefully.
2. Think about how freqently your administrator engages in the behavior described by the item.
3. Decide whether your administrator is very positive, positive, mildly positive, mildly negative, negative, or very negative in the manner described by the item.
4. Draw a circle around one of the six numbers (6, 5, 4, 3, 2, 1) following the item to show the answer you have selected.

Mark your answers as shown in the examples below:

Example:	Your administrator's eye contact is very positive.	(6)	5	4	3	2	1
Example:	Your administrator's eye contact is very negative.	6	5	4	3	2	(1)
Example:	Your administrator's eye contact is mildly positive.	6	5	(4)	3	2	1

Congruent <---------> Incongruent

	Very Positive	Positive	Mildly Positive	Mildly Negative	Negative	Very Negative
1. The number that best depicts eye contact manifested by your administrator as you perceive it.	6	5	4	3	2	1
2. The number that best depicts facial expression manifested by your administrator as you perceive it.	6	5	4	3	2	1
3. The number that best depicts body language manifested by your administrator as you perceive it.	6	5	4	3	2	1
4. The number that best depicts gestures manifested by your administrator as you perceive it.	6	5	4	3	2	1
5. The number that best depicts use of voice inflection (raising or lowering) manifested by your administrator as you perceive it.	6	5	4	3	2	1
6. The number that best depicts use of space (nearness or distance of people from each other in interacting situations) manifested by your administrator as you perceive it.	6	5	4	3	2	1

DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION

DIRECTIONS: Please check (✓) the appropriate answer.

1. I am:

_____ male _____ female

2. My age is:

_____ 20 - 29	_____ 50 - 59
_____ 30 - 39	_____ 60 - 69
_____ 40 - 49	_____ 70 - --

3. I have been employed by this school district:

_____ 0 - 3 years	_____ 11 - 15 years
_____ 4 - 6 years	_____ 15 plus years
_____ 7 - 10 years	

	Yes	No
4. Do you have tenure:	☐	☐

5. Have you ever taught in a school system other than your present one:

Yes	No
☐	☐

If yes, how many <u>total</u> number of years teaching experience have you had?

_____ 0 - 3	_____ 11 - 15
_____ 4 - 6	_____ 15 - 19
_____ 7 - 10	_____ other

6. I am:

_____ administrator (principal), full time

_____ administrator (principal), part-time administrator and part-time teacher

_____ teacher, full-time employment

_____ teacher, part-time employment

7. My highest degree earned:

_____ B.S.	_____ M.E.
_____ B.A.	_____ Ed.D
_____ M.S.	_____ Ph.D
_____ M.A.	

8. My major in undergraduate work was:

_____ elementary education

_____ special education

_____ other (such as biological science, languages, home economics, etc.)
please list: _____

9. My major in graduate work was:

please list: _____

10. My salary level is:

_____ $4,999 or less
_____ $5,000 - 9,999
_____ $10,000 - 14,999
_____ $15,000 - 19,999
_____ $20,000 - 24,999
_____ $25,000 - 29,999
_____ more than $30,000 or higher

	Yes	No
11. Is there an OEA organization in your school system?	☐	☐
If so, do you belong?	☐	☐
12. Is there an official negotiating team in your school system?	☐	☐
If so, are you presently a member?	☐	☐
have you ever been a member?	☐	☐
13. Considering only the last three years, have you:		
served on official committees in your building?	☐	☐
served on system-wide committees with teachers or administrators from other buildings?	☐	☐
been chairman any of the time?	☐	☐

14. Approximately how many classroom teachers are in your building? ☐

15. How many administrators are in your building? |___|

16. What are the job titles?

_____ administrator (principal)

_____ assistant (principal)

_____ other

	Yes	No
17. Were you graduated from high school in the district or county in which you are now teaching?	|___|	|___|
18. Do you have relatives teaching in your school system?	|___|	|___|

