NONVERBAL COMMUNICATION:
RACE, GENDER, SOCIAL CLASS, WORLD VIEW AND
THE PONS TEST; IMPLICATIONS FOR THE THERAPEUTIC DYAD

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

DeVon Renard Stokes, B.A., M.A.

* * * *

The Ohio State University
1983

Reading Committee: Approved By

W. Bruce Walsh, Chairman
Charles M. Galloway
Linda J. Myers
Andrew I. Schwebel

Adviser
Department of Psychology
To my family and Raymond A. Winbush
ACKNOWLEDGEMENTS

I would like to express my appreciation to Dr. Charles M. Galloway for sharing his insight and knowledge in nonverbal communication. I am grateful to Dr. Linda J. Myers for her wisdom and guidance throughout my graduate experience. I would like to thank Dr. Andrew I. Schwebel for giving me the freedom to "express myself," and for encouraging me to maximize my research potential. Dr. W. Bruce Walsh, I am deeply thankful for his understanding of the process as well as the content and for supporting me in creating new channels of learning.

I am grateful to Dr. Frank W. Hale and the Office of Academic Affairs, Herbert A. Toops Committee and the Department of Psychology, and Dr. James M. Jones and the American Psychological Association for their financial support in making this dissertation possible.
VITA

January 25, 1956
Born - San Diego, California

EDUCATION:

1983 The Ohio State University, Columbus, Ohio. Doctorate of Philosophy, Clinical Psychology, expected December 1983. Chairman: W. Bruce Walsh.

1981 The Ohio State University, Columbus, Ohio. Master of Arts, Clinical Psychology. Chairman: Andrew I. Schwebel.


SUPPLEMENTARY GRADUATE STUDIES SPONSORED THROUGH VARIOUS SCHOLARSHIPS:


1981 University of Michigan, Religion and Psychology, Summer. Professor: Richard Mann.

1981 Oxford University, Nonverbal Communication, Spring. Research Official: Peter Collett


TEACHING AND RESEARCH EXPERIENCE:

1980-1983 The Ohio State University, Columbus, Ohio.
Teaching Associate.

1979 Jan Kiecolt, Ph.D., Department of Psychiatry, The Ohio State University, Columbus, Ohio.
Research Assistant.

1978 Gwen Gilbert, Ph.D., Director of the Center for Change and Leadership, Columbus Urban League, Columbus, Ohio. Research Assistant.

1977-1978 Linda J. Myers, Ph.D., Director of the Human Service Program, Institute for Black Community Research and Development, Columbus, Ohio. Research Assistant.

1976-1977 Raymond A. Winbush, Ph.D., Chairman, Department of Behavioral Sciences, Oakwood College, Huntsville, Alabama. Reader/Teaching Assistant.

CLINICAL EXPERIENCE:

1983–present Irvine Counseling Center, Irvine, California.
Pre-doctoral internship (APA accredited).

1983 Columbus Area Mental Health Center, Columbus, Ohio. Emergency Services Counselor.

1982–1983 Southeast Community Mental Health Center, Columbus, Ohio. Emergency Services Counselor.


1981–1982 Linda J. Myers, Ph.D., The Ohio State University, Columbus, Ohio. Individual Counseling Practicum.


1979 Jo Murray, Ph.D., The Ohio State University, Columbus, Ohio. Clinical Practicum.
HONORS:

1983 Outstanding Academic Achievement, The Ohio State University.
1983 Herbert A. Toops Dissertation Research Award, OSU Psychology.
1982 Recommended for Fulbright-Hayes Award to Oxford University by OSU.
1982 Outstanding Student Achievement, San Diego, California.
1982 Outstanding Academic Performance, The Ohio State University.
1982 Nominated for The Ohio State University Service Award.
1982 CIC Traveling Scholar to the University of Chicago.
1982 Academic Scholarship, American Psychological Association.
1981 CIC Traveling Scholar to the University of Michigan.
1981 The Ohio State University Graduate School Leadership Award.
1981 Tuition Scholarship to Oxford University by its Department of Experimental Psychology.
1980 Outstanding Student Accomplishments, San Diego, California.

1977–1979 Fellow, The Ohio State University Clinical Psychology.

Psi Chi National Honorary Society.

PUBLICATIONS:


PRESENTATIONS:

August 9-14, 1983

May 24, 1983

Nonverbal Communication and the Developmentally Disabled. Paper presented at The Ohio State University, Department of Psychology, Columbus, Ohio.

May 23, 1983

Nonverbal Communication and Channel Perception: Their Relationship to an Afrocentric Paradigm. Paper presented at The Ohio State University Nigerian Education Program, Columbus, Ohio.

March 14, 1983


August 1980

Participant, the V Annual Conference on Empirical Research in Black Psychology, The Institute for Urban Affairs and Research, Howard University, Washington, D.C.

July 1979


January 7-9, 1979

Stress vs. Identity Among Black Males. Paper presented at the IV Annual Conference on Empirical Research in Black Psychology, University of California at San Diego (UCSD), La Jolla, California.

January 28, 1978

GRANTS:

1983a   The Ohio State University
1983b   The Ohio State University
1982a   The Ohio State University
1982b   The Ohio State University
1982    American Psychological Association
1981    American Psychological Association
1981    The Ohio State University
1980    The Ohio State University
1978    The Association of Black Psychologists
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CHAPTER 1

INTRODUCTION

"Is there a signalling code—a language without words—common to all men?" This question has often been debated and contradictory statements have been recorded in scientific literature. As long ago as the 19th century Charles Darwin in his book, "The Expression of the Emotions in Man and Animals," expressed his belief that there were certain similarities in the expressive behavior of people, regardless of their cultural backgrounds. He was convinced that these similarities were innate. He felt that the innate expressive system (emotions) was an important component of both human and animal behavior (Weitz, 1979). Further, drawing on the anatomical (Bell, 1844) and physiological (Duchenne, 1862) data available to him, he hypothesized that emotions could be detected and differentiated universally by muscle patterns (expressions) in the face. Since that time, much attention and enthusiasm has been given to this aspect and other characteristics of nonverbal communication. Researchers in nonverbal communication have traditionally asked themselves: Are gestures and emotions innate and universal? Do men and
women respond the same to cues of nonverbal behavior? Can observers make accurate inferences about emotion? Can observers detect clinical (therapeutic) change or diagnosis? Do people from different cultures interpret nonverbal behavior differently? Are observers influenced by contextual knowledge in their judgments of the face? Do individuals attend more to the face than to the voice, etc. (Ekman & Friesen, 1976)?

As many investigators are aware, nonverbal communication remains far from well understood even though it plays a major role in human interaction and our daily lives. We are in the beginning stages of learning the effect nonverbal behavior has on other people, about individual differences between individuals in how they are able to interpret and relate nonverbal messages, and about the ways in which these differences have importance in their lives (Rosenthal, Hall, DiMatteo, Rogers & Archer, 1979).

One of the many reasons why our knowledge of nonverbal communication is so incomplete may be this society's strong verbal orientation. For example, educational institutions in this society teach adolescents that the appropriate use of words equals communication. Another subtle reason for our lack of education in nonverbal communication is that many of our nonverbal messages are so embedded in our daily lives and culture we are unaware of them. Further, when an opinion is formed about an interactant the interpretation is partly
based on a complex analysis of nonverbal information. When we assume a person to whom we have just been introduced is anxious, jealous or angry and ready to depart we not only determine such by what was actually said, but our conclusion may be based on the tone of voice, by observing the movements of the agitated individual, or by the impression that was formed by the frigid facial expression of the person (Hall, et al., 1977).

In the past, the investigation of nonverbal communication has had methodological problems (Darwin, 1872). Nonverbal communication has had to overcome problems in recording, coding, analyzing and reproducing. However, an increase in investigation in this area has been developing by the diffusion of film and videotape technology represented in this study.

