

PHILOSOPHIES OF HUMAN NATURE AND
NONVERBAL COMMUNICATION
PATTERNS

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CHAPTER I

INTRODUCTION

During the past decade there has emerged a group of educators who have come to view a teacher's philosophy as the basis for his decisions about the educational process. This was indicated by Morris when he said:

A limited contingent of educators who have come to see philosophical and educational problems as continuous has emerged. Philosophy and education are really two aspects of the same undertaking--the forming of those fundamental dispositions toward nature and our fellow man which the world demands of us. This has led to a going beyond educational aims and strategies to examine the relevance of a person's philosophical thinking in curriculum design, teaching methodology, and other areas such as administrative policy-making. (Morris, 1966)

Since teachers play a significant part in determining the educational environment, it is important that we have some expectations about the nature of their behavior. Wrightsman stated the importance of these expectations:

Each of us, I believe, has a philosophy of human nature, or a set of assumptions about what people are really like, particularly about the way they deal with other people. We must all make certain assumptions in order to be able to interact with other people. (Wrightsman, 1969)

This concept of a basic nature of man extends into interactions within the classroom. Teachers must form an attitude as to the nature of man as reflected by the pupils in classroom interaction. (Butler, 1957)

The interaction within any classroom consists of verbal and non-verbal acts by both teachers and pupils. In his pedagogical model, Smith listed linguistic behaviors as verbal; performance and expressive behaviors as nonverbal. The importance of these expressive behaviors was described by Smith:

Expressive behaviors are illustrated in bodily posture, facial expression, tone of voice, expression of the eyes and other ways. Expressive behaviors function in teaching because they are taken by pupils as signs of the psychological state of the teacher. (Smith, 1961)

These expressive behaviors, as the predominant channel for non-verbal communication, determine the course of interpersonal relations. That is, highly relevant information is usually communicated nonverbally, and verbal and nonverbal communications may reinforce each other in face-to-face interaction. (Halpin, 1960)

The importance of nonverbal communication was described in a study by Davidson and Lang. (1960) This study described the significance of teachers' communicative behavior as it related to pupil productivity and teacher-pupil rapport. One of the findings was the need that teachers be helped to recognize the significance of the feelings they express toward children.

Justification of the Study

The importance of a person's basic beliefs about the nature of man and the influence of the phenomenon upon human interaction was described by Combs:

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. 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 before dreamed. No belief will be more important to education than those we hold about the nature of man and his potential. (Combs, 1962)

Concomitantly, Mehrabian (1967) indicated the importance of non-verbal communication with a study which found that our real attitudes and emotions are often communicated nonverbally, and when the nonverbal message contradicts the verbal message, people tend to believe the nonverbal message.

This was congruent with a study which indicated that even if teachers use certain words purportedly representing certain attitudes, the teacher's real attitude was likely to show through, thereby affecting behavioral and emotional reactions on the part of pupils. (Torrance, 1960)

If teachers' attitudes are a result of their basic beliefs about the nature of man, and if teachers' real attitudes toward students are more apt to be reflected nonverbally than verbally, then it behooves educators to analyze teacher-pupil interaction from a nonverbal standpoint, and to determine the relationship, if any, between a teacher's nonverbal behavior and his basic philosophy of human nature.

This investigation is based upon the premise that: (1) teaching behavior is a result of what teachers believe about the nature of man, and (2) these beliefs are more accurately communicated to students through nonverbal behavior than through verbal behavior.

Therefore, research to analyze the relationships between teachers' basic view of man and their nonverbal communication should be beneficial to all educators.

Statement of the Problem

This study is an investigation of the relationships that exist between a teacher's basic beliefs about the nature of man and the teacher's behavior as expressed by his nonverbal communication with students in the educational environment.

Answers to the following questions are sought: (1) Is there a relationship between a teacher's view of man and his nonverbal communication? (2) Is there a relationship between a teacher's view of man and the nonverbal communication of his students?

Basic Hypotheses

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

I. There is no significant relationship between the nonverbal communication patterns of teachers who have a positive view of man and teachers who have a negative view of man.

1a. There is no significant relationship between the nonverbal communication patterns of teachers who believe man is trustworthy and teachers who believe man is untrustworthy.

1b. There is no significant relationship between the nonverbal communication patterns of teachers who believe man is altruistic and teachers who believe man is selfish.

1c. There is no significant relationship between the nonverbal communication patterns of teachers who believe man has strength of will and teachers who believe man has lack of will.

1d. There is no significant relationship between the nonverbal communication patterns of teachers who believe man has independence and teachers who believe man is a conformist.

II. There is no significant relationship between the teachers' view regarding the nature of man and the nonverbal communication

patterns of pupils taught by those teachers.

- 2a. There is no significant relationship between the teachers' view regarding the trustworthiness of man and the nonverbal communication patterns of pupils taught by those teachers.
- 2b. There is no significant relationship between the teachers' view regarding man as being altruistic and the nonverbal communication patterns of pupils taught by those teachers.
- 2c. There is no significant relationship between the teachers' view regarding the strength of will of man and the nonverbal communication patterns of pupils taught by those teachers.
- 2d. There is no significant relationship between the teachers' view regarding the independence of man and the nonverbal communication patterns of pupils taught by those teachers.

Definition of Terms

For the purposes of this study the following definitions will be used:

Positive View of Man. In this study a positive view of man indicates a belief that man is inherently good and capable of achieving goals without external motivation or constraints. On Wrightsman's Philosophies of Human Nature Scale, if the summation of the scores on the first four subscales yields a plus score, a positive view of man is indicated.

Negative View of Man. In this study a negative view of man indicates a belief that man is inherently bad and not capable of achieving goals without external motivation or constraints. On Wrightsman's Philosophies of Human Nature Scale, if the summation of the scores on the first four subscales yields a negative score, a negative view of man is indicated.

General Favorability of Human Nature Score. The summation of the first four subscales on Wrightsman's Philosophies of Human Nature

Scale. This score may be either positive or negative.

Trustworthy. The trustworthy scale measures the extent to which one views people as honest, moral, and ethical.

Untrustworthy. The untrustworthy scale measures the extent to which one views people as dishonest, immoral, and unethical.

Strength of Will. The strength of will scale measures the extent to which one sees people as having the will power to determine the outcomes in their lives.

Lack of Will. The lack of will scale measures the extent to which one sees people as lacking the will power to determine the outcomes in their lives.

Altruistic. The altruistic scale measures the extent one views people as being unselfish and sincerely interested in helping others.

Selfish. The selfish scale measures the extent to which one views people as being self-centered and interested only in helping someone when it helps themselves also.

Independence. The independence scale measures the extent to which one views people as able to make decisions without dependence upon others.

Conformity. The conformity scale measures the extent to which one views people as constantly needing others for support in decision making.

Nonverbal Communication. Nonverbal communication occurs by transmitting a thought or feeling from one person to another through a gesture, posture, facial expression, tone and quality of voice, or physical contact, as an auxiliary function to speech, or without speech. Galloway (1968) identifies ten categories of nonverbal communication.

Indirect Teacher Behavior. Those acts by the teacher toward the pupils which maximize the freedom to respond are termed indirect behavior or indirect teacher influence. (Galloway, 1968)

Direct Teacher Behavior. Those acts by the teacher which minimize the freedom of the student to respond are termed direct teacher behavior or direct teacher influence. (Galloway, 1968)

Major Assumptions

For the purposes of this study, the following assumptions will apply.

1. The Philosophies of Human Nature Scale yields a method for determining the beliefs of teachers concerning the basic nature of man.
2. Nonverbal communication is the basis of all communicative acts inasmuch as it is the first type of communication that is learned.
3. The nonverbal behaviors expressed in the classroom are the most authentic type of communication.
4. Galloway's Analysis of Nonverbal Communication yields a method for the classification of teacher-pupil interaction as measured in the classroom.
5. The use of a trained observer is a reliable method for collecting classroom data on nonverbal communication.
6. The presence of an observer will not appreciably alter interaction patterns of nonverbal behavior.
7. The analysis of philosophies of human nature and teacher influence by nonverbal communication will be limited only to the replies received from the two instruments that were employed to gather the necessary data for the study.

Methodology and Design

The data for this study were secured from a group of seventy-nine elementary school teachers of grades kindergarten through six inclusive. Permission was obtained and the data were collected from three school districts that were located in small urban areas in Southeastern Oklahoma. These districts were predominantly composed of less affluent students than those that are found in most urban areas. The teaching staff of these buildings varied from eleven to twenty-one. Because of the requirements of this study, all teachers were not utilized.

Those teachers selected for this study were chosen because of the familiarity of the investigator with the geographic location of the schools and because of the willingness of the administration for their teachers to participate actively in research. All teachers selected were administered the Philosophies of Human Nature Scale and the results were computer scored. The ten teachers who scored the highest and the ten teachers who scored the lowest on the General Favorability of Human Nature Score as well as those ten who scored the highest and the ten who scored the lowest on each of the subscales were chosen for the second phase of this study. Because of the nature of a subscale, the afore-mentioned group of teachers consisted of thirty different people. These names were given the investigator without any indication as to their score on the Philosophies of Human Nature Scale.

The investigator practiced in the observation of nonverbal communication patterns in the Instructional Media Center at Southwestern State College. This consisted of approximately ten hours observing video tapes of actual teaching situations and films of planned classroom

interactions. The investigator then observed the language arts class of those thirty teachers selected on the basis of the responses to the Philosophies of Human Nature Scale. Language arts class was chosen because it was taught by all teachers and it offered optimum environment for interaction. The observations were not on successive days, nor preceding or following holidays.