19. What kind of work did your father (or head of household) do while you were growing up?

_____ business, managerial
_____ farm
_____ skilled labor
_____ professional
_____ white collar
_____ other _____

20. How often do you talk face-to-face with your superintendent?

_____ every day
_____ several times a year
_____ several times a week
_____ not more than once or twice a year
_____ several times a month
_____ every one or two months
_____ have never talked with him

21. Considering the members of the school board which is true?

_____ I am on a first name basis with at least one of them.

_____ At least one of them has visited in my home.

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APPENDIX D

ADDITIONAL STATISTICAL DATA

TABLE IX

CORRELATION COEFFICIENTS FOR THE RELATIONSHIP BETWEEN TEACHER PERCEPTION OF SUPERINTENDENT VERBAL-NONVERBAL CONGRUENCE AND VERBAL (SPEAKING) COMMUNICATION

	Eye Contact	Facial Expression	Body Language	Gestures	Voice Inflection	Use of Space
Talk to Superintendent Face-to-Face	-.1377 (230) P = .018	-.1000 (229) P = .066	-.0996 (229) P = .066	-.1374 (227) P = .019	-.0868 (228) P = .096	-.1389 (230) P = .018

Note: $P \leq .05$

TABLE X

COMPARISON OF ADMINISTRATOR INDIVIDUAL SCORES AND TEACHERS' MEAN SCORES FOR INDIVIDUAL SCHOOLS

	School	Eye Contact	Facial Expression	Body Language	Gesture	Voice Inflection	Use of Space
Administrator *	A1	5	5	5	5	5	5
Teacher **		5.25641	5.92564	5.05128	4.94737	5.02564	4.97436
Administrator	A2	4	3	5	6	5	5
Teacher		4.28571	4.39236	3.50000	3.82143	4.33333	3.75000
Administrator	B1	6	5	5	5	6	5
Teacher		5.42857	5.42857	5.28571	5.57143	5.42857	5.71429
Administrator	C1	6	6	6	6	6	6
Teacher		5.20000	5.00000	4.60000	4.40000	5.00000	5.00000
Administrator	D1	5	5	5	5	5	5
Teacher		4.75000	4.50000	4.75000	4.75000	4.50000	4.75000
Administrator	E1	.	.	.	.	.	.
Teacher		5.41667	5.34783	5.08333	5.17391	5.16667	5.08333
Administrator	F1	5	5	4	4	4	4
Teacher		4.40000	4.40000	4.30000	4.60000	4.66667	4.50000
Administrator	G1	5	5	5	5	5	5
Teacher		5.20000	5.00000	4.40000	4.80000	4.20000	5.00000
Administrator	H1	5	5	5	4	5	5
Teacher		4.75000	4.62500	4.28571	4.50000	4.87500	4.62500
Administrator	I1	6	5	4	4	6	4
Teacher		5.60000	5.80000	5.80000	5.80000	5.40000	5.40000
Administrator	J1	3	3	3	3	4	4
Teacher		4.86667	4.20000	4.33333	4.35714	4.53333	4.20000
Administrator	K1	5	5	5	5	3	4
Teacher		4.71429	4.57143	4.57143	4.42857	4.71429	4.85714

TABLE X (Continued)

	School	Eye Contact	Facial Expression	Body Language	Gesture	Voice Inflection	Use of Space
Administrator	L1	.	.	.	.	.	.
Teacher		4.87500	4.37500	4.37500	4.25000	5.00000	4.37500
Administrator	M1	6	5	5	5	5	5
Teacher		5.00000	5.16657	4.83333	5.00000	5.00000	5.66667
Administrator	N1	5	5	5	5	5	5
Teacher		5.00000	4.85714	4.71429	4.85714	4.57143	4.71429
Administrator	O1	6	6	6	6	5	6
Teacher		5.66667	5.66667	5.66667	5.66667	6.00000	5.66667
Administrator	P1	.	.	.	.	.	.
Teacher		4.90000	4.65000	4.65000	4.30000	4.50000	4.55000
Administrator	R1	5	5	4	5	5	4
Teacher		5.06667	4.80000	4.66667	4.66667	4.73333	4.60000
Administrator	S1	6	6	6	6	6	5
Teacher		5.33333	5.16667	4.66667	4.66667	5.50000	5.16667
Administrator	T1	5	5	5	5	5	5
Teacher		5.30000	4.90000	4.50000	4.50000	4.50000	4.80000