Nonverbal communication research has been complicated by behaviors that have wide ranges and are, at least in some way, nonverbal. These nonverbal behaviors include hand gestures, body and eye movements, facial expressions, head nods, tones of voice and postures. Operationally, "channels" is the term used to describe these levels of nonverbal communication. Even in the simplest communication various channels are often involved. For example, if a person is reprimanding a child, simultaneously, we can observe displeasure in his voice, a frown in his facial expression, a warning
hand gesture, etc. However, there are instances where, instead of simultaneous channel involvement, we have only auditory cues such as in telephone conversations. Examples would be tones of voice, speech hesitations, accent, etc. In general, nonverbal interactions that involve the face have virtually a chorus of different nonverbal messages. Because nonverbal communication research is full of redundancy and complexity its study is complicated. The difficulty is determining what is being studied nonverbally, the cues that are most important and the variation of an individual's skill in giving and receiving the messages of nonverbal behavior (Rosenthal, et al., 1979).

The study of sending and judging nonverbal messages is not new. In the past, many efforts have been made to determine the accuracy of judging cues of nonverbal behavior. In a broad sense, research in nonverbal communication includes social intelligence (Walker & Foley, 1973), empathy (Campbell, Kagan, & Krathwohl, 1971), judging personality (Cline, 1964) and person perception (Taguiiri, 1969). Often, such decoding is intertwined with other behaviors and skills to an unknown extent. They include motivational states, wisdom in choosing one's social responses, knowledge of personal dispositions and the ability to judge situational or contextual cues. There is also a long history of study in decoding strictly nonverbal cues. Interestingly enough, decoding strictly nonverbal cues is one of the oldest research traditions in social psychology (Allport, 1924).
CHAPTER II

REVIEW OF LITERATURE

History of Nonverbal Communication

Today's work in nonverbal behavior has antecedents in philosophy, psychiatry (Ruesch, 1956), dance (Dickinson & Travis, 1977), psychology (Rosenthal, 1979), anthropology (Hall, 1959), linguistics (Birdwhistell, 1965), sociology (Altman, 1975), education (Galloway, 1977), speech (Kendon, 1972) and animal behavior (Sebeok, 1968). Many scientists (e.g., Knapp, 1978) believe that studies in nonverbal behavior have never been the province of any peculiar discipline. For instance, in the last half of the 1800's, Descartes attempted to identify and manage bodily expressions by codifying and giving a set of rules for "voice culture" and body gestures/movements. Yet, many believe that the person responsible for the enthusiasm, discussion and attention given to today's nonverbal research is Charles Darwin in his work, "The Expression of the Emotions in Man and Animals," published in 1872 (Ekman, 1973). Even though Darwin's work spawned the interests in present day research on facial expressions by validation of his work, some researchers
(Birdwhistell, 1965) do not accept his overall conclusion of the universality of nonverbal communication.

There are no universal gestures. As far as we know, there is no single facial expression, stance or body position which conveys the same meaning in all societies.

Few research efforts were made in nonverbal communication between the period of 1900 to 1950. Interests increased when the study of body types caught the attention of Kretschmer (1925) and Sheldon (1940). Efron's (1941) classic study gave way to creative ways of studying body language. He explained the important role culture played in developing our gestures. He influenced many of our nonverbal researchers today by formulating a theoretical framework for nonverbal behavior classification (Efron, 1972). Prior to these studies in nonverbal behavior little attention was given to voice, face, physical appearance and dress. Less attention was given to the study of environment, kinesics and proximics.

Research efforts in nonverbal behavior increased significantly in the 1950's. The first researchers to use nonverbal communication in their title was Ruesch and Kees (1956). This psychiatrist and photographer provided theoretical insights into the origins, usage and coding of nonverbal behavior. They also provided in their work extensive visual documentation for the environment's communicative role. The 1950's were also years in which
many anthropologists (Birdwhistell, 1952; Hall, 1959) became responsible for launching research programs in nonverbal communication. These men were also responsible for labeling studies of body movement (kinesics) and space (proxemics), and for utilizing the principles of linguistics in applying them to the phenomenon of nonverbal behavior. Trager's (1958) investigation of paralanguage greatly enhanced the study of vocal cues. One oft-cited study (Maslow & Mintz, 1956), referring to the environmental effects of a "beautiful" and "ugly" room played an important role in its influences on human communication. It wasn't until Frank's (1957) comprehensive study, suggesting testable hypotheses, that systematic research attempts on touching behavior became evident.

The 1960's exploded with research on specific areas of the body. For example, a wide range of studies on body activity was done by Dittman, Argyle, Kendon, Scheflen and Mehrabian. Extensive studies were done on eye behavior (Exline et al., 1961; 1965), vocal expressions of emotion (Davitz, 1964), pupil dilation (Hess, 1960), personal space and design (Sommer, 1969), and pauses and hesitations in spontaneous speech (Goldman-Eisler, 1968). During these years clinical psychologists outlined the impact nonverbal behavior had on the growth of students and experiments through teacher expectation and experimental bias (Rosenthal & Fode, 1963; Rosenthal, 1966; 1967; Rosenthal &
Jacobson, 1968). The classic research of the 1960's, distinguishing five areas of nonverbal investigation, was done by Ekman and Friesen (1969). Their theoretical article highlighted the origins, usage and coding of nonverbal behavior which, incidentally, composes a major part of their work today (i.e., emblems, illustrators, affect displays, regulators and adaptors).

The 1970's began with a best-seller called "Body Language" (Fass, 1970). This journalist's interpretation ranged from a relatively small number of researchers. In pursuit of simplification, readability and applicability for the American public, the host of books that followed this best-seller often misinterpreted research conclusions while trying to offer insight on how to obtain a gender partner, detect deception, assert dominance, salesmanship, etc. (Knapp, 1978).

The 1970's were also a period of synthesizing and summarizing. Research gave way to many attempts to bring about a cohesion in research program development with specific emphasis in a single volume. They include Birdwhistell's (1970) work in kinesics; Montagu's (1971) touching; Ekman, Friesen and Ellsworth's (1972) research on the human face; Mehrabian's (1972) study on the nonverbal meaning of immediacy cues, status and responsiveness; Scheflen's (1972) general systems theory in kinesic research; Hess'
(1975) investigation of pupillometrics; Cook's (1975) research on gazing; and Argyle's (1975) study of eye behavior and body movement.

Researchers continue to strive for specificity in their specialized areas. Specialization has grown in the 1980's (i.e., territoriality and environmental factors). Researchers interested in a given phenomena are studying through a combination of many nonverbal and verbal measures. Interest has risen in the methods used to test one's consciousness at receiving and sending cues of nonverbal behavior. Increasingly, scientists are involved in human ethology; that is, many who started their investigations with animals are now applying their hypotheses and methods to human behavior (Knapp, 1978).

Currently, researchers are curious about such questions as, what nonverbal behaviors have ancient roots in our history. Does a particular behavior have cultural or inherited components or both? How are these innate and learned factors influencing each other during infancy? It is interesting to note in passing that many researchers speculate that our prehistoric ancestors were developing their skills in verbal language post hoc while communicating nonverbally (Knapp, 1978).

Scientists have made important discoveries in phylogeny; primarily through investigative strategies of (1) sensory deprivation; (2) nonhuman primates; and (3) multicultural

Although researchers expect to find variations in nonverbal behavior with respect to culture, class and ethnic lines, many (e.g., Lack, 1940) believe cultural and biological influences overlap in specific and numerous ways. Further, there are "day to day" innate processes used later to communicate (i.e., breathing can be a sigh of relief or boredom; a hiccough can be an imitation of an intoxicated person's behavior; audible blowing through one's nose may assume to be a snort of scorn; coughing may be "ahem"; etc.) Researchers (e.g., Ekman, 1973) have even shown that facial expressions of emotion are inherited and also shared by different cultures.

