

AN EXPLORATION OF SEX-BASED  
NONVERBAL INSTRUCTION

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## CHAPTER I

### INTRODUCTION

The emphasis in uncovering the meaning of communication has mostly been concerned with understanding the verbal content of the message. For example, Barnlund (1968) indicated that the systematic study of verbal content was begun over 2,000 years ago with the writings of Plato, Aristotle, and others. This emphasis culminated with the 1950's--the decade described as the "communication revolution"--a time of national preoccupation with the process of communication (Knapp, 1972). However, not until the publication of Darwin's 1872 classic, The Expression of the Emotions in Man and Animals, was the recognition of the importance of the nonverbal part of communication acknowledged (Mahl, 1968; Dunning, 1971; Davis, 1972). Even though this book marked the beginning of the scientific study of nonverbal communication, it has been only since World War II that interest has been markedly exhibited in researching this topic.

The next natural progression, the introduction of nonverbal research into the classroom, did not take place until Galloway (1962) began to develop an instrument to record teacher nonverbal behavior (Loss, 1973; Williams, 1977). In a later article, Galloway (1971a) elaborated on the importance of the inclusion of the study of nonverbal behavior in an educational setting. He called nonverbal "the language of sensitivity," stating "the authentic and real will prevail. We can



pretend that this isn't true, but nonverbal actions speak for themselves. It is to the fidelity of human experience that nonverbal meanings have value" (p. 230). Of course, Galloway (1971b) concomitantly affirmed that student and teacher relationships were the basis of the formation of student's success or failure in an educational system.

Interest in researching the differences between male and female communication behavior has only emerged with the women's movement (Baird, 1976). Baird reviewed the literature of group communication from 1950, searching for studies concerning sex differences and reported, "a characteristic limitation of the literature" (p. 179). The most cogent statements about the differences between male and female nonverbal communications to date are made by Henley and Freeman (1976). Reviewing a wide variety of researchers and studies, Henley (1977) developed the premise that it is nonverbal behavior of both sexes that mediates and sustains women's subordinate position in our culture. Baird (1976, p. 185) simply states, "Differences in nonverbal behaviors seem generally consistent with role stereotypes."

No matter what the setting or what variables are being examined, the reason predicating the research of nonverbal behavior is simple: "All behavior is motivated" (Schneider, 1971, p. 259). Mehrabian (1970) stated that even though some behaviors are more communicative than others, all behavior communicates in the sense that they are observable and have significance. With a shift in emphasis from the encoder to the decoder, Schefflen (1967) makes an almost identical point when he writes that all behavior is communicative when others are capable of attaching some significance to it. In fact, even when refraining from talking, one cannot refrain from communicating through what Goffman (1963, p. 35)

terms the "body idiom: although an individual may stop talking . . . he cannot say nothing."

The task of nonverbal communication research has been to discover the unwritten rules established by centuries of communication through language without words (Dunning, 1971). However, the cause of nonverbal research was strongly supported by Albert Mehrabian's (1971a) statement of the totality of communication. Based on two studies he and his colleagues completed in 1967, Mehrabian (1971a, p. 43) devised a formula delineating how affect is communicated: "total feeling = 7% feeling + 38% vocal feeling + 55% facial feeling." Generalizing from that formula, it is easy to hypothesize that people say more nonverbally (93 percent) than they do with their words (seven percent).

One of the first steps that researchers took to bring the study of nonverbal behavior into the classroom was the development of observational systems for charting teacher and student nonverbal behavior. One such effort was that of Loss (1973). She cites Galloway's 1962 exploratory study as laying the ground work. Later, French and Galloway (1968) modified Flander's (1970) system to handle both verbal and nonverbal communication. Loss's (1973, p. 24) system emphasizes broad categories of student and teacher nonverbal behavior and she reports, "One of the outstanding findings of the study . . . was that teacher and student nonverbal behavior are highly interdependent."

Most of the classroom nonverbal research, however, has focused on the teacher's behavior. Gefner (1976) asked high school students to rate a teacher's 10 minute videotape on the teacher's level of warmth and then to indicate what clues contributed to the ratings. She concluded from her study that students judge warmth mostly through nonverbal behavior

and that they were able to discern which behaviors contributed to the ratings. Although students are capable of identifying and interpreting teachers' nonverbal behavior, teachers themselves are not always aware of how they communicate nonverbally. This lack of awareness, in fact, is often cited as a key reason to research nonverbal behavior in the classroom (Dunning, 1971; Galloway, 1971a; Loss, 1973). In one such study by Lyon (1977), an observer rated the teacher's nonverbal behavior toward her students. Lyon concludes that the teacher displayed differential nonverbal behavior toward her students and that the differences correlated with and were distinguished by her ratings of a particular student's social/personal attributes, academic ability, age, and her liking of him.

Another aspect of nonverbal behavior that impacts the descriptions and ratings of the communicator is that of quantity. In general, communicators using fewer nonverbal behaviors are judged differently than those using a higher volume of nonverbal behaviors. Using an adjective checklist, students rating counselors using either a high or low frequency of nonverbal behaviors gave significantly more positive ratings to the counselor with more nonverbal behaviors (Strong, Taylor, Bratton, and Loper, 1971). In a similar study, LaCrosse (1975) had college students rate counselors on their attractiveness and persuasiveness. The counselors had been trained to portray two different conditions: affiliative and unaffiliative. Both conditions were defined nonverbally, with affiliate behavior indicated by eye contact, smiles, gesticulations, and the like; and unaffiliative behavior was described as a lessening or absence of the same behaviors. Counselors displaying the affiliative behavior were judged to be significantly more persuasive and attractive.

Switching the experimental setting from the counseling paradigm to the classroom, Willett (1976) compared the nonverbal behavior of average and effective teachers. Specifically, Willett found that effective teachers differed nonverbally from average teachers in that they displayed more nonverbal behavior when engaged in teaching (e.g., illustrating/demonstrating). Average teachers displayed more nonverbal behaviors when engaging in directing.

There are many variables that impact the success and/or failure of the teaching-learning paradigm. This study will attempt to examine how gender based nonverbal behavior affects student attitudinal ratings of teachers and retention of academic subject content.

#### Significance of the Study

Research has generally neglected the impact of teacher nonverbal behavior on students' retention of content and their attitudes toward their instructors. Also, generally ignored experimentally in classroom research has been the effect that sex role nonverbal communication has on the teaching-learning paradigm. Accenting the first point, Victoria (1971) stated:

Historically, curriculum structure in our schools and the attendant teaching-learning strategies employed have been linked to predominantly discursive modes of communication. The purposeful use of nondiscursive modes of communication has been incidental at best (p. 301).

And,

The teacher can manipulate his verbal behavior at will, but he may have little concern for or control of his nonverbal expressive behavior. It is important to realize that students to attend to teacher's nonverbal expressive behaviors to determine the accuracy of the verbal message (p. 301).

The above statements are complemented by Balzer (1969) who concluded that teachers' nonverbal behavior far outweighs their verbal output, and that the teachers' nonverbal communication often contradicted their verbal message. The incongruity of verbal and nonverbal content is echoed by Galloway (1971b). He states that feelings are primarily conveyed through nonverbal behaviors and that sometimes the teacher's words and feelings are not consistent. Schusler (1971) noted the disparity of research in teacher nonverbal behavior. He noted that teachers receive training in order to better understand what they communicate nonverbally. Eleven years later, Halpin (1960, p. 87) pointed out that our teacher training programs "ignore the entire range of nonverbal communication, the muted language in which human beings speak to one another more eloquently than with words."

Citing gender-based differences in eight different areas (e.g., eye gazing and contact, and amount and timing of smiling behavior), Blahna (1975) stated:

. . . if the differences indicated in this review are confirmed by future studies, sex will be shown as a significant variable in nonverbal communication and consistently should be part of research design (p. 9).

That males and females act differently nonverbally, and subsequently communicate different messages is the major thesis of Henley's (1977) book. Henley relates each gender's nonverbal behavior to their status as perceived by others, their power and control in relationships, and to their sex role relationships and culture.

Sex-based nonverbal behavior is largely ignored in the literature. Particularly, there is a paucity of research related to teacher sex-based communication differences.

## Statement of the Problem

The problem under investigation in this study is stated as follows: What are the differential effects of sex-based nonverbal instruction on students' attitudes toward their instructor and cognitive performance in the classroom?

## Purpose of the Study

The major purpose of this investigation is to identify the effects of instructor gender on the performance and attitude of selected college students. It will attempt to determine the results of teacher nonverbal behavior on the students' attitudes toward the instructor as measured by a teacher performance indicator. The study further proposes to identify the effects of teacher nonverbal behavior on students' cognitive performance as measured by a multiple-choice content test. Finally, the study will identify differential effects of a male and female instructor on students' attitudes and cognitive performance.

## Definition of Terms

Definition of terms important to this study are listed below:

1. Nonverbal Behavior--that part of the total communicational process presented by the teacher which may reflect thoughts and feelings through bodily attitudes and motion, facial expression and gestures echoing the use of verbal speech.
2. Cognitive Performance--the number of correct responses on a content test relating to the lecture material.
3. Instructor Performance Scale--the student's attitude toward the teacher as measured by a 16-point true-false instrument.

## Hypotheses

The following hypotheses are under investigation in this study:

1. There is no significant difference in the overall cognitive performance of students who are subjected to an instructor that exhibits no intentional nonverbal behavior as compared to a group of students whose instructor accompanies the lecture with nonverbal behavior.
2. There is no significant difference in the overall attitudinal ratings of the instructor by students who are subjected to an instructor that exhibits no intentional nonverbal behavior as compared to a group of students whose teacher accompanies the lecture with nonverbal behavior.
3. There is no significant difference in the overall cognitive performance of students who are subjected to a male or female instructor.
4. There is no significant difference in the overall attitudinal ratings of students who are subjected to a male or female instructor.
5. Nonverbal behavior and sex of instructor will not interact to produce significant differential scores on cognitive performance.
6. Nonverbal behavior and sex of instructor will not interact to produce significant differential scores on attitudinal ratings by students.

## Organization of the Study

Chapter I included an introduction to the study, significance of the

study, statement of the problem, purpose of the study, definition of terms, and hypotheses. Chapter II contains a review of literature related to this investigation. Chapter III describes the subjects, research procedure, and instrumentation. Chapter IV will contain results of the study and discussion of the analysis of the data. Chapter V will consist of a summary, conclusions, and recommendations for further research.



## CHAPTER II

### REVIEW OF THE LITERATURE

This investigation is primarily concerned with the impact of instructor gender-based nonverbal behavior on students' cognitive retention and attitudes of students toward teachers in the college classroom. The purpose of this chapter is to review literature pertinent to nonverbal behavior in general, and more particularly to nonverbal behavior in the classroom and sex-based nonverbal behavior. A summary will follow the review.

#### Human Nonverbal Behavior in the Behavioral Sciences

The history of nonverbal literature is rich in heritage, even though it only recently has been the subject of stringent research. In reviewing research of nonverbal communication and interviewing, Gladstein (1974, p. 35) concluded that the overall picture was "confused, complex." One reason for this diverse picture is that the research of nonverbal communication stems from several different disciplines: psychology, psychiatry, ethology, anthropology, and sociology (Davis, 1973). Davis did not include the work of Darwin (1955) which would be classified as biological. Regardless of the classification of the area of nonverbal research, the focus has been on communication.

