

THE CONGRUENCY OF VERBAL AND NONVERBAL
BEHAVIOR OF ELEMENTARY SCHOOL
TEACHERS WITH DIFFERING
BELIEFS ABOUT THE
NATURE OF MAN

By

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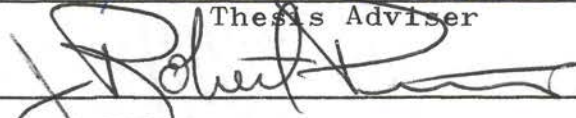
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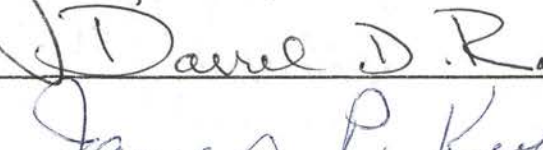
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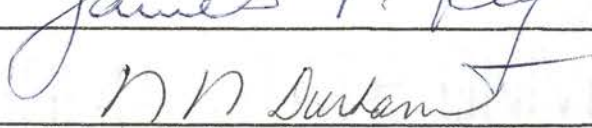
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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Justification of the Study	3
Statement of the Problem	6
Basic Hypotheses	6
Limitations of the Study	7
Definition of Terms	7
Major Assumptions	9
Methodology and Design	10
Format for Succeeding Chapters	12
II. REVIEW OF SELECTED RESEARCH AND LITERATURE . . .	13
Philosophies of Human Nature	13
Verbal and Nonverbal Communication	21
Conclusion	30
III. RESEARCH DESIGN AND INSTRUMENTATION OF THE STUDY	32
Introduction	32
The Study Sample	32
Philosophies of Human Nature	34
Reliability and Validity of the PHN Scale	36
Flanders Verbal Interaction Analysis Scale	37
Galloway's Analysis of Nonverbal Communication	39
Observer Reliability	42
Statistical Treatment	43
IV. PROCEDURES, ANALYSIS, AND TREATMENT OF DATA . .	45
Introduction	45
Scoring the Instruments	46
Testing the Hypotheses	49
V. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	57
Summary	57

Chapter	Page
V. (CONTINUED)	
Findings	58
Conclusions	62
Theoretical Considerations	64
Recommendations	66
Recommendations for Further Research . . .	67
SELECTED BIBLIOGRAPHY	69
APPENDIX A - PHILOSOPHIES OF HUMAN NATURE SCALE	74
APPENDIX B - INTERACTION ANALYSIS OBSERVATION RECORDING SHEET	81
APPENDIX C - DEMOGRAPHIC DATA	83

LIST OF TABLES

Table	Page
I. Summary of Observer Reliability During the Course of the Investigation	46
II. Philosophy of Human Nature Scores for the Two Teacher Groups	47
III. Summary of Data for the Percent of Congruent Verbal-Nonverbal Responses of Teachers	49
IV. Summary of Data for the Percent of Congruent Verbal-Nonverbal Response by High PHN Teachers and by Category	50
V. Summary of Data for the Percent of Congruent Verbal-Nonverbal Response by Low PHN Teachers and by Category	51
VI. Summary of Data for the Mean of the Congruent Verbal-Nonverbal Responses of Teachers	55
VII. Demographic Data for the Teachers Who Comprised the Positive Attitude Toward the Nature of Man	84
VIII. Demographic Data for the Teachers Who Comprised the Negative Attitude Toward the Nature of Man	85

CHAPTER I

INTRODUCTION

For centuries, man has considered verbal expression to be the chief means of communication. He has given little or no thought to the importance of nonverbal communication. During the past decade, Galloway (1962), Koch (1971), and others have emphasized the importance and far reaching implications of nonverbalizations.

A teacher may believe that he is communicating toward a specific objective when he compliments a student on his work, when he says that he likes something or someone but, in reality, his actions or nonverbalizations might be telling the student quite the opposite. A contradiction may exist between what the teacher is saying and what he is communicating. If this condition exists, there is incongruence between verbal and nonverbal communication. The nonverbal language is the language that is believed and accepted by the student as was reported by Galloway (1966).

The true meaning of what an individual has to say is said largely through nonverbal behavior such as facial expressions, gestures, intonations, actions, silence (Galloway, 1966), and proximity, tactility, dress, breathing, materials, and methods and actions (Koch, 1971).

The nonverbal expression of an individual represents his true inner feeling. Hopkins (1973) stated that teachers reflect their basic philosophies of the nature of man in their nonverbalizations. The basic philosophy a teacher holds regarding the nature of man is reflected in his nonverbalizations and these nonverbalizations reflect the expectations he has for students. Rosenthal and Jacobson (1968) reported that nonverbal cues may play a significant role in achievement expectations the teacher holds toward the student.

The nature of man relative to good and evil is expressed in many different ways. Durant (1953) says that to be good does not merely mean to be obedient and harmless. Goodness without ability is lame and all the virtue in the world will not save one if he lacks intelligence.

Spinoza's (1665) interpretation of the nature of man revealed that man's nature is in a constant state of change and moving toward a particular model. He says:

With regard to good and evil, these terms indicate nothing positive in things considered in themselves, nor are they anything else than modes of thought, or notions which we form from the comparison of one thing with another. For one and the same thing may at the same time be both good and evil or indifferent. But although things are so, we must retain these words. For since we desire to form for ourselves an idea of man upon which we may look as a model of human nature, it will be of service to us to retain these expressions in the sense I have mentioned. By good, therefore, I understand everything which we are certain is a means by which we may approach nearer and nearer to the model of human nature we set before us. By evil, on the contrary, I understand everything which we are certain hinders us from reaching that model. Again, I shall call

men more or less perfect or imperfect insofar as they approach more or less nearly to this same model.

According to John Dewey (1910), the nature of man is good. He believed, as did Spinoza, that man is in a state of change and that goodness resides within man.

Divinity is within us, not in these neutral cosmic powers. Intelligence has descended from its lonely isolation at the remote edge of things, whence it operated as unmoved mover and ultimate good, to take its seat in the moving affairs of men (Dewey, 1910).

Dewey believed that the aim in living is not perfection as a final goal, but is the ever enduring process of perfecting, maturing, and refining. He believed that the bad man is the man who, no matter how good he has been, is beginning to deteriorate and to grow less good. The good man is the man who, no matter how morally unworthy he has been, is moving to become better. Such a conception makes one severe in judging himself and humane in judging others (Dewey, 1920).

Justification of the Study

What man has to say is said as much nonverbally as verbally and both phenomenon are influenced by a person's basic belief about the nature of man. This belief plays a significant part in what and how one determines the educational environment. Combs (1962) reiterates as follows:

Whatever we do in teaching depends upon what we think people are like. The goals we seek, the things we do, the judgments we make, even the experiments we are willing to try, are determined

by our beliefs about the nature of man and his capacities. It has always been so. Teachers who believe children can, will try to teach them. Teachers who believe children are unable, give up trying or spend their days on a treadmill, hopelessly making motions they never expect will matter. The beliefs we hold about people can serve as prison walls limiting us at every turn. They can also set us free from our shackles to confront great new possibilities never dreamed of before. No beliefs will be more important to education than those we hold about the nature of man and the limits of his potentials (Combs, 1962).

Wrightsmen (1964) substantiates what Combs has to say and further emphasizes the importance of the philosophy of the nature of man regarding the daily dealings with others.

For most of us, 'human nature' is a pervasive and useful concept. We depend on it frequently to justify our own behavior and the behavior of others. Our beliefs about it influence everything from the way we bargain with a used car dealer to our expectations about a nuclear war. The average man believes that there is and that he employs his philosophy of human nature in his dealings with others.

Nonverbal communication, the language of emotion, takes president over verbal communication and is an affective means of transmitting the true meaning of what an individual is trying to communicate. Darwin (1955) relates an experience, although incongruent, expresses the true meaning of his feelings.

When my first-born infant was about four months old, I made in his presence many odd noises and strange grimaces, and tried to look savage; but the noises, if not too loud, as well as the grimaces, were all taken as good jokes; and I attributed this at the time to their being preceded or accompanied by smiles. When five months old, he seemed to understand a compassionate expression and tone of voice (Darwin, 1955).

Watzlawick (1967) is in agreement with Darwin and

indicated the importance of carrying the true meaning in communication in the realm of the analogic.

Pet lovers often are convinced that their animals 'understand' their speech. What the animal does understand, needless to say, is certainly not the meaning of the words, but the wealth of analogic communication that goes with speech. Indeed, wherever relationship is the central issue of communication, we find that digital language is almost meaningless. This is not only the case between animals and between man and animals, but in many other contingencies in human life, e.g., courtship, love succor, combat, and of course, in all dealings with very young children or severely disturbed mental patients. Children, fools, and animals have always been credited with particular intuition regarding the sincerity or insincerity of human attitudes, for it is easy to profess something verbally, but difficult to carry a lie into the realm of the analogic (Watzlawick, 1967).

If teacher-pupil interaction is related to children's learning, if successful communication of teacher-pupil interaction is largely dependent upon nonverbal expressions, and if these nonverbal expressions are influenced by the belief teachers hold about the nature of man, then the real attitudes of teachers should be reflected in their nonverbal messages and these messages should reveal the expectations teachers hold for pupils. Analysis of teacher-pupil interaction should reveal the relationship, if any, of the congruency of verbal-nonverbal communication patterns and the expectations of teachers who hold different views about the nature of man. This study should reveal significant information with regard to the teaching strengths of teachers who may or may not be congruent in what they teach based on their philosophy of the nature of man.