Three times during the observations, another observer who was also trained in the use of Galloway's Analysis of Nonverbal Communication checked observer reliability by the use of Scott's Coefficient.

Data Analysis

The Philosophies of Human Nature Scale was scored by tabulating and ranking the scores to determine the ten highest and ten lowest scores on the subscales as well as the General Favorability of Human Nature Score. These scores result in two groups of teachers for each hypothesis.

The Galloway Analysis of Nonverbal Communication was scored by tabulating the teacher and student nonverbal behaviors as categorized by the observer. Totals were tabulated for five experimental groups. (Appendix B)

The statistical test to determine the relationships in teacher behavior between the experimental groups was chi square. (Popham, 1967, pp. 291-300) The level of confidence has been set at the .05 level. The formula for chi square is:

$$X^2 = \frac{(\text{Observed frequencies} - \text{Expected frequencies})^2}{\text{Expected Frequencies}}$$

The statistical test to determine the relationship in pupil behavior between the experimental groups was Spearman rho. (Runyon and Haber, 1968, pp. 88-89) The level of confidence has been set at the .05 level. The formula for Spearman rho is:

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

Format for Succeeding Chapters

Five chapters suffice to fulfill the requirements of this study. Following the present introductory chapter, Chapter II is devoted to 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. Finally, Chapter V summarizes the entire study, presents findings of the study, gives conclusions drawn from the 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 concepts of philosophy which provide the coherence to all actions and to nonverbal communication which occurs as a part of classroom interaction.

Philosophies of Human Nature

Educators have recognized a theoretical relationship between teacher philosophy and behavior. Rogers states:

If we distrust the human being then we must cram him with the information of our own choosing, lest he go his own mistaken way. But if we trust the capacity of the human individual for developing his own potentiality, then we can permit him the opportunity to choose his own way in learning. Hence, this type of learning would be possible only for a teacher who has a somewhat confident view of man. (Rogers, 1957)

Although people continually refer to the manner in which others act and react in terms of their assumptions about human nature, attempts to quantify and measure this pervasive concept have been scarce. Recently, however, social scientists have become interested in empirical research related to philosophies of human nature. The initiative and bulk of the research has been the contribution of Lawrence S. Wrightsman, a Professor of Psychology at George Peabody College for Teachers.

The instrument, which was developed in 1964, is called the PHN or Philosophies of Human Nature Scale. The PHN has been used since its inception in 1964 to collect normative data to determine if the instrument can differentiate between various groups of people. This differentiation is based upon philosophical orientations.

Ligon (1963) sought to discover what relationship existed between a person's religious background and that person's philosophy of human nature. The PHN was used in conjunction with a scale to determine the type of religious orientation of one hundred six college students. Findings indicated, although not strongly, that those who held humanitarian religious attitudes had a more favorable view of the human nature of man than did those who held fundamentalist religious attitudes. This led the author to conclude that religious education techniques were not proving useful in integrating religious concepts into a functional philosophy of human nature. Further studies by Malone (1964), Ewing (1966), and Kawamura and Wrightsman (1969) have produced evidence which is in general agreement with the study by Ligon.

Thompkins (1965) found that eighty percent of those who say they believe that man is basically good also believe in those ideologies which Thompkins labeled as "humanistic". By contrast, approximately eighty percent of those who believe people are basically evil are committed significantly to the belief that man should conform to external standards.

Mason (1966) used counselor trainees and ministerial students in his study of the perceptions of human nature, tendencies toward authoritarianism, and the relationship between these two attitudes. Counselor trainees and ministerial students were administered the

PHN and the Social Maturity Scale. It was indicated that there were no significant differences in their perception of human nature on in tendencies to be authoritarian. A statistically significant relationship was reported to exist between a negative view of human nature and the tendency to be authoritarian.

In an attempt to determine if one changes his philosophy of human nature due to a traumatic experience, Wrightsman and Noble (1965) retested students on the PHN soon after the assassination of President John F. Kennedy. Students who felt a "great personal loss" with the President's death showed greater negative views toward human nature than did students less emotionally affected. By retesting the same students three months later, it was determined that the negative views were apparently only temporary as students returned to their pre-assassination position on the PHN.

Wrightsman (1966) administered the PHN to fifty-one males and forty females who were enrolled in the University of the Phillipines. Students were also administered the TFI (Traditional Family Ideology). There was a significant relationship between negative scores on the PHN and the TFI.

Normative data is reported by Wrightsman and Satterfield (1967) which lists the results of the administration of the PHN at twenty colleges and universities. The schools were predominantly Southern; however, samples were also taken from Central Michigan College, the State University College of Fredonia, New York, the U. S. Air Force and Military Academies, and the University of Hawaii.

Students in these studies generally scored in the neutral range of substantive subscales. They saw human nature as neither trustworthy

nor untrustworthy, as neither possessing will power nor lacking will power, as neither altruistic nor selfish, and neither independent nor conforming. Students from colleges with primarily religious orientation, as well as students from Negro colleges, usually viewed human nature more negatively than students from other colleges.

Some differences can be shown on the PHN regarding male and female students at the college level. Females consistently have more favorable views about trustworthiness, strength of will, altruism, and independence in human nature. Females also believe human nature is more complex than do males. (Wrightsman and Satterfield, 1967)

Two separate attempts were undertaken to determine the effectiveness of different types of counseling practicums. (McNamara, 1967; Anderson, 1968) In each of the studies the investigator was unable to show any great change in the subject's beliefs regarding human nature. The investigators concluded that perhaps the counselor trainees already possessed favorable perceptions of human nature.

Miller (1968) compared the attitudes of social work graduate students, professional social workers, and undergraduate students. His findings indicated that 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 perhaps persons who enter social work education already possess basic values compatible with those expounded by the social work profession and that professional social work might strengthen these beliefs.

In a study comparing 176 graduate students in counseling psychology, clinical psychology, and vocational rehabilitation counseling,

Dole, Nottingham, and Wrightsman (1969) again used the PHN. The students tended to have a neutral, although slightly favorable, attitude toward people. The students also agreed that human nature is basically complex and variable. The authors, by the use of the PHN, could not differentiate the vocational specialty of the students.

In order to determine changes over a long period of time, Baxter (1968) retested college freshmen and sophomores after one year and two respectively, using the PHN. Students became more positive in their views toward man's complexity, trustworthiness, and altruism. Changes tended to be as great after one year as after two years.

In testing seven years of entering freshmen classes at George Peabody College for Teachers, Baker (1969) found results which differ somewhat from Baxter's. Baker states that recent classes of freshmen have significantly increased in their basic distrust of human nature and in their cynicism.

Ashcraft (1969) hypothesized that a person's philosophy of human nature could be used to predict how he would make judgments regarding the variability and the complexity of others. One hundred freshmen girls were used to test this hypothesis. Findings were not conclusive but were indicative 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.

Wolfe (1971) measured principals' beliefs about human nature, teacher morale, and teachers' perceived participation in decision making. The instruments used were the PHN, the Purdue Teacher Opinionnaire, and the Decision Point Analysis, respectively. Wolfe found

there was no relationship between teaching staffs' perceived participation in educational decision-making and principals' beliefs about human nature. He found a slight relationship between principals' beliefs about human nature and the teaching staff's morale. Of the eleven principals with high PHN scores, eight had teachers with above-average teacher morale. Of the eleven principals with low PHN's, eight had teachers with below-average teacher morale. Neither of these relationships was statistically significant.

Since Wrightsman first developed the Philosophy of Human Nature Scale, increasing research attempts have been made to clearly define the manner in which most people view the interpersonal aspects of man's nature. Most of the data on the PHN is normative. The research has yet to indicate any strong predictive validity of the PHN to differentiate between groups. Most longitudinal attitude studies have used a teacher's scores on the PHN as a determinant for observation of nonverbal communication within the classroom.

Nonverbal Communication

Whenever human beings come into contact, a reality exists that is understood and shared without words. This is the fundamental assumption that undergirds the significance of nonverbal communication. This section of the paper will review some of the literature concerning the afore-mentioned reality, nonverbal communication.

After completing his famous work on The Origin of the Species, Darwin (1955) turned his attention to "the expression of emotion in men and animals." He encountered little difficulty in describing behavioral characteristics which were representative of various emotions. He

believed that emotions and their expressional referents were everywhere the same. His research suggests cross-cultural similarities in the expression of happiness, sadness, elation, etc. Darwin believed the smile was a remainder of man's earlier evolution. Darwin theorized that human expression could be traced to earlier functions these expressions performed in survival.

Today there is disagreement with Darwin's thesis that expressions have the same definition and purpose for all of man. Birdwhistell (1970) and Hall (1959) both assert that different purposes can be represented by the same expression, dependent upon culture. Cultural and subcultural differences are stressed as significant variables in the interpretation of nonverbal behavior. Birdwhistell and Hall both feel that Darwin underestimated the influence of acculturation processes. Hall states that the Arab, because of the cultural variables, may stand quite close and look intently into the American's eyes as he talks. This type of nonverbal behavior may be associated with sexual intimacy by the American.