Historically, efforts to systematically study the process of communication have been in progress for at least 2,000 years (Barnlund, 1968). The study of human communication presumes the study of interpersonal relationships, and Heider (1958) notes that there is a systematic way in which people relate to one another, and that this organized way of relating can be discovered. The study of nonverbal behavior has evolved from being solely a part of the interpersonal system into an important research topic itself. Over the past 20 or 30 years, investigators have become increasingly interested in expanding their analysis of interpersonal communication to include more than the purely verbal (Delaney and Heinman, 1966). Mehrabian (1970) stated that even though some behaviors are more communicative than others, all behaviors communicate in the sense that they are observable and have significance. Schefflen (1967), a psychiatrist who has done extensive research on nonverbal communication within the psychiatric therapy paradigm, made an almost identical statement when he wrote that all behavior is communicative when others are capable of attaching some significance to it. Communication, according to Schefflen (1964, p. 318), is a general concept and includes "all behaviors by which a group forms, sustains, mediates, corrects, and integrates its relationship." Thus, interpersonal communication may be viewed as a complex process wherein all behaviors, including nonverbal behaviors, have the potential to communicate meaning.

Very few researchers have undertaken a systematic study of nonverbal communication as it pertains to a total communications system. A notable exception is Albert Schefflen and his colleagues at Temple University Medical Center (Schefflen, 1966). Although focusing on nonverbal communication in psychotherapy, this research group's findings

have variable applications to nonverbal behavior in many communication contexts. A major thesis of this group was that the isolating variables (e.g., hand and arm gestures) for study, has little impact upon the totality of communication. In fact, they believe this isolation may lead to erroneous conclusions. Gestures, for example, have meaning only within the context that they occur. To avoid an atomistic approach, this research group has evolved into what they term "Context Analysis: A Natural History Method" (Scheflen, 1966, p. 264). In order to study nonverbal communication in this manner, the group would film psychotherapy sessions and study the film frame-by-frame. This method insured that nonverbal behavior would be understood within the context that it occurred and that the interplay of nonverbal behaviors between people would be captured.

Most researchers in the area of nonverbal communication have chosen to focus upon one or a few variables. The remaining of this section will be comprised of a review of these foci. A major problem inherent in this distinction is that of artificiality. There are no clearly distinct categories of nonverbal behaviors that have no relation to others. For example, emotion has long been considered to be communicated nonverbally, although words themselves have a wide variety of connotational and denotational shades of meaning (Davitz, 1964). Also, although facial expressions are generally considered to be the primary channel for expressing emotions, certainly there are facial expressions not concerned with emotions and emotions which are not exclusively communicated by the face. Nonverbal communication in counseling/psychotherapy will be reviewed separately simply because the bulk of research in nonverbal communication in the behavioral sciences has been so separated.

A major origin of the study of nonverbal behavior was in the study of emotion. Initially, nonverbal behavior was an ancillary part of this research. However, gradually the emphasis was placed on the mechanisms of communication (nonverbal behavior), rather than on the emotion itself. For example, Darwin (1955) as early as 1856 maintained that facial expressions were universally communicative because they are biologically based in the evolution process. He also maintained that nonverbal gestures and expressions of emotion are the oldest form of communication units.

During the first quarter of this century, demonstration was a popular form of psychological experimentation. It was of the opinion of Boring and Titchener (1923, p. 471) that "Emotion has long baffled us." The difficulty that these authors experienced was in building a demonstrator manikin which could capture the nuances of changing facial expressions and concomitant changes in emotions. The authors cited Darwin as their basis in equating facial expressions with emotions. Hall (1957) underscored this difficulty in terming nonverbal behavior a "silent language" originating in the preconscious.

In the 1930's, behavioral scientists were concerned with cataloging personality traits as they relate to nonverbal expressions and emotion. Allport and Cantrill (1934) conducted a research project aimed at predicting nonverbal behaviors from personality traits. They concluded that the relationship was somewhat remote and very complex. They also concluded that inner feelings were displayed by expressive movement.

One of the major difficulties in researching nonverbal behavior in the communication process was stated as early as 1955 (Ruesch, 1955). He concluded that verbal behavior and nonverbal behavior were separate,

that they were two different languages, and that they were operationally different. This difficulty was noted by Davitz (1964) who recognized verbal behavior and nonverbal behavior as two different channels. Brannigan and Humphries (1969) suggested an exercise designed to emphasize their distinctness. If one cognitively attends to a speaker's nonverbal behavior rather than his verbal, one experiences difficulty in following the verbal content. While Bernard Kaplan (1961) agreed in principal with the separation of verbal channels from nonverbal channels, he pointed out that words and gestures are merely symbolic representations of inner processes and that both symbolic systems have the same internal origin.

The separation of verbal and nonverbal processes becomes more complex with the realization that verbal content also contains nonverbal material. The antecedents of nonverbal vocal research are in early experiments testing the ability of judges to ascertain emotional meaning conveyed by photographs of actors in various poses and postures (Davitz, 1964). In tracing the experimental history of the communication of emotion through nonverbal means, Davitz draws several inevitable conclusions. One is that the communication of emotion is primarily accomplished nonverbally. Secondly, vocal expressions and facial expressions are the primary channels for this communication.

Davitz dates his own investigations into nonverbal vocal communication of emotion with the publication of "The Communication of Feelings by Content-Free Speech" (Davitz and Davitz, 1959). In this study, the authors report listeners hearing speakers expressing 10 different emotions by reciting parts of the alphabet could correctly identify the

emotion. However, different feelings were differently identified: anger was correctly identified 65 percent of the time while love and pride were correctly identified about 25 percent of the time.

The Davitzs' (1959) research led to a journal dealing with the non-verbal vocal communication of feelings. By filtering voice sample so that language cues were lost, Soskin and Kauffman (1961) concluded that voice sounds solely can communicate a speaker's emotional state. Starkweather (1961) reviewed the related research and concluded that the nonverbal vocal aspects of speech contained more information than the words themselves. He further stated that judges are able to identify emotion in content-free speech by cueing into changes in vocal rate, pitch, and volume. Davitz and Davitz (1961) summarized:

No general, systematic theory of nonverbal emotional communication has emerged, but the discovery of consistent, lawful relationships in the data provides a growing empirical basis for such a general theory (p. 86).

The face has long been a focal point of researching the communication of emotions nonverbally. In fact, the prevailing emphasis in nonverbal research during the 1920's and 1930's was on facial expressions--the communication of attitudes and affect (Davis, 1972).

Jenness (1932) provided that period with an excellent review of current and previous literature, citing European publications, dating from the past century. However, in terms of impact on today's current research into nonverbal communication of emotions, Woodworth (1938) presented a paradigm that has persisted, although modified, through today. He suggested a linear scale upon which expressions of affect could be ranked according to their similarity. Schlosberg (1941) changed the linear scale into a circular one, and later Schlosberg (1952, 1954) settled

upon a scale of three linear dimensions which he termed "attention-rejection," "sleep-tension," and "pleasantness-unpleasantness."

This earlier research led to Osgood's (1966) development of a three dimensional model based upon a factor analysis of facial expressions. He termed this concept the "semantic space." By factor analysis of student's judgment of the facial expression of student actors, Osgood found a three dimensional paradigm: activation, pleasantness, and control.

The communication of affect through the face has long been a research topic of Ekman (1965). He attempted to differentiate between head and body communication of affect. He had his subjects rate photographs of faces and bodies for affect using Schlosberg's (1954) three dimensional model. His results indicated that the body communicates the intensity of the affect, while the face is the primary channel for communicating the particular affect. In a following experiment, Ekman joined by Friesen (1967) continued to pursue research using photographs and found that pictures depicting action or movement conveyed emotionality. Thus, bodily movement and action seems to be another channel by which affect is communicated. This line of research by Ekman and Friesen culminated in a 1969 publication which condensed their previous work and presented in preliminary form their Facial Affect Affect Scoring Technique.

A somewhat different emphasis in this research area was presented by Thompson and Meltzer (1964). Although using the Woodworth-Schlosberg scale, Thompson and Meltzer used live males and females as actors, rather than photographs; and, the authors focused on encoding ability. The physical arrangements of the study resulted in the face as the

primary channel of encoding. The encoders were mostly undergraduates, all enrolled in a social psychology course. The authors found a wide range of individual differences in the encoder's ability to communicate affect.

One question which has emerged from the research on facial affect is whether facial expressions are culturally or biologically determined. Ekman (1975), again using photographs of people expressing several basic emotions facially, found that people from widely divergent cultures (Japan, Chile, United States, and New Guinea) were able to identify the emotion. Ekman concluded that Darwin (1955) was basically right, that facial expressions are universal and biologically determined rather than culturally determined.

Citing the recent findings supporting the biologically based communication of facial affect, Boucher and Ekman (1975) set out to determine if one area of the face was more prominently concerned than others in feeling communication. They concluded that there is no one facial area which communicates affect better than other areas, but that some facial areas communicate some affect better than other areas communicate the same affect.

Of course, people communicate more than affect nonverbally and virtually, at one time or another, use every movable part of their body in that communication. Morris (1977) made this point by naming over 10 nonverbal gestures found world wide. Since some gestures are universally understood to mean the same (e.g., the head nod, always a "yes" sign) and others (e.g., the "OK" sign, meaning perfect in America and money in Japan) while used universally, but have different connotations, Morris supports Darwin's biologically based



nonverbal theory. He does, however, point out that cultural differences account for different meanings.

No one, however, has approached Ray Birdwhistell as a proponent of culturally based nonverbal behavior or for his thoroughness as a researcher. Birdwhistell was associated with the Temple University group and shares Albert Scheflen's bias against the isolation of nonverbal behaviors for research. In a 1963 publication, he argues against dichotomies such as thinking-feeling and the notion that spoken words relate only to cognition while movement relates only to affect. Instead, Birdwhistell focuses on movement. Birdwhistle (1963, p. 125) defined kinesics--a word he coined--as "the systematic study of those patterned and learned aspects of body motion which can be demonstrated to have communicational value." This communicational value is understood within a cultural context.

Birdwhistell's (1970) major contributions are contained in a 1970 publication. The book represents a culmination of two decades of research and writing. In presenting his case for the natural history research method of looking at nonverbal behaviors within the context in which they are presented, he states that children acquire patterns of behaving that are socializing in nature. He further argues that communication is circular, continuous process that utilizes several communication channels simultaneously. While arguing against the atomization of behaviors for research, he does maintain that patterns of behavior are composed of elements. It is only the placing of elements together within the context of the interaction that yields the "meaning" of the communication.

The independent publications of Scheflen (1963) have a common theme, although Scheflen used the psychiatric interview as his laboratory. His first major publication was concerned with behavior sequences filmed during psychiatric interviews. He uses the film to demonstrate how people control and regulate their relationships through the use of nonverbal behaviors. For example, one sequence of the film showed a mother and son maintaining eye contact when discussing a shared activity and averting eye contact when discussing an unshared one. The following year, Scheflen (1964) published an article dealing with postures and gestures in communication. Following his previous theme of regulation, Scheflen demonstrates how specific movements and gestures mark areas of communication, one from another. Specifically, certain hand, eye, and head movements indicate ends of statements; also, shifts of postures as delineating points of view. These regulatory functions may change as the context changes, from culture to culture, or by sex and role of the behavior. Within the context of courtship behavior, Scheflen (1965, p. 246) shows "a model for conceptualizing the organization of living systems." Thus, courtship behaviors can only be understood within their context, whether the behaviors take place in the parlor or therapy room. Two later articles by Scheflen (1967, 1968) deal with integration of his previously reported findings into a total communications system and within an interactional system. Scheflen (1972) presents a text profusely illustrated with photographs which summarizes his research primarily for the layman.