The results of this research should be beneficial to teacher training institutions and school administrators in the training and selection of potential teachers.

Statement of the Problem

This study is done to determine if there is a relationship in the congruency of verbal and nonverbal communication of elementary school teachers with differing beliefs about the nature of man while teaching.

Answers to the following questions are sought: (1) Is there congruency of verbal and nonverbal communication by elementary school teachers who view man as being basically good? (2) Is there congruency of verbal and nonverbal communication by elementary school teachers who view man as being basically bad?

Basic Hypotheses

This study proposed to establish a basis for the testing of the following hypotheses:

- I. H_0 . There is no significant relationship in the congruency of verbal and nonverbal communication of teachers with differing views of the nature of man.
- II. H_1 . There is a relationship in the congruency of verbal and nonverbal communication of teachers who hold differing views of the nature of man.

Limitations of the Study

The study was limited to:

- (1) The congruency or incongruency of verbal-nonverbal communication of elementary school teachers.
- (2) The kindergarten and elementary teachers of the city and rural schools of Okmulgee County, Oklahoma.
- (3) The use of Wrightsman's Philosophies of Human Nature Scale in determining the teacher's view of the nature of man.
- (4) The use of Flanders' and Galloway's scales of Verbal and Nonverbal Interaction in tallying responses of congruent or incongruent verbal-nonverbal communication.
- (5) The tallies made by the two trained observers while observing teachers and pupils during classroom interaction.

Definition of Terms

For the purpose of this study, the following definitions will be used:

Congruent: A congruent phenomena exists when the teacher's verbal message is supported and reinforced by non-verbal behavior to the extent that there is harmony or agreement between verbal intent and nonverbal referents.

Incongruent: A mixed message or an incongruent phenomena exists when there is a discrepancy or contradiction between the verbal intent and nonverbal referents.

Verbal Communication: Verbal communication occurs by transmitting a thought from one person to another by voice and the concern is what is being said.

Nonverbal Communication: Nonverbal communication is concerned with how a thought or feeling is transmitted from one person to another. Nonverbal cues are represented by facial expressions, movements, postures, mannerisms, vocal tones, gestures, energy changes, use of space, use of time, and control maneuvers (Galloway, 1968).

Encouraging: Congruent verbal-nonverbal actions by the teacher tends to increase interaction of pupils in a classroom experience. These actions are characterized by praising, joking to relieve tension, but not at the expense of another individual, nodding the head, and such phrases as "go on" or "um hum?" (Amidon, 1968).

Restricting: Incongruent verbal-nonverbal actions by the teacher tends to decrease interaction of pupils in a classroom experience. These actions are characterized by contradictions between verbal and nonverbal cues, avoidance of verbal interchange, the acknowledgment of pupil's idea but only repeating or restating it, harsh criticism, unwillingness to alter the pace or direction of the lecture, and disregarding pupil cues (Lail, 1968).

Philosophy of Human Nature: A person's inclination to

view others as good or bad in regard to their trustworthiness, altruism, independence, and strength of will (Wrightsman, 1961).

Nature of Man Considered Good: In this study, the good man is considered to be the one that is kind and possesses a generous disposition. He is fair, trusting, and believes that man is capable of achieving goals without being prodded. He is unselfish and interested in helping others. If a positive score results from the summation of scores on the four subscales of Wrightsman's PHN Scale, then the basic nature of man is considered to be good.

Nature of Man Considered Bad: In this study, the bad man is considered to be the one that is unfavorable, unpleasant and possesses a disagreeable disposition. He is unfair, distrusting and believes that man is capable of achieving goals only by continuous prodding. He is selfish and not interested in the welfare of others. If a negative score results from the summation of scores on the four subscales of Wrightsman's PHN Scale, then the basic nature of man is considered to be bad.

Major Assumptions

For the purpose of this study, the following assumptions have been applied:

- (1) Wrightsman's Philosophies of Human Nature Scale yeilds normative data for determining the basic

philosophies of teachers concerning the nature of man.

- (2) Flanders' System of Interaction Analysis Scale yields a method for the classification of what is said by the teacher and pupil.
- (3) Galloway's Analysis of Nonverbal Communication Scale yields a method for the classification of how things are said by the teacher and pupil.
- (4) Observational data can be collected simultaneously with the Flanders and Galloway Scales.
- (5) The use of trained observers is a reliable method for collecting classroom data on the congruency of verbal-nonverbal communication.
- (6) The philosophy one holds toward the nature of man influences his interaction with others.
- (7) When there is incongruency in verbal and non-verbal communication, it is the nonverbal that is believed and accepted.

Methodology and Design

The data for this study were obtained from teachers in the city and rural schools of Okmulgee County, Oklahoma. Okmulgee County was selected for this study because of the representation of both rural and city schools and because of the ethnic representation of both teachers and pupils. There were two phases in the collection of data. Phase one consisted of administering the Philosophies of Human Nature

Scale (PHN) to 158 teachers who were teaching in grades kindergarten through sixth, inclusively. Twenty teachers were selected from this group to participate in phase two of the study. Of these twenty teachers, ten of them, according to the PHN, believed that the basic philosophy or nature of man was that he is good. The other ten teachers believed that man, by nature, is bad.

During phase two of this study, the twenty teachers were observed while they were teaching in their assigned areas.

Four observers were trained in the use of the Flanders System of Interaction Analysis Scale, which is verbal, and the Galloway Analysis of Nonverbal Communication Scale. Two of these observers who showed the greatest observer reliability were selected to continue data collection in phase two. Scoring of the subject's verbal and nonverbal responses was done simultaneously because of the similarity of the two scales.

Each teacher selected for participation in phase two of this study was observed for twenty minutes by two observers on two separate occasions. Mondays, Fridays, days preceding holidays or special events, and days following unusual events such as sickness or tragic experiences in the lives of the teachers or observers were excluded as days for observation and collection of data.

Format for Succeeding Chapters

Five chapters suffice to fulfill the requirements of this study. Chapter I is the introductory chapter. Chapter II presents a review of related research and literature. Chapter III presents a discussion of the instrumentation of the study. Chapter IV presents a statistical treatment of the data used in the study. Chapter V summarizes the entire study, presents findings, makes recommendations in keeping with these conclusions, and suggests areas for further research.

CHAPTER II

REVIEW OF SELECTED RESEARCH AND LITERATURE

This chapter includes a review of selected sources of information pertaining to the concepts of the philosophy of human nature and the congruency of verbal and nonverbal communication.

Philosophies of Human Nature

For centuries, philosophers, poets, theologians, and essayists have theorized about the fact that an attitude toward the nature of man exists in each person. How one reacts to other human beings is based largely on how he views man. If he views man as being bad, he is hesitant in trusting him and one becomes more custodial or directive in his relationships with him. One crams him with the information of his own choosing, lest he go on his own mistaken way. If one views man as being good, one trusts him, one helps him, and the relationship becomes more humanistic than custodial. One may permit him the opportunity to choose his own way in learning. This type of teaching and learning would be possible only for a teacher who has a somewhat confident view of man (Hopkins, 1973).

Ashcraft (1963) hypothesized that a person's judgments regarding the variability and the complexity of others could be predicted on the basis of a person's philosophy of human nature. She used one hundred freshman girls to test this hypothesis. Her findings were not conclusive, but did indicate that the manner in which one views the variability and complexity of human nature may be part of a total concept of cognitive complexity which can be related to findings of studies in other areas of perception and discrimination.

The ideas people hold about the nature of man have inevitable effects on the things they do in dealing with others. Nowhere has this effect been more marked than in the thinking about the goals of education. Whatever is done in teaching depends upon what is thought people are like. Allport (1961) says that the theories of learning rest on the investigators conception of the nature of man. He concluded that if one thinks of man as a thing, pushed and pulled by external forces, then one will seek for quasi-mechanical principles of learning. With this philosophical view of man, one will embrace a stimulus-response view that puts as much emphasis as possible on simple physiological forces and on elementary processes of nerve tissue. Combs (1962) stated that pupils learn who they are and what they are from the ways in which they have been treated and taught by those who surrounded them in the process of their growing up.

Another view is that of Malony (1964). He stated that

man, from an existentialist point of view, is no longer simply viewed as an ignorant creature needing more education; nor is he viewed as a wholly sinful creature needing to believe a gospel of objective facts to escape from present evil and future punishment.

Miller (1968) administered the Philosophies of Human Nature Scale to professional social workers, social work graduate students, and undergraduate students to compare their views of human nature. He found that graduate students who enter the social work field are more positive in their views of human nature than are the undergraduate students, but not as positive in their views as professional social workers. Miller concluded that persons entering social work already possess altruistic views and these views are expounded as the person progresses in the social work field.

All persons form expectations about others because they have a strong need to know what to expect from them. But why do one person's expectations so differ from another's? According to Wrightsman (1961), the best approach to understanding human nature is to treat philosophies of human nature as attitudes and apply one's conceptions of how social attitudes develop to this problem. One may then expect that a person's philosophy of man will be strongly influenced by the attitudes and behavior of his parents and other significant persons in his environment. One may expect that his own personality needs and his psychological adjustment will

influence the philosophies he develops.

The Philosophies of Human Nature Scale was administered to one hundred six college students by Ligon (1963) who sought to compare the relationship between a person's religious background and his philosophy of human nature. Some significant relationships were found, although not strong. Ligon concluded that religious training did influence the expectations of these students about others. Those students with humanitarian religious attitudes held a more favorable view of the nature of man than did the students who had a Fundamentalist religious background.