*Administrator scores

**Teacher mean scores

TABLE XI

CROSSTABULATION OF TEACHER-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION (TOTAL YEARS OF TEACHING EXPERIENCE)

Total Years of Teaching Experience	Eye Contact		Facial Expression		Body Language		Gestures		Voice Inflection		Use of Space	
	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive
0-3	5	8	7	5	7	4	7	2	5	7	5	6
	38.5	61.5	53.8	38.5	53.8	30.8	53.8	15.4	38.5	53.8	38.5	46.2
	8.1	17.4	10.9	13.9	11.7	13.8	13.5	6.5	9.3	17.1	9.8	14.3
4-6	14	8	12	8	13	6	12	5	13	9	13	8
	51.9	29.6	44.4	29.6	48.1	22.2	44.4	18.5	48.1	33.3	48.1	29.6
	22.6	17.4	18.8	22.2	21.7	20.7	23.1	16.1	24.1	22.0	25.5	19.0
7-10	10	7	12	5	13	3	10	4	10	7	7	9
	37.0	25.9	44.4	18.5	48.1	11.1	37.0	14.8	37.0	25.9	25.9	33.3
	16.1	15.2	18.8	13.9	21.7	10.3	19.2	12.9	18.5	17.1	13.7	21.4
11-15	13	8	13	8	11	7	10	8	10	7	12	8
	50.0	30.8	50.0	30.8	42.3	26.9	38.5	30.8	38.5	26.9	46.2	30.8
	21.0	17.4	20.3	22.2	18.3	24.1	19.2	25.8	18.5	17.1	23.5	19.0
15-19	13	9	9	8	7	7	6	8	9	7	6	7
	52.0	36.0	36.0	32.0	28.0	28.0	25.0	33.3	37.5	29.2	24.0	28.0
	21.0	19.6	14.1	22.2	11.7	24.1	11.5	25.8	16.7	17.1	11.8	16.7
Other	7	6	11	2	9	2	7	4	7	4	8	4
	33.3	28.5	52.4	9.5	42.9	9.5	33.3	19.0	35.0	20.0	38.1	19.0
	11.3	13.0	17.2	5.6	15.0	6.9	13.5	12.9	13.0	9.8	15.7	9.5
Column Totals	62	46	64	36	60	29	52	31	54	41	51	42
	44.6	33.1	46.0	25.9	43.2	20.9	37.7	22.5	39.4	29.9	36.7	30.2

TABLE XII

CROSSTABULATION OF TEACHER-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION (SEX)

	Eye Contact		Facial Expression		Body Language		Gestures		Voice Inflection		Use of Space	
Sex	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive
Male	12	10	13	8	16	6	11	5	8	11	13	8
	44.4	37.0	48.1	29.6	59.3	22.2	40.7	22.2	29.5	40.7	48.1	29.6
	12.4	13.5	12.5	14.8	16.0	14.3	12.0	13.6	8.5	18.0	14.6	13.8
Female	85	64	91	46	84	36	81	38	86	50	76	50
	41.5	31.2	44.6	22.5	41.2	17.6	40.1	18.8	42.4	24.6	37.1	24.4
	87.6	86.5	87.5	85.2	84.0	85.7	88.0	86.4	91.5	82.0	85.4	86.2
Column	97	74	104	54	100	42	92	44	94	51	89	58
Totals	41.8	31.9	45.0	23.4	43.3	18.2	40.2	19.2	40.9	26.5	38.4	25.0