While some argue, many researchers are convinced of the impact nonverbal communication has on every aspect of our lives (Pitcairn & Eibl-Eibesfeldt, 1976).

Body Movement and Gesture

The heart of nonverbal communication research lies in the study of body movement and gesture (Davis, 1972). Its investigation helps to clarify and give understanding to
the nature of human interaction, both verbally and nonverbally. This area of research has led to provocative formulations in the process of communication and of psychological functioning in relationship to the significance of body usages. Irrespective of better or worse, the public eye has focused directly on the applicability of body movement and gesture (Polhemus, 1978). Body movement and gesture are often termed, in the approach to signals of nonverbal behavior, "detective."

When studying the area of body movement and gesture the concept of meaning, itself, is a problem and has fostered major debates in the field. The two opposing viewpoints are the "structural" (or social—in its understanding of communicative structures) and the "clinical," which Duncan (1969) calls the "external variable" (or psychological—in its focus on personality traits).

**Structural Approach**

The structural approach has a holistic quality that combines verbal and nonverbal in relationship to communication itself. Without attaching any psychological meaning to any combination or single movement, it sees every movement as part of a greater whole. Thus, it is unlike the popular "body language" approach. The position of the structuralists has been actively encouraged by Birdwhistell (1970), Kendon (1976), Scheflen (1968; 1973) and Condon (1976).
Within the structural tradition Kendon (1976) is in the forefront of research. Kendon, rather than focusing on the person, focuses on the interaction as the unit of analysis. Kendon's (1972) work in synchrony demonstrates that "the flow of movement in the listener may be rhythmically coordinated with the speech and movements of the speaker," thus emphasizing that the unit of analysis is not only within individual interactants but by the interaction itself within the context of verbal and nonverbal inseparability. This phenomenon was first described by Condon and Ogston (1967) along with self-synchrony between speech patterns and individual movement.

Scheflen (1973), who worked with Birdwhistell for many years, developed a model of the nature of communication within the transaction of psychotherapy. This psychiatrist emphasized the sharing code of meaning among interactants and the patterning of the interaction. Scheflen's (1968) analysis of interaction is outlined in three steps:

First, you must agree on the frame of reference. Focus on the form of behavior, resisting the temptation at this stage to abstract qualities, as you do in a personality study. Refrain from making black-box inferences about the mental or physiological processes that mediate behavior.

Second, your observations must be first-hand and not obtained by directly or indirectly asking the subject; he cannot adequately tell you what he is doing. What he reports are feelings about behavior or idiosyncratic or cultural myths
about behavior. Such data are useful in making inferences or studying myth systems but not in determining behavioral patterns.

Third, you must not be satisfied to isolate bits of behavior and merely measure or count them. It is the relations of the elements or events, the configuration, the pattern we are after. (p. 44)

Condon (1976) is also a believer in the holistic quality of human communication. He states, "there is a genuine coherence among the things we perceive and think about, and...this coherence is not something we create but something we discover" (p. 285). In general, Condon's work promotes the idea that there are noticeable regularities in interaction, synchronies of verbalizations and movements, which point to a direct biological organization of behavior. He emphasizes a basic rhythm in human interactions. Condon (1976) states, "speaking and listening may both utilize the same rhythmic organizing processes of the brain" (p. 309). Entrainment is the word used for this process that he says begins early in life. Condon and Sander (1974) found that speech patterns in adults in the same room with neonates one to four days old (and as early as 20 minutes after birth, and may exist in utero) are synchronized with the neonate's body movements, irrespective of language. Condon suggests that entrainment may be a process so basic that if there is an error in its operation severe pathology may develop. Weitz (1979) comments on Condon's entrainment:
He (Condon) proposes a highly innovative theory of autism in which such dysfunctional children are seen as evidencing multiple responses to sound out of synchrony with the normal pattern of interaction. (Condon's) entrainment may provide the primary ground for interactional potential. Without its proper operation, the child may be unable to go further in the communicative process. It is commonly observed by those who work with autistic children that their inability to learn language may be a result of their not really knowing what to do with language; they do not seem to be able to communicate or want to. Such children often avoid eye contact, surely a primary channel for the synchronizing of interaction. Thus the linguistic deficit may be secondary to a more important primary communicative (entrainment?) deficit. (p. 92)

Byers (1976) and Kendon (1972) speak extensively about this rhythm component.

Last of the structuralists (structural approach) who will be discussed is Ray Birdwhistell, the father of this approach. In 1946 he became interested in body movement while conducting anthropological research among the Kutenai Indians of western Canada. Birdwhistell found that when the Indians spoke English as opposed to their native tongue, differences occurred in their patterns of nonverbal behavior (Davis, 1971).

His research has influenced, primarily, the areas and study of psychiatry and communications. He bitterly opposes the manipulation and isolation of variables chosen by some in the clinical approach.
Birdwhistell's methodological approach to nonverbal behavior is the conversation. He observes interactive behavior in naturalistic settings by detailed analysis of short film segments. Eighteen seconds of film time are taken to observe one of his famous clips of a woman having her cigarette lit by a man. The segment is called "The Cigarette Scene." Obviously, much longer time of analysis is needed to read the components of verbal and nonverbal behavior.

The descriptive linguistic model is the basis of Birdwhistell's method of analysis which he began to develop in 1952. Kinesics is the term coined by Birdwhistell to cover his approach and interests. Although this term is applied to Birdwhistell's structural perspective and tradition, it has been adopted to represent the field as a whole. Large units of body movements (i.e., lateral headsweeps and eyelid closure) are called kinemes. Combined kinemes form kinemorphs, kinemorphic classes, complex kinemorphs, then complex kinemorphic constructions. Cooke (1980), in his research on African-Americans, explains:

...kinesics...basically explores how man sees rather than how he hears... the gestures of giving and getting skin shall be considered as kinemes according to Birdwhistell's classification. They derive their meaning from the analysis of the entire range of components involved in a communicative act--sender, receiver, channel, code, setting, etc. The kinemes of
giving and getting skin can be combined with facial expressions to produce kinemorphs. The variations within each of the kinemes represent subtle, individual allocines of giving skin. (p. 140)

Along with his isolation of head, body, and facial kinemes, Birdwhistell has also been interested in the integration of the general communicative stream, including verbal behavior and kinesic behavior. The distinction, in fact, of the verbal and noverbal dichotomy, as Knapp (1972) reports: "studying nonverbal communication is like studying noncardiac physiology"; has no place in his system.

Birdwhistell supports the idea that there are many hazards to be encountered with attributing meanings to gestures. Lamb and Watson (1979) state: Gestures form a convention, or culture-based alphabet, which we use one way in private, yet another way within our own cultural group, and yet again in other ways with people different to ourselves, especially in situations outside our usual experience. Attempts to publish a gesture-alphabet, to say gesture X = this, whereas gesture Y = that, will always prove misleading unless the definitions cover a whole range of variables. We can begin to make allowance for these variables as soon as we begin to perceive gestures in relation to their context. Such a context is provided by the background, as it were, of the body, on which the gestures happen.

Although very little formal work has been done, gestures and its cultural distinctiveness have often been recognized (Davis, 1971; Efron, 1972). Edwards (1968) states:
Black people are communal by culture. They prepare communally. They dance, they play games communally. That slap on the hand you see Lew Alcindor (Kareem-Abdul Jabar) give Mike Warren, or vice versa, that means something to those brothers. It means something to the brothers in the stands. It means something to the brothers who are watching the TV sets. (p. 18)

Birdwhistell (1979) recognized the error he initially made by classifying, under a broad parakinesic description, an ethnically and linguistically tied behavior. Lamb and Watson (1979) describe a few gestures which are culturally distinct. For example, they emphasize the culturally conditioned kiss of the Russian—exemplifying and affectionate greeting, the Japanese bow—representing humility and the Indian placing the hands together in a gesture of prayer—representing a welcome of gentleness.