With regard to expectations or assumptions, Ashcraft (1963) stated that people develop assumptions concerning the behavior of others with whom they come in contact every day. Without such assumptions, she says, it would be impossible to create order in one's environment. These assumptions or expectations may cover a wide range from, say, the paranoid who expects hostility from all he meets to the idealist who believes that man is always good. She cited the Hebrews and Greeks as having conflicting views relative to human nature. The statement of Socrates, "know thyself," is evidence that he saw man as rational and understanding, and capable of self-control through the use of reason, while the Hebrews' view is typified in the book of Job where man is viewed as innately bad and sinful.

McClelland (1951) is in agreement with Ashcraft. He also compared the development of the two conflicting views

of human nature, those of the Hebrews and the Greeks. The Greeks' view during the time of Plato and Socrates was that man, by reasoning, could arrive at understanding and control of himself. While the Hebrews felt that there were dark inscrutable forces within human nature, just as there were in the outside world and that even the wish to understand them was in itself bad, in fact a symptom of those evil forces themselves at work.

Beliefs concerning the nature of man have been progressing through a slow evolutionary process. The movement has been away from a philosophy of mistrust and authoritarian control of people to a philosophy which holds that man is good and can be trusted to determine his own fate. During the dark ages, the impulsive, destructive, and irrational urges within man were attributed to evil spirits or demons. The scientific discoveries of the Renaissance period began to revive man's faith in himself, and consequently his attempts to understand himself. LeMettrie felt that man operated as a machine and could be understood only through mechanical principles while Locke regarded man as the Pawn, not of fate, but of society which could make of him what it would through education and training (Ashcraft, 1963).

Wrightsman (1964) developed an instrument called the Philosophies of Human Nature Scale (PHN). The PHN was developed to be used in the collection of normative data which differentiates between the philosophical beliefs of people relative to human nature. This instrument was

administered by Wrightsman and Satterfield (1967) at twenty predominantly Southern colleges and universities. The substantive scales showed that students in the schools generally scored in the neutral range indicating that they saw man as neither good nor evil. However, students from Negro colleges and those colleges which were primarily religious oriented, usually viewed human nature more negatively than students from other colleges. The females of this study possessed more favorable views of the nature of man than did the males. The females also believed that human nature is more complex than do males.

Fiske (1909) believed that man's continual change toward goodness was due to the long period of human infancy which determines the civilizing character of mankind. This prolonged infancy and family life fosters the development of an instinct that leads to altruism instead of selfish jungle traits.

Although man's philosophical concepts are moving toward altruism, there are periods in history which reflect a regression in the evolutionary process. These regressions are influenced by environmental factors and tend to be temporary manifestations. Baker (1969) conducted a study to determine if there has been a deterioration of idealism and a growth of anxiety and cynicism in college students. She administered the Philosophies of Human Nature Scale (PHN), the Taylor Manifest Anxiety Scale (MAS), or both to seven freshman classes entering the same college between 1959 and

1968 during the first week on campus. The mean scores of the four substantive subscales of the PHN showed a unidirectional trend toward a more negative view of human nature from 1962 through 1968.

The mean scores of the Taylor MAS also showed significant differences among classes, with the trend being toward increasingly higher scores in more recent classes. High scores on the MAS are indicative of overt admissions of anxiety, indicating that more recent freshmen express more anxiety symptoms than did earlier classes. When the investigator asked college students why college freshmen would have reported less positive views of the nature of man and increases in anxiety, the most frequently named answers were: Vietnam, pressures to make high grades to get into college, racial rioting, and assassinations of public figures.

Similarly, Wrightsman and Noble (1965) noticed that the reaction of several people concerning the assassination of President Kennedy, was a general disillusionment with human nature. They conducted this study to determine whether this disillusionment might be a general finding among those persons most upset by the assassination. Thirty college students who had responded to the PHN Scale fourteen months earlier retook the scale, along with a questionnaire assessing one's agreement with the President's policies and the extent of one's reaction to his assassination.

Of the fifteen subjects who agreed with Kennedy's stand on each of the four issues (civil rights, tax cut, test ban,

and foreign affairs), four changed to more favorable views of human nature, while eleven changed to less favorable views. Of the fifteen people who disagreed with Kennedy's stand on one or more of the issues, ten changed to more favorable views of human nature while five changed to less favorable views. It appeared that the majority of the persons sympathetic with Kennedy's views developed a less favorable view of human nature, while most of those not in sympathy with his views did not.

Four months after the assassination, the thirty subjects were again asked to complete the PHN Scale. Those feeling a great personal loss developed more favorable views of human nature during the four months, while those who felt no personal loss did not. Wrightsman concluded that whatever reactions felt, by the pro-Kennedy subjects, were temporary reactions. Their attitudes toward human nature were more favorable four months after the assassination than they had been on either prior occasion.

History has revealed a series of rises and falls of placing emphasis on the worth of the individual. The Greek civilization, and that of the city of Athens in particular, was the first to attempt to produce intellectual development in each individual. The Athenians saw a rapid transition from the old traditions as their society placed worth on the individual. The Middle Ages reflect a trend or a low ebb in the estimation of the individual's worth. Here the belief in the innate badness of man again held precedence. Not until

the Renaissance was individual worth again recognized (Graves, 1936). These two concepts, the innate goodness and the innate evilness of mankind, act as catalists in producing periods of growth or rest. With each ensuing period of progression and regression in the philosophical views of man, a greater worth has been placed on the individual and on his innate goodness. The range of man's philosophy from that of the innate goodness to the innate evilness of the individual is reflected in the verbal and nonverbal responses he makes in his interactions with others.

Verbal and Nonverbal Communication

Learning depends a great deal on teacher-pupil interaction, and interaction at its best is dependent upon congruent verbal-nonverbal communication. Communication is the transmission of an idea or message from one organism to another. Certain sounds or symbolic gestures may be made but until understanding is attained, no communication has taken place. Both verbal and nonverbal means of communicating are utilized throughout the world in all the linguistic forms (Pei, 1965).

Nonverbal communication is the language of emotion as expressed by Galloway (1971):

The nonverbal is indeed the language of sensitivity. It is the age-old language of lovers, that sublime communication without words. It is the language of the content, a knowing smile, an exchanged glance that tells more--much, much more than words can ever way. It is the frown that makes one feel guilty; the silent anger that emits

a tenseness so real that it can almost be touched. It is that obscure, yet emphatic meaning behind the silence that thunders its message. The nonverbal is so complicated that it can convey an entire attitude, yet so simple that when a head nods or shakes everyone understands. All human relationships involve meanings that are more than words, and the nonverbal exposes the truth in these relationships.

One of man's greatest problems has been his inadequacy in communicating his feelings to his fellow man. Adequate communication has been lacking at the conference tables of world powers, with the man on the street, and with the teacher and pupil in the classroom. The lack of adequate consideration and understanding of nonverbal language has played its part in the weakness of communication. Hall (1959) states:

Of equal importance to training in the language, history, government, and customs of another nation is an introduction to the nonverbal language which exists in every country of the world and among the various groups within each country. Most Americans are only dimly aware of this silent language even though they use it every day. They are not conscious of the elaborate patterning of behavior which prescribes our handling of time, our spatial relationships, our attitudes toward work, play, and learning. In addition to what we say with our verbal language we are constantly communicating our real feelings in our silent language--the language of behavior.

The understanding and true meanings in communication are conveyed in the nonverbal cues man emits as he comes in contact with others. When the nonverbal cues become congruent with the verbal expressions, communication has reached its highest level of achievement. Yet, nonverbal language is often incongruent with the verbal and may be

betrayed through nonverbal leakages.

Nonverbal leakage and clues to deception occur in many ways. Ekman and Friesen (1969) identified seven primary affective states of nonverbalizations having their origin in the face such as: happiness, anger, fear, surprise, sadness, disgust, and interest. These channels of communication are difficult to control largely because of a lack of immediate feedback one has to his own nonverbal communication as he has for hearing his own voice. Such nonverbal facial behavior may be expressed in varying degrees of time. Micro-facial expressions are not detectable unless seen under slow motion replay, and unless they are as slow as 1/50th of a second. Macro-facial expressions last from about one-half to a full second and can easily be seen and readily labeled in terms of emotion. When the facial expression shows disagreement with what is being said verbally, an incongruency in communication arises.

A study by Mehrabian (1971) concerning betrayal of feelings showed that, when being deceitful, a communicator nodded, gestured, and had less frequent leg and foot movements. He also assumed less immediate positions relative to his addressees, talked less and more slowly, had more speech errors, and smiled more. When the addressee was threatened, he maintained a greater degree of eye contact and less relaxation. While seated, the communicator's rate of rocking, gesticulation, and leg and foot movement indicated his degree of comfort and relaxation. His speech volume was a

correlate of a more dominant and self-assured feeling.

In addition to nonverbal body cues, Halpin (1966) cited the importance of such nonverbal cues as time, space, and style of speech in conveying true meanings in communication. Lipham and Franche (1966) pointed out that the school administrator showed congruency or incongruency of verbal and nonverbal behavior in the manner in which he greets visitors. Congruency is expressed by the administrator who leaves the security of his chair behind his desk to greet a visitor in the outer office, who is concerned with the visitor's overcoat and hat, and who is conscious of the need to seat the visitor near him. Incongruent actions are expressed by the administrator who remains in the security of his inner office in his chair behind his desk and merely offers a handshake to his visitor. He is not concerned with the visitor's overcoat and hat and he seats him in front of his desk at an impersonal distance.