The publications of Albert Mehrabian stand in opposition to Scheflen in that they tend to be more limiting and specific. They are, however, important in the development of nonverbal behavior research. Overall,

Mehrabian concerns himself with how body posture orientations, distances between communicators, and body positions affect attitudes, perceived status, and persuasiveness. A 1968 article centered on a liking-disliking continuum in relation to various nonverbal behaviors (e.g., leg orientation, eye contact, distance). Subjects were asked to position their distance to, and assume various positions for someone they liked or disliked. Mehrabian (1968) found that some behaviors (eye contact, for example) were related to liking significantly, while other behaviors were not predictive of either liking or disliking. In a later article, Mehrabian (1970) proposes that the referents of nonverbal behavior consistently fall into one of three categories: evaluation, responsiveness, and potency or status. Mehrabian suggests that psychotherapists can use this information to look at the degree of liking or disliking they communicate by their nonverbal behavior. Mehrabian (1971a) presents his integration of his research findings into a cultural context.

It is not only facial expressions, body positions, gestures, and the like nonverbal behaviors which effect the receiver's perception, but also the degree of action. Ekman and Friesen (1967) demonstrated that judges had a greater degree of agreement when judging pictures showing action. The judges were rating the photographs according to Woodworth's (1938) six basic feelings. The authors concluded that an emotional person is more apt to show movement than one who is nonemotional, thus the snapshots depicting movement were more readily categorized as to their emotional content.

The "activity" variable indicated above has primarily been a factor in counseling or counseling-related research. It has, however, received attention in noncounseling related articles. Schmidt and Hore (1970)

were interested in relating nonverbal behaviors to social-economic status (SES). They hypothesized that mothers of high SES would be more verbal and less likely to use nonverbal communication when interacting with their five-year old children and that low SES mothers would be more expressive having less verbal skills. Glances, physical contact, and body inclination were the nonverbal behavior variables. In general, the hypothesis was not supported. However, the low SES group exhibited more physical contact; no difference was noted for the body inclination; and high SES mothers engaged in more glance behavior. The results did indicate that people who are verbally skilled did engage in more glancing behaviors.

In Chapter I, two studies (Strong, Taylor, Bratton, and Loper, 1971; LaCross, 1975) were reported showing the impact that high incidence of nonverbal behaviors affected judges' ratings as compared to low incidence on nonverbal behaviors. In the earlier study by Strong et al. (1971), student judges consistently gave more positive ratings to counselors displaying higher incidence of nonverbal behavior. Similarly, in the study by LaCrosse (1975) college students rated the more nonverbally active counselors as more persuasive and attractive.

The activity dimension was not supported in two other counseling related studies. Hill and Gormally (1977) researched the effect of counselor verbal behaviors (probes, restatements, and reflections) and nonverbal behaviors (head nods and smiles) upon clients' discussions of their feelings. While probes did result in more feeling discussions by clients, neither nonverbal behavior did. Likewise, Smith-Hanen (1977) also found that the general nonverbal category of movement did not impact the subjects' rating of counselors' empathy and warmth.

Island's (1966) doctoral dissertation classified counselor nonverbal behaviors into 17 categories, and related each of the behaviors to counselor effectiveness ratings. Reporting results significant beyond the .01 level, high rated counselors were found to display more arm movements, talking and talk shifts, head support shifts, body shifts, and gestures. Low rated counselors displayed more head support, nods, smiling, and head movements. In terms of the still-active variable, the results seem to be mixed.

Nonverbal behavior has been widely reputed to be the modality through which relationships are communicated (Ekman and Friesen, 1968; Loffler, 1970; Galloway, 1971b). Thus, the nonverbal communication interaction between a client and counselor has special importance. Nonverbal research and information have not been stressed in counselor publications and preparation until relatively recently. Harman (1971, p. 189) reviewed "some major textbooks in counseling theory" and found "little or no mention of nonverbal communication in the counseling process." He goes on to state that since likings, feelings, and preferences are communicated nonverbally, counselors would benefit from more training and information in nonverbal process of communication. In addition, Harman points out that the counselor's nonverbal behavior will have "psychological meaning" to the client. In another literature review covering the area of rehabilitation counseling, Brown and Parks (1972, p. 183) write in summary that "most rehabilitative counselors have a greater sensitivity to the verbal aspects of their own and of their client's communication processes." They further assess that some nonverbal behaviors are related directly to the counseling relationship, that these behaviors can be identified, and that this recognition will

facilitate an awareness of attitudes expressed nonverbally during the counseling process.

#### Nonverbal Communication in Counseling

The paucity of literature concerning nonverbal communication and therapy is hard to understand in light of the beginning of the history of this literature. Mahl (1968) began his article reporting the results of several research projects dealing with nonverbal behavior in interviews by citing a "research neglect" in psychotherapy literature. In recounting a historical perspective for this research, he cites Darwin as being the impetus of research in this direction. Mahl then cites the contradiction of Freud and also notes Freud's debt to Darwin. Freud proposed that unconscious material may be manifested in behavior, thus providing a link between internal and external experiences. Mahl postulates that Freud did not pursue this important and far-reaching discovery because of his preoccupation with and emphasis upon the unconscious. Reich (1949) did maintain a connection in his writings and nonverbal behavior. Reich's concept of body armor is grounded in the premise that one's movement was communicative of one's defense mechanisms. In other words, walking, breathing, gesturing, were all indicative of inner processes.

The psychoanalytic tradition started by Freud has persisted. Mahl exemplified this line of research. In 1968, Mahl reported the findings of three research projects accompanied by psychoanalytic observations and interpretations. The first of these studies concerned focusing on the patient in several interviews without the reproduction of sound. Mahl interpreted the patient's nonverbal behavior from a psychoanalytic

frame of reference. In particular, Mahl was interested in whether he would be able to determine changes in psychic functioning with therapeutic interventions, by the comparison of an admission film with a discharge film. Differences were found. The second research project was concerned with the nonverbal differences among patients. Mahl notes the differences and ascribes the differences to internal, psychoanalytic phenomena (e.g., "unconscious fantasies"). The third and final experiment in this publication involves students being interviewed, both face-to-face and back-to-back. In the latter situation, subjects exhibited more gestures. Mahl concludes this informative and intellectual article with a detailed, step-by-step interpretation of one case history. Detailed psychoanalytic interpretations are given.

Perhaps the most traditionally analytically oriented of the contemporary psychoanalytic researchers in nonverbal communication is Felix Deutsch. An exemplary publication is "Analytic Posturology" (Deutsch, 1952). The subjects of this publication are patients who have been in analysis for several months or years. The thrust of the article is Deutsch's depth psychological interpretations of the patients' nonverbal behaviors (e.g., feet pointed in means resistance). Deutsch offers a summary of his principles of interpretations in a 1966 publication. Although psychoanalytically oriented, Allen Dittman's publications show an ability to transcend the traditional psychoanalytic mold. Dittman (1962) found, for example, that foot movements and identified mood of a patient positively correlated. One interesting correlation in this study was that foot and head movements were correlated to anger, but hand movements were not. In a follow-up study, Dittman (1963) found no relationship between foot movements and speech disturbances.

Medicine has influenced nonverbal research in ways other than psychoanalytic. EMG recordings and heart measures were used to record stress in 12 psychiatric interviews (Sainsbury, 1955). An increase in gestures and heart rate were noted when the patient dealt with stressful topics. In an earlier, similar experiment by Sainsbury and Gibson (1954), corresponding measurements displayed high correlations between neurotic patients' reports of pain areas and an EMG recording of muscle tension in the same area.

The development of rapport in counseling is an important function of the therapeutic process. Rapport is also important in the teaching-learning paradigm, particularly as it relates to student attitudes toward the teacher. Nonverbal behavior offers a unique way of measuring this concept. Pope and Siegman (1962) reported the results of a descriptive study showing that therapist's paralanguage and patient paralanguage are positively related. Ten years later, Pope and Siegman (1972) demonstrate that a therapist's nonverbal behavior influences an interviewee's nonverbal behavior. This method of matching therapist's and patient's nonverbal behavior indicates that both may be structured so as to be congruent.

Synchrony is the term Condon and Ogston (1966) use to describe the movement of the body in tune with their vocalizations, as well as the movement of the listener. To support this concept of rapport, they note that they have found this same situation in 30 films, and that this quality is absent in films made of an aphasic and a schizophrenic. In a later article, Condon and Ogston (1967) used a frame-by-frame analysis of a film (the method used in their 1966 article) and found the body of a speaker to "dance" with his speech. A study published by Charny (1966)



reported similar results. Charny analyzed a film of a psychotherapy session, looking for "naturally occurring configurations of postures assumed by the patient and the therapist" (p. 305). These concurrent postures were classified as either congruent or noncongruent. Congruent postures accompanied verbalizations concerning positive statements, current states of being, references to self or others, and content referring to place and time. Noncongruent postures accompanied primarily self reference, unspecified place and time and place references, and negative self references. Charny concluded that congruent posture was indicative of relatedness and rapport. Fretz (1966) correlated postural movement in a counseling dyad with counselee perception of the relationship as measured by the Barrett-Lennare Relationship Inventory. Fretz found that some counselor and client nonverbal behavior was more associated with rapport variables. Fretz suggests that nonverbal communication may be a measure of the effectiveness of the counseling relationship. Confounding the results reported above, another 1966 study by Shapiro reports results that, at least in part, appear to be in opposition. Shapiro was looking for agreement between channels of communication in counseling interviews. He used audio-visual tapes, audio tapes, and typescripts of counseling sessions, and concluded that for certain judgments of feelings, auditory and visual channels may not agree. He also concluded that even though judges did not agree about the vocal and visual channels, the judges did respond to both channels in the audio-visual condition.

Selected research of nonverbal behavior in the behavioral sciences has been reviewed. Counseling was a major part of this review since the importance of rapport in therapy coincides with the importance of rapport

in teaching. Emotion was shown to be an important topic since high non-verbal activity seems to accompany more emotional content. By cause of the research tapes showing primarily the upper torso of the instructor, the face and its nonverbal communication was of principal importance. Also, the channels concept of nonverbal communication was reviewed in light of its impact of the still, active concept of the current study. Likewise, vocal nonverbal communication is important to this study since in this study's still condition, vocal communication is the primary mode. Mehrabian's studies were important since they relate to ascribed roles and status, much as are imputed to student and teacher. And finally, the Natural History proponents, Birdwhistell and Schefflen, were reviewed in depth because they looked at the nonverbal communication in toto, as subjects in this study does.

What then is the state of research in nonverbal behavior in the behavioral sciences? Gladstein (1974) reviewed counseling/psychotherapy sources of NVC (Nonverbal Communication) both published and unpublished from 1947 through 1973. He surmised that the complexity and confusion that characterized nonverbal research stems from:

. . . (1) various researchers, theorists, and reviewers looked at different aspects of NVC; (2) different research models and methods were used; and, (3) different populations (both helpers and helpees) were studied (p. 35).

Dunning (1971) pointed out:

Reviewing the literature on nonverbal communication is difficult since no general theory exists into which the various concepts which have been studied may be fitted. The pattern still needs to be found (p. 255).