**Clinical Approach**

The clinical approach, in that it seeks to anchor body movement to an external referent (affect), is closer in spirit to the popular image of the field. Much of the research on facial expression has been used by this approach (i.e., Ekman & Friesman, 1969; Ekman, Friesman, & Ellsworth, 1972). An affective component is usually involved in the clinical approach to body movement, except for the work of Freedman (1972; 1977) in his work on the relationship between gesture and cognitive style. Other proponents of
the clinical approach are Schefflen (1973), Mahl (1968), Davis & Weitz (1978) and Schutzenberger & Geffroy (1979).

Few behavioral scientists are aware of the value nonverbal behavior played in the psychoanalytic interview.

At the turn of the century Freud (1905) revealed:

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

He convinced his students of the importance kinesics played in the clinical interaction.

(There is a) common belief that the gestures or expressive movements of a person are consistent with one another...This belief undoubtedly derives from an underlying conviction that all the mobile features of the body are avenues for the expression of personality. If personality is self-consistent, it is reasoned, its expressions must in turn be consistent among themselves. (Allport & Vernon, 1967, p. 173)

Wundt (1921; 1973) was first to advance the theory that body movement had an emotional referent to gesture. He argued that arising out of emotional states was the primitive form of language, namely gesture.
Gestures themselves are nothing more than movements of expression which have been given special qualities by the urge to communicate and to understand. (p. 73)

With respect to the clinical approach, Ekman and Friesen (1969; 1972) believe that hand gestures can be categorized in any one of a number of ways. In their system are three categories of behavior (i.e., emblems, illustrators, and adaptors). Emblems are the direct translation into a phrase or word; for example, various obscene gestures and the A-OK sign. Illustrators (speech accompaniments) serve to emphasize verbal output but without discrete meaning in and of themselves. Adaptors or hand and body movements are involved in the use of a physical object and/or oriented to the self (i.e., scratching). Dittmann (1972) and Freedman (1977) note the use of illustrators in their research (of) speech accompaniments. Freedman's (1977) body-focused gestures are essentially the same as adaptors, particularly self-adaptors. The use of emblems signify a concept of affect that could be conveyed through language because they are consciously used and are conventionalized movements. Because emblems are consciously used they provide the least amount of information concerning a client's psychological state or relationship to the other. Creider (1977) believes in an explicit nature of emblems while rejecting Birdwhistell's (1970) conclusion that explicit and invariable meanings
have no place in gestures. Creider argues that gestures are dependent on context. Bates (1975) notes that many hand gestures (emblems) represent superstitious and religious practices (e.g., crossing fingers to signify luck). Johnson, Ekman and Friesen (1975) argue that there are over 100 common emblems used by contemporary America (e.g., follow me, shame on you).

In quest of understanding the underlying personality dynamics of a person, body movements and hand gestures are extremely important (Weitz, 1979). The clinical approach proponents have been very active in using "nonverbal" as a separable domain of behavior. The approach is most characteristic in the research of facial expression, which generally assumes that affect is a result of all (or almost all) facial expressions. Research on facial expression, using the external variable tradition, is characteristically used by Duncan (1969). Ekman's (1965; Ekman & Friesen, 1968) investigations on nonverbal behavior have given insight and awareness to many psychotherapists and experimental social psychologists. Facial expression has been the latest focus of his (and associates') energies (Ekman, Friesen & Ellsworth, 1972; Ekman, 1973). Ekman and Friesen's (1969) work has been valuable for use in psychiatric interviewing. For example, they found in their work on body movement that even when a client tried to deceive an investigator, nonverbal materials
could be gathered to obtain information about a client's affective state. Both Mahl (1968) and Freud (1905) were instrumental in developing this nonverbal research application in psychoanalysis.

Ekman is concerned with interpreting (or decoding by others) the relationship of inner-feeling states to nonverbal behavior, and not the establishment of a grammar of body language as Birdwhistell suggests. He believes communication is a psychological problem vis-à-vis an emotional state. Weiner, et al. (1972) argue that communication of an emotional state is, by definition, nonverbal behavior. The research of Dittmann (1972) and Freedman (1977) further suggests that other functions are involved in body movement (e.g., an accompaniment to speech encoding). Interestingly, similar to Ekman's orientation, though identified with experimental social psychology, is Mehrabian's (1972) work, characterized by the manipulation of environmental, psychological and nonverbal variables.

In the clinical approach the central theme is that everyone has an "expressive style," which underlies certain personality dynamics and encompasses all categories of movement.

Complex, dynamically based ideations, seen in the therapeutic setting, are expressed in movements. This approach is different, however, to the simple "dictionary" approach
to gesture, which is that, regardless of the context or the individual, one movement always means one thing. Obviously, when decoding body movement in psychoanalytic interview, much information needs to be known about the client. Mahl (1968) argues that because temporal sequencing of movement and verbalization is sequential and not contiguous, a client's movements may represent an emotional reaction to something which happened previously during the interaction. Critical to movement patterns in therapy are the reactions to the analyst in the process of transference.

Loeb (1968) has psychoanalytically interpreted a recurrent clenched fist, representing an angry gesture in a client. Consistent with the Freudian scheme, Loeb argues that the client is not consciously aware of his emotion but the emotion will, through the body, "'leak' out." In this case, anger is an emotion repressed, as represented by the fist. Loeb discusses:

In our culture, the presentation of the thing, anger, and the presentation of the word, anger, are usually associatively connected, and together form the element of preconscious content, anger. When the presentation of the anger word loses its associative connection with the presentation of the thing, anger, and hence with the actual or potential feeling or affect, anger, the element of preconscious content, anger, is said to have become repressed...When the content anger is repressed, the mental presentation of fistlike movement, unlike the presentation of the word, does not lose its
associative connection with the then unconscious presentation of the thing, anger. Thus, under the influence of repression, the fate of the associative connections of the fistlike movement is different from the fate of the associative connections of the anger word. This difference in fate may be accounted for by the fact that the proprioceptive and visual fist presentation had from the first much less to do with the bringing of the thing presentation, anger, to consciousness than did the auditory anger word presentation...Because of these continued connections, an individual can use non-lexical elements of expression to reveal ideas to others of which he himself is not conscious. (Loeb, 1968, pp. 616-617)

One of the most recognized proponents of body-movement analysis in psychoanalysis is Kestenberg (1975). She has been interested in integrating the therapies of Labanotation (dance notation and conceptual scheme for understanding movement) and psychoanalysis for a deeper insight into the person. In her treatment of children, movement information is used as a diagnostic tool. "Body attitude" is an identification of expressive style which is associated with psychosexual development of the person (Kestenberg, 1965). Kestenberg (1965; 1971; 1975) argues that instinctual drives (oral, anal, phallic) are indicative of characteristic movement patterns, beginning in infancy. She believes that throughout childhood and adolescence, flow and shape patterns of movement develop; passage through the psychosexual stages are denoted and also highlight conflicts encompassing development (i.e., "anal body ego" reveals itself by resistance
and erectness in body movement and characterizes obsessive-
complusives). Kestenberg uses her Movement Profile to
picture the nature shape-flow and tension-flow in the per-
son's movements. Through her one-to-two hour observation
period her Profile reveals the body movement's general
quality. She organizes the morass of client movement using
the Laban-based categories of shape and effort (tension).