Concomitantly, Boucher (1972) and Mehrabian (1965) cited seating distance and nods of the head of interviewer and interviewee as a determining factor in the length of an interview. Birdwhistle (1970) and Merrill and Lowenstein (1971) described most communication in the broadest sense as being nonverbal and involving all the sensorily based modalities which permit ordered human interaction.

Nonverbal behavior primarily involves the communication of one's feelings and attitudes. A person's feelings and attitudes are influenced by what he believes, personal

preference, or by professional objectives. Mehrabian (1971) states:

Despite therapists firm intention not to maneuver their patients, researchers who have viewed therapy sessions through one-way mirrors have found that these therapists do influence patients, albeit in subtle ways. Such a therapist can readily convey interest or disinterest, pleasure, encouragement, or disappointment nonverbally. He may lean back or turn away slightly instead of saying 'I don't like what you just said' or 'I don't like the kinds of things that you've been doing.' Alternatively, if he likes what his patient reports, he may convey more positiveness in his voice while speaking, address his patient by first name, lean forward as he listens, have more eye contact, or ask for more elaboration.

Judgments as to the congruency or incongruency of verbal and nonverbal communication can be determined in many ways. Knapp (1971) stressed the importance of using both verbal and nonverbal dimensions when attempting to analyze classroom situations. Nonverbal cues serve to reinforce, contradict, complement, substitute for, accent or help to regulate the flow of verbal responses. Mehrabian (1969) indicated that judgments can be made on the basis of posture and position cues. Weinstein and Fantini (1970) also stated that these and other nonverbal clues play an important role in communication and are far more subtle and difficult for teachers to interpret than students' verbal expressions.

Nonverbal is unlike the verbal communication process in that it is conducted unconsciously and possibly even received unconsciously (Garner, 1970). One can use nonverbalizations to arouse curiosity, to expell mischievousness, and to create an atmosphere for learning. A person can cause

depression and drowsiness, turn the listeners attention to activities not of a constructive nature, and even create an environment too uncomfortable for learning. Goffman (1959) stated that the teacher sets the pattern in his classroom by being either congruent or incongruent in his verbal and nonverbal behavior. He can manage his nonverbal cues to achieve a desired effect. His personal front may include insignia of office or rank, clothing, sex, age, racial characteristics, posture, speech patterns, facial expressions, and bodily gestures. Some of these signs are relatively mobile or transitory and can vary during a performance.

Berman (1968) hypothesized that if the teacher would permit children to learn the components of nonverbal behavior, they could describe more nonverbal components of communication in a non-structured setting than if they were not helped to become aware. Austin, Clark, and Fitchett (1971) asserted that the associations among the female members of society or in mixed sex groups, appear to be largely upon the verbal basis. Active oral communication is frequently the foundation of such associations. In the male society, communication is as frequently nonverbal in form as verbal. The more closely allied the members of a male community are, the less oral communication appears necessary.

Pancrazio and Johnson (1971) did a study to compare three training approaches in terms of their effectiveness in producing specified goal behaviors in pre-service teachers

in home economics and social studies. The three approaches were (1) a programmatic videotape approach emphasizing examples of selected nonverbal behaviors, (2) a lecture discussion approach with the viewing of transparencies of selected nonverbal behaviors of teachers and pupils, and (3) a micro-teaching setting for practice teachers in which no instructions were given other than instructions on encouraging pupil interaction through nonverbal behavior. The study showed that observers may be trained to a high level of agreement in assessing the extent to which pre-service teachers in home economics and social studies demonstrate selected non-verbal behaviors in micro-teaching situations. Training approaches, which are carefully controlled for time, pupil effect, and content, will manifest nonverbal behaviors related to encouraging classroom interaction. Males and females in the area of social studies did not differ in the frequency with which they manifested selected nonverbal behaviors related to encouraging classroom interaction.

Positive interaction is highly dependent upon many variables. Fabun (1968) stated that the very fabric of today's society is woven of spoken and visual symbols and that we also communicate meaningfully in many nonverbal, nonsymbolic ways. Silence itself is a way of communication. When someone says "Good morning," and we fail to respond, we communicate a response. When someone asks us a question and we fail to answer, we also communicate a response. Fabun

indicated that the color and style of clothing worn for different events tells others something nonverbally. He also cited space and time as being of the same nature.

Koch (1971) likened nonverbalizations to an umpire's signal of "You're out!" or the teacher's "Shh," with her finger to her lips but hastens to add that judging a single nonverbal cue out of context is no more valid than judging a single verbal expression. Koch says that once one knows nonverbally, he knows for sure. Ruesch and Kees (1966) indicate that nonverbalizations are expressed in the form of pictures, sculpture, dancing, signal fires of the Greeks and Romans, and the smoke signals of American Indians. Pei (1965) cited other nonverbalizations such as the talking drums of African natives and the signal systems of the navies and merchant marines. Pei (1949) reported that gestural language contains some seven hundred thousand distinctly different signals and is assumed to have preceded oral speech by close to a million years. Schafflen (1964) observed that there are only about twenty-six traditional American gestures and even fewer culturally standard postural configurations.

Other nonverbalizations are surface manifestations of excitement such as facial color, pouring out of sweat, dilation of pupils, hurried respiration, the stopping of saliva-flow in the mouth, the rising of the hair, the rapid heart beat, and the trembling or twitching of muscles about the lips (Cannon, 1929). Cherry (1957) defined

nonverbalizations as redundant systems which tend to render verbalizations as communicative. The nonverbalizations are comparable to the addition of extra words and phrases in verbal conversations which build in redundancy as judged to be necessary for understanding.

Nonverbal communication is the transmission of a message, meaning, or understanding by any means outside of words. Galloway (1968) stated that a requirement of communication in the classroom is that the symbols a teacher chooses from his repertoire must satisfy his own particular requirements and meaning and must evoke a similar meaning in the pupil. Communication is successful when the teacher and the pupil agree upon the context in which the message should be interpreted. Perfect communication is rarely achieved because words are at best mediating symbols between the expressed intent of an inner state of being and the achieved effect they elicit.

Kanner (1948) stated that human infants have a remarkable aptitude for understanding other persons' moods and attitudes imparted nonverbally. Gestures have more communicative value to them than words. As children grow older and learn to speak, the need for communication is supplemented but not supplanted by words. There is an integration of speech and nonverbal language which remains throughout life, differing individually and culturally. Kanner says that gestures, without words, can convey complex meanings with all their communicative and affective connotations. He

cites the sign language of the deaf, pantomime, and the silent moving pictures as examples.

Conclusion

In conclusion, it must be stated that communication is achieved as much through nonverbal as through verbal expressions and these nonverbal expressions are influenced by the philosophy one holds toward the nature of man. The philosophy a teacher holds toward the nature of man determines the expectations she has for pupils and learning (Combs, 1962). Pupils learn what is expected of them and tend to fulfill those expectations from the signals they pick up through teachers' encouraging or restricting nonverbal leakages and through the teachers management of his verbal and nonverbal expressions.

Wrightsman (1964) stated that one often depends on the philosophy of the nature of man to justify his own behavior and the behavior of others and that he employs this philosophy of man when dealing with others. A person's philosophy, he says, influences everything he does from the way he bargains with a used car dealer to his expectations about a nuclear war.

Although the philosophy of human nature and the nonverbal mode of communication are not taught or learned in any formal way, each has a tremendous impact on classroom interaction and on teaching and learning. More research is being

done in this area to more accurately define the limits and implications.

Chapter II has reported selected literature related to the philosophy of human nature and verbal-nonverbal communication. The literature tended to reveal a positive correlation between verbal-nonverbal communication and the philosophical beliefs an individual holds toward man. The philosophy one holds is reflected in what and how he communicates. Chapter III gives a description of the research design and instrumentation of the study.

CHAPTER III

RESEARCH DESIGN AND INSTRUMENTATION

OF THE STUDY

Introduction

The purpose of this study was to investigate the relationship between teachers' views regarding the nature of man and the congruency of their verbal and nonverbal behavior in the classroom.

The Study Sample

In order to fulfill the requirements of this study, it was necessary to measure the philosophies of human nature and the congruency of verbal and nonverbal behavior of teachers who were interacting with a group of children in a classroom.

The philosophies of human nature of the teachers were obtained from the teachers' responses to the Philosophies of Human Nature Scale (PHN). All elementary school teaching personnel in Okmulgee County, Oklahoma were encouraged to respond to the PHN Scale. The writer met with each school faculty in their respective buildings to give an explanation

of the project and to get the teachers' responses to the Scale.

The instructions given to each faculty group included the reading of the instructions printed on the questionnaire as well as the following statements:

1. Your response to this questionnaire will, in no way, be used to rate you or any other teacher.
2. You will not be identified, with the information furnished, to any person excepting the personnel directly involved in this project.
3. All elementary teachers in Okmulgee County are being asked to complete this questionnaire.
4. The information you record on the answer sheet will be transferred to an IBM computer card. The computer at the Oklahoma State University Computer Center will score your response.
5. Twenty teachers will be selected from those responding in this county based on their responses to the questions.
6. The twenty teachers selected will be observed in their classroom setting for twenty minutes on two separate occasions.