Galloway (1971b, p. 313) stated that a major hinderance in nonverbal research is that: "Measurable units of behavior are not readily available to researchers and precise analytic methods have not been devised."

Finally, Weiner et al. (1972) indicate that much of the research in nonverbal communication has focused on decoding--the attribution of meaning (referent) to a particular nonverbal behavior. These authors critically argue that not all nonverbal behavior has communicative value, and that such research omits the importance of focusing upon the encoder's intent of communication (i.e., his internal experience).

One major contributor to the field, Galloway (1971b), surmised the conclusions of nonverbal research:

1. Nonverbal behavior can be viewed as a language of relationships.
2. . . . nonverbal behaviors are the primary vehicles for expressing emotions.
3. . . . nonverbal cues function as qualifiers in the form of metacommunicative messages that indicate how verbal statements ought to be understood.
4. . . . nonverbal behavior provides a leakage channel which is difficult to censor or control.
5. . . . certain sets of cues and responses are learned by teachers and students as part of their role-taking activities in the classroom (pp. 311-312).

Ekman and Friesen (1968) agree with four of Galloway's five assumptions, substituting the assumption that nonverbal behavior has a "symbolic value" for Galloway's classroom assumption.

The following review will be concerned with nonverbal behavior in the classroom, sex-based nonverbal behavior in the classroom, and sex-based nonverbal communication/behavior outside the classroom.

### Sex-Related and Classroom

#### Nonverbal Behavior

Since nonverbal communication is considered to be the modality through which relationships--including their emotionality--are communicated, and a primary factor of classroom roles, the classroom and the teaching-learning paradigm serve as a crucial situation within which

nonverbal communication takes place. Also of principal concern to classroom nonverbal communication is that of sex-based nonverbal communication. The following section will be reviewed: nonverbal communication in the classroom, sex-based nonverbal behavior in the classroom, and sex-based nonverbal behavior.

The major classroom teaching event is comprised of a message sent (encoding) and message received (decoding). Two studies, researched outside the classroom, underscore the importance of this event. The first study, by Julian (1977), concerned the impact of nonverbal communication upon credibility. Speech class students were asked to assess the credibility of a newscaster who either sneered or did not, and maintained eye contact with the camera or did not, during a news broadcast; also, the students were asked to rate the subject matter of the news presented by the newscaster. The results supported the newscaster's credibility when he maintained maximum eye contact, but his sneer, or lack of it, did not affect the student's message evaluation.

Conflict between nonverbal and verbal channels was the thrust of a research project of Bugenthal et al. (1971). Videotapes of parent-child communications were made and analyzed for congruent and non-congruent messages. Two-thirds of the families studied had disturbed children, and the remainder had reported no family problems. Parental messages were judged for nonverbal visual content, vocal nonverbal content, and verbal content (the words evaluated from typescripts). Mothers produced more channel conflicting messages in the disturbed families, and sons in the disturbed families scored higher in aggressiveness in school.

A study which has profoundly impacted the educational process was conducted by Rosenthal and Jacobson (1968) combines the two major

emphases of the preceding studies: credibility and congruency. Prior to the start of school, teachers were told that certain randomly selected students were expected to "blossom" intellectually during that school year. These students did far better, and the authors presume that the students did so because the teachers expected them to perform up to their predicted blossoming. Rosenthal and Jacobson further assume that the teachers communicated their expectations nonverbally, and were credible enough that the students believed the teachers and performed accordingly. Also, the teachers' messages were congruent--they believed that the students would perform up to the teachers' expectations.

Pointing out that classroom communication is "essentially a communication event," Knapp (1971, p. 243) states that the emphasis in teacher education has been on verbal content at the expense of the body movement. And, writing about the subtle messages that teachers send, Knapp (p. 245) states: "It is interesting to speculate on the many conscious and unconscious ways in which teachers exhibit status cues when talking to students." Galloway (1971a) emphasizes Knapp's point about teachers' communication of status when he states that teachers' nonverbal behavior is essential in the formation of attitudes toward school by students. Galloway further alerts teachers to the possibility of artificiality using nonverbal communication as a technique. This becomes "the disparity between what a teacher is and what he pretends to be" (Galloway, 1971a, p. 230).

The teacher has, by far, received the most attention in the nonverbal classroom literature. A major underlying theme of this literature is how the teacher's nonverbal behavior impacts the student's learning. The classic example is the research done by Rosenthal and Jacobson (1968)

concerning how teacher expectancy affected pupil performance. A similar, although not as extensive, project was completed in 1974 by Chaikin et al. Subjects (undergraduates) were asked to tutor one of two confederates who were described to the subjects as either dull or bright. The interactions were videotaped and analyzed for subject's nonverbal behavior. A multivariate analysis indicated that subjects expecting a bright tutee engaged more in nonverbal behaviors communicating liking and approval: eye contact, forward lean, head nods, and smiles. Lyon (1977) attempted to correlate a teacher's nonverbal behavior with that teacher's ratings of pupils. Lyon found no relation with high rated pupils; however, low rated students did receive significantly more negative nonverbal behaviors.

Based on her experience of observing teachers in all levels of classrooms, Napell (1976) has abstracted six teacher behaviors which hinders student growth. She states: "At issue is the relationship between intent and actions: what teachers do and how they do it delivers more of an impact than what they say" (p. 79). An example of a "non-facilitating behavior" is "insufficient wait-time." This happens whenever a teacher does not allow enough time for students possessing a slower learning style to formulate an answer. Hennings (1976) simply says that teachers can increase their effectiveness by being aware of his nonverbal teaching style. This awareness of nonverbal teaching style is given importance by Koch (1971a) when he proposes that teachers are more skillful in verbal than nonverbal communication. Hodge (1971) devotes a whole article to teacher classroom management through eye contact.

Several authors have noted the lack of teacher understanding and skill in productive use of nonverbal behavior have suggested that training in the use of nonverbal communication be included in curriculums. For example, Schusler (1971, p. 283) states that "pupils are able to see, as well as hear," so nonverbal communication "is important enough that it should be included in teacher training" (p. 285). Schusler was writing about elementary teachers. Koch (1971b) proposes that individual schools could develop their own training program. Both Swick (1974) and Galloway (1968) offer suggestions as to how individual teachers can improve their teaching effectiveness through exercises designed to increase their awareness of nonverbal behavior. Still others (Stipetic, 1972; Drumheller, 1970) indicate ways in which teachers can include instruction in nonverbal communication for their students. French (1971) presents a model for developing and implementing a nonverbal communication in-service.

Concomitant with the recognition of the importance of nonverbal communication in the classroom is the development of nonverbal classification systems. Island's (1967) system was developed from research correlating counseling effectiveness with counselor nonverbal behavior. In 1969, Evans developed a system for codifying the verbal and nonverbal behavior of science teachers and correlated that data with measures of the teacher's personality. Evans reports no significant correlations to support his hypothesis that certain nonverbal behaviors and personality traits are related. Perhaps the most sophisticated of all the systems is Flanders' (1970) Interaction Analysis Categories. Flanders' system emphasized teacher-student interchanges, but was primarily verbal. One category out of 10 is indirectly concerned with nonverbal behavior--

category 10, "Silence." This was created to deal with periods of non-talking, when "communication cannot be understood by the observer" (Flanders, 1970, p. 34).

As reported in Chapter I, Galloway (1966) must be credited with the introduction of nonverbal measurement of classroom activity. A notable interactional analysis system was developed by Griffard (1971). His method was based on the natural history method of analyzing behavior, and the model includes both verbal and nonverbal behavior of students and teacher. Also, Victoria (1971) developed a typology designed to quantify gestural nonverbal behavior in the teaching/learning situation. These categories were accompanied by "qualities evoked by them" (Victoria, 1971, p. 302). These qualities were affective (i.e., disapproval). The Love-Roderick Nonverbal Categories was created to provide teachers with a tool by which they could bring unconscious nonverbal behaviors into their awareness (Love and Roderick, 1971). Hodge (1975) suggests that his system can be used for teacher evaluation. Finally, Linn (1976) developed an instrument for classifying teacher's nonverbal behaviors. This instrument is concerned with pairing nonverbal behavior with verbal behavior.

The bulk of research done on classroom nonverbal behavior has the teacher as the focus point. One way to utilize nonverbal behavior in assessing teacher effectiveness is to compare effective teachers' nonverbal behavior with that of teachers who are judged otherwise. A fruitful research project using this distinction was completed by Willett (1976). Willett compared the nonverbal activity level and specific nonverbal behaviors with teaching effectiveness. The teacher's students provided one measure of the teachers' nonverbal behavior. Significantly,



effective teachers were judged to have nonverbal behaviors which were more dominant and pleasant, and to have a more active motion than average teachers when engaging in teaching behavior. Credell's (1977) research demonstrates that superior rated teachers are able to identify more positive nonverbal behaviors of teachers who were otherwise not included in the study during actual classroom teaching than were average rated teachers. Thus, not only do more effective teachers engage in more positively rated nonverbal behaviors, but also are able to recognize more positive nonverbal communication in others.

Both Willett (1976) and Credell (1977) were using indirect means to attempt to associate teacher nonverbal behavior with a measure of teaching effectiveness. Dean (1976) attempts to find a relationship among teacher effectiveness, their self concepts, and nonverbal behaviors. Most of the findings were not significant, although effectiveness was related to some of the self-concept scores. Sewell (1973) sought to relate views of man's nature with verbal and nonverbal behavior congruency. Even though all teachers displayed congruent nonverbal and verbal behaviors, neither was related to their beliefs of mankind.

A nonexperimental paper by Johnson and Pancrazio (1973) explores how a teacher's nonverbal and verbal communications can impact student interactions and thinking. The authors suggest a classroom teacher to be cognizant of how his nonverbal behavior can affect a student's classroom performance. A study done by Woolfolk (1977) that presents somewhat disparate results, indicates that negative teacher nonverbal behavior led to significantly better student performance. This was true regardless of sex of student or teacher.

London (1976) used both black and white judges to respond to the nonverbal behavior of black and white teachers who were video taped while teaching a racially mixed class. The judges were similar in their judgments of the teachers' verbal behaviors, but were significantly in disagreement about the teachers' nonverbal communications and the disagreements demonstrated a racial difference in perception. Feldman (1976) concluded that judges could ascertain whether a teacher was dissembling or being truthful by nonverbal behavior.

Of perhaps greater importance to this study is the question of whether students can judge accurately the nonverbal communications of their teachers. Student perceptions of their teacher's nonverbal behaviors was the central theme of a study by Antonoplos (1978). He concluded that both students and teachers could gauge their interactions with accuracy and agreement. With counseling students, Delaney and Heimann (1966) concluded that a counselor's nonverbal behavior could accurately be ascertained and that students could be taught to do this through dynamic or experiential methods, although experiential methods got the better results.

Some researchers were concerned with student ratings of teacher qualities expressed nonverbally. For example, Clark (1976) asked students to rate teachers' nonverbal behavior as having either an encouraging or discouraging effect. The author reported differing effects statistically. However, support has been given by Gafner (1976) that students are able to identify teacher warmth primarily through nonverbal channels. Specific nonverbal behaviors (eye contact, proximity-tactility, and proximity) were measured by students for their impact on classroom achievement and climate (Williams, 1977). Williams found

statistical support that each nonverbal modality effected the perceptions of students' evaluation of classroom climate. Achievement was not likewise effected. Three other specific nonverbal behaviors (touching, invasion, and eye contact) were investigated by Fredrickson (1974). Sex differences among students were reported.