Hall (1959) writing from an anthropological viewpoint, states that all individuals communicate through conventional means of gesture making and idiosyncratic expressions. The absence of nonverbal communication is virtually impossible:

Even a person who stands relatively rigid, or who remains immobilized, or who appears impassive, conveys messages. Perhaps such messages are not intentionally meant to be transmitted, but they are addressed transmissions which convey information; for indeed, the silent codifications of nonverbal messages influence the perceptions of persons who come into contact with each other. (Hall, 1959)

Ruesch (1955) developed a codification system which differentiated the codification of verbal and nonverbal communication systems:

Nonverbal Codifications

- Permit redundancies
- Permit quick statements
- Are subject oriented
- Have emotional appeal
- Facilitate understanding
- Represent intimate language

Verbal Codifications

- Produce fatigue when redundant
- Necessitate long-winded statements
- Are predicate oriented
- Exert an intellectual appeal
- Are apt for teaching agreements
- Represent a distant language

Ruesch summed his codification with the idea that nonverbal is a series of signs representatively similar to things for which they stand while verbal is only an identifying and typifying sign which lacks the immediacy of the nonverbal.

Brooks (1971) has a similar codification except he adds these two concepts: (1) Nonverbal communication uses the older structures of the central and autonomic nervous system and thus is learned earlier in life while verbal uses the younger structures of the nervous system and is learned later in life. (2) Nonverbal communication is regulated by principles governed by biological necessity whereas verbal communication is governed by arbitrary, man-made principles.

Ruesch and Kees (1956) have developed an elaborate theory of communication which does not make any type of distinction between intentional statements and unintentional expressions. Thus all communicative acts have a function. Their theory asserts:

Communication does not refer to verbal, explicit and intentional transmission of messages alone, . . . The concept of communication would include all those processes by which people influence one another. . . . This definition is based upon the premise that all actions and events have communicative aspects, as soon as they are perceived by another human being.

Ruesch and Kees also state that nonverbal communication reflects the inner state of the organism, particularly the emotions and feelings. It appears that the sender and receiver can predict events more accurately than if they relied upon words alone. This leads to the contention that nonverbal behavior is superior to verbal because it is a more accurate representation of the true person or self; that is, nonverbal communication is more constant with the real feelings and thoughts of the person. Thus, a person who can detect contradictions between verbal and nonverbal messages can secure a more precise and accurate message.

An assumption shared by many people and supported by psychiatrists is that nonverbal behavior provides a leakage channel which is difficult to control or to censor. Ekman and Friesen (1969) feel that the primary reason for this is the lack of immediate feedback one has to his own nonverbal communication. It is possible to hear yourself talk, but little information is available regarding a person's own body movements and expressions.

This is confounded, according to Bluemer (1936), because it may be impossible to, in a conscious sense, identify the exact expressive cues to which an individual is responding. The nonverbal is distinguished by spontaneity and immediate response. It seems that individuals are generally unaware of this unconscious response just because it occurs spontaneously, requiring mediating interpretation.

Goffman (1959) presents another view on this matter. He suggests that nonverbal behaviors can be managed to achieve a desired effect. His view emphasizes the idea that people in everyday life take on roles for the purpose of achieving proper impressions. Goffman states:

As a part of personal front we may include insignia of office or rank, clothing, sex, age, racial characteristics, posture, speech patterns, facial expressions, bodily gestures, and the like. Some of these, such as racial characteristics, are relatively fixed. . . . Some of these sign vehicles are relatively mobile or transitory . . . and can vary during a performance.

This ascertains that during social interaction, the expressive acts of an individual's activity suggest a promissory character that is assumed by others to represent an accurate reflection of the real self an individual possesses. Even those best at managing their expressive behaviors assume that the expressive behaviors of others are not managed.

Many of the early experimental studies tested whether observers and judges could accurately identify the emotions of subjects when specified emotions were expressed nonverbally. Using photographs of posed expressions, it was found that observers could not identify these nonverbal expressions. One factor that precluded an accurate judgment by an observer was the absence of context. Missing a definition of the situation and an understanding of the context in which the expressions occurred, observers were inconsistent in their judgments. Another factor in these studies which prevented accurate estimates of emotion was the reliance on posed expressions which often seemed unnatural to observers. From these studies it was learned that an understanding of contextual information and the appearance of natural behaviors were necessary to studies of nonverbal behavior. (Bruner and Tagiuri, 1954)

Koch (1971) feels that judging a single nonverbal signal is not a valid method of judgment; instead it should be judged just as one would judge a word, in context. A frown might indicate concentration or annoyance, depending upon the total contextual field. Koch further states that once we know nonverbally, we know for sure.

In a recent study involving teachers and nonverbal communication, Hughes (1962) stated that teaching may be analyzed in terms of the function of verbal and nonverbal behaviors in an instructional setting. That is, the teacher performs verbal and nonverbal functions which are directed toward a pupil, group, or class. One of the conclusions of the study was that responsiveness on the part of the teacher, both verbally and nonverbally, would lead to more open communications and greater involvement in learning.

Bernstein (1961) suggested that the lower class culture in England is limited to a form of verbal language that is abbreviated and not complex with a system of nonverbal communication serving as a background to speech. He further notes that lower class children encounter academic hardships in school, since a premium is placed on spoken and written communication. This is not so of the middle class, whose parents prize and reward verbal communication.

Bernstein further states that the lower classes use nonverbal communication for inner meanings and distrust verbal language as a major vehicle presenting messages. Thus, these children become laconic in their speech habits and suspicious of words to convey meanings.

Jecker, Maccoby, and Breitrose (1964) utilized video tapes to see if teachers could use the nonverbal communications on the tapes as a predictor of the student's ability to answer questions about topics that were being discussed. It was found that there was a pattern of nonverbal cues related to teacher prediction of comprehension and that teachers can be trained to recognize and use them as accurate feedback in teaching.

Strother (1971) did a study to determine if instruction in nonverbal communication would improve teacher competency and student achievement in an elementary school setting. Students were randomly assigned to experimental and control groups. Those in the experimental groups were instructed in nonverbal communication. After testing both groups to determine if the instruction in nonverbal communication produced any statistically different effects, it was found that there was no significant difference.

In his initial study of nonverbal communication, Galloway (1962) attempted to develop an observational system to describe the consequences of nonverbal acts. Bound by his pedagogical interest in the effects of teacher behavior on subsequent student behavior, he created observational categories that had broad rather than specific definitions. The purpose of the study was to determine whether a reliable observational procedure, with broad categories, was most consistent among observers.

In his later writings, Galloway (1969) appears to be congruent with some of the writings of sociologists such as Goffman (1959). Both writers identify much nonverbal behavior as a result of role performance, although Galloway limits his descriptions to the classroom. Galloway characterizes this by referring to the act of teachers, within this culture, snapping their fingers to get attention, or folding their arms to indicate disapproval. Meanwhile, students are nodding their heads to indicate understandings and are raising their hands to be recognized.

Several instruments have been developed by observers during the past few years to measure nonverbal communication. All of these

instruments appear to be based upon the work of Davitz (1964), who measured three broad areas of emotional meaning. After measuring these areas, Davitz concluded that the most important finding was that although individuals differ in their ability to communicate nonverbally, it still appears that emotional communication is a stable, measurable phenomenon. Those instruments developed are very similar to the instruments used to measure verbal behavior in a classroom setting.

Building upon the earlier work of Galloway, French (1970) conducted a study to determine whether a combination of verbal and nonverbal data might be more meaningful than verbal behavior alone. His findings demonstrated that much of meaningful teacher behavior is nonverbal and cannot be ignored if an inquirer into classroom interaction wants to obtain full information as well as provide useful feedback data to the teacher. Another aspect of French's research revealed that personalized communicative contacts by teachers were rare during classroom activities.

Another observational instrument that combines verbal and nonverbal behaviors has been developed by Heger (1970). His instrument, called Mini-TIA, reflects the earlier work of Flanders and Galloway, but emphasizes neither verbal nor nonverbal as more significant.

Lail (1969) uses Galloway's Analysis of Nonverbal Communication in the evaluation of student teachers. This method can be used independently or in conjunction with Flander's Interaction Analysis. Use of this instrument has aided in describing and categorizing student teacher behaviors.

Anderson (1970) has developed a verbal and nonverbal observational instrument to provide descriptions of teacher overall teaching styles

and the uses of instructional materials which accompany teacher strategies.

In conclusion it must be stated that the meanings of nonverbal expression are used by students to check on the communicative acts, and that such meanings are used by the same pupils to obtain a better picture of the self a teacher proposes to be. By interpreting and inferring from nonverbal expressions, pupils may attempt to obtain the full impact of a teacher's perceptions and motivations. Jourard (1958) has found that a person who employs nonverbal communication in an unsuitable fashion can verbally utter the most profound truth, only to have it disregarded by others who feel that the speaker's nonverbal expressions are inconsistent with his verbal utterances.

This review has attempted to highlight the function nonverbal messages play in classroom interaction between teachers and pupils. The importance of the nonverbal is recognized by both students and teachers, although neither has been instructed in this particular area. Because of the importance of nonverbal communication in a classroom interaction situation, researchers are constantly seeking new ways to more accurately measure this phenomenon.

CHAPTER III

INSTRUMENTATION OF THE STUDY

The purpose of this study was to investigate the relationship between teachers' views regarding the nature of man and those teachers' classroom nonverbal behaviors. The study also sought to determine whether a relationship exists between the nonverbal behavior of pupils and their teachers' beliefs regarding the nature of man.

In order to fulfill the requirements of this study it was necessary to measure the philosophies of human nature and the nonverbal classroom practices of thirty teachers.

The philosophy of human nature of the participating teachers was measured by eliciting their responses to the Philosophy of Human Nature Scale. The participating teachers' nonverbal behavior was determined by the analysis of their nonverbal responses and their students' nonverbal responses as categorized by Galloway's Analysis of Nonverbal Communication. The following description of the Philosophies of Human Nature Scale and of the Galloway Analysis of Nonverbal Communication will offer some assistance in the understanding of this study.