TABLE XIII

CROSSTABULATION OF TEACHER-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION (HIGHEST DEGREE EARNED)

Highest Degree Earned	Eye Contact		Facial Expression		Body Language		Gestures		Voice Inflection		Use of Space	
	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive
BS	56	43	59	32	59	25	55	25	53	33	53	32
	40.9	31.4	43.4	23.5	43.4	18.4	40.7	18.5	39.3	24.4	38.7	23.4
	58.3	58.9	57.3	60.4	59.6	59.5	60.4	56.8	57.6	54.1	59.6	55.2
BA	14	12	19	7	15	5	17	5	19	11	14	11
	36.8	31.6	50.0	18.4	39.5	13.2	45.9	16.2	50.0	28.9	36.8	28.9
	14.6	16.4	18.4	13.2	15.2	11.9	18.7	13.6	20.7	18.0	15.7	19.0
MS	7	11	8	9	8	8	9	7	8	10	10	8
	29.2	45.8	33.3	37.5	33.3	33.3	37.5	29.2	33.3	41.7	41.7	33.3
	7.3	15.1	7.8	17.0	8.1	19.0	9.9	15.9	8.7	16.4	11.2	13.8
MA	6	3	5	2	5	1	1	3	5	2	1	3
	50.0	25.0	41.7	16.7	41.7	8.3	8.3	25.0	41.7	16.7	8.3	25.0
	6.3	4.1	4.9	3.8	5.1	2.4	1.1	6.8	5.4	3.3	1.1	5.2
ME	13	3	12	2	12	2	9	2	7	4	11	3
	76.5	17.6	70.6	11.8	70.6	11.8	52.9	11.8	41.2	23.5	54.7	17.6
	13.5	4.1	11.7	3.8	12.1	4.8	9.9	4.5	7.5	6.6	12.4	5.2
Ed.D.		1		1		1		1		1		1
		50.0		50.0		50.0		50.0		50.0		50.0
		1.4		1.9		2.4		2.3		1.6		1.7
Column Totals	96	73	103	53	99	42	91	44	92	61	89	58
	41.7	31.7	45.0	23.1	43.2	18.3	40.1	19.4	40.4	26.8	38.7	25.2

TABLE XIV

CROSSTABULATION OF TEACHER-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION (UNDERGRADUATE MAJOR)

Undergraduate Major	Eye Contact		Facial Expression		Body Language		Gestures		Voice Inflection		Use of Space	
	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive
Elementary Education	76 42.9 78.4	51 28.8 69.9	81 45.8 77.9	39 22.0 73.6	73 41.5 73.7	30 17.0 71.4	71 40.6 78.0	31 17.7 70.5	70 40.0 75.3	46 26.3 75.4	71 40.1 79.8	40 22.6 69.0
Special Education	1 14.3 1.0	4 57.1 5.5	3 42.9 2.9	3 42.9 5.7	4 57.1 4.0	1 14.3 2.4	2 28.6 2.2	1 14.3 2.3	1 14.3 1.1	3 42.9 4.9	1 14.3 1.1	4 57.1 6.9
Secondary Education	18 42.9 18.6	16 38.1 21.9	18 43.9 17.3	10 24.4 18.9	20 47.6 20.2	10 23.8 23.8	16 39.0 17.6	11 26.8 25.0	21 50.0 22.6	10 23.8 16.4	15 35.7 16.9	12 28.6 20.7
Other	2 50.0 2.1	2 40.0 2.7	2 40.0 1.9	1 20.0 1.9	2 40.0 2.0	1 20.0 2.4	2 40.0 2.2	1 20.0 2.3	1 20.0 1.1	2 40.0 3.3	2 40.0 2.2	2 40.0 2.2
Column Totals	97 42.0	73 31.6	104 45.2	53 23.0	99 43.0	42 18.3	91 39.9	44 19.3	93 40.6	61 26.6	89 38.5	58 25.1