London's (1976) study was supported by research done by Crump (1974). Crump looked at the verbal and nonverbal behaviors of white and black teachers upon a racially mixed student population of adjudicated delinquents. Although the results were inconsistent, Crump concluded that teachers' nonverbal cues encourage interaction; that male and female teachers differed in their encouraging behavior toward same- and different-sexed students; and that the students believed the nonverbal encouraging behavior more than the verbal. The greater reported belief in teachers' nonverbal behavior supports the findings of Rosenthal and Jacobson (1968) which were reported previously.

Findings in the evaluation of teacher nonverbal communication are not always consistent. Fourth graders were asked to assess their teacher's nonverbal and verbal behavior (Woolfolk and Woolfolk, 1974). These researchers found that verbal, not nonverbal, was more instrumental in formulating student perceptions of the teacher. Further, the verbal channel had more impact on student's positive attitude toward the teacher than did the nonverbal. Galloway (1974) offered a critique of the Woolfolk's research and points out that teacher nonverbal negative behaviors, regardless of modality, affected student perceptions more than did positive behaviors. Further, importance of the labels placed upon that which is being measured is of prime importance (Woolfolk, Woolfolk, and Wilson, 1977). These authors showed identical video tapes

to students for their evaluations, giving different labels to the teacher process: "humanistic education" vs. "behavior modification." The teacher demonstrating the humanistic model was rated more favorably.

Again, looking at student ratings of teacher effectiveness, an article by Perry, Abrami, and Leventhal (1979) concludes that teacher nonverbal behavior contributes more to favorable perceptions than does verbal content or a lack of nonverbal behaviors coupled with an impactful verbal content. These researchers concluded that high expressiveness, regardless of meaningful content, contributed more to a positive lecture. Thus, the "activity" variable seems to be an important contributor to student perceptions of teachers.

#### Sex-Based Nonverbal Behavior

Regardless of classroom research or nonclassroom research, researchers have consistently found a difference in female and male nonverbal ability. While that is, perhaps, an elementary fact of life, Baird (1976) points out that it is only with the emergence of the women's movement has an interest been generated in studying behavioral sex differences. Baird concludes that sex-based communication differences are supported by research. Davis (1973) indicates that sex-based differences are learned, a process that begins at birth. She interprets these behaviors, primarily nonverbal cues, as a sexual identity confirmation. Henley (1976, 1977) reviewed the literature of sex-based nonverbal communication and concluded that nonverbal communication from both women and men confirms the feminine subordinate role across cultures.

That men and women differ nonverbally is obvious to the most casual observer, but just how has not been firmly established by published

research. In fact, Wiggers (1978) found no significant difference among male and female clients and male and female counselors in terms of non-verbal evaluations of affiliation and relaxation. Wiggers further concluded that either sexes' nonverbal communication does not vary with sex of the interactant. Correctly "reading" affective nonverbal cues was the focal point of Isenhardt's (1978) investigation. Although finding that decoding ability was related positively to gender with females possessing a lesser decoding ability, neither of these two variables were found to be related to submission and dominance communicated non-verbally. The author points out that most previous research has reported a greater decoding ability among females. Miller (1966) compared both encoding and decoding ability between males and females and found no significant differences. Also, these two abilities were not related significantly.

A review of the sex-based nonverbal literature reveals that most researched differences are almost incidental parts of research designs. Inferior and superior attitudes which are communicated nonverbally was the topic of the research done in Great Britain by Argyle, Salter, Nicholson, Williams, and Burgess (1970). This team found females to be more attuned to nonverbal cues than to verbal. Argyle (1972) simply explains that nonverbal behavior of either males or females varies by situational definition, other people involved, and roles (including sex roles) of others present.

Mehrabian (1968) has been a most prolific researcher of nonverbal communication--focusing on body posture, proxemics, and body orientation as they relate to attitudes. Sex has often been an independent variable in his studies and viewed only coincidentally. For example, while

indexing certain nonverbal behaviors of communicator's posture and relating these to addressee's liking or disliking of the communicator, he states that neither sex showed any significant relationship to liking. Mehrabian (1971b) found that females more than males were apt to display intimate nonverbal behavior when conversing with a same-sexed stranger. The relaxation, affiliation, and liking--as measured nonverbally--between unacquainted people was the major content of the study. A study by Mehrabian and Friar (1969) concluded that female encoders displayed less arm openness when addressing a higher status addressee. In another study in which sex differences were a secondary part of the study, Zaidel and Mehrabian (1969) state that males were more adept at communicating positive attitudes, and females, negative attitudes. The same study also indicated that facial nonverbal communication was more effective than mere vocal expressions in producing attitudes. Negative attitudes were more readily encoded than were positive. Glazner (1973), in a doctoral dissertation, simply stated that male and female decoders differed significantly in ability to rate nonverbal communication.

Other writers have explored nonverbal sex differences from a cultural point of view. "Face-ism" suggests that both men and women tend to think of men "in terms of their faces" and women "in terms of their bodies" (Archer, Kimes, and Barrios, 1978, p. 65). This conclusion was reached when the authors asked students to draw pictures of males and females, and in evaluating photographs of people in three major magazines and two newspapers. The distancing of dolls among five national groups indicated that female-female distancing was greater regardless of culture than male-male distancing (Little, 1968).

Baird (1976), Davis (1973), and Henley (1976, 1977) seem to be in agreement that much of what we do nonverbally is sex related. The other research cited indicates that men and women act differently in similar situations. Just how sex related nonverbal behavior impacts the teaching-learning paradigm will be explored in the following paragraphs.

The school is a primary institution for the transmission of sex-role behavior (Gropper, 1975). Gropper states that while teachers expect students to be behaved, they often have expectations that girls will be more easily managed. One may only recall the Rosenthal and Jacobson (1968) "Pygmalion" publication to understand the implication. In fact, McCune and Matthews (1975) state that teachers should realize how sex-role behaviors and attitudes are communicated. These authors further state that schools should investigate "casual relationships between sex differences in educational performance or outcome" (p. 300).

Research by Rekers and Amaro-Plotkin (1977) indicates that at least by the age of four nonverbal gestures were significantly different between girls and boys. This research finding seems in line with Davis (1973), as does Nelson (1977). Nelson studies over 400 elementary and junior high school students to ascertain developmental differences in the nonverbal category of prozemic behavior. The author also analyzes the behavior for sex differences and concluded that the sixth grade marks the time when same-sexed, dyadic organization of space differentiates males from females. Nelson did not find any significant difference in shoulder orientation of same and mixed sex dyads. Buck (1975) noted that by age four, encoding ability of both girls and boys was positively related to several nonverbal behaviors (e.g., activity level and aggressiveness) and negatively related to others (e.g., emotional inhibition

and shyness). Buck found, however, no significant relationship between sex and encoding.

Most of the sex related nonverbal classroom research has used elementary age school children and their teachers as subjects--even when the researcher looks at teacher nonverbal behavior as perceived by students. Norton (1974), using 6, 8, and 10 year olds, concludes that boys and girls view teachers' nonverbal behavior differently, and that age and race also account for differing student perceptions of teacher behavior. Cospers (1970) found that fifth and sixth grade gifted students and their teachers (four females) interacted differently according to the sex of the student. In particular, opposite sexed students displayed more responses than did same sexed students, and same sexed teachers were more restricting.

Student and teacher sex affects student imitation of the teacher's nonverbal behavior (Portuges and Feshback, 1972). Fourth grade girls and boys were the subjects in this research. Girls were more imitative than boys and both boys and girls were more likely to be imitative if the teacher was positive and if the students were classified as advantaged, as opposed to being classified as disadvantaged. An early study by Davidson and Lange (1960) found that among fourth, fifth, and sixth graders, girls were better able to identify their teachers' affect, and that perceived teacher affect positively correlated with student self perception.

The research cited above substantiates that teachers do impact their student nonverbally, and that this impact has differential effects when student and teacher sex is considered. Communication is usually two sided, and one would suspect that students also influence their teachers.



Four 11-year-old confederates were used by Bates (1976) to evaluate the effects of positive and negative student cues upon teacher evaluation. The adult teachers rated more positively those children who reacted to them with positive nonverbal behaviors.

The communication process is by nature one of influencing. People have impact upon us even when we decide that they will not, for that decision indicates the impact. Our nonverbal system of communicating is complex, partly unaware, and not surprisingly ingeniously capable of communicating even the most subtle nuances of meaning. A more complete understanding of the nonverbal process as it relates to teacher-learning transactions will contribute towards more effective classroom behaviors.

#### Summary

A selected review of human nonverbal behavior in the behavioral sciences was presented. Following that review, a review of nonverbal behavior in the classroom, sex-based nonverbal communication in the classroom, and sex-related nonverbal communication/behavior in nonclassroom settings was presented. In each review, specific attention was given to those studies and aspects of those studies which were germane to this study. This study will attempt to further expand the knowledge available and offer an additional framework within which nonverbal communication research can be applied in the classroom.

## CHAPTER III

### RESEARCH DESIGN

#### Introduction

The previous chapter has substantiated the importance of understanding the function of nonverbal communication as it relates to human interaction--especially that between instructor and student. This chapter will delineate the research design and methodology of this research project. Included in this chapter will be a description of the subjects participating in the study, an explanation of the video tapes used, the instrumentation, data collection, and its statistical analysis. The chapter will conclude with a summary.

#### Subjects

The subjects who participated in this study were graduate students at Oklahoma State University enrolled in master's degree level education classes. The data collection was completed during the week of October 11-17, 1979. The subject number totaled 38 females and 38 males. They volunteered to participate and were randomly assigned to one of four treatments to view and respond to one of four video tape presentations. Approval was obtained from the Department of Applied Behavioral Studies in the selection of subjects. The treatment of subjects conformed to that department's standards regarding human participation in research.

## Video Tapes

The video tapes were prepared using one female and one male presenter. They were designed to be 25 minutes in length. The four tapes consisted of a lecture from a prepared manuscript (Appendix B). Therefore, each of the two presenters was video taped in two conditions duplicating each other. In each tape, the presenter stood behind a podium. Consequently, the nonverbal behaviors exhibited in the active condition were limited to gestures of the hands and arms, facial movements, vocal tones, and trunk movements. In each of the nonactive tapes, the instructor grasped the podium continuously, eliminating any arm and hand gestures. Both the actor and actress rehearsed their presentations to further eliminate unconscious and unpreventable nonverbal behaviors. Across all four conditions, the lecture presentation was real in appearance and accurately represented a college class presentation.

The subject matter and wording of each tape was consistent and adhered verbatim to the Transcript of Stimulus Presentation. The content consisted of a discussion of the effects that differing parental types (e.g., autocratic and democratic) have on the development of their children's internal control. Much of the material was based on ideas of Julian Rotter (Rosenthal and Jacobson, 1968).

## Instrumentation

Immediately upon completion of the video tapes, the students were asked to complete two instruments. One was a multiple-choice questionnaire developed from the lecture transcript (Appendix C). The second instrument (Appendix A) measured the student's attitudes toward the lecturer.