Philosophies of Human Nature Scale

The Philosophies of Human Nature Scale (PHN) was utilized by the investigator to determine the teacher's basic beliefs concerning the nature of man. This instrument contains eighty-four statements.

Responses are made to each statement on a six point scale of -3, -2, -1, +1, +2, and +3. These scores indicate strongly disagree (-3) to strongly agree (+3). (See Appendix A.)

The PHN scale is designed to measure a person's beliefs about human nature. This scale is composed of six subscales with fourteen items on each subscale. The subscales are:

1. Trustworthiness vs. Untrustworthiness,
2. Strength of Will and Rationality vs. Lack of Will and Irrationality,
3. Altruism vs. Selfishness,
4. Independence vs. Conformity,
5. Simplicity and Understanding vs. Complexity and Nonunderstanding,
6. Simplicity vs. Variability.

Scores were obtained for each subscale with a possible range from a -42 to a +42 with a score between -14 and +14 indicating a neutral view of the dimension. Scores falling between -14 and -42 indicate a negative view on that particular dimension while scores falling between +14 and +42 indicate a positive view on that particular dimension.

Scores on the first four dimensions may be summed to give a General Favorability of Human Nature Score (range +168 to -168). This score indicates a positive or negative view of man.

Scores on the fifth and sixth dimension may be summed to give a score on the multiplexity of human nature. However, for the purpose of this study, only the Favorability of Human Nature Score will be used.

Reliability

Wrightsman (1964) reports split-half reliability coefficients for

the individual subscales are of an acceptable magnitude ranging from .40 to .78. The test-retest reliability coefficients, with a three-month interval between testing, were as follows: 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 of Human Nature Score; this score had a reliability of .90. Thus the subscales appear to be quite stable over time, and the reliability of coefficients are higher than those measuring the internal consistency of the subscales.

The relationships among the first four subscales indicate that there is something common to the first four dimensions, as each of these six correlations is positive, above .30, and significant from zero. The highest correlations are among Trustworthiness, Altruism, and Independence; those ranging from .61 to .69. Correlations between these variables and Strength of Will are appreciably lower, in the .30's.

Validity

To test for validity, Wrightsman (1964) administered the PHN scale and other attitude scales in the same conceptual area to the same groups. As expected, there are significant negative correlations between the Favorableness of Human Nature Scores and the Political Cynicism Scale. (Agger, Goldstein, and Pearl, 1961) These negative correlations ranged from $-.58$ to $-.66$ and were significant at the .01 level.

There are also negative correlations between the Favorableness of Human Nature Scores and scores obtained on the Machiavellian Scale.

(Christie and Merton, 1958) The person scoring high on the Machiavellian Scale has needs to manipulate people. He believes that flattery, threat, and deceit are the most successful ways of getting people to conform to his thinking. The correlations between PHN Scores and the Machiavellianism Scale ranged from $-.38$ to $-.67$, which was significant at the $.01$ level.

There was a positive correlation, significant at the $.01$ level, between the Favorability of Human Nature and the Faith in People Scale. (Rosenberg, 1956) These correlations ranged from $.39$ to $.75$. This is to be expected, as both scales attempt to measure the goodness, worthiness, and improvability of human nature.

These correlation coefficients, both positive and negative, would be indicative that positive scores on the Favorableness of Human Nature would indicate a positive view of human nature. Also, negative scores on the Favorableness of Human Nature would be indicative of a negative view of human nature.

Galloway's Analysis of Nonverbal Communication

Galloway's Analysis of Nonverbal Communication was employed in the investigation to assess the extent of direct or indirect behavior of participating teachers in the classroom. The Galloway system is composed of ten categories which are described below. Categories one through four classify teacher actions as indirect or allowing for the maximizing of student freedom and interaction. Categories five, six, and seven classify teacher actions that minimize student freedom of response. The last category, ten, categorizes the nonverbal behavior that occurs during silence or confusion.

The sections of nonverbal behavior which are categorized as direct or indirect influence are subdivided in order to make the total pattern more meaningful. Indirect influence consists of four observational categories: encouraging or restricting, congruent or incongruent, implement or perfunctory, and personal or impersonal. Direct influence is divided into three categories: responsive or unresponsive, involve or dismiss, and firm or harsh. Student activity is listed as either receptive or inattentive.

The subdivisions of Galloway's interaction analysis of pupil-teacher nonverbal behavior are described in the following way:

1. Encouraging or Restricting:
 - Encouraging--accepts the feeling tone of the students and their right to have these feelings. These student feelings may be either positive or negative.
 - Restricting--does not accept the feeling tone of the students or their right to have these feelings.
2. Congruent or Incongruent:
 - Congruent--nonverbal cues reinforce and further clarify the credibility of a verbal message.
 - Incongruent--contradiction occurs between verbal and nonverbal cues.
3. Implement or Perfunctory:
 - Implement--implementation occurs when the teacher actually uses student's idea by discussing it, reflecting upon 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 or Impersonal:
 - Personal--face-to-face confrontation
 - Impersonal--avoidance of verbal interchange in which mutual glances are exchanged.
5. Responsive or Unresponsive:
 - Responsive--change in teacher's pace or direction of talk in response to student behavior.
 - Unresponsive--inability or unwillingness to alter the pace or direction of lecture disregarding pupil cues.

6. Involve or Dismiss:
Involve--students are involved in a clarification or maintenance of learning tasks.
Dismiss--teacher dismisses or controls student behavior.
7. Firm or Harsh:
Firm--criticism which evaluates a situation cleanly and crisply and clarify expectations for the situation.
Harsh--criticism which is hostile, severe, and often denotes aggressive or defensive behavior.
8. Receptive or Inattentive:
Receptive--involves attitude of listening and interest, facial involvement, and eye contact.
Inattentive--involves a lack of attending eye contact and teacher travel movement.
9. Receptive or Inattentive:
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 or Distress:
Comfort--silence characterized by times of reflection, thought or work.
Distress--instances of embarrassment or tension-filled moments, usually reflecting disorganization and lack of continuity.

A series of steps in training the observer was followed by the investigator. The following steps were observed: (1) memorizing the categories, (2) following a simple set of rules, and (3) practicing using video tapes from various classrooms as well as films of classroom situations. After working on these tapes for approximately ten hours, an observer begins to develop the ability to make judgments easily and to categorize consistently.

Observer Reliability

Observer reliability was estimated by Scott's Coefficient. Scott's method is unaffected by low frequencies, can be adapted to percent figures, can be estimated more rapidly in the field, and is

more sensitive at higher levels of reliability. Scott calls his coefficient "pi" and it is determined by the following formula:

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

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 which is found by squaring the proportion of tallies in each category and summing these over-all categories. This formula can be expressed verbally as the amount that the observers exceed chance agreement divided by the amount that perfect agreement exceeds chance.

Three times during the observations, another observer trained in the use of Galloway's Analysis of Nonverbal Communication checked observer reliability by the use of Scott's Coefficient.

The analysis of all data obtained in this study was made by the use of chi square and Spearman rho tests of significant relationships. These data may not be inferred to a population other than the population in the study.

CHAPTER IV

PROCEDURES, ANALYSIS, AND TREATMENT OF DATA

This chapter describes the procedures used by the investigator to collect the data in this study. Also presented in this chapter are the tabulated results of the data obtained from the instruments described in Chapter III. The data gathered in this investigation were used for the primary purpose of testing the following null hypotheses:

I. There is no significant relationship between the nonverbal communication patterns of teachers who have a positive view of man and teachers who have a negative view of man.

1a. There is no significant relationship between the nonverbal communication patterns of teachers who believe man is trustworthy and teachers who believe man is untrustworthy.

1b. There is no significant relationship between the nonverbal communication patterns of teachers who believe man is altruistic and teachers who believe man is selfish.

1c. There is no significant relationship between the nonverbal communication patterns of teachers who believe man has strength of will and teachers who believe man has lack of will.

1d. There is no significant relationship between the nonverbal communication patterns of teachers who believe man has independence and teachers who believe man is a conformist.

II. There is no significant relationship between teachers' view regarding the nature of man and the nonverbal communication patterns of pupils taught by those teachers.

- 2a. There is no significant relationship between the teachers' view regarding the trustworthiness of man and the nonverbal communication patterns of pupils taught by those teachers.
- 2b. There is no significant relationship between the teachers' view regarding man as being altruistic and the nonverbal communication pattern of pupils taught by those teachers.
- 2c. There is no significant relationship between the teachers' view regarding the strength of will of man and the nonverbal communication patterns of pupils taught by those teachers.
- 2d. There is no significant relationship between the teachers' view regarding the independence of man and the nonverbal communication patterns of pupils taught by those teachers.

The data to test the null hypotheses were collected through the Philosophies of Human Nature Scale and Galloway's Analysis of Nonverbal Communication. The rationale, purpose, and content of these two instruments were presented earlier.

Subjects

The subjects were chosen from three school districts in Southeastern Oklahoma. The school districts were located in urban areas and consisted of students of less affluence than many of those in urban school districts in Oklahoma. Those particular districts were chosen because of the familiarity of the investigator with the area and the willingness of the administration for the schools to be part of a research project.

After the districts were chosen, eighty-eight faculty members were given the Philosophies of Human Nature Scale. Seventy-nine of these were completely answered and these were chosen for the initial phase of the study. Any teacher who did not teach language arts was not

administered a Philosophies of Human Nature Scale, since only those who did could be utilized for the second phase of the study.