Approximately ninety percent of the teaching personnel in the elementary schools responded. One hundred fifty-seven questionnaires were returned from the Okmulgee County population. Nine questionnaires were not used because of incompleteness or because of the teachers' familiarity with the study. The teachers' responses were scored to determine the philosophy each held toward the nature of man.

For the purpose of this study, two groups of teachers were needed. The two groups formed the dependent variable of the study and consisted of the ten teachers who scored

the highest positive score on the PHN and the ten teachers who scored the lowest negative score. These two groups formed the basis for classifying those who believed that man is good, the positive group, and for those who believed that man is bad, the negative group.

The independent variable of this study was the congruency of verbal and nonverbal behavior of the twenty teachers under study. The teachers' congruency was obtained by observing them and scoring their behavior according to the categories of the Flanders Verbal Interaction Analysis Scale and the Galloway Analysis of Nonverbal Communication Scale. Two observers, who were trained in the use of the two scales, observed the teacher-pupil classroom interaction for each of the twenty teachers. Each classroom was observed two times. The tallies for the four observations were summed by category to obtain normative data for statistical analysis.

Philosophies of Human Nature

The philosophies of Human Nature Scale (PHN) is an instrument designed to measure a person's belief about the nature of man and it consists of six subscales with fourteen items in each. The subscales are:

1. Trustworthiness versus Untrustworthiness
2. Strength of Will and Rationality versus Lack
of Will and Irrationality
3. Altruism versus Selfishness

4. Independence versus Conformity to Group Pressure
5. Complexity versus Simplicity
6. Variability versus Similarity

This scale is an eighty-four statement questionnaire and the response to each statement is made on a Likert type scale of -3, -2, -1, +1, +2, and +3. The minus three indicates strongly disagree. The plus three indicates strongly agree (see Appendix A).

For the purpose of this study, only the first four subscales were used. Subscales five and six are used to determine the multiplexity of human nature. Scores on each subscale have a range from a -42 to a +42. A score between -14 and +14 indicates a neutral view toward man's nature. Scores falling between -14 and -42 indicate a negative view on that particular scale while scores falling between +14 and +42 indicate a positive view on that particular scale. When the scores are summed on the first four subscales a General Favorability of Human Nature Score is obtained with a range of -168 to +168. This score is an indication of a negative or positive view of the nature of man. A negative score is an indication that man's nature is bad while a positive score is an indication that man's nature is good (Wrightsmann, 1964).

Reliability and Validity of the PHN Scale

Wrightsmann (1964) shows split-half reliability coefficients for the individual subscales. They are of an acceptable magnitude range from .40 to .78. The test-retest reliability coefficients, with a three-month interval between testings, were the following: Trustworthiness, .74; Altruism, .83; Independence, .75; Strength of Will and Rationality, .75; Complexity, .52; and Variability, .84. The scores on the first four subscales were summed to give a general Favorability Score; this score had a reliability of .90. Thus, the subscales appear to be quite stable over time and these reliability coefficients are higher than those measuring the internal consistency of the subscales.

To determine the validity of the instrument, Wrightsmann administered the PHN Scale to both undergraduate and graduate students. The scale has been revised and now appears to have construct validity; predictions relating the scale to sex differences, self-ideal discrepancies, differences in religious background, and evaluations of one's instructor have been borne out. The scale discriminates to some degree between student groups at different colleges and universities.

Flanders Verbal Interaction Analysis Scale

The Flanders (1970) Interaction Analysis Categories is a ten-item instrument developed to achieve an accurate estimate of the initiative-response balance of classroom interaction of pupils and teacher. There is no scale implied by the ten categories. Each number is classificatory; it designates a particular kind of communication event. The categories of the instrument are described in the following way:

- (1) Accepts feeling. Accepts and clarifies an attitude or the feeling tone of a pupil in a nonthreatening manner. Feelings may be positive or negative. Predicting and recalling feelings are included.
- (2) Praises or encourages. Praises or encourages pupil action or behavior. Jokes that release tension, but not at the expense of another individual; nodding head, or saying "Um hm?" or "Go on" are included.
- (3) Accepts or uses ideas of pupils. Clarifying, building, or developing ideas suggested by a pupil. Teacher extensions of pupil ideas are included but as the teacher brings more of his own ideas into play, he shifts to category five.

- (4) Asks questions. Asking a question about content or procedure, based on teacher ideas, with the intent that a pupil will answer.
- (5) Lecturing. Giving facts or opinions about content or procedures; expressing his own ideas, giving his own explanation, or citing an authority other than a pupil.
- (6) Giving directions. Directions, commands, or orders to which a pupil is expected to comply.
- (7) Criticizing or justifying authority. Statements intended to change pupil behavior from nonacceptable to acceptable pattern; bawling someone out; stating why he is doing what he is doing; or extreme self-reference.
- (8) Pupil-talk--response. Talk by pupils in response to teacher. Teacher initiates the contact or solicits pupil statement or structures the situation. Freedom for the pupil to express his own ideas is limited.
- (9) Pupil-talk--initiation. Talk by pupils which they initiate. Expressing own ideas; initiating a new topic; freedom to develop opinions and a line of thought, like asking thoughtful questions; going beyond the existing structure.
- (10) Silence or confusion. Pauses, short periods of

silence and periods of confusion in which communication cannot be understood by the observer.

To use the Flanders Scale, Amidon and Flanders (1967) outlined three simple rules to follow. These rules are as follows: (1) memorize the categories, (2) follow a simple set of rules, and (3) practice using the scale.

Galloway's Analysis of Nonverbal Communication

Galloway's instrument was used in this study to determine the congruency of verbal and nonverbal behavior of teacher-pupil interaction. Galloway's analysis categories are easily adapted to the Flanders system and used in combination. Flanders' system provides information on what is said, and Galloway's system deals with how things are said.

Galloway (1968) developed two categories for nonverbal communication to further describe each category of the Flanders System of Verbal Interaction. With the exception of Flanders' first category which does not need extension or qualification, there is one nonverbal category for use when the verbal encourages interaction and one nonverbal category for use when the verbal restricts interaction.

Galloway's analysis, like Flanders', categorizes ten areas for observation. In tabulating pupil-teacher interaction, the observers simply wrote down the number of the Flanders' verbal category and, if it was nonverbally

encouraging, it was left as it was. If it was nonverbally restrictive, a one was added in front of the number. Thus, if a teacher praised a student, which is a two on the Flanders Scale, and if the teacher's nonverbal cues reinforce and further clarify the credibility of a verbal message (congruent), the observer recorded a two. If the nonverbal contradicted the verbal (incongruent), a one was placed in front of the two, making it a twelve.

Galloway's interaction analysis of pupil-teacher non-verbal behavior are described in the following categories:

- (1) Encouraging. Accepts the feeling tone of the students and their right to have these feelings.

Restricting. Does not accept the feeling tone of the students or their right to have these feelings.

- (2) Congruent. Nonverbal cues reinforce and further clarify the credibility of a verbal message.

Incongruent. Contradiction occurs between verbal and nonverbal cues.

- (3) Implement. Implementation occurs when the teacher actually uses student's idea either by discussing it, reflecting on it, or turning it to the class for consideration.

Perfunctory. Perfunctory use occurs when the teacher merely recognizes or acknowledges

student's idea by automatically repeating or restating it.

- (4) Personal. Face-to-face confrontation.

Impersonal. Avoidance of verbal interchange in which mutual glances are exchanged.

- (5) Responsive. Change in teacher's pace or direction of talk in response to student behavior, i.e., bored, disinterested, or inattentive.

Unresponsive. Inability or unwillingness to alter the pace or direction of lecture disregarding pupil cues.

- (6) Involve. Students are involved in a clarification or maintenance of learning tasks.

Dismiss. Teacher dismisses or controls student behavior.

- (7) Firm. Criticisms which evaluate a situation cleanly and crisply and clarify expectations for the situation.

Harsh. Criticisms which are hostile, severe, and often denote aggressive or defensive behavior.

- (8 & 9) Receptive. Involves attitude of listening and interest, facial involvement, and eye contact.

Inattentive. Involves a lack of attending eye contact and teacher travel or movement.

(10) Comfort. Silences characterized by times of reflection, thought, or work.

Distress. Instances of embarrassment or tension-filled moments, usually reflecting disorganization and disorientation.

A series of steps were followed by the investigator in training four college seniors, future teachers, as observers in the collection of data for this study. The following procedures were observed: (1) memorizing the Flanders and Galloway categories, (2) following a set of rules, (3) scoring practice using verbal and nonverbal training film, and (4) observing and tallying classroom interaction in the classroom on the college campus and in elementary school classrooms. After approximately six to ten hours of training, the observers began to develop the ability to judge and categorize consistently.

Observer Reliability

To obtain observers who were the most consistent in observation and tallying, Scott's Coefficient for observer reliability was used on the last practice observation scores. The two most consistent observers were selected to collect the data for this study. Their reliability coefficient was .8085 for verbal, .8864 for congruency, and .5542 for incongruency. These observers spent twenty minutes together on two separate occasions independently scoring the verbal and nonverbal responses of the teachers selected for

phase two of the study. Each teacher observed was scored during a morning session on one occasion and during an afternoon session on one occasion. This was done to get a representative sample of the teachers' daily performance. For interaction analysis observation recording sheet, see Appendix B.

Scott's Coefficient (Flanders, 1966) is designated by "pi" and is determined by the use of Formula 1.