**Gestures and Culture**

Even though very little formal work has been completed
cultural distinctiveness of gestures has been recognized
(Efron, 1972). Creider (1977) has isolated nearly seventy
distinctive gestures in his research on East African gesture.
Weitz (1979) argues that the majority of these gestures are
not found anywhere else in the world. Cultural differences
in the characteristic modes of sitting and standing (posture)
have been noted (Hewes, 1955). Hewes believes that cultural
traits and habits are diffused to neighboring cultures.
Mehrabian (1972) has reported on postural orientation as
correlated with certain psychological states (i.e., persua-
siveness and liking). In psychiatric journals there are
also scattered reports of certain postures associated with
states of psychopathology (Weitz, 1979).

**Cultural Differences**

Historically, social scientists have been interested
in the interpretation of nonverbal expressions by various
cultures. As mentioned heretofore, Darwin (1872) was one
of the early researchers in the area. Darwin carefully described and was fascinated by physical movements in relationship to emotional expressions (i.e., muscle constriction around the eye during extreme stressful periods, crying or shouting) (Rosenthal, et al., 1979).

Darwin’s primary question with nonverbal communication was whether or not gestures and expressions were identified between cultures. His question represented a genetic or biological, as opposed to a social or cultural choice in nature with respect to explanations of gestures and expressions. In his attempt to answer this question he undertook what was the first questionnaire approach to nonverbal research. In his approach a list of sixteen questions were submitted to people living for a time in preliterate and non-Western cultures. Thirty-six responses were received (Rosenthal, et al., 1979).

The items in Darwin’s questionnaire reflected various nonverbal expressions and gestures based upon his detailed observations. He inquired of his participants to determine within the cultures they have worked whether or not the people had similar expressive and behavior patterns. Darwin asked his respondents not to rely on memory but, for the sixteen questions he listed, conduct fresh observations. For example, question 2 stated: "Does shame excite a blush when the color of the skin allows it to be visible? And especially how low down the body does the blush extend?"
Question 4 was similar: "When considering deeply on any subject, or trying to understand any puzzle, does he frown or wrinkle the skin beneath the lower eyelids?" (Darwin, 1872, p. 15).

Although many questions reflected Darwin's interest in the somatic and muscular changes that accompanied gesture expression and emotional state, he also questioned the degree an interpretation could be made about expressions in different cultures. Question 15 stated: "Can guilty, or sly, or jealous expressions be recognized? Though I know not how these can be defined"; and question 8 stated: "Can a dogged or obstinate expression be recognized, which is chiefly shown by the mouth being firmly closed, a lowering brow and a slight frown?" (Darwin, 1872, p. 16).

Darwin (1872, p. 359) exclaimed, "I have endeavored to show in considerable detail that all the chief expressions exhibited by man are the same throughout the world." He seemed to be convinced that there was a consistency between cultures in the form of gesture and expression. Based upon his sample, Darwin concluded that most forms of gesture and expressions were not characteristic of the cultures, but rather of the species. Darwin emphasized that the major human expressions are biological; however, aspects of expressive actions, he suggested, were culturally individualized (i.e., kissing, nodding and shaking the head). He
argued that interpretation of these expressions would not
be the same across cultures, given his conclusion that they
were not biological or universal.

There are many researchers today that find Darwin's
questions fascinating. Ekman (1972), Ekman, Friesen and
Ellsworth (1972), Ekman (1973) and Harrison, et al. (1972)
overview much of the nonverbal research since Darwin con-
cerning cultural differences and similarities in the ex-
pression of emotions. Ekman (1973), along with others
however, has suggested possible flaws in the classic work
of Darwin. One particular bias was the thirty-six sampled
by Darwin knew what particular muscle pattern he thought
was related to each emotion from the way the questions were
worded. For example, rather than asking, "What movements of
the face are there when a person is considering deeply on
any subject, or trying to understand any puzzle?" Darwin in
his question provided a suggested answer (i.e., "Does he
frown or wrinkle the skin beneath the lower eyelid?").
Ekman (1973) points out that Darwin knew about his method-
ological problems. Rosenthai, et al. (1979) suggests that
Darwin was aware of experimental bias and assumed it would
affect his outcome.

World View Differences

The following section pertains to the world view dif-
ferences between African-Americans and European-Americans.
African World View

African psychology lies in the holistic world view—oneness. It believes that spiritual and material, as one, is the nature of reality. In this ontology, everything is spirit—that which must be known in an extra-sensory fashion—manifesting itself materially, as revealed through the five senses.

Nobels (1980) and Myers (1981b) both agree that when one is unified with all creation, spirit is uniquely expressed. Mbiti (1970) writes, "I am because we are; and because we are, I am." "I" manifests itself in the infinite whole, and "we," therefore, becomes the individual manifestations. Self would then include the entire community, nature, posterity and future born. Myers (1981b) concludes that with this definition of self I am an extension of everything, and thus, not a finite, separate and limited being. "My worth is intrinsic in being." Needless to say, what has been expressed is the African concept of self.

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1...That we are here studying a single race, not races; and a single people, not peoples, is a major theory and fact of Black history and one of our principal guidelines. We are, therefore, primarily concerned only with those things which were characteristically African, practically universal among them from one end of the continent to the other and which thereby indicated an ancient common culture in a common center of Black civilization. On this we stand. (Williams, 1976).
The epistemological assumption that the basis of all knowledge is self-knowledge is consistent with the aforementioned ontology. As one realizes he/she is the unique expression of infinite spirit, learning about yourself is the main objective. In other words, there is no external knowledge, per se. With reference to African mode of thought, Dixon (1971) and Nichols (1976) suggest that one understands symbolic imagery and rhythm. With this interpretation, knowledge is not separated into discrete disciplines or from self.

Interestingly enough, the spiritual/material ontology of African Psychology is supported by modern physics (Myers, 1981b). Myers states:

Physics considers four fundamental forces to account for all known phenomena: gravity, electromagnetic forces, weak nuclear forces, and strong nuclear forces. The need to postulate another force to account for phenomena occurring below the limits of instrumental observation is recognized. Einstein's relativity theory, Bohr's principle of complementarity, Heisenberg's uncertainty principle and Godel's incompleteness theorem, all speak to the spiritual, extra-sensory nature of materiality. (p. 6)

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2Material manifestations reflect the nature of spirit in the role of symbolic imagery. Rhythm is concerned with forming the whole representative of spirit, such as the way human beings, ideas and things fit together. Dixon (1971) notes that motion, the opposite of stillness, is an implication of rhythm. Further, when one analyses isolated moments one cannot equally appreciate movement from one moment to another. Rhythm is lost when motion discontinues the process of investigating stillness.
Von Neuman believed that reality becomes decreasingly knowable as observations become more refined within a positivist system based on purely natural, observable phenomena (Le Shan, 1969). Even the respected Pritjof Capra, a subatomic physicist, disagrees with the validity of a material reality:

All particles can be transmitted into other particles: They can be created from energy and vanish into energy. In this world, classical concepts, such as 'elementary particles,' 'material substance' or 'updated affect' have lost their meaning; the whole universe appears as a dynamic web of inseparable energy patterns (Alan, et al., 1977).

Further, Cummins and Linscott (1947) maintain that even though the whole world of appearance is constituted by the material world, it does not constitute the entire world of reality (e.g., time).

This African ontology reaches back some five thousand years, along with the historical beginnings of psychology. The Egyptian Mystery System, which was the earliest theory of salvation (i.e., deliverance from danger, destruction, difficulty or failure), was first to portray the African ontology. In hopes to understand the relationship between psychological theory and this theory of salvation we must investigate the legacy of the Egyptian Mystery System. Myers (1981b) states:

The English word Egyptian comes from the Greek word Aiguptos, which means Black. Thus we have a Black Mystery System.
According to Homer and Herodotus, black people were the inhabitants of what we now refer to as the Sudan, Egypt, Arabia, Palestine, Western Asia and India. (p. 1)

These people were also called "burnt faces" or Ethiopians (Jackson, 1970).