Scoring the Instruments

Responses to the Philosophies of Human Nature Scale were punched on IBM cards and tabulated by a computer using a program designed by the computer center for the scoring of the PHN scale. From the data available, the names of the people in the experimental groups necessary to test each hypothesis were selected. These names were given the investigator without any indication to which of the experimental groups each person belonged.

In order to obtain a representative sampling of the nonverbal communication, each of the classrooms was observed three times and the frequencies averaged to obtain a representative sampling. This observation was done by the investigator after he had completed his training sessions using Galloway's Analysis of Nonverbal Communication.

In order to try to remain constant in the observational situation, only language arts classes were observed for twenty minutes. In addition, classes were not observed prior to or immediately after holidays, school assemblies, or when a substitute teacher was in charge of the classroom situation. The data collected from each observation were compiled for each of the experimental groups. (Appendix B)

Scott's coefficient was employed to compute observer reliability. This was done during the early phases of the observation, during the middle of the observation period, and near the end of the observation period. The relevant data are in Table I.

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

Early	Middle	End
.547	.483	.426

Testing the Hypotheses

The first major hypothesis, as well as its four subscales, was tested using the chi square statistical test of significant relationships. Popham advocates the use of Yates correction for continuity in statistical treatments such as these. This correction consisted of subtracting 0.5 from the absolute value in each cell. For the first major hypothesis, as well as the four subscales of this hypothesis, the significance level of 3.84 is required to reject Hypothesis I and the related sub-hypotheses.

Hypothesis I. There is no significant relationship between the nonverbal communication patterns of teachers who have a positive view of man and teachers who have a negative view of man.

To test this hypothesis, the nonverbal communication pattern of the teachers who scored high on the PHN scale were classified, on the basis of their scores, as being direct or indirect in their nonverbal communication. This was determined by which category had the greater frequency. This procedure was also completed for those teachers who scored low on the PHN scale. The relevant data are in Table II.

TABLE II

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT
RELATIONSHIP BETWEEN NONVERBAL COMMUNICATION
PATTERNS OF HIGH PHN AND LOW PHN TEACHERS

HIGH PHN Direct = 3 Indirect = 7 $X^2 = 7.66$	$df = 1$	LOW PHN Direct = 9 Indirect = 1 $p > .05$
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The X^2 for testing hypothesis I was 7.66. With one degree of freedom, this value was significant at the .05 level. Therefore, hypothesis I was rejected.

Hypothesis la. There is no significant relationship between the nonverbal communication patterns of teachers who believe man is trustworthy and teachers who believe man is untrustworthy.

To test the hypothesis, the nonverbal communication patterns of the teachers who scored high on the trustworthiness scale were classified, on the basis of their scores, as being direct or indirect in their nonverbal communication. This was determined by which category had the greater frequency. This procedure was also completed for those teachers who scored low on the trustworthy scale. The relevant data are in Table III.

The X^2 for testing hypothesis la was 13.00. With one degree of freedom, this value was significant at the .05 level. Therefore, hypothesis la was rejected.

TABLE III

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN NONVERBAL COMMUNICATION PATTERNS OF TRUSTWORTHY
 AND UNTRUSTWORTHY TEACHERS

TRUSTWORTHY TEACHERS		UNTRUSTWORTHY TEACHERS	
Direct	= 1	Direct	= 9
Indirect	= 9	Indirect	= 1
$\chi^2 = 13.00$	$df = 1$	$p > .05$	

Hypothesis 1b. There is no significant relationship between the nonverbal communication patterns of teachers who believe man is altruistic and teachers who believe man is selfish.

To test this hypothesis, the nonverbal communication pattern of the teachers who scored high on the altruistic scale were classified, on the basis of their scores, as being direct or indirect in their nonverbal communication. This was determined by which category had the greater frequency. This procedure was also completed for those teachers who scored low on the altruistic scale. The relevant data are in Table IV.

The χ^2 for testing Hypothesis 1b was 10.08. With one degree of freedom, this value was significant at the .05 level. Therefore, hypothesis 1b was rejected.

TABLE IV

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT
RELATIONSHIP BETWEEN NONVERBAL COMMUNICATION
PATTERNS OF ALTRUISTIC AND SELFISH TEACHERS

ALTRUISTIC TEACHER		SELFISH TEACHER	
Direct	= 2	Direct	= 9
Indirect	= 8	Indirect	= 1
$X^2 = 10.08$		df = 1	p .05

Hypothesis 1c. There is no significant relationship between the nonverbal communication patterns of teachers who believe man has strength of will and teachers who believe man has lack of will.

To test this hypothesis, the nonverbal communication patterns of the teachers who scored high on the strength of will were classified, on the basis of their scores, as being direct or indirect in their nonverbal communication. This was determined by which category had the greater frequency. This procedure was also completed for teachers who scored low on the strength of will scale. The relevant data are in Table V.

The X^2 for testing hypothesis 1c was 10.08. With one degree of freedom, this value was significant at the .05 level. Therefore, hypothesis 1c was rejected.

TABLE V

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN NONVERBAL COMMUNICATION PATTERNS OF STRENGTH
 OF WILL AND LACK OF WILL TEACHERS

STRENGTH OF WILL TEACHERS		LACK OF WILL TEACHERS	
Direct	= 2	Direct	= 9
Indirect	= 8	Indirect	= 1
$\chi^2 = 10.08$		df = 1	P > .05

Hypothesis 1d. There is no significant relationship between the nonverbal communication patterns of teachers who believe man has independence and teachers who believe man is a conformist.

To test this hypothesis, the nonverbal communication pattern of the teachers who scored high on the independence scale were classified, on the basis of their scores, as being direct or indirect in their nonverbal communication. This was determined by which category had the greater frequency. This procedure was also completed for those teachers who scored low on the independence scale. The relevant data are in Table VI.

The χ^2 for testing hypothesis 1d was 5.23. With one degree of freedom, this value was significant at the .05 level. Therefore, hypothesis 1d was rejected.

TABLE VI

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
BETWEEN NONVERBAL COMMUNICATION PATTERNS OF
INDEPENDENCE AND CONFORMIST TEACHERS

INDEPENDENCE TEACHERS		CONFORMIST TEACHERS
Direct = 3		Direct = 8
Indirect = 7		Indirect = 2
$\chi^2 = 5.23$	df = 1	P > .05

The second major hypothesis, as well as its four sub-hypotheses, was tested by using the Spearman rho statistical test for significant relationships. For the second major hypothesis, as well as for the four sub-hypotheses, the significance level of .05 is required to reject these hypotheses.

Hypothesis II. There is no significant relationship between the teachers' view regarding the nature of man and the non-verbal communication patterns of pupils taught by those teachers.

To test this hypothesis, the PHN scores were ranked from the highest to the lowest. The frequency of tallies of pupil nonverbal communication which is found by adding categories eight and nine, was ranked from highest to lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data are in Table VII.

TABLE VII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN PUPIL NONVERBAL COMMUNICATION PATTERNS OF HIGH PHN
 TEACHERS AND PUPIL NONVERBAL COMMUNICATION
 PATTERNS OF LOW PHN TEACHERS

$D^2 = 265$	$1 - \frac{6(265)}{20(20^2-1)} =$	
$\rho = .80$	$n = 20$	$P > .05$

The rho for testing hypothesis II was .80. With an n of twenty, the value was significant at the .05 level. Therefore, hypothesis II was rejected.

Hypothesis 2a. There is no significant relationship between the teachers' view regarding the trustworthiness of man and the nonverbal communications pattern of pupils taught by those teachers.

To test this hypothesis, the trustworthiness scores were ranked from the highest to the lowest. The frequency of tallies of pupil nonverbal communication which is found by adding categories eight and nine, was ranked from the highest to the lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data are in Table VIII.

TABLE VIII

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN PUPIL NONVERBAL COMMUNICATION PATTERNS OF
 TRUSTWORTHY TEACHERS AND PUPIL NONVERBAL
 COMMUNICATION PATTERNS OF
 UNTRUSTWORTHY TEACHERS

$D^2 = 316$	$\frac{6(316)}{20(20^2-1)}$	
$\rho = .76$	$n = 30$	$P > .05$

The rho for testing hypothesis 2a was .76. With an n of twenty, the value was significant at the .05 level. Therefore, hypothesis 2a was rejected.

Hypothesis 2b. There is no significant relationship between a teacher's view regarding man as being altruistic and the nonverbal communication patterns of pupils taught by that teacher.

To test this hypothesis, the altruistic scores were ranked from the highest to the lowest. The frequency of tallies of pupil nonverbal communication, which is found by adding categories eight and nine, was ranked from the highest to the lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data are in Table IX.

TABLE IX

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN PUPIL NONVERBAL COMMUNICATION PATTERNS OF ALTRUISTIC
 TEACHERS AND PUPIL NONVERBAL COMMUNICATION PATTERNS
 OF SELFISH TEACHERS

$D^2 = 276$	$1 - \frac{6 (276)}{20 (20^2 - 1)}$	
$\rho = .79$	$n = 20$	$P > .05$

The rho for testing hypothesis 2b was .79. With an n of twenty, the value was significant at the .05 level. Therefore, hypothesis 2b was rejected.

Hypothesis 2c. There is no significant relationship between the teachers' view regarding the strength of will of man and the nonverbal communication patterns of pupils taught by those teachers.

To test this hypothesis, the strength of will scores were ranked from the highest to the lowest. The frequency of tallies of pupil nonverbal communication, which is found by adding categories eight and nine, was ranked from the highest to the lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data are in Table X.