The attitudinal instrument was derived from the Purdue Instructor Performance Indicator which was designed to evaluate the classroom conditions created by the teacher. The Purdue was modified and shortened by adopting only those items directly related to the current study. The final instrument, the Instructor Performance Indicator, consisted of 16 items including both positively and negatively couched possible descriptions of the lecturer. A frequency for nonverbal behaviors for both male and female presenters was determined to establish possible interaction effects. No significant difference in the frequency of occurrence was found. Therefore, it was determined that the tapes represented a valid and similar view for each sex. The instructions on the instrument directed the subjects to mark a data sheet either true, if the statement expressed their opinion about the lecturer, or false, if the statement did not agree with their opinion about the lecturer. The subjects had the option of leaving blank any item about which they had no opinion.

The multiple-choice test consisted of 25 items with four choices each. The subjects responded to these items on the same answer sheet. Prior to this study, a list of statements were generalized representing information conveyed in the lecture and stated objectives. These items were administered to three judges who had previously viewed the stimulus tape. Their responses indicated that the material on the test accurately represented the lecture content and that the instrument had content validity. Also prior to this study, the Kuder-Richardson Formula for estimating reliability of the attitude measure produced a mean reliability coefficient of .78 for the modified Instructor Performance Indicator.

### Data Collection

Student responses to the multiple-choice test and the Instructor Performance Indicator and the student's sex were the data for this study. The data were collected from each student after viewing one of the four video tapes and recorded by them on the OP-SCAN answer sheets.

For the multiple-choice test measuring student retention of the lecture content, the number of correct responses was totaled. Number designations were assigned to each student and their totaled number of correct responses was assigned to that number.

The responses on the Instructor Performance Indicator were treated similarly. They were divided into favorable and unfavorable categories. Items representing a no-response answer, or no opinion, were not included in the tabulations.

### Statistical Analysis

The response from both the Instructor Performance Indicator and the multiple-choice test were used to complete a three-dimensional factorial analysis of variance. Dependent variables in the study were the responses to the two instruments. Independent variables were instructor nonverbal behavior, sex of instructor, and sex of student.

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Introduction

This chapter will present the outcome of the statistical treatment of the data as specified in Chapter III. Each of the hypotheses listed in Chapter I will be restated accompanied by its results. The six hypotheses were analyzed by using the classical approach for the fixed effects modes (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975). The results of the ANOVA procedures are presented in Tables III and IV.

#### Results Related to Hypotheses

##### Hypothesis I

There is no significant difference in the overall cognitive performance of students who are subjected to an instructor who exhibits no intentional nonverbal behavior as compared to a group of students whose instructor accompanies the lecture with nonverbal behavior.

Reference Table I, the main effect of nonverbal behavior is not significant for the cognitive performance measure ( $F_{1,72} = 2.20$ ,  $p > .05$ ). Thus, Hypothesis I is not rejected. Therefore, it was concluded that the nonverbal behavior of the instructors did not effect the cognitive performance of their students.

TABLE I  
SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE:  
COGNITIVE PERFORMANCE MEASURE

Source	df	SS	MS	F	P
Movement (N)	1	36.264	36.264	2.200	.142
Sex of Presenter (S)	1	8.277	8.277	.502	.481
N x S	1	3.715	3.715	.225	.636
Within Cells Error	72	1186.988	16.486		
Total	75	1232.770			

### Hypothesis II

There is no significant difference in the overall attitudinal ratings of the instructor by students who are subjected to an instructor who exhibits no intentional nonverbal behavior as compared to a group of students whose teacher accompanies the lecture with nonverbal behavior.

Reference Table II, the main effect of nonverbal behavior is significant for the attitudinal measure ( $F_{1,72} = 18.36, p < .05$ ). Thus, Hypothesis II is rejected. Therefore, it is concluded that the instructor's nonverbal behavior did affect the students' attitudes toward that instructor. Specifically, the effect of nonverbal behavior on students' attitude can be seen in Table III. Students who viewed instructors who demonstrated active nonverbal behavior were more positive in their attitudinal ratings than were students who viewed instructors who demonstrated no intentional nonverbal behavior.

TABLE II  
 SUMMARY TABLE FOR THE ANALYSIS OF VARIANCE:  
 ATTITUDE MEASURE

Source	df	SS	MS	F	P
Movement (N)	1	179.097	179.097	18.316	.001
Sex of Presenter (S)	1	11.959	11.959	1.223	.272
N x S	1	1.108	1.108	.113	.737
Within Cells Error	72	704.024	9.778		
Total	75	890.032			

TABLE III  
 MEANS AND STANDARD DEVIATIONS BY SEX AND MOVEMENT  
 OF PRESENTER: ATTITUDE MEASURE

	Male			Female			Total		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
Active	21	8.19	3.42	18	9.22	3.66	39	8.67	3.52
Still	17	5.35	2.91	20	5.90	2.38	37	5.65	2.61
Total	38	6.92	3.47	38	7.47	3.45	76	7.20	3.44



### Hypothesis III

There is no significant difference in the overall cognitive performance of students who are subjected to a male or female instructor.

Reference Table I, the main effect of sex of instructor is not significant for the cognitive performance measure ( $F_{1,72} = .50, p > .05$ ). Thus, Hypothesis III is not rejected. Therefore, it is concluded that sex of instructor did not affect students' cognitive performance.

### Hypothesis IV

There is no significant difference in the overall attitudinal rating of students who are subjected to a male or female instructor.

Reference Table II, the main effect of sex of instructor is not significant for the attitudinal ratings of students ( $F_{1,72} = 1.22, p > .05$ ). Thus, Hypothesis IV is not rejected. Therefore, it is concluded that the main effects of sex of instructor did not affect attitudinal ratings of students.

### Hypothesis V

Nonverbal behavior and sex of instructor will not interact to produce significant differential scores on cognitive performance.

Reference Table I, the interaction effect of nonverbal behavior and sex of instructor is not significant for the cognitive performance measure ( $F_{1,72} = .225, p > .05$ ). Thus, Hypothesis V is not rejected. Therefore, it is concluded that the combined effect of sex of instructor and nonverbal behavior did not affect student cognitive performance.

### Hypothesis VI

Nonverbal behavior and sex of instructor will not interact to produce significant differential scores on attitudinal ratings by students.

Reference Table II, the interaction effect of nonverbal behavior and sex of instructor is not significant for the attitudinal measure ( $F_{1,72} = 2.25, p > .05$ ). Thus, Hypothesis VI is not rejected. Therefore, it is concluded that the combined effect of nonverbal behavior and sex of instructor did not affect student attitudes.

### Discussion of the Findings

That nonverbal behavior is a vital part of the total communication system was well documented in Chapter II. Although the somewhat confused picture of nonverbal communication research is due to several factors (Gladstein, 1974), Galloway (1971b) stated:

The deeper problem in research on nonverbal behavior is what is meant by meaning. . . . Nonverbal cues and body language are similar dependent on how and where they occur and how they are responded to, but the dependency is greater because there exists no dictionary of behavioral signs and signals for easy reference (p. 311).

As Tables I and IV bear out, cognitive performance was not significantly affected by any of the independent variables or interaction effects. Although sex of instructor was not significant at the .05 level, the probability of the obtained F approached significance ( $p = .142$ ). Thus, even though the observed difference was not reliable, the observed difference was in the same direction as the significant difference found for attitude (Table IV). It is possible that positive attitudes toward the instructor and cognitive performance are related

and that cognitive performance processes are secondary to that of attitude. It is also possible that the attitudinal measure was more sensitive to the treatment than the cognitive performance measure. With a larger sampling, or a more sensitive instrument, the effect might have become observable. Finally, cognitive performance was not affected, perhaps, because of the unique population. Graduate students in education may have carried information that was contained in the lecture stimulus into the experimental conditions.

TABLE IV  
MEANS AND STANDARD DEVIATIONS BY SEX AND MOVEMENT  
OF PRESENTER: COGNITIVE PERFORMANCE MEASURE

	Male			Female			Total		
	N	$\bar{X}$	SD	N	$\bar{X}$	SD	N	$\bar{X}$	SD
Active	21	18.71	3.54	18	18.94	2.94	39	18.82	3.24
Still	17	16.88	5.37	20	18.00	4.15	37	17.49	4.72
Total	38	17.89	4.48	38	18.45	3.61	76	18.17	4.05

Sex of instructor did not significantly effect that of either cognitive performance (Table III) or attitude (Table IV). In fact, the means for male instructor, still and active, and the means for female instructor, still and active, for both attitude and cognitive performance (Tables I and II) indicated that sex of instructor was not related to the other variables. The graduate students may have responded to them as persons and not as sexual beings.

That attitudes are affected by nonverbal movements is well born out by previous research (LaCrosse, 1975; Strong et al., 1971; Smith-Hanen, 1977). Nonverbal behavior is the means by which relationships and emotions are conveyed (Galloway, 1971b; Ekman and Friesen, 1968), and thus, it is no surprise that an active instructor evokes more positive attitudes than a still instructor. Teaching is, by and large, a movement oriented profession.

The reliability coefficients computed using the Kuder-Richardson Formula 20, were strong for both the cognitive instrument (ranging from .66 for the female active condition to .89 for the male still condition) and for the attitude measure (ranging from .71 for the female still condition to .88 for the female active condition). These strong coefficients indicate that acceptable reliabilities were obtained in each of the subgroups.

#### Summary

This chapter reported the results of the experiment in relation to the hypotheses presented in Chapter I. A straight two-way analysis of variance was used to analyze the data related to each hypothesis. Independent variables were nonverbal behavior and instructor sex. Dependent variables were the Instructor Performance Indicator and cognitive performance instrument reflecting the contents of the lecture. The analysis of variance reflected an effect of nonverbal movement on student attitudes. All other effects were nonsignificant. The Kuder-Richardson Formula 20, developed by Kuder and Richardson (1934), was utilized to obtain reliability coefficients. This chapter also presented a discussion of relevant findings.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The purposes of this investigation were as follows: to measure the effects of instructor sex and movement on students' cognitive performance and attitudes toward their instructor, and the combined effects of instructor sex and movement upon the same two independent variables. Six hypotheses listed in Chapter I were analyzed by a simple two-way analysis of variance. Reliability coefficients for both cognitive and performance, as marked on the Instructor Performance Indicator, and for the attitudinal measure were computed using the Kuder-Richardson Formula 20 and the procedure recommended by Kuder and Richardson (1934).

Graduate students attending educational courses at Oklahoma State University were the subjects. Each subject was randomly assigned to stations to view one of four video taped lectures. The lectures consisted of a male and a female instructor each giving a lecture with either no intentional nonverbal behavior or actively nonverbal. The no intentional nonverbal behavior condition consisted of no arm and hand movement and flat facial appearance and voice inflection and tone.

The results indicated that only active nonverbal behavior affected either of the independent variables--student attitudes. The other effects, including combined, were not significant. Instructor active

nonverbal behavior affected student attitudes at better than a .001 level of confidence.

### Conclusions

Analyzing the data obtained in this study indicated that a more nonverbally active teacher positively affects students' attitudes significantly; and that a more active nonverbal teacher affects student cognitive performance, although not significantly. The sex of the instructor did not show any affect upon either student performance or attitudes.

These results indicated the importance of teacher nonverbal behavior in eliciting favorable student attitudes. Students are more apt to like a teacher who is expressive, regardless of the teacher's sex.

These results also suggest that the sex of the instructor does not affect students' liking of the instructor nor their cognitive performances. Thus, sex of the instructor is not a factor in the students' responses on these two variables which are important in the teaching-learning paradigm.

These conclusions, although helpful for teachers at any educational level, should not be generalized beyond the scope of this study. The participants in this study, as well as others, are distinctive educationally, developmentally, and otherwise.