It is apparent that the Mystery System of the Egyptians was expelled out of the world view of the ancient Africans (pre-history). It was responsible as an institution for educating students about their cultural beliefs, skills and knowledge. The Egyptian Mystery System taught the deification of man—to identify and become one with the infinite, thus liberating the mind's finite consciousness. James (1954) espouses that the Mystery System also taught arithmetic, astronomy, geometry, grammar, logic, music and rhetoric. James further notes that the areas of study were all taught with respect to the process of deification because they were used to represent One. The pupils were encouraged to strive for everlasting happiness as a result of becoming godlike. Further, these men cured diseases from their knowledge and understanding of the Mysteries (Wooley, 1965).

Over five thousand years ago, in the city of Thebes on the banks of the Nile, resided the Egyptian Grand Lodge of Ancient Mysteries, the equal to our universities. Higher education was its purpose. The Egyptian Grand Lodge was
the dwelling place of the governing body. The members of the Grand Lodge, along with the minor lodges and philosophical schools, were responsible for the organization and control of the Ancient Mystery System (James, 1954).

After thousands of years of prohibition, Greek scholars such as Socrates, Plato, Pythagoras and Aristotle, gained entrance to study the Mysteries vis-a-vis the invasion of the Persians (Boardman, 1973). Interestingly, James (1954) reveals the Egyptians and their Mystery System were responsible for many of the philosophies the Greeks shared throughout the ages. This affiliation with the Egyptians may explain why Greek scholars, (e.g., Aristotle, Socrates) were accused by their brethren for introducing "foreign doctrines" and "strange divinities" (Selincourt & Burn, 1972).

James (1954) reveals that the Egyptian Mysteries were responsible for training and influencing many great leaders.

All of the great religious leaders from Moses to Christ were Initiates of the Egyptian Mysteries. Moses became an Egyptian priest, a Hierogrammat; and Christ took final initiation at the Great Pyramid of Cheops in Egypt after attending the lodge at Mt. Carmel (Myers, 1981b, p. 3).

Membership to the Egyptian Mystery System was gained by initiation and also a vow to secrecy. The pupil was orally taught and examined. The initiates were forbidden to communicate the development of their teaching and writing skills
(secret systems). Myers (1981b) admonishes that these teachings are widely accepted and have been shared throughout the centuries, under the auspices of other names and doctrines (e.g., Greek philosophy, Christianity).

The toll has been taken on African-Americans as a result of the havoc created by the prohibition of direct access to and negation of African culture. Even though African-Americans need to reclaim much of their traditional African culture, Myers (1981a) agrees that traces still exist in present-day African-American communities (e.g., church organizations, nonverbal behavior, etc.; see also Cooke, 1980).

In sum, the basis of knowledge is self-knowledge (i.e., to understand reality is to understand oneself) and its values would include communalism, spiritualism and oneness with nature; "everything fits into the economy of the whole, relates to the whole." That is, everything happens for a purpose and has meaning.

European World View

Contemporary Western societies are characterized by a frantic proliferation of material goods, ecological exploitation and a fragmentation of knowledge into highly specialized compartments. Innumerable dichotomies are presented to individuals each day: inner and outer reality; science and religion; Eastern meditative techniques and Western technology and medicine; order and chaos; and life and death (Pelletier, 1978, p. 2).
European world view is based on Descartes's assertion, "I exist, therefore I am." This expression affirms the existence of a material body distinct from an immaterial mind. Plato also promoted this distinction, giving priority to the mind or soul, over the animal body. The separation of mind and body caused much of the distinctiveness of human existence (Peursen, 1966). The emphasis of this world view is to become as independent as one possibly can, in terms of financial, social and spiritual status. Competition and individual achievement are encouraged in one's surroundings, whether it be scientific or physical.

The traditional European self-worth is based on material—that which is to be gained through the five senses—success and achievement. Import stems from residence, education and its quality, features, personal appearance and presentation, material wealth, occupational status, background and other symbols of prestige. In an ironic sense, some (e.g., Pelletier, 1978) will philosophically argue that when one becomes saturated with material glut the obvious focus will be towards higher aspirations and values.

3Western psychological thought has been permeated with the prioritizing of the mind in the body-mind dualism. For example, psychoanalysis focuses its attention on correcting the problems of the mind through the mind (or the emotions, being conceived almost entirely within a mentalistic framework).
External knowledge is the basis of knowledge in the European world view. Without personal bias, western culture tries to understand reality by looking outside itself (Myers, 1981a). By focusing on the parts it compartmentalizes reality. Thus, its world view is segmented to the dismay of many researchers (i.e., Whitehead, 1961; Kahn & Weiner, 1967; Young, 1976).

Isolation is also stressed in the European world view. Heisenberg (1974) states:

(Our) objective world (pursues) its regular course in space and time, independently of any kind of observing subject; this has been the guiding image from modern science...
(p. 227)

In The European world view, man is taught to view the body separately (i.e., body, mind and spirit). The structure of Western healing professions reflect this body-mind-spirit division. For example, medical doctors treat the body, therapists (e.g., psychologists and psychiatrists) treat the mind and the clergy focus their attention on the soul—spiritual healing. Antagonism and discretion tend to follow these areas of specialty. Yet, in any of them, the healing perspectives are divisive and fragmented. Further, the European world view encourages specialization (Pelletier, 1978).

Pelletier argues that European culture is based on hyperrationality. Self-control is a very high premium and the principle of individualism fosters a naive sense of personal identity.
With reference to death, Deikman (1971) explains that the European world view acknowledges a manipulative orientation toward society (active mode of human organization). Fear of death is the result of the excessive reliance on the active mode as thought to provide material gain and self-esteem. Death in European culture represents failure in the capacity to manipulate the environment and, in turn, is experienced as threatening one's integrity and loss of self-control. This feeling of isolation and separateness from the environment is represented in Martin Buber's I-it rather than I-thou relationship. Feeling insecure and threatened become factors because the environment is beyond control (Pelletier, 1978). Weil (1973) explains:

The ultimate distinction that the intellect makes is the one between "self" and "not-self"; the sense of "I" as distinct from everything else in the universe is the very root of ego consciousness. Further, in the ego's own terms, all that is not self is potentially threatening because it has the capacity to undermine the whole conceptual scheme built up so carefully by the intellect. Consequently, persons who have not yet learned to let go of ego consciousness must necessarily experience the profound sense of isolation that some philosophers consider the normal human condition. Along with this existential loneliness comes the inevitable conviction that one is surrounded by a hostile universe. Everything out there is not-self seems bent on destroying the fragile, isolated bubble of self.
Because so high an emphasis is placed on control in the European world view, insecurity and anxiety occur as a result of control loss. Death, therefore, is unacceptable. When he encounters the realness of his own death, and control and rationality are ultimately lost, he has not the sustaining power of his inner resources. Dependency and inadequacy reflect his feelings: "in a sense the ego is no longer master of its own fate nor the captain of the self" (Grotjahn, 1960).

Friedman and Rosenman (1974) agree on two truths concerning the world view of Europeans: (1) they are not able to discern that man's ending is always the same, whether he be a Moorish prince or a galley slave; and (2) his childhood is not made up of a particular cluster of days that will eventually shelter him in his old age. Life is a series of days. Of course, some days are more important than others.

In the European world view, one is unable to realize the real composition of his life in total. He permits many days to float by unobserved and, worse, enjourned, believing that in the ultimate "end" explanations will be given to justify his life on earth. Not until disease afflicts or an accident occurs will he realize that his real life was composed of his early days past.