TABLE X

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN PUPIL NONVERBAL COMMUNICATION PATTERNS OF
 STRENGTH OF WILL TEACHERS AND PUPIL NONVERBAL
 COMMUNICATION PATTERNS OF
 LACK OF WILL TEACHERS

$D^2 = 350$	$1 - \frac{6(350)}{20(20^2 - 1)}$	
$\rho = .74$	$n = 20$	$P > .05$

The rho for testing hypothesis 2c was .74. With an n of twenty, the value was significant at the .05 level. Therefore, hypothesis 2c was rejected.

Hypothesis 2d. There is no significant relationship between the teachers' view regarding the independence of man and the nonverbal communication patterns of pupils taught by those teachers.

To test this hypothesis, the independence scores were ranked from the highest to the lowest. The frequency of tallies of pupil nonverbal communication, which is found by adding categories eight and nine, was ranked from the highest to the lowest and Spearman rho was utilized to analyze the relationship between the rankings. The relevant data are in Table XI.

TABLE XI

SUMMARY OF THE DATA FOR THE TEST OF SIGNIFICANT RELATIONSHIP
 BETWEEN PUPIL NONVERBAL COMMUNICATION PATTERNS OF
 INDEPENDENCE TEACHERS AND PUPIL NONVERBAL
 COMMUNICATION PATTERNS OF
 CONFORMIST TEACHERS

$D^2 = 351$	$1 - \frac{6(351)}{20(20^2-1)}$	
$\rho = .74$	$n = 20$	$P > .05$

The rho for testing hypothesis 2d was .74. With an n of twenty, the value was significant at the .05 level. Therefore, hypothesis 2d was rejected.

The two major related null hypotheses, as well as the eight related sub-hypotheses were tested and the results were summarized in this chapter. All of the null hypotheses were rejected at the .05 level.

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

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This study was designed to determine whether teachers' philosophical beliefs about the nature of man influence their nonverbal communication pattern in a classroom situation.

Summary

A review of related literature seems to reveal two important trends in relation to the focus of this study: (1) Philosophy is becoming more important to educators as they theorize that philosophy, especially those beliefs about the nature of man, is the basis for all teaching acts; (2) Nonverbal communication seems to be the truest expression of the state of a person. In view of the implications of these considerations, an investigation of this nature seemed to have merit.

Two instruments of analysis were used. The Philosophies of Human Nature Scale (PHN) was employed to identify the teacher's beliefs about the nature of man. Galloway's Analysis of Nonverbal Communication was employed to observe the nonverbal communication patterns of teachers and students in thirty different classrooms.

The selection of the participating school districts was based upon several factors: (1) a teacher population large enough to supply an

adequate sampling; (2) geographic locale; (3) willingness of teachers and administrators to participate in the study; and (4) a diversity of organizational designs and instructional techniques. The thirty teachers whose classroom nonverbal communication was studied were selected by their scores on the General Favorability of Human Nature Score and their scores on the subscales of Trustworthiness; Altruistic; Strength of Will; and Independence. Those ten teachers who scored the highest and those ten who scored the lowest on each of the preceding scales were observed for direct influence, indirect influence, and pupil nonverbal communication patterns. Because of the nature of a subscale, most of the teachers chosen on each subscale were also chosen on other subscales and the General Favorability of Human Nature Score.

The data were analyzed through a chi square test of significant relationship and Spearman rho test of significant relationship. The level of significance was set at the .05 level of confidence.

Findings

The findings of this study considered to be the most significant were the following:

1. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' direct influence in the classroom and the teachers' beliefs about the nature of man. Teachers who had a negative view of man tended to express nonverbal communication patterns of a more direct nature than did teachers who had a positive view of man.

2. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' direct influence

in the classrooms and the teachers' beliefs about the trustworthiness of man. Teachers who believed man was untrustworthy tended to express nonverbal communication patterns of a more direct nature than did teachers who believed man was trustworthy.

3. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' direct influence in the classrooms and the teachers' beliefs about man being altruistic. Teachers who believed man was selfish tended to express nonverbal communication patterns of a more direct nature than did teachers who believed man was altruistic.

4. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' direct influence in the classrooms and the teachers' beliefs regarding strength of will. Teachers who believed man had lack of will tended to express nonverbal communication patterns of a more direct nature than did teachers who believed man had strength of will.

5. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' direct influence in the classrooms and the teachers' beliefs regarding the independence of man. Teachers who believed man was a conformist tended to express nonverbal communication patterns of a more direct nature than did teachers who believed man had independence.

6. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' indirect influence in the classrooms and the teachers' beliefs about the nature of man. Teachers who had a positive view of man tended to express nonverbal communication patterns of a more indirect nature than did teachers who

had a negative view of man.

7. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' indirect influence in the classrooms and the teachers' beliefs about the trustworthiness of man. Teachers who believed man was trustworthy tended to express nonverbal communication patterns of a more indirect nature than did teachers who believed man was untrustworthy.

8. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' indirect influence in the classrooms and the teachers' beliefs about man being altruistic. Teachers who believed man was altruistic tended to express nonverbal communication patterns of a more indirect nature than did teachers who believed man was selfish.

9. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' indirect influence in the classrooms and the teachers' beliefs regarding strength of will. Teachers who believed man had strength of will tended to express nonverbal communication patterns of a more indirect nature than did teachers who believed man had lack of will.

10. There was a significant relationship between the nonverbal communication patterns which reflected the teachers' indirect influence in the classrooms and the teachers' beliefs regarding the independence of man. Teachers who believed man had independence tended to express nonverbal communication patterns of a more indirect nature than did teachers who believed man was a conformist.

11. There was a significant relationship between the nonverbal communication patterns of pupils and their teachers' beliefs about the

nature of man. Pupils whose teachers had a positive view of man tended to express more nonverbal communication than pupils whose teachers had a negative view of man.

12. There was a significant relationship between the nonverbal communication patterns of pupils and their teachers' beliefs about the trustworthiness of man. Pupils whose teachers believed man to be trustworthy tended to express more nonverbal communication than pupils whose teachers believed man to be untrustworthy.

13. There was a significant relationship between the nonverbal communication patterns of pupils and their teachers' beliefs about man being altruistic. Pupils whose teachers believed man to be altruistic tended to express more nonverbal communication than pupils whose teachers believed man to be selfish.

14. There was a significant relationship between the nonverbal communication patterns of pupils and their teachers' beliefs regarding strength of will. Pupils whose teachers believed man to have strength of will tended to express more nonverbal communication than pupils whose teachers believed man to have lack of will.

15. There was a significant relationship between the nonverbal communication patterns of pupils and their teachers' beliefs about the independence of man. Pupils whose teachers believed man to have independence tended to express more nonverbal communication than pupils whose teachers believed man to be a conformist.

Conclusions

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

1. The PHN of teachers appears to be reflected in the degree to which they expect compliance and conformity to rules and authority on the part of their pupils.
 - A. Teachers with a high PHN were apparently concerned with the development of independent thought and action on the part of pupils as described by the kind of nonverbal communication they encouraged.
 - B. Teachers with a low PHN were apparently more concerned with controlling and limiting the pupils as described by the kind of nonverbal communication they encouraged.
2. The PHN of teachers appears to be reflected by the positive and negative nonverbal communication they utilize within their classroom.
 - A. Teachers with a positive PHN would appear to utilize more positive nonverbal communication in classroom interactions.
 - B. By comparison, teachers with a negative PHN would appear to utilize more negative nonverbal communication in classroom interactions.
3. The PHN of the teachers in this study appears to be reflected in their teaching methodology.
 - A. Teachers who have a high PHN appear to be more concerned with feelings and emotions in their interactions with students.
 - B. Teachers who have a low PHN appear to be more concerned with content and subject matter in their interactions with students.

Recommendations

The relationship between a teacher's philosophy and his classroom behavior has become increasingly obvious. Teachers need to be aware of this relationship. The data from this study further recommend the study of philosophy by teachers. Both the pre-service and in-service training could be utilized for such a study.

The recommendation is also made that an awareness of the impact of nonverbal communication be encouraged through a pre-service or in-service program. This would emphasize not only what is said, but how it is said. An investigation into some of the basics in nonverbal communication such as gestures, eye movements, tactile communication, voice, space, time, and methods would enlighten teachers to the importance their acts play in classroom interaction.

One of the more important characteristics of a research study is the questions that it generates. Additional research can substantiate the validity of the results and conclusions of this study. The following seem to be some of the more pertinent questions which could be answered by additional research:

1. Research investigation should be instigated to analyze the teacher and pupil nonverbal communication patterns in schools which would be separated by larger geographic areas than the ones used in this study.
2. A research investigation should be attempted to determine the relationship, if any, between the verbal and nonverbal communicative acts of teachers in a classroom situation.
3. Some investigations should attempt to determine the relationships, if any, between various aspects of a person's belief system and

his nonverbal communication.

4. This study should be replicated with larger samples of teachers.

5. An attempt should be made to compare the academic achievement of students whose teachers have a positive view of man and pupils whose teachers have a negative view of man.

6. Additional investigations should attempt to determine whether variables such as age, sex, level of educational attainment, and years of experience relate to positive and negative views of man.

7. A research investigation should be made to compare the beliefs of teachers regarding the nature of man and the pupil's self-concept.

8. Further research should be attempted to identify any additional dimensions of the belief system of teachers which are reflected in their classroom behavior.

As research investigations continue to produce additional information concerning the relationship of a teacher's belief system and the classroom interaction, this information must not only be analyzed independently, but also in light of the interrelationships which affect the teacher-pupil interaction in the classroom. Only when there is concern with the actual classroom situation can there be beneficial results of research in education.