Formula 1

$$\pi = \frac{P_o - P_e}{1 - P_e}$$

P_o is the proportion of agreement between the observations made of the same teacher by different observers, and P_e is the proportion of agreement expected by chance and is found by squaring the proportion of tallies in each category and summing the scores. Expressed verbally, this formula indicates the amount that the observers exceed chance agreement divided by the amount that perfect agreement exceeds chance. Observer reliability was checked four times by the use of Scott's Coefficient and the results are shown in Table I.

Statistical Treatment

Because of the varied nature of the data in this study, different scales of measurement were used in the statistical

treatment. The t test was used for analysis of the PHN scores of the two teacher groups (see Formula 2).

Formula 2

$$t = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}.$$

The Mann-Whitney U test was used for the analysis of the percent of congruent responses of each teacher (see Formula 3).

Formula 3

$$U = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1$$

$$U = n_1 n_2 + \frac{n_2 (n_2 + 1)}{2} - R_2$$

$$U = n_1 n_2 - U'.$$

The data in this study may not be inferred to a population other than the population in study.

Chapter III has reported the purpose of the study, the population, the sample and its selection, the procedures used in the study, the instruments employed and the statistical treatment applied to the data. Chapter IV gives a detailed description of the procedures, analysis, and treatment of data.

CHAPTER IV
PROCEDURES, ANALYSIS, AND
TREATMENT OF DATA

Introduction

This chapter describes the procedures used and the tabulated results of the data obtained from the instruments described in Chapter III. The data gathered in this study were used for the primary purpose of testing the following hypotheses.

- H_0 . There is no significant relationship in the congruency of verbal and nonverbal communication of teachers who hold differing views of the nature of man.
- H_1 . There is a relationship in the congruency of verbal and nonverbal communication of teachers who hold differing views of the nature of man.

The data to test the hypotheses were collected through the use of the Philosophies of Human Nature Scale, Flanders' Verbal Interaction Analysis Scale, and Galloway's Analysis of Nonverbal Communication Scale. The rationale, purpose, and content of these three instruments were presented in Chapter III.

Scoring the Instruments

Observer reliability was computed by the use of Scott's Coefficient (see Formula 1). This was done on four occasions during the period data were being taken. The relevant data pertaining to observer reliability are found in Table I.

Formula 1

$$\pi = \frac{P_o - P_e}{1 - P_e}$$

TABLE I
SUMMARY OF OBSERVER RELIABILITY DURING
THE COURSE OF THE INVESTIGATION

Observations	Verbal	Congruent	Incongruent
First	.877	.951	.700
Early Middle	.979	.978	.802
Late Middle	.967	.945	.977
Last	.961	.987	.880

Twenty teachers were selected to participate in phase two of the study. Their selection was based on the scores on the Philosophies of Human Nature Scale which determined their view of the nature of man. The two groups consisted of the ten teachers who scored the highest (positive) and

the ten teachers who scored the lowest (negative) on the PHN. Relevant data pertaining to these two groups are found in Table II.

TABLE II
PHILOSOPHY OF HUMAN NATURE SCORES
FOR THE TWO TEACHER GROUPS

Positive		Negative	
Teacher	PHN Score	Teacher	PHN Score
53	+113	75	- 86
98	+108	27	- 80
14	+ 93	42	- 56
95	+ 89	63	- 56
64	+ 89	3	- 51
89	+ 88	87	- 48
28	+ 87	38	- 35
26	+ 84	133	- 35
10	+ 80	107	- 34
116	+ 79	136	- 31
N = 10	+910	N = 10	-512
$\bar{X} = 91.0$		$\bar{X} = -52.2$	
t = 5.511		df = 9	
		P < .001	

The mean scores of the two groups were found to be significantly different. The data in Table II indicates a t value of 5.511 df = 9. (See separate variance Formula 2.)

This value exceeds the tabled value of 4.781 for the .001 level of significance (Popham, 1967)

Formula 2

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

The data were scored for each of the twenty teachers whose classroom interaction was observed during phase two of this study. No two teachers scored the same number of responses. To arrive at normative data for statistical analysis, each teacher's responses were calculated to obtain a percent of congruent verbal-nonverbal responses. The relevant data are presented in Table III.

After all data were collected and the percent of congruent verbal-nonverbal responses were recorded, the investigator requested and obtained release of the Philosophies of Human Nature scores from the University Computer Center. The scores of the 148 teachers who participated in phase one of the study were not known to the investigator until this time. The computer center personnel previously released only the names of the ten teachers who held the highest positive scores and the ten teachers who held the lowest negative scores. The investigator did not know which of the twenty teachers held positive scores or negative scores.

TABLE III
SUMMARY OF DATA FOR THE PERCENT OF
CONGRUENT VERBAL-NONVERBAL
RESPONSES OF TEACHERS

Teacher Positive PHN Score	Percent	Teacher Negative PHN Score	Percent
28	87.02	63	88.24
14	86.39	136	87.55
95	86.10	27	82.98
116	82.21	38	82.14
98	76.24	42	80.17
89	68.05	133	79.32
10	67.12	75	73.90
53	65.29	3	69.07
64	65.15	107	67.62
26	53.46	87	62.78
N = 10	737.03	N = 10	773.77
	$\bar{X} = 73.7$		$\bar{X} = 77.3$

Testing the Hypotheses

To test the hypotheses, the percent of congruent responses of the ten positive and ten negative PHN teachers were calculated by each category to determine the percent for each teacher (see Tables IV and V). To test for the significance of congruency of high and low PHN teachers by category, the Mann-Whitney U test was used (Siegel, 1956).

TABLE IV
SUMMARY OF DATA FOR THE PERCENT OF CONGRUENT
VERBAL-NONVERBAL RESPONSE BY HIGH
PHN TEACHERS AND BY CATEGORY

Teacher	PHN Score	Categories										\bar{X}
		1	2	3	4	5	6	7	8	9	10	
53	113	69	18	31	79	81	61	44	90	93	54	65
98	108	79	40	31	90	77	80	80	79	96	91	76
14	93	85	68	50	93	100	91	100	91	96	100	86
95	89	91	69	61	90	92	93	100	89	94	71	86
64	89	65	17	23	81	100	58	100	95	100	77	65
89	88	68	54	53	75	100	69	64	82	87	10	69
28	87	94	70	74	81	100	87	0	91	98	84	87
26	84	72	9	35	81	40	49	27	75	89	38	53
10	80	52	28	38	60	94	57	79	93	98	55	67
116	79	65	93	66	95	100	82	47	93	84	75	82
\bar{X}		74.0	46.6	46.2	82.5	88.4	72.7	64.1	87.8	93.5	65.5	73.6

TABLE V
SUMMARY OF DATA FOR THE PERCENT OF CONGRUENT
VERBAL-NONVERBAL RESPONSE BY LOW
PHN TEACHERS AND BY CATEGORY

Teacher	PHN Score	Categories										\bar{X}
		1	2	3	4	5	6	7	8	9	10	
75	-86	67	50	29	82	57	83	80	97	99	54	73
27	-80	69	78	67	96	85	75	100	91	98	45	82
42	-56	75	68	62	93	0	82	76	94	95	19	80
63	-56	86	67	68	91	100	97	100	94	98	93	88
3	-51	74	50	50	96	50	78	48	84	80	15	69
87	-48	81	22	17	57	50	77	72	84	95	85	62
38	-35	78	72	48	89	100	91	65	91	100	58	82
133	-35	89	41	71	78	50	86	74	93	88	42	79
107	-34	90	30	27	75	72	60	64	96	95	50	67
136	-31	86	73	70	91	82	90	0	95	90	100	87
\bar{X}		79.5	55.1	50.9	84.8	64.6	81.9	67.9	91.9	93.8	56.1	76.9

The Mann-Whitney U test was used to test for the significance of congruency of verbal-nonverbal communication of the two teacher groups by category and by the summation of categories (see Formula 3).

Formula 3

$$U = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1$$

$$U = n_1 n_2 + \frac{n_2 (n_2 + 1)}{2} - R_2$$

$$U = n_1 n_2 - U'.$$

Analysis of category one, teacher accepts feeling: encouraging or restricting, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 35.5$. The table value to reject category one at the .05 level of significance was 27.

Analysis of category two, teacher praises or encourages: congruent or incongruent, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 38.5$. The table value to reject category two at the .05 level of significance was 27.

Analysis of category three, teacher accepts or uses ideas of pupils: implement or perfunctory, revealed that

there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 43.5$. The table value to reject category three at the .05 level of significance was 27.

Analysis of category four, teacher asks questions: personal or impersonal, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 40.0$. The table value to reject category four at the .05 level of significance was 27.

Analysis of category five, teacher lecturing: responsive or unresponsive, revealed that there was a significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The positive PHN score group was significantly more congruent than the negative PHN score group. The obtained value was $U = 26.0$. The table value to reject category five at the .05 level of significance was 27.

Analysis of category six, teacher giving directions: involve or dismiss, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 35.0$. The table value to reject category six at the .05 level of significance was 27.

Analysis of category seven, teacher criticizing or justifying authority: firm or harsh, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained

value was $U = 49.0$. The table value to reject category seven at the .05 level of significance was 27.

Analysis of category eight, pupil talk response to teacher: receptive or inattentive, revealed that there was a significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The negative PHN score group was significantly more congruent than the positive PHN score group. The obtained value was $U = 26.5$. The table value to reject category eight at the .05 level of significance was 27.

Analysis of category nine, pupil talk initiation to teacher: receptive or inattentive, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 45.5$. The table value to reject category nine at the .05 level of significance was 27.