Finally, the European world view supports the desire to control one's outcome of, or finish, everything one begins as soon as one possibly can. One will go to extreme lengths, and often a frenzy, to finish involvements in as
brief a period of time as possible. A self-harrasing state is the result of one's acquisition, combined with one's "hurry sickness," will lead, invariably, to scores and scores of processes encountered, at various stages of completion. A habitual drive persists and brings about a situation in which one relaxes in consolation thinking, "Well, everything now has been completed" (Friedman & Rosenman, 1974).

It is unreasonable to think of achieving a state where one will be completely satisfied in his endeavors because life itself is a series of unfinished events. Moreover, it is common to pursue far more projects than one could finish. This can be understood recognizing the vain effort to gain security by numbers, outside events and people.

Friedman and Rosenman (1974) outline characteristics which are common among the European world view, though they describe it as Type A behavior:

1. ...you have (a) a habit of explosively accentuating various key words in your ordinary speech even when there is no

4Their research emphasized alternating behavior and personality to prevent potential heart problems in Type A people in the American population. According to Friedman and Rosenman's (1974) research Italians were excluded from these characteristics and habits.
real need for such accentuation, and (b) a tendency to utter the last few words of your sentences far more rapidly than the opening words. The vocal explosiveness betrays the excess aggression or hostility you may be harboring. The hurrying of the ends of sentences mirrors your underlying impatience with spending even the time required for your own speech.

2. ...you always move, walk and eat rapidly.

3. ...you feel (particularly if you openly exhibit to others) an impatience with the rate at which most events take place. You are suffering from this sort of impatience if you find it difficult to restrain yourself from hurrying the speech of others and resort to the device of saying very quickly over and over again, "Uh huh, uh huh," or, "yes yes, yes yes," to someone who is talking, unconsciously urging him to "get on with" or hasten his rate of speaking. You are also suffering from impatience if you attempt to finish the sentences of persons speaking to you before they can.

Other signs of this sort of impatience: If you become unduly irritated or even enraged when a car ahead of you in your lane runs at a pace you consider too slow; if you find it anguishing to wait in a line or to wait your turn to be seated at a restaurant; if you find it intolerable to watch others perform tasks you know you can do faster; if you become impatient with yourself as you are obliged to perform repetitious duties (making out bank deposit slips, writing checks, washing and cleaning dishes and so on), which are necessary but take you away from doing things you really have an interest in doing; if you find yourself hurrying your own reading or always attempting to obtain condensations or summaries of truly interesting and worthwhile literature.
4. ...if you indulge in polyphasic thought or performance, frequently striving to think of or do two or more things simultaneously. For example, if while trying to listen to another person's speech you persist in continuing to think about an irrelevant subject, you are indulging in polyphasic thought.

Similarly, if while golfing or fishing you continue to ponder your business or professional problems, or if while using an electric razor you attempt also to eat your breakfast or drive your car, or if while driving your car you attempt to dictate letters for your secretary, you are indulging in polyphasic performance. This is one of the commonest traits in (western) culture. Nor is he always satisfied with doing just two things at one time. We have known subjects who not only shaved and ate simultaneously, but also managed to read a business or professional journal at the same time.

5. ...you find it always difficult to refrain from talking about or bringing the theme of any conversation around to those subjects which especially interest and intrigue you and, when unable to accomplish this maneuver, you pretend to listen but really remain preoccupied with your own thoughts.

6. ...you almost always feel vaguely guilty when you relax and do absolutely nothing for several hours to several days.

7. ...you no longer observe the more important or interesting or lovely objects that you encounter in your milieu. For example, if you enter a strange office, store or home, and after leaving any of these places, you cannot recall what was in them, you no longer are observing well—or, for that matter, enjoying life very much.

8. ...you do not have any time to spare to become the things worth being because you are so preoccupied with getting the things worth having.
9. ...you attempt to schedule more and more in less and less time and, in doing so, make fewer and fewer allowances for unforeseen contingencies. A concomitant of this is a chronic sense of time urgency, one of the core components of (European) behavior pattern.

10. ...on meeting another severely afflicted (individual), instead of feeling compassion for his affliction you find yourself compelled to "challenge" him. This is a tell-tale trait because no one arouses the aggressive and/or hostile feelings of one (afflicted) subject more quickly than another (afflicted) subject.

11. ...you resort to certain characteristic gestures or nervous tics. For example, ...in conversation you frequently clench your fist or bang your hand upon a table or pound one fist into the palm of your other hand in order to emphasize the conversational point, you are exhibiting (European) gestures. Similarly,... the corners of your mouth spasmodically, in ticticlike fashion, jerk backward slightly exposing your teeth, or...you habitually clench your jaw, or even grind your teeth, you are subject to muscular phenomena suggesting the presence of a continuous struggle, which is, of course, the kernel of the (European) behavior pattern.

12. ...you believe that whatever success you have enjoyed has been due in good part to your ability to get things done faster than your fellow men and...you are afraid to stop doing everything faster and faster.

13. ...you find yourself increasingly and ineluctably committed to translating and evaluating not only your own but also the activities of others in terms of "numbers." (pp. 100-102)

These characteristics and habits exemplify the completely internalized European world view. Many exhibit these characteristics to a lesser extent. For example, if your world view is moderately internalized you rarely
display or feel hostility. Your aggressiveness, although in excess, is not free-floating. Your impatience can be controlled during off-hours. However, at work, you still attempt to squeeze more events into smaller pieces of time. After returning from an erratic day you can become almost dormant or apathetic. But as soon as your alarm clock peals, you resume the hustle, bustle and challenge with time.

Finally, if your world view is not completely internalized, you are not obsessed with the acquisition of sheer numbers. However, even though you are still aware of the beautiful aspects of life, you cannot completely lose yourself in or enjoy them (Friedman & Rosenman, 1974).

**Ethnic Variation**

There have been researchers (e.g., Gitter, Black & Mostofsky, 1972a; 1972b) interested in black and white differences in decoding skills of nonverbal communication. Gitter and his associates discovered, using still photographs as stimuli on college students, that blacks were better decoders than whites, based upon their two studies. When Gitter and Quincy (1968) sampled four to six-year old black and white subjects they were unable to find any differences in decoding skills of nonverbal cues. Izard (1971) found no differences between black and white children, ages five to seven, using the still photos. However, Kellog and
Eagelson (1931), in their study of blacks and whites, ages five to fourteen, found black children performing significantly poorer than their white counterparts in decoding nonverbal cues using still photos for seven of the ten age levels.

Newmeyer (1970) found, in his research employing motion picture stimuli developed by Gitter, no overall differences in decoding skills between black and white adolescent boys; but he did find whites to be superior at decoding video cues while blacks were better at decoding audio cues. Apparently, there are no overall conclusions that we may establish based upon the aforementioned data using these methods (i.e., still photos and movies, video versus audio channels) of analysis.

The Profile of Nonverbal Sensitivity (PONS) Test

The situational stimulus to be used in this study is Rosenthal, et al. (1979), Profile of Nonverbal Sensitivity test. They state:

The Profile of Nonverbal Sensitivity (PONS) is a forty-seven minute black and white 16-mm film and soundtrack composed of 220 numbered auditory and visual segments. These segments are a randomized presentation of twenty short scenes portrayed by a young woman, each scene represented in eleven "channels" of nonverbal communication. The test taker's assignment is to view the film and for each segment to circle the label that correctly describes the scene enacted in the segment. He or she makes
this choice from two alternative labels printed on an answer sheet containing
220 such pairs of descriptions. Each segment is followed by a pause long
enough for the decision to be made and recorded. (p. 23)

Within the PONS test eleven nonverbal channels are
isolated. Three of these eleven are considered "pure"
visual channels: (1) the face; (2) the body from the
neck to the knees; and (3) the entire figure (face and
body down to the thighs).