SELECTED BIBLIOGRAPHY

- Agger, Robert E., Marshall N. Golstein, and Stanley A. Pearl. "Political Cynicism: Measurement and Meaning." Journal of Politics, 23 (1961), 477-506.
- Anderson, Ronald D., and others. "Development of a Verbal and Nonverbal Observation Instrument." Paper presented at the American Educational Research Association meeting, March 3-5, 1970, Minneapolis, Minnesota.
- Anderson, Susan J. "Changes in Attitudes, Personality and Effectiveness of Counselor Trainees in Counseling Practicums." (Unpublished Doctoral dissertation, North Texas State University, 1968.)
- Ashcraft, Carolyn W. "The Relationship Between Conceptions of Human Nature and Judgments of Specific Persons." (Unpublished Doctoral dissertation, George Peabody College for Teachers, 1969.)
- Baker, George W., Jr. "Evidence for Increasing Levels of Cynicism and Anxiety in College Freshmen Classes." George Peabody College for Teachers, Nashville, Tennessee, 1969. (Mimeographed.)
- Baker, Nathan J. "Changes in Philosophies of Human Nature After One and Two Years in College." (Unpublished Master's thesis, George Peabody College for Teachers, 1968.)
- Bernstein, Basil. "Social Structure, Language and Learning." Educational Research, 3 (June, 1961), 163-176.
- Birdwhistell, Ray L. Kinesics and Context. Philadelphia: University of Pennsylvania Press, 1970.
- Blumer, Herbert A. "Social Attitudes and Nonsymbolic Interaction." Journal of Educational Sociology, 9 (1936), 512-523.
- Brooks, William D. Speech Communication. Dubuque, Iowa: William C. Brown Company, 1971.
- Bruner, Jerome, and Robert Tagiuri. "The Perception of People." Handbook of Social Psychology. Cambridge, Massachusetts: Addison Wesley, 1954.
- Butler, J. Donald. Four Philosophies and Their Implications for Education and Religion. New York: Harper and Row, 1957.

- Christie, Richard, and Robert K. Merton. "Procedures for the Sociological Climate of Medical Schools." Journal of Medical Education, 33 (1958), 124-153.
- Combs, Arthur W. Perceiving Behaving Becoming. Washington: Association for Supervision and Curriculum Development, 1962.
- Darwin, Charles. The Expression of Emotions in Man and Animals. New York: Philosophical Library, 1955.
- Davidson, Helen H., and Bernard Lang. "Children's Perceptions of Their Teacher's Feelings Toward Them Related to Self-Perception, School Achievement, and Behavior." Journal of Experimental Education, 23 (December, 1960), 107-118.
- Davitz, James. The Communication of Emotional Meaning. New York: McGraw-Hill, 1964.
- Dole, Arthur A., Jack Nottingham, and Lawrence S. Wrightsman. "Beliefs About Human Nature Held by Counseling, Clinical, and Rehabilitation Students." Journal of Counseling Psychology, 16 (1969), 197-202.
- Ekman, Paul, and Wallace Friesen. "Nonverbal Behavior in Psychotherapy Research." Research in Psychotherapy, Vol. 3 (1968).
- Ewing, Walter A. "Philosophy of Human Nature, Personal Religious Orientation, and Conformity to Religious Authority." (Unpublished Master's thesis, University of Hawaii, 1966.)
- French, Russel L. "A Study of Communication Events and Teacher Behavior: Verbal and Nonverbal." A paper presented at the American Education Research Association meeting, March 30, 1970, Minneapolis, Minnesota.
- Galloway, Charles M. "An Exploratory Study of Observational Procedures for Determining Teacher Nonverbal Communication." (Unpublished Doctoral dissertation, University of Florida, 1962.)
- Galloway, Charles M. "Teacher Nonverbal Communication." Educational Leadership, 24 (October, 1966), 55-63.
- Galloway, Charles M. "Teaching Is Communicating: Nonverbal Language in the Classroom." NEA Bulletin No. 29. Washington, D. C.: Association for Student Teaching, 1970.
- Goffman, Erving. The Presentation of Self in Everyday Living. New York: McGraw-Hill Book Company, 1959.
- Hall, Edward T. The Silent Language. New York: Doubleday and Company, 1959.

- Halpin, Andrew W. "Muted Language." School Review, 67 (Spring, 1960), 89-105.
- Hegler, Herbert K. "Verbal and Nonverbal Classroom Communication: The Development of an Observational Instrument." Paper presented at the American Education Research Association meeting, March 3-5, 1970, Minneapolis, Minnesota.
- Hughes, Marie M. "What Is Teaching? One Viewpoint." Educational Leadership, 29 (January, 1962), 251-259.
- Jecker, James D., Norman Maccoby, and Harold S. Breitrose. "Improving Accuracy in Interpreting Nonverbal Cues of Comprehension." Journal of Applied Psychology, 48 (December, 1964), 39-97.
- Jourard, Sidney M. Personality Adjustment--An Approach Through the Study of Healthy Personality. New York: Macmillan and Company, 1958.
- Kawamura, W. I., and Lawrence S. Wrightsman. "The Viability of Religious Beliefs: A Factorial Study With Eighteen Measures of Religiosity and Twenty-Nine Measures of Personality." Paper presented at the Southwest Regional Convention, Society for the Scientific Study of Religion, January, 1969, Atlanta, Georgia. (Mimeographed, 1966.)
- Koch, Robert. "The Teacher and Nonverbal Communication." Theory Into Practice, 10 (October, 1971), 231-242.
- Lail, Sue S. "The Model in Use." Theory Into Practice, 7 (December, 1968), 176-180.
- Ligon, Charles L. "Religious Backgrounds and Philosophies of Human Nature." (Unpublished Education Specialist thesis, George Peabody College for Teachers, Nashville, Tennessee, 1963.)
- McNamara, Thomas C. "A Study of Philosophical Identities in a Counseling Practicum." (Unpublished Doctoral dissertation, University of Illinois, Urbana, 1967.)
- Maloney, Harold D. "Human Nature, Religious Beliefs, and Pastoral Care." (Unpublished Doctoral dissertation, George Peabody College for Teachers, 1964.)
- Mason, Robert Lee. "A Comparative Study of the Relationships Between Seminary Students and Counselor Trainees in Their Perceptions of Human Nature and Tendencies Toward Authoritarianism." (Unpublished Doctoral dissertation, University of Georgia, 1966.)
- Meharabian, Albert. "Orientation Behavior and Nonverbal Attitude Communication." Journal of Communication, 17 (December, 1967), 328-342.

- Miller, Paul. "A Comparative Study of Values of Graduate Social Work Students, Professional Social Workers, and Undergraduate College Students, as Measured by the Philosophies of Human Nature Scale." (Unpublished Master's thesis, School of Social Work, University of Tennessee, 1968; author's Abstract.)
- Morris, Van Cleve. Philosophy and Educational Development. Boston: Houghton Mifflin Company, 1966.
- Popham, W. James. Educational Statistics; Use and Interpretation. New York: Harper and Row, 1967.
- Rogers, Carl. "A Note on the Nature of Man." Journal of Counseling Psychology, 14 (1957), 199-203.
- Rosenberg, Morris. "Misanthropy and Political Ideology." American Sociological Review, 21 (1956), 690-695.
- Ruesch, Jurgen. "Nonverbal Language and Therapy." Psychiatry, 18 (1955), 320-334.
- Ruesch, Jurgen, and Weldon Kees. Nonverbal Communication. Berkeley: University of California Press, 1956.
- Runyon, Richard P., and Audrey Haber. Fundamentals of Behavioral Statistics. London: Addison Wesley, 1968.
- Smith, B. O. "A Concept of Teaching." Language and Concepts in Education. New York: Rand McNally and Company, 1961.
- Strother, David. The Effects of Instruction in Nonverbal Communication in Elementary School Teacher Competency and Student Achievement. Pullman: Washington State University Department of Speech, 1972.
- Thompkins, Lester. "The Psychology of Being Right and Left." Transaction, Vol. 31, 23-27.
- Torrance, E. Paul. "Teacher Attitude and Pupil Perception." Journal of Teacher Education, 11 (March, 1960), 97-102.
- Wolfe, Robert C. "A Study of Relationships Among Faculty Morale, Philosophies of Human Nature of High School Principals, and Teacher's Perceived Participation in Educational Decision-Making." (Unpublished Doctoral dissertation, George Peabody College for Teachers, 1971; author's Abstract.)
- Wrightsmen, Lawrence S. Philosophies of Human Nature and Styles of Interpersonal Behavior. Nashville: George Peabody College for Teachers, 1969.
- Wrightsmen, Lawrence S. "Child Rearing Attitudes and Philosophies of Human Nature Held by Undergraduates at the University of the Philippines." (Mimeographed, George Peabody College for Teachers, 1966.)

Wrightsman, Lawrence S. "Measurement of Philosophies of Human Nature." Psychological Reports, 14 (1964), 743-751.

Wrightsman, Lawrence W., and Charles F. Noble. "Reactions to the President's Assassination and Changes in Philosophy of Human Nature." Psychological Reports, 16 (1965), 159-162.

Wrightsman, Lawrence S., and Christine Satterfield. "Additional Norms and Standardization of the PHN Scale--1967 Revision." (Mimeographed, George Peabody College for Teachers, 1967.)