Analysis of category ten, silence or confusion: comfort or distress, revealed that there was no significant difference in the congruency of verbal-nonverbal behavior of the two teacher groups. The obtained value was $U = 41.0$. The table value to reject category ten at the .05 level of significance was 27.

The mean score for each category was obtained for the ten teachers in each of the high and low PHN groups. (see Table VI). The Mann-Whitney U test was utilized to test for significance. The obtained value for all categories was $U = 47$. The table value to reject at the .05 level of

TABLE VI
SUMMARY OF DATA FOR THE MEAN OF THE
CONGRUENT VERBAL-NONVERBAL
RESPONSES OF TEACHERS

Category	High PHN	Low PHN	Difference
1	$\bar{X} = 74.0\%$	$\bar{X} = 79.5\%$	- 5.5%
2	46.6	55.1	- 8.5
3	46.2	50.9	- 4.7
4	82.5	84.8	- 2.3
5	88.4	64.6	+23.8
6	72.7	81.9	- 9.2
7	64.1	67.9	- 3.8
8	81.8	91.9	-10.1
9	93.5	93.8	- .3
10	65.5	56.1	+ 9.4
\bar{X}	71.5	72.6	

significance 27, therefore, the summation of all categories were found to not be significant. The null hypothesis:

H_0 . There is no significant relationship in the congruency of verbal and nonverbal communication of teachers who hold differing views of the nature of man,

was rejected in favor of the alternate hypothesis:

H_1 . There is a relationship in the congruency of verbal and nonverbal communication of teachers who hold differing views of the nature of man.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This study was designed to determine whether teachers' philosophical beliefs about the nature of man influence the congruency of their verbal-nonverbal communication patterns in the elementary school classroom.

Summary

This study was a descriptive correlation of elementary school teachers' congruency of verbal and nonverbal behavior based on their philosophy of the nature of man.

The review of the literature revealed that little serious effort has been made in the study of the nature of man and in the area of nonverbal communication. One of the greatest scientific efforts in the study of the nature of man was made by Wrightsman in 1961 in the development of the Philosophies of Human Nature Scale.

Galloway (1962) made a significant contribution in the area of nonverbal communication. Others are beginning to follow Galloway in this area. Most of the scientific study in the two areas has been done in the past two decades. The related literature revealed very little scientific study in

applying the philosophy of the nature of man to nonverbal communication.

Findings

The findings of this study resulting from the statistical analysis of the data were:

- (1) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category one. Teachers who held a negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man (see Tables IV and V, pp. 50 and 51).
- (2) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category two. Teachers who held a negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man.
- (3) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category three. Teachers who held a negative view of man were slightly more

congruent than the teachers who held a positive view of the nature of man.

- (4) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category four. Teachers who held a negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man.
- (5) There was a significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category five. Teachers who held a positive view of man were significantly more congruent than the teachers who held a negative view of the nature of man.
- (6) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category six. Teachers who held a negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man.
- (7) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category seven. Teachers who held a

negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man.

- (8) There was a significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category eight. Teachers who held a negative view of man were significantly more congruent than the teachers who held a positive view of the nature of man.
- (9) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category nine. Teachers who held a negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man.
- (10) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man in category ten. However, teachers who held a positive view of man were slightly more congruent than the teachers who held a negative view of the nature of man.
- (11) There was no significant difference in the congruency of verbal-nonverbal communication of teachers with differing views of the nature

of man in the summation of all categories.

Teachers who held a negative view of man were slightly more congruent than the teachers who held a positive view of the nature of man.

- (12) There was a significant difference in the two teacher groups in their philosophy of the nature of man. Teachers who held a positive view of man showed a mean score on the PHN of +91.0. Teachers who held a negative view of man showed a mean score on the PHN of -52.2.

- (13) Demographic data revealed the following information (see Appendix C):

- (a) All twenty subjects in phase two of the study were female.
- (b) Sixteen of the subjects were white.
- (c) Three of the subjects were black.
- (d) One of the subjects was Indian.
- (e) There was a slight positive difference in the congruency of verbal-nonverbal communication of the minority ethnic representation in the study.

- (14) The summation of all categories revealed that there was a change in the congruency of verbal-nonverbal behavior of the two teacher groups on the second observation. Seventy percent of the positive teachers were more congruent on the second observation than they were on the

first. Sixty percent of the negative teachers were less congruent on the second observation than they were on the first.

Conclusions

The following conclusions have been drawn from the findings of this study:

- (1) The finding of no significant difference in the congruency of verbal-nonverbal communication in the summation of all categories of the two teacher groups causes the writer to conclude that perhaps teachers were fulfilling a role-expectation and were masking their real attitudes through management of their non-verbal cues while being observed (Goffman, 1959).
- (2) The finding of a significant difference in category five, teacher lectures, and a high percentage of congruency in category ten, silence or confusion, in the positive group would appear to lend support to the alternate hypothesis of this study. Perhaps the greatest opportunity for incongruent non-verbal leakages to occur for both positive or negative teachers would be at the time the teacher is at peak performance, lecturing, and also when there is no interaction

in progress. The actions of pupils in the classroom during the periods of lecturing or of silence or confusion is perhaps a valid indicator of the positive teacher's attitude. The congruency of the positive teacher in these categories is perhaps a valid indication of the affect of their philosophy of the nature of man and their lack of need to mask their nonverbal behavior.

- (3) The finding of a significant difference in the congruency of verbal-nonverbal behavior of the negative group of teachers in category eight, student talk response, would appear to lend support to the masking of nonverbal cues. Masking can be accomplished perhaps more easily when the pace is slower for the teacher.
- (4) The finding of no significant difference in the congruency of verbal-nonverbal behavior of teachers in all categories, except five and eight, and only a small percentage difference in the two groups favoring the negative, causes the writer to conclude that, for this population, there is not enough evidence presented to draw a valid conclusion concerning the question under study.

- (5) A teacher may mask his congruency or incongruency for short periods of time if he has a desire to do so, but over an extended period of time his nonverbal leakages will betray his true feelings.

Theoretical Considerations

The real objective in education today is not the manipulation of teaching personnel, space, time, materials, and equipment. It is not the writing of majestic volumes of behavioral objectives on how and what to teach and learn. Rather, education has as its primary objective the aim of helping children and youth to find their rightful place in society without experiencing many of the crippling fears, suspicions and hypocrisies that have been so common in the traditional schools of this century.

The objective of educators should be aimed primarily at helping children develop a positive self-definition and constructive relationships with others as they pursue the study of what is relevant in past and present cultures, while utilizing their most efficient learning styles.

The role of the teacher must be realistic, open, and sincere. The literature has revealed that the teacher who is not realistic, open, or sincere will be exposed as a phony through his concept of what he teaches, by how he groups, by segregation, by evaluation and by the classification of students under his control.

Nonverbal behavior can no longer be ignored by the teacher as having a strong affective influence on children in what and how they learn. The teacher must become aware of his philosophical belief about the nature of man and the affect this belief has on his nonverbal behavior. This belief determines how teachers group children, how they grade and classify them and how much freedom children are permitted in what and how they learn.

Although this study was an attempt to determine the congruency of verbal-nonverbal communication of teachers with differing views of the nature of man, the literature of Dewey, Combs and others in this study revealed or implied certain imperatives that need to be met if education is to be made realistic. There is a great need for a kind of pre-service and in-service experience for teachers which would help them identify what should be taught in the elementary school and ways of evaluating what has been taught. Teachers also need to be aware of the influence their view of the the nature of man has on their expectations of students, under their supervision, for learning.

The expectations teachers hold for learning cannot remain totally cognitive for objective realization. For the fullest realization of achievement in the major goals of education, the affective domain must be utilized. The affective domain encompasses nonverbal behavior such as feelings, values, attitudes, and the whole realm of emotional behavior.

Although the study showed no significant difference in the congruency of the two groups, the writer feels that different findings might result if the number of classroom observations were increased and continued until a repetitive pattern is set in the congruency of the two teacher groups. Different findings might also result in a similar study using more sophisticated instruments in the measurement of teacher-pupil verbal-nonverbal interactions.

Recommendations

The data from this study and the review of related literature provide a basis for the following recommendations for consideration by those who are responsible for teacher training, for those who are responsible for selecting personnel to make up the instructional staffs of public and private schools and for further research and innovation.

Based on the findings of this study, the following recommendations are made:

- (1) In studies of this nature, consideration should be given to lengthening the time of observation and increasing the number of observations. This would allow for a greater number of tallies which might influence the percent of congruent verbal-nonverbal responses.
- (2) A course of study should be available for potential teachers which would place

emphasis on the importance and far-reaching implications of the language of emotion, nonverbal communication.

- (3) Since the literature reveals that attitudes toward others are learned, teacher preparatory courses of study should provide experiences which encompass a philosophy of openness and acceptance of children who come from all walks of life, from the economically deprived to the socially and economically affluent.

Recommendations for Further Research

The following recommendations are extended for further investigation:

- (1) Additional research should be conducted to determine the teachers' practice relative to encouraging or restricting teacher-pupil or pupil-pupil classroom interaction based on the teachers' philosophy of human nature as measured by Wrightsman's PHN Scale and the Flanders and Galloway verbal and nonverbal scales.
- (2) Since educational leadership is provided by elementary school principals, studies should be conducted to determine the effect, if any, of the principals' philosophy of human nature on the direction of his educational leadership.