### Recommendations

The area of nonverbal behavior and communication, while widely researched, is vastly unorganized and ill-defined. The following recommendations are offered to further the understanding of this area:

1. Research in this area should be aimed at organizing the present findings into a cohesive theory of nonverbal behavior. Existing theories do not recognize all aspects of nonverbal behavior.

2. The area needs more sophisticated instruments for recording nonverbal communication, for labeling the actions, and for taking into account responding communications.

3. Training in nonverbal communication should be incorporated into teacher education curricula. The impact of nonverbal behavior upon decoders has been firmly established, and teachers can and should be educated in nonverbal communication as well as they are in verbal communication.

4. Future research should consider which nonverbal behaviors contribute to students' attitudes and performance. Specifically, some nonverbal behaviors may be found to positively affect attitude while others may be found to be detrimental to positive attitudes.

5. This study should be expanded to include other populations. A differential effect may be found for different age populations.

6. Extensions of the study should take into account the sex of the students. Teacher nonverbal behavior and sex may have a discernible effect upon male and female students.

7. Future studies should also consider the specific attitudes of students which are affected by instructor's nonverbal behaviors. Not only are attitudes toward the teacher important, but also attitudes toward learning, studying, the curriculum, etc.

8. Cognitive performance should be more precisely defined. Teacher nonverbal behavior could affect different levels of learning in a different way.

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APPENDIXES

APPENDIX A

INSTRUCTOR PERFORMANCE INDICATOR

## Instructor Performance Indicator

## Directions:

This rating scale consists of 16 statements concerning your attitudes toward the instructor you have just seen on video-tape. Please respond to each statement by darkening the TRUE space if it describes the instructor and FALSE if it does not. If you have no opinion, leave that space blank on the BACK of the I.B.M. card.

1. The instructor seems to be sincere.
2. The instructor does not speak well.
3. The instructor seems to be interested in the subject matter.
4. The instructor seems to have confidence in himself.
5. The instructor exhibits good use and command of the English language.
6. The instructor does not have a clear and pleasant voice.
7. The instructor cannot keep the attention of the class.
8. The instructor has a sense of humor.
9. The instructor has poor posture.
10. The instructor presents materials in a clear fashion.
11. The instructor stimulates students by raising interesting questions.
12. The instructor does not put ideas across logically or orderly.
13. The instructor is mechanical and monotonous.
14. The instructor presents subject matter forcefully.
15. The instructor presents himself as being well groomed.
16. I would like to have the person on video-tape as an instructor for a course sometime in the future.

APPENDIX B

TRANSCRIPT OF STIMULUS PRESENTATION

## Transcript of Stimulus Presentation

What we're going to be taking a look at this evening is a question that I am certain is of interest to all of us. A question that, like most important questions, has no definitive answers, but has been examined enough over the years that some insight into its dynamics has been provided by researchers. The question concerns itself with the different types of parents and the different affects they have on their children's behavior. In other words, how do parents treat their children, and how do the children respond to that treatment? One of the most frequently examined issues in the discussion of these so-called parental types is how certain patterns of control affect the development of children. So we'll first examine this issue of control. Now, one of the most frequent and convenient ways of examining the different ways parents handle their children is to simply categorize the control as either power-oriented or love-oriented.

In the power-oriented type control, the parents lay down the laws and swiftly punish the child who disobeys. This method of controlling behavior is considered by some to be what is known as "external" control of behavior. This means that the child is really a passive recipient of the rules that are controlling him. He has no input into what these rules are. They are formulated and "imposed" by others "external" to him and any digression from these rules is sometimes handled through verbal reprimand or physical punishment. There is no real effort made on the part of the parents to legitimize their power with reason. To explain to the child the importance of rules and make him understand that there is a reason behind the rules and that they are not just

capriciously exercising their power. Also, the power-oriented parents seldom reward their children for good behavior but rather expect it of them. When the child does something right, he is supposed to; so there is no reason for rewarding him. This particular attitude is not exclusively used by parents but is sometimes evidenced in the way schools handle children. I once experienced a Junior High School, for example, that like most schools, gave report cards with letter grades. Next to each grade on the report card was a number which stood for the way the teacher viewed the child's behavior in his or her class. There was a list of seven numbers that the teacher had to pick from and these numbers depicted such behavior as "talks a little in class," "talks a lot in class," "is out of his seat a lot," "doesn't do his homework," but not one of these numbers stood for any positive behavior of the child. Why? Because it was expected of him! One teacher expressed to me her frustration because she had some children who were not getting good grades for their work but yet had excellent attitudes, were cooperative and were trying hard. She had no numbers to pick! The only way the teacher was able to communicate this to the parents was to talk to them personally, which she did. But the point is, that the system provided no way of easily communicating these positive behaviors.

As a consequence of this power-oriented type system, the child does not learn to differentiate right from wrong, but rather learns which behaviors get punished and which behaviors he can get away with. The child learns to act appropriately only when someone is present who will punish him if he doesn't. This child who is controlled externally sizes up each situation to determine what he can get away with and what he can't. Picture, for example, what happens when a teacher who exclusively



employs external control is forced to leave the classroom for a minute. Spit-balls start flying, Jimmy starts teasing Johnny, and so on. Now picture what happens when this type teacher comes back to the class and finds everyone running around.

In the power-oriented system, when physical punishment is used, the attitude of the punisher is exemplified in this mother's response to the question: "How often do you spank your child?"

She answered:

Pretty often--it might be every time I turn around. Over the week-end he is the worst. I don't know if it's the fact that he is not in school or what, but over the week-end he gets unbearable. So maybe he'll have the living daylights whaled out of him and snap him out of it for a week, and then next week-end he just goes through the same process. Seems like every week he's got to get a hard whaling. I am not saying he's an angel for the week--you have to crack him all during the week, but not really have to turn him over and give him a really hard spanking . . .

In contrast to this type of control is the love-oriented type which may also be considered as a fostering of "internal control." In this system, the child is encouraged to be an "active participant" in those rules that are governing his behavior. It utilizes praise, warmth, and reasoning. Its major feature is its use of the child's sense of right and wrong to "induce" the appropriate behavior. The parents explain their rules, letting the child know there is a reason for what they want him to do or not to do. If the child does something wrong and is punished for it, he knows there is a reason for the punishment; even if he is too young to fully comprehend the reason. So, in this system, the child is internally "filtering" the reasons for the rules. Rewards for good behavior are plentiful; the idea being founded on the well established principle that a child is more likely to exhibit those behaviors

he's reinforced for. So when a child does something right he's praised for it. Since the child is usually accustomed to this warmth and affection, punishment that jeopardizes the usual pleasant relationship is hard to tolerate because at that moment it signifies to the child that his mother or father doesn't love him. If physical punishment is used, the whole atmosphere which surrounds the incident is different than that in the power-oriented system. The interruption of the free flow of love and affection is more unbearable than the physical pain itself. A graphic description of this type of situation was given by a mother, who said in answer to an interviewer's question, "How does he act when you spank him--does it seem to hurt his feelings or make him angry or what?" She said: "It hurts his feelings. I think Billy feels you don't love him then--that's how it affects him. He'll come back to you and say, 'I love you, Mummy'." Then the interviewer asked: "How do you react to this?" and the mother answered:

Oh, I give him a hug; I love him, too. I've told him and Jean if I get very cross and spank and say something cross to them that 'even though I'm very cross, I still love you.' I tell them to remember that when I'm cross.

From this perspective, then, spanking by a love-oriented parent is more severe--and consequently more effective--than spanking by a power-oriented parent.

It is interesting to speculate what type of far-reaching effects, if any, these different types of control may have on a person. For example, it is possible that the consequences of internal or external control may influence the way a person perceives his or her own ability to control his or her environment. Their ability to have a say in what happens to them. The idea of one researcher, Julian Rotter, may be appropriate here. He believes that the things that happen to a person

can be interpreted by that person in either one of two ways. A person learns to either feel he controls his own destiny or that something or someone else controls it for him. We all believe to some extent that the results of what we do are governed by force beyond our control. But the question is--to what degree. For example, how much control do you think you have over what grade you are going to get in this course? Do you feel that you have most control by the amount of hours you study, or the number of classes you attend, or do you feel that a lot of it is up to such things as the teacher you happened to have gotten, his type of tests, or whether you were lucky enough to study what he asks on the test. If a person believes in what Rotter also terms external control, he believes that even though certain things happen as a result of what he does, there are many unpredictable things, such as fate, luck or chance that also contribute heavily to what happens. We can all picture the fellow that "thanks his lucky stars" when something goes right--and believes it! The opposite type person, who Rotter says is one who believes in internal control, perceives the results of his behavior as largely stemming from his own actions "I caused it." This person sees a direct relationship between what he does and what happens as a consequence. Now, whether or not a person believes in internal or external control of his behavior plays an important part in how quickly a person learns. Rotter argues that when a person performs a particular act, if he believes in internal control, there will be a tighter link between what he does and what happened to him. In other words, "the more this person sees himself as the cause of the results, the more likely he is to learn from the experience." Let's stop here for a minute, and try to better understand that.

The question is, why does a person who believes he is the cause of what happens learn better? Suppose a man is looking for an unusual brand of tobacco and after trying many different stores he finally finds his special brand at this one particular store. The probability is that when he wants that brand of tobacco again he will have learned to go right to that particular store. In this case, the man performed an act, and was rewarded for it, by getting what he wanted and learned from the experience because he felt he caused what happened. Now let's take a look at a fellow who needs \$5.00. As he is walking down the street, he finds \$5.00 lying in the street. The probability is that the next time he needs \$5.00 he won't go back to that same spot in the street. He hasn't learned from his past experience. Why? Because he felt it was luck that he found it the first time and that he had little control over what happened. Now we all recognize that in the second instance it was pure luck that he found the money. No one would dispute that. But look what affect it had on learning. Now suppose the issue wasn't so cut and dried. Rotter maintains that two people experiencing the same situation may perceive differently how much control they have over that situation. In that case, the one who feels he has more control over the situation will learn better from the experience as was shown by the example.

Now let's get back to our original idea of love-oriented versus power-oriented. One wonders if a child who is raised in a power-oriented type situation will learn to feel that he is not in control over what happens, what Rotter termed as an external person, while someone who is raised in a love-oriented situation learns to feel he is in control. Rotter's internal person. Some research points to the fact that this may be the case.