APPENDIX A

INSTRUMENT

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 will 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 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 you fit 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 unrealistic favorable view of their own 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 religious conversation, 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 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 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 decision, 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 used he was 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, but act that way because they are afraid they will get 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 others.
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 in 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

GALLOWAY OBSERVATION DATA

OBSERVATIONAL DATA FOR HIGH PHN TEACHERS

I.D. No.	PHN SCORE	Categories									
		1	2	3	4	5	6	7	8	9	10
1**	137	20	146	122	181	202	94	8	252	261	83
2*	137	32	27	76	97	278	71	4	263	301	139
3**	131	22	114	99	163	120	49	3	309	273	184
4**	127	45	150	138	175	166	65	11	184	213	142
5**	124	21	73	52	152	178	78	20	234	296	281
6*	123	15	102	28	82	257	28	2	337	241	220
7**	115	38	97	126	158	252	32	29	168	239	231
8**	111	32	68	89	112	186	54	6	296	384	87
9**	91	28	135	116	148	232	88	16	268	231	117
10*	91	<u>52</u>	<u>134</u>	<u>93</u>	<u>51</u>	<u>229</u>	<u>63</u>	<u>122</u>	<u>168</u>	<u>192</u>	<u>303</u>
		305	1046	939	1319	2100	622	221	2479	2631	1787

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR LOW PHN TEACHERS

I.D. No.	PHN SCORE	Categories									
		1	2	3	4	5	6	7	8	9	10
20**	-15	1	56	38	262	287	67	13	249	154	227
19*	-16	6	47	68	153	590	115	85	184	82	164
18*	-19	5	61	22	160	602	51	14	166	89	179
17*	-25	4	53	57	81	493	127	68	203	169	121
16*	-27	6	45	66	107	549	72	51	136	174	108
15*	-33	8	65	59	127	404	105	49	189	174	138
14*	-36	5	46	39	117	581	60	24	179	113	182
13*	-36	1	43	29	178	476	134	48	196	98	156
12*	-41	3	21	43	138	427	127	16	115	147	316
11*	-48	6	47	68	153	590	114	85	184	82	164
		<u>45</u>	<u>484</u>	<u>489</u>	<u>1476</u>	<u>4999</u>	<u>972</u>	<u>453</u>	<u>1801</u>	<u>1282</u>	<u>1755</u>

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR TRUSTWORTHY TEACHERS

I.D. No.	TRUST- WORTHY SCORE	Categories									
		1	2	3	4	5	6	7	8	9	10
7**	41	38	97	126	158	252	32	29	168	239	231
3**	41	22	114	99	163	120	49	3	309	273	184
5**	40	21	73	52	152	178	78	20	234	296	281
9**	38	28	135	116	148	232	88	16	268	231	117
1**	35	20	146	122	181	202	94	8	252	261	83
8**	33	32	68	89	112	186	54	6	296	384	87
2*	32	32	27	76	97	278	71	4	263	301	139
4**	28	45	150	138	175	166	65	11	184	213	142
30**	27	41	83	154	129	210	80	32	197	217	225
21**	26	41	85	137	126	248	69	9	249	186	274
		<u>299</u>	<u>978</u>	<u>1109</u>	<u>1441</u>	<u>2072</u>	<u>680</u>	<u>138</u>	<u>2420</u>	<u>2601</u>	<u>1763</u>

* = Direct
** = Indirect

OBSERVATIONAL DATA FOR UNTRUSTWORTHY TEACHERS

I.D. No.	UNTRUST- WORTHY SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
16*	- 6	6	45	66	107	549	72	51	146	174	108
14*	- 7	5	46	39	117	581	60	24	179	113	182
29*	-10	10	39	53	96	587	140	15	153	79	201
18*	-11	5	61	22	160	602	51	14	166	80	179
25*	-12	13	52	63	162	464	137	68	149	130	147
27*	-13	8	37	58	125	319	163	28	201	218	214
20**	-15	1	56	48	262	287	57	13	194	209	227
12*	-19	3	30	24	133	434	85	15	256	292	147
13*	-20	1	43	29	178	476	134	48	196	98	156
11*	-24	3	21	43	138	427	127	16	115	147	316
		55	430	445	1478	4726	1026	292	1755	1540	1878

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR ALTRUISTIC TEACHERS

I.D. No.	ALTRUISM SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
2*	41	32	27	76	97	278	71	4	263	301	139
5**	41	21	73	52	152	178	78	20	234	296	281
8**	37	32	68	89	112	186	54	6	296	384	87
9**	37	28	135	116	148	232	88	16	268	231	117
6*	35	15	102	28	82	257	28	2	337	241	220
7**	34	38	97	126	158	252	32	29	168	239	231
1**	33	20	146	122	181	202	94	8	252	262	83
21**	30	42	85	137	126	248	69	9	249	186	274
30**	29	22	114	99	163	120	49	3	309	273	184
21**	24	41	85	137	126	248	69	9	249	186	274
		291	922	982	1345	2151	632	106	2625	2599	1890

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR SELFISH TEACHERS

I.D. No.	SELFISH SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
13*	- 8	1	43	29	178	476	134	48	196	98	156
16*	-10	6	45	66	107	549	72	51	146	174	108
18*	-11	5	61	22	160	602	51	14	166	80	179
28**	-13	7	49	153	203	199	50	53	202	247	220
11*	-14	3	21	43	138	427	127	16	115	147	316
23*	-14	4	39	62	180	394	143	26	149	168	103
22*	-15	11	53	68	132	401	111	61	150	137	160
15*	-16	5	46	39	117	581	60	24	179	113	82
14*	-18	8	65	59	127	404	105	49	189	174	138
12*	-19	3	30	24	133	434	85	15	256	192	147
		54	452	565	1475	4467	938	357	1748	1530	1609

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR STRENGTH OF WILL TEACHERS

I.D. No.	STRENGTH OF WILL SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
2*	42	32	27	76	97	278	71	4	163	301	139
5**	40	21	73	52	152	178	78	20	234	296	281
3**	36	22	114	99	163	120	49	3	309	273	184
9**	35	28	135	116	148	232	88	16	268	231	117
8**	28	32	68	89	112	186	54	6	296	384	87
10*	28	52	134	93	51	229	63	122	168	192	303
7**	27	38	97	126	158	252	32	29	168	239	231
1**	26	20	146	122	181	202	94	8	252	261	83
30**	26	41	83	154	129	210	80	32	197	217	225
21**	24	41	85	137	126	248	69	9	249	186	274
		<u>327</u>	<u>962</u>	<u>1064</u>	<u>1317</u>	<u>2135</u>	<u>678</u>	<u>249</u>	<u>2304</u>	<u>2580</u>	<u>1924</u>

* = Direct

** = Indirect

OBSERVATIONAL DATA FOR LACK OF WILL TEACHERS

I.D. No.	LACK OF WILL SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
17*	+1	4	53	57	81	493	127	68	203	169	121
26*	0	9	23	71	158	362	164	32	206	184	110
13*	0	1	43	29	178	476	134	48	196	98	156
19*	-4	6	47	68	153	590	114	85	184	82	164
25*	-5	13	52	63	162	464	137	60	149	130	147
16*	-5	6	45	66	107	549	72	51	136	174	108
24*	-6	9	49	53	103	299	450	58	212	247	200
14*	-7	5	46	39	117	481	60	24	179	113	182
20**	-12	1	56	48	262	287	57	13	249	154	227
15*	-22	8	65	59	127	404	105	49	189	174	138
		<u>62</u>	<u>479</u>	<u>553</u>	<u>1448</u>	<u>4405</u>	<u>1420</u>	<u>488</u>	<u>1903</u>	<u>1525</u>	<u>1553</u>

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR INDEPENDENCE TEACHERS

I.D. No.	INDE- PENDENCE SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
1**	33	20	146	122	181	202	94	8	252	261	83
6*	30	15	102	28	82	257	28	2	337	241	220
3**	25	22	114	99	163	120	49	3	309	273	184
9**	22	28	135	116	148	232	88	16	268	231	117
2*	22	32	27	76	97	278	71	4	263	301	139
4**	19	45	150	138	175	166	65	11	184	213	142
21**	19	41	85	137	126	248	69	9	249	186	274
10*	16	52	134	93	51	229	63	122	168	192	303
5**	16	21	73	52	152	178	78	20	234	296	281
7**	15	38	97	126	158	252	32	29	168	239	231
		<u>314</u>	<u>1063</u>	<u>987</u>	<u>1333</u>	<u>2162</u>	<u>637</u>	<u>224</u>	<u>2432</u>	<u>2433</u>	<u>1974</u>

* = Direct
 ** = Indirect

OBSERVATIONAL DATA FOR CONFORMIST TEACHERS

I.D. No.	CON- FORMIST SCORES	Categories									
		1	2	3	4	5	6	7	8	9	10
14*	-10	5	46	39	117	581	60	24	179	113	182
15*	-10	8	65	59	127	404	105	49	189	174	138
20**	-11	1	56	38	262	287	67	13	149	254	227
18*	-12	5	61	22	160	602	51	14	166	80	179
19*	-13	6	47	68	153	590	114	85	184	82	164
23*	-14	5	39	62	180	394	143	26	149	168	203
11*	-15	3	21	43	138	427	127	16	115	147	316
28**	-15	7	49	153	203	199	50	53	202	247	220
12*	-17	3	30	24	133	434	85	15	256	192	147
17*	-20	4	53	57	81	493	127	68	203	169	121
		<u>47</u>	<u>467</u>	<u>565</u>	<u>1554</u>	<u>4411</u>	<u>929</u>	<u>363</u>	<u>1792</u>	<u>1626</u>	<u>1877</u>

* = Direct
 ** = Indirect

VITA

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Doctor of Education

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PATTERNS

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