- (3) Research should be conducted to determine the academic achievement of pupils who are assigned to congruent or incongruent verbal-nonverbal teachers.
- (4) Further research should attempt to determine the relationship, if any, of the congruency of teachers' verbal-nonverbal communication based on demographic variables such as teacher age, education, undergraduate and graduate majors, years experience teaching, and ethnic backgrounds.

Teacher beliefs and the relationship of these beliefs to teaching and learning presents many complex variables for researchers in this area. Much work is still needed to further identify these variables and to determine their relationships to each other. The primary objectives of this research have been to show the affect of teacher attitudes on classroom interaction and learning, and to encourage more research in this important area.

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APPENDIX A

PHILOSOPHIES OF HUMAN NATURE SCALE

PHN Scale

This questionnaire is a series of attitude statements. Each represents a commonly held opinion and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with matters of opinion.

Read each statement carefully. Then, on the separate answer sheet, indicate the extent to which you agree or disagree by circling a number by the number for each statement. The numbers and their meanings are indicated below:

If you agree strongly	circle +3
If you agree somewhat	circle +2
If you agree slightly	circle +1
If you disagree slightly	circle -1
If you disagree somewhat	circle -2
If you disagree strongly	circle -3

First impressions are usually best in such matters. Read each statement, decide if you agree or disagree and the strength of your opinion, and then circle the appropriate number on the answer sheet. Be sure to answer every statement.

If you find that the numbers to be used in answering do not adequately indicate your own opinion, use the one which is closest to the way you feel.

PHN Scale

1. Great successes in life, like great artists and inventors, are usually motivated by forces they are unaware of.
2. Most students will tell the instructor when he has made a mistake in adding up their score, even if he had given them more points than they deserved.
3. Most people will change the opinion they express as a result of an onslaught of criticism, even though they really don't change the way they feel.
4. Most people try to apply the Golden Rule even in today's complex society.
5. A person's reaction to things differs from one situation to another.
6. I find that my first impression of a person is usually correct.
7. Our success in life is pretty much determined by forces outside our own control.
8. If you give the average person a job to do and leave him to do it, he will finish it successfully.
9. Nowadays many people won't make a move until they find out that what other people think.
10. Most people do not hesitate to go out of their way to help someone in trouble.
11. Different people react to the same situation in different ways.
12. People can be described accurately by one term, such as "introverted," or "moral," or "sociable."
13. Attempts to understand ourselves are usually futile.
14. People usually tell the truth, even when they know they would be better off by lying.
15. The important thing in being successful nowadays is not how hard you work, but how well you fit in with the crowd.
16. Most people will act as "Good Samaritans" if given the opportunity.

17. Each person's personality is different from the personality of every other person.
18. It's not hard to understand what really is important to a person.
19. There's little one can do to alter his fate in life.
20. Most students do not cheat when taking an exam.
21. The typical student will cheat on a test when everybody else does, even though he has a set of ethical standards.
22. "Do unto others as you would have them do unto you" is a motto most people follow.
23. People are quite different in their basic interests.
24. I think I get a good idea of a person's basic nature after a brief conversation with him.
25. Most people have little influence over the things that happen to them.
26. Most people are basically honest.
27. It's a rare person who will go against the crowd.
28. The typical person is sincerely concerned about the problems of others.
29. People are pretty different from one another in what "makes them tick."
30. If I could ask a person three questions about himself (and assuming he would answer them honestly), I would know a great deal about him.
31. Most people have an unrealistically favorable view of their capabilities.
32. If you act in good faith with people, almost all of them will reciprocate with fairness toward you.
33. Most people have to rely on someone else to make their important decisions for them.
34. Most people with a fallout shelter would let their neighbors stay in it during a nuclear attack.
35. Often a person's basic personality is altered by such things as a religious conversion, psychotherapy, or a charm course.

36. When I meet a person, I look for one basic characteristic through which I try to understand him.
37. Most people vote for a political candidate on the basis of unimportant characteristics such as his appearance or name, rather than because of his stand on the issues.
38. Most people lead clean, decent lives.
39. The average person will rarely express his opinion in a group when he sees the others disagree with him.
40. Most people would stop and help a person whose car is disabled.
41. People are unpredictable in how they'll act from one situation to another.
42. Give me a few facts about a person and I'll have a good idea of whether I'll like him or not.
43. If a person tries hard enough, he will usually reach his goals in life.
44. People claim they have ethical standards regarding honesty and morality, but few people stick to them when the chips are down.
45. Most people have the courage of their convictions.
46. The average person is conceited.
47. People are pretty much alike in their basic interests.
48. I find that my first impressions of people are frequently wrong.
49. The average person has an accurate understanding of the reasons for his behavior.
50. If you want people to do a job right, you should explain things to them in great detail and supervise them closely.
51. Most people can make their own decisions, uninfluenced by public opinion.
52. It's only a rare person who would risk his own life and limb to help someone else.
53. People are basically similar in their personalities.
54. Some people are too complicated for me to figure out.

55. If people try hard enough, wars can be prevented in the future.
56. If most people could get into a movie without paying and be sure they were not seen, they would do it.
57. It is achievement, rather than popularity with others, that gets you ahead nowadays.
58. It's pathetic to see an unselfish person in today's world because so many people take advantage of him.
59. If you have a good idea about how several people will react to a certain situation, you can expect most people to react the same way.
60. I think you can never really understand the feelings of other people.
61. The average person is largely the master of his own fate.
62. Most people are not really honest for a desirable reason; they're afraid of getting caught.
63. The average person will stick to his opinion if he thinks he's right, even if others disagree.
64. People pretend to care more about one another than they really do.
65. Most people are consistent from situation to situation in the way they react to things.
66. You can't accurately describe a person in just a few words.
67. In a local or national election, most people select a candidate rationally and logically.
68. Most people would tell a lie if they could gain by it.
69. If a student does not believe in cheating, he will avoid it even if he sees many others doing it.
70. Most people inwardly dislike putting themselves out to help other people.
71. A child who is popular will be popular as an adult, too.
72. You can't classify everyone as good or bad.

73. Most persons have a lot of control over what happens to them in life.
74. Most people would cheat on their income tax if they had a chance.
75. The person with novel ideas is respected in our society.
76. Most people exaggerate their troubles in order to get sympathy.
77. If I can see how a person reacts to one situation, I have a good idea of how he will react to other situations.
78. People are too complex to ever be understood fully.
79. Most people have a good idea of what their strengths and weaknesses are.
80. Nowadays people commit a lot of crimes and sins that no one else ever hears about.
81. Most people will speak out for what they believe in.
82. People are usually out for their own good.
83. When you get right down to it, people are quite alike in their emotional makeup.
84. People are so complex, it is hard to know what "makes them tick."

APPENDIX B

INTERACTION ANALYSIS OBSERVATION

RECORDING SHEET

INTERACTION ANALYSIS
OBSERVATION RECORDING SHEET

Flanders Verbal Categories		Galloway Tabulations of Nonverbal Categories		Verbal	Cong.	Incong.
Teacher	1. Accepts Feeling					
	2. Praises or Encourages					
	3. Accepts or Uses Ideas					
	4. Asks Questions					
	5. Lectures					
	6. Gives Directions					
	7. Criticisms or Justified Authority					
Student	8. Student Talk Response					
	9. Student Talk Initiat					
	10. Silence or Confusion					

Scoring Procedure: If the teacher praises a student, which is a two (2) on the Flanders Scale, and if the teacher's nonverbal cues reinforce and further clarify the credibility of a verbal message (congruent) then the observer records a two (2). If the nonverbal contradicts the verbal (incongruent) then a one (1) is placed in front of the two (2) making it a twelve (12).

teacher

subject being taught

observer

date

APPENDIX C

DEMOGRAPHIC DATA

TABLE VII
 DEMOGRAPHIC DATA FOR THE TEACHERS WHO
 COMPRISED THE POSITIVE ATTITUDE
 TOWARD THE NATURE OF MAN

Teacher	Age	Sex	Grade Taught	Years Exp.
53	20 - 29	F	4	2
98	30 - 39	F	2	1
14	50 -	F	3	6
95	30 - 39	F	5	7
64	20 - 29	F	3	1
89	20 - 29	F	Spec. Educ.	2
28	20 - 29	F	6	2
26	30 - 39	F	3	5
10	20 - 29	F	2	8
116	30 - 39	F	Spec. Educ.	2
Mode 20 - 29			$\bar{X} = 3.5$	$\bar{X} = 3.6$

TABLE VIII
 DEMOGRAPHIC DATA FOR THE TEACHERS WHO
 COMPRISED THE NEGATIVE ATTITUDE
 TOWARD THE NATURE OF MAN

Teacher	Age	Sex	Grade Taught	Years Exp.
75	20 - 29	F	Rem Reading	6
27	50 -	F	4	16
42	20 - 29	F	1	1
63	30 - 39	F	3	7
3	30 - 39	F	3	1
87	50 -	F	2	31
38	30 - 39	F	1	9
133	20 - 29	F	5	1
107	40 - 49	F	5	11
136	20 - 29	F	4	2
Mode 20 - 29			$\bar{X} = 3.1$	$\bar{X} = 8.5$

VITA

Raymond Doyle Sewell

Candidate for the Degree of

Doctor of Education

Thesis: THE CONGRUENCY OF VERBAL AND NONVERBAL BEHAVIOR OF
ELEMENTARY SCHOOL TEACHERS WITH DIFFERING BELIEFS
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