TABLE XV

CROSSTABULATION OF TEACHER-PERCEIVED ADMINISTRATOR VERBAL-NONVERBAL CONGRUENCE AND DEMOGRAPHIC, PROFESSIONAL, AND PERSONAL INFORMATION (SALARY)

	Eye Contact		Facial Expression		Body Language		Gestures		Voice Inflection		Use of Space	
Salary	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive	Positive	Very Positive
$4,999 or less							1 100.0 1.1		1 100.0 1.1			
$5,000-9,999	4 80.0 4.2	1 20.0 1.4	3 75.0 2.9	1 25.0 1.9	2 40.0 2.0	1 20.0 2.4	4 80.0 4.4		2 40.0 2.2	1 20.0 1.7	2 40.0 2.3	
$10,000-14,999	17 43.6 17.9	13 33.3 17.8	23 59.0 22.3	7 17.9 13.2	21 55.3 21.4	4 10.5 9.5	22 56.4 24.4	2 5.1 4.5	15 41.0 17.2	11 28.2 18.3	19 48.7 21.6	9 23.1 15.5
$15,000-19,999	51 37.8 53.7	44 32.6 60.3	56 41.5 54.4	34 25.2 64.2	57 42.2 58.2	27 20.0 64.3	48 36.1 53.3	30 22.6 58.2	54 40.6 58.1	37 27.8 61.7	50 37.0 56.8	39 28.9 67.2
$20,000-24,999	21 48.8 22.1	13 30.2 17.8	20 46.5 19.4	9 20.9 17.0	17 39.5 17.3	8 18.6 19.0	14 33.3 15.6	10 23.8 22.7	17 39.5 18.3	10 23.3 16.7	15 34.9 17.0	8 18.6 13.8
$25,000-29,999	2 40.0 2.1	2 40.0 2.7	1 20.0 1.0	2 40.0 3.8	1 20.0 1.0	2 40.0 4.8	1 20.0 1.1	2 40.0 4.5	3 60.0 3.2	1 20.0 1.7	2 40.0 2.3	2 40.0 3.4
Column Totals	95 41.7	73 32.0	103 45.4	53 23.3	98 43.2	42 18.5	90 40.0	44 19.6	93 41.2	50 26.5	88 38.5	58 25.4

VITA

Maxine Beeley Emerson Weber

Candidate for the Degree of

Doctor of Education

Thesis: THE RELATIONSHIP BETWEEN PERCEIVED VERBAL AND NONVERBAL CONGRUENCE OF PUBLIC ELEMENTARY SCHOOL ADMINISTRATORS AND THEIR NOMOTHETIC-IDIOGRAPHIC DIMENSIONS

Major Field: Educational Administration

Biographical:

Personal Data: Born in Wichita, Kansas, December 19, 1924, the daughter of Frances R. and Joseph Lynn Beeley; married to Cal J. Emerson, 1945; sons, Timothy Kent and Ted Ross; married to Fabien Weber, 1975.

Education: Graduated from Missouri Valley School District 39 in May, 1939; graduated from Coldwater High School at Coldwater, Kansas, in May, 1943; received Bachelor of Science in Education degree from Northwestern State College, Alva, Oklahoma, in June, 1965; received Master of Education degree from Wichita State University in June, 1970; completed requirements for the Doctor of Education degree at Oklahoma State University in May, 1986.

Professional Experience: Elementary Teacher, Preston Elementary School, Preston, Kansas, 1965-66; North Elementary School, Pratt, Kansas, 1966-71; Sullivan Elementary School, Ulysses, Kansas, 1971-77; and Cherokee Elementary School, Cherokee, Oklahoma, 1977-80.

Professional Organizations: Charter Member of National Education Association, Delta Kappa Gamma, American Association of University Women, Kappa Delta Pi.