Now let's take a look at some other research that's been done with the power-oriented versus love-oriented classification. In certain studies it has been found that external type control, in which both parents have been consistently punitive in the early years of the child's life, has resulted in a reduced tendency to cheat and in a reduced crime rate. However, such research has failed to assess the possible by-products of the control employed. Is the good child simply a subdued child? Is obedience won at the expense of lost initiative and self-respect? In the vast bulk of research, power-oriented control fares poorly. It's been found to produce blends of dependency, resentment, and submission. It has also been shown to breed rebellion and displaced aggression. In power-oriented situations, boys are likely to fight back while girls tend to succumb. If a girl does strike back, it sometimes shows itself in the form of sexual promiscuity which is her way of getting back at her parents. Some negative findings have also been reported on love-oriented control. It has been shown, for example, that too much fostering of internal control may lead to excessive feelings of guilt by the child for his bad behavior. There is also evidence to indicate that the love-oriented type control develops an inordinate need for affection from the parents which may result in dependency. So what we have reported in the literature, then, is indications that both extremes may create dependency. The power-oriented parent does it by stifling any gestures of independence while the love-oriented parent creates an insatiable need to please which results in the child doing what the parent wants at the expense of his learning to make his own decisions about what is best for him. This concept of dependency versus independence has created much interest over the past few years. Establishing

true independence from parents is seldom a simple matter because motivation and rewards for both independence as well as continued dependence are both likely to be strong; thus leading to conflict and vacillating behavior. However, the degree of difficulty encountered in establishing independence depends in a large measure on two things: (1) how the culture treats independence and (2) the different child-rearing practices of the parents. To be consistent with the main type of this discussion we will not consider the cultural factor but rather restrict our investigation to the different ways parents foster independence. In an effort to better understand these different types of parents we're going to have to define them more specifically than the power versus love oriented dichotomy we have used up to this point. One researcher who has done much work in this area with adolescents is Glen Elder. He has defined seven different parental variations in child-rearing techniques that range from complete parental domination, to complete self-direction. At the complete control extreme he defines the autocratic parent. This type of parent provides no allowance for the adolescent's expression concerning matters of self-government. There is no tolerance for the assertion of leadership or initiative. This is the type of parent that would display an extreme amount of the external control I previously talked about. Next on the continuum, Elder defines the authoritarian parent. This type differs from the autocratic in that the adolescent is allowed to contribute to the solution of his problem but the final decisions are always made by the parents in accordance with their own judgement. The third type of parent Elder defines is the democratic parent. In this type, the child contributes freely to discussions of issues

relevant to his behavior and may even make his own decisions. However, in all instances the final decision is either formulated by the parents or meets their approval. The fourth type is the equalitarian which involves both the parents or adolescents to a similar degree in making decisions pertinent to the adolescent's behavior. So the difference here is that the parents don't always control the final decision. The fifth classification is the permissive type where the adolescent assumes a more active and influential position in decision making. This differs from the equalitarian type in the degree of participation. The next model Elder describes is the laissez-faire. Again, this differs in the degree of adolescent's involvement in decision making. In this type of relationship the youth has the option of either subscribing to or disregarding parental wishes. The seventh and final structure defined, Elder calls the ignoring type. This represents actual parental divorce-ment from directing the youth's behavior. So moving from the autocratic to the ignoring structure involves a gradual increase in the participation of the adolescent in self-direction. Let's take a look at a specific example and see how each parent and child may interact in solving the problem. Suppose a 15-year-old girl is going to her sophomore high school dance. The problem is that she wants to come home later than she usually does because she is double-dating with another couple and doesn't want to have to make them go home earlier on her account. With autocratic parents the decision would be made without consideration to the reason. If the parents felt it was not against the girl's best interests as they see it, to stay out later they would allow it but only after considering what they felt was best. The authoritarian parents

would consider the reason for the request but they would still be in total charge over the final decision. The democratic parents would probably allow the request but the youth still must ask to receive their sanction of what was really her decision. In the equalitarian permissive households this decision would be made by the adolescent who would consult with the parents to mull over the pros and cons. The same would hold true in the laissez-faire household but the youth probably wouldn't bother to even seek their advice unless something was bothering her that she needed help on. More likely she would probably just tell them what time she would be home. In the ignoring situation, the parent wouldn't even be told about the later hour and they probably would not care.

Elder used this classification system in a study of 7,400 adolescents who rated their parents behavior according to this scale. A number of interesting findings came out of this study. As might be expected, fathers were more likely to be rated as autocratic or authoritarian than mothers. This is consistent with findings from other studies that indicate that most adolescents tend to view their fathers as stricter and more aggressive and their mothers as more emotionally supportive and expressive of affection. Also, as one might anticipate, both mothers and fathers tended to treat older adolescents more permissively than younger ones. Parents in larger families tended to be slightly more autocratic or authoritarian than those in smaller families, even when social class was held constant. The adolescents that took part in the study were also asked their attitudes toward their parents. They were asked "Do you think your parents' ideas, rules, or principles about how you should behave are good and reasonable, or wrong and unreasonable?" The results showed that children exposed to democratic practices



considered their parents most fair with equalitarian parents ranking next. Autocratic parents ranked the lowest. These results are consistent with one of Elder's major contentions. He believes that communication between parents and children as in the democratic and equalitarian homes fosters what Freud called "identification." What this is, is a process by which an individual is led to think, feel and behave as though the characteristics of another person belonged to him. For example, a boy who identifies with his father may imitate the way his father talks or pretend he's reading a newspaper like Daddy. Consequently, communication helps foster internal control. A unilateral control of power without communication, as is found in the autocratic type, is more likely to produce resentment. But what also can be seen from these findings is a desire on the part of the youth for some type of structure which is found in both the democratic and equalitarian types. They tend to dislike the unstructure at the lower end of the continuum.

Another interesting finding from the study showed that more favorable ratings on fairness were given to authoritarian fathers, than to authoritarian mothers; in contrast, more favorable ratings were given to permissive mothers than to permissive fathers. This shows that a father, even though he makes the basic decision, will generally be considered fairer if he's willing to listen, but not if he lays down the law without listening. In other words, as we mentioned earlier, acceptance of parental dictates is greater if the parent makes some effort to "legitimize his power." Furthermore, being the law-giver is generally considered by adolescents as a more socially appropriate role for fathers than for mothers. In contrast, permissiveness is considered a somewhat

more appropriate role for mothers. The adolescents were also asked whether they ever thought that their parents made them feel unwanted. By far the largest percentage of adolescents who reported they felt unwanted were found among youths with autocratic or laissez-faire and ignoring parents. In conclusion, then, perhaps the best formula is this: control your child's environment so as to encourage good behavior, and reward it frequently. Bad behavior should be ignored if possible, and if not possible, reasonable punishment should be used. Rules should be explained with reasons for their necessity, with an increase of the child's participation in the making of these rules as he or she gets older.

APPENDIX C

MULTIPLE CHOICE INSTRUMENT

## Multiple Choice Instrument

Please answer the following questions by choosing the best stem for each multiple-choice item. Respond to all items by darkening the appropriate space on the FRONT of the I.B.M. card.

1. The question of different parental types:
  - A. has no definitive answers
  - B. has generated little research
  - C. has little to do with children
  - D. has specific and definite answers
  
2. Power-oriented parents:
  - A. develop internal control in their children
  - B. have paranoid complexes
  - C. develop external control in their children
  - D. always physically punish their children
  
3. Power-oriented parents:
  - A. over protect their children
  - B. rarely try to legitimize their power
  - C. always say "no"
  - D. always say "yes"
  
4. The children of power-oriented parents:
  - A. are always meek and mild
  - B. do not learn right from wrong
  - C. respect their parents for what they are doing
  - D. are usually better students in school
  
5. The love-oriented parental type:
  - A. develops external control in their children
  - B. develops internal control in their children
  - C. tends to be permissive
  - D. usually has a higher I.Q. score than other parental types
  
6. The major feature of love-oriented parents:
  - A. is the use of the child's sense of right and wrong to induce appropriate behavior
  - B. is hugging and kissing their children
  - C. is their own self-esteem
  - D. is their inability to say "no"
  
7. Praise, warmth and reasoning:
  - A. characterize the power-oriented parents
  - B. aren't significant modifiers of behavior
  - C. should be used sparingly
  - D. characterize the love-oriented parents

8. Children should know the reason for punishment:
  - A. so they won't develop unreasonable fears
  - B. so they will be good parents
  - C. so they can teach other children
  - D. so they will develop internal control
  
9. Physical pain:
  - A. is very effective in modifying behavior
  - B. is more bearable than the loss of affection and love
  - C. means little to children
  - D. is harder to give than to receive
  
10. The example of Billy and her mother illustrates:
  - A. the effectiveness of saying "no"
  - B. that spanking by a love-oriented parent is more effective than by a power-oriented parent
  - C. that spanking by a control-oriented parent is more effective than by a love-oriented parent
  - D. the concept of miscommunication
  
11. The way a person perceives his own ability to control his environment:
  - A. is a consequence of his childhood experiences with internal and external control
  - B. has very little to do with his childhood
  - C. is determined by luck or chance
  - D. is a consequence of physical punishment during childhood
  
12. Julian Rotter believes:
  - A. that the individual determines the source of control, to be inner directed or other controlled
  - B. that everything is controlled by FATE
  - C. to be inner or other controlled is determined by heredity
  - D. to spare the rod spoils the child
  
13. A person who believes in internal control:
  - A. is always confident
  - B. perceives the results of his behavior stemming from his own actions
  - C. never listens to advice from others
  - D. sees himself as self-actualized
  
14. How quickly a person learns:
  - A. is determined by test grades
  - B. is determined by the connection he makes between his behavior and reinforcement
  - C. is determined by luck
  - D. is determined by the teacher
  
15. A person raised to reason with internal control:
  - A. feels that he is in control of what happens to him
  - B. believes in luck and chance
  - C. never makes errors
  - D. raises his children the same way

16. In some studies, external type discipline:
  - A. was found to be associated with reduced cheating
  - B. was always found to be negative
  - C. was found to be associated with physical punishment
  - D. was always found to be positive
  
17. In most studies, power-oriented control was found to be:
  - A. associated with rebellion and displaced aggression
  - B. associated with producing smarter children
  - C. better than love-oriented control
  - D. neutral
  
18. In power-oriented situations:
  - A. girls are more likely to fight back
  - B. girls are more likely to rebel
  - C. boys will succumb
  - D. girls are more likely to succumb
  
19. When girls do strike back, it usually involves:
  - A. doing poorly in school
  - B. sexual promiscuity
  - C. physical anger
  - D. conflict with the mother
  
20. Too much fostering of internal control may lead to:
  - A. excessive self-reliance
  - B. excessive guilt
  - C. excessive behavioral problems
  - D. excessive physical punishment
  
21. Generally, the research literature states:
  - A. both extreme types of discipline create dependency
  - B. that severe punishment results in greatest behavior change
  - C. power-oriented control works best
  - D. love-oriented control works best
  
22. Glen Elder's studies:
  - A. involved grade school children
  - B. adolescents
  - C. graduate students
  - D. infants
  
23. The autocratic parent:
  - A. allows the child to make his own decisions
  - B. provides no allowance for the child to make decisions
  - C. is ambivalent toward the child
  - D. gives the child free expression
  
24. The democratic parent:
  - A. allows the child to make his own decisions
  - B. tells the child what to do
  - C. does not care what the child does
  - D. allows the child to do anything

25. In general, Elder's study pointed at the necessity for parents:
- A. to love their children
  - B. to legitimize their power
  - C. to avoid discipline
  - D. to avoid control

VITA<sup>2</sup>

Dale Norman Sinclair

Candidate for the Degree of

Doctor of Education

**Thesis:** AN EXPLORATION OF SEX-BASED NONVERBAL INSTRUCTION

**Major Field:** Student Personnel and Guidance

**Biographical:**

**Personal Data:** Born in Waco, Texas, June 6, 1944, the son of Jim Houston and Minnie Hazel Sinclair.

**Education:** Attended public schools in Waco, Hillsboro, and Clifton, Texas; graduated from Clifton High School in 1962; attended Tyler Junior College, Tyler, Texas, and The University of Texas at Austin, Austin, Texas; received the Bachelor of Arts degree in Psychology from the University of Texas at Austin, 1967; attended East Texas State University, Commerce, Texas; received the Master of Science degree in Student Personnel and Guidance from East Texas State University in 1968; completed requirements for the Doctor of Education degree at Oklahoma State University in December, 1979.

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