There are two other "pure" auditory channels that
utilize two unique techniques to mask the words spoken,
but preserve the other characteristics of "paralanguage,"
(i.e., tone of voice, pitch and affect); (4) randomized
spliced voice (random scrambling of the speaker's taped
voice); and (5) content-filtered voice (an electronic treat-
ment that removes the high frequencies that help identify
specific words). The last two (auditory) channels disguise
the exact words being said, but the possibility still
exists for some individuals to tell the way it is said
(i.e., soft, loud, friendly, hostile, etc.).

In addition to these pure channels are six channels
which are paired combinations of a single visual channel
with a single auditory channel; (6) face and randomized
spliced voice; (7) face and content-filtered voice; (8)
body and randomized spliced voice; (9) body and content-
filtered voice; (10) figure and randomized spliced voice;
and (11) figure and content-filtered voice.
The PONS test makes it possible to study a wide range of nonverbal behaviors. Because the PONS test offers complexity it makes it possible to study the accuracy of individuals decoding a variety of scenes in various nonverbal channels. These design characteristics of the PONS test make it possible to pursue a complex research program focusing on the distribution of this unique type of nonverbal sensitivity in the population. The test has been shown to be reliable across different encoders (i.e., Rosenthal, Hall & Zukerman, 1978) and can hopefully be used to determine whether the sensitivity is related to life circumstances.

In conclusion, the PONS test reveals whether an individual (decoder), male or female, can recognize emotions that the encoder or sender is trying to display.

PONS Variation

There is some research that has been done looking at ethnic differences in performance utilizing the Profile of Nonverbal Sensitivity (Rosenthal, et al., 1979). For instance, Bryan (1977) issued an eighty-item short form of the PONS Test to three hundred and sixteen children with and without learning disabilities. A specially developed female child PONS utilizing the content-filtered and randomized spliced channels and the face and body channels of the full-length PONS was employed. Approximately two-thirds of the children were white and one-third were black. There
was no overall significance between the ethnic groups. However, in the content-filtered channel, the black children did significantly better, but not as good on the other channels.

Rosenthal and his colleagues suggest, based upon published and unpublished studies, that blacks tend to be superior to whites in decoding content-filtered cues, while whites are superior to blacks in decoding randomized spliced cues. However, there is no hard evidence.

**Social Class and the PONS**

There is very little data available distinguishing social class differences using the Profile of Nonverbal Sensitivity. Two samples taken from the Eastern and mid-Western United States using high school students (father's occupational level was used as the operational level for social class). Interestingly enough, both studies, using the full PONS, revealed a positive correlation with females between social class and nonverbal cues, while males revealed a negative correlation (Rosenthal, et al., 1979, p. 232). Izard's (1971) study showed children of higher social class responded significantly better to cues of nonverbal behavior. Pfaff's (1954) study using junior high school students was consistent with Izard's outcome. However, the results of Pfaff were based on an auditory channel only (i.e., tone of voice). For gender of subject he reported no moderating effects. Pfaff's outcome was also consistent with Rosenthal
and associates' two female samples, mentioned previously, when isolating the PONS auditory channels (i.e., randomized splicing and content-filtered). The male sample outcome still remains in question, however. Rosenthal, et al., (1972) agree that more accurate sensitivity responses to nonverbal cues are more visible in a higher social class, at least in auditory cues. Rosenthal and his colleagues do suggest that the full PONS could respond to the mystery and address the question as to why a firmly positive relationship exists in females and a negative correlation exists in males with respect to social class and sensitivity to nonverbal behavior.

Belief Systems Analysis (BSA) Scale

The Belief Systems Analysis (BSA) scale was developed by Linda Myers in 1982. The scale determines the degree to which a person ascribes to a particular cultural world view, dichotomized in terms of Afrocentric versus Eurocentric.

The scale was predicted on the assumption that certain philosophical assumptions underpin the generalized cultural world view (e.g., African, Asian, European) of various cultural groups (Nicholas, 1976). These philosophical assumptions work together to structure a conceptual system which can be tapped by measuring the degree of endorsement of specific personal beliefs. The higher the score (100 being the maximum score), the more Afrocentric the measures indicate, while a lower score identifies an Eurocentric world view (see Appendix B).
The Afrocentric world view holds the axiological assumption of highest value on interpersonal relationships among men/women versus the Eurocentric axiology of highest value on acquisition of object. In addition, the more Afrocentric orientation emphasizes nuatology as the primary process, which indicates that all sets are interrelated through human and spiritual networks versus an emphasis on technology (e.g., all sets are respectable and reproducible).

**Hypotheses**

Although there is empirical research scattered in the literature discussing cross cultural concerns it has almost always been characterized by one or more of the following limitations: (1) the research in nonverbal behavior has been limited to one channel, with most studies using facial expressions in still photographs; (2) most of the cultural samples have been small, comparing two or three to nine being the largest; and (3) there are no consistent patterns with respect to the variation among different cultures in interpreting the same nonverbal materials.

There is virtually nothing in any scientific journal addressing black and white differences and/or similarities, or social class differences between or within groups while testing college age students, utilizing the full PONS test.

Questions that have given incentive to many nonverbal researchers over the years include:
1. Are women more accurate decoders than men?
2. Are members of certain professions (e.g., actors, psychologists) exceptionally good at decoding emotions?
3. Are parents better nonverbal decoders as a result of interaction with their prelanguage children?
4. Are members of different cultures able to interpret the same nonverbal behavior with equal accuracy?
5. Is nonverbal decoding correlated with general intelligence or other cognitive skills?
6. Are people accurate judges of their own nonverbal sensitivity?
7. Does nonverbal sensitivity decrease or increase with age?
8. Are people handicapped in vision or in hearing more sensitive, as a result, in other sensory channels?
9. Are there personality correlates of individual differences in sensitivity?
10. Can nonverbal sensitivity be trained or increased?
11. Are psychiatric patient populations unusually sensitive or insensitive in some nonverbal channels?
12. Can people decode emotions accurately from extremely fleeting nonverbal cues?
13. Does sensitivity predict success—for instance, are better decoders more popular or more effective in their work? (Rosenthal, et al., 1979)

The hypotheses in the present study are:

Hypothesis 1:
American college whites are more sensitive to nonverbal cues than American college blacks.

Hypothesis 2:
American college females are more sensitive to nonverbal cues than American college males.

Hypothesis 3:
American white college females are more sensitive to nonverbal cues than American white college males.

Hypothesis 4:
American black college females are more sensitive to nonverbal cues than American black college males.

Hypothesis 5:
American white college males are more sensitive to nonverbal cues than American black college males.

Hypothesis 6:
American white college females are more sensitive to nonverbal cues than American black college females.

Hypothesis 7:
Higher social class college students are more sensitive to nonverbal cues than lower social class college students.5

5Parents' occupation determined social class.
Hypothesis 8:
Higher social class college whites are more sensitive to nonverbal cues than lower social class college whites.

Hypothesis 9:
Higher social class college blacks are more sensitive to nonverbal cues than lower social class college blacks.

Hypothesis 10:
Black college students are more Afrocentric (as measured by the BSA scale) in their world view than white college students.

Hypothesis 11:
College females are more Afrocentric in their world view than college males.

Hypothesis 12:
Lower social class college students are more Afrocentric in their world view than higher social class college students.

Hypothesis 13:
College students who are more Afrocentric in their world view are more sensitive to nonverbal cues.
CHAPTER III

METHOD

Participants

One hundred and seventy-two American blacks and whites (males and females) were tested. An attempt was made to get proportionate representation for race, gender and social class at The Ohio State University.

Instruments

The full 220 item PONS test representing eleven channels of nonverbal behavior, including visual and auditory channels, with a wide range of emotional expression (i.e., commonplace and subtle expressions to more dramatic emotions) was given.

The PONS test consisted of a 16-mm film and soundtrack composed of 220 numbered auditory and visual segments.

For each of the 220 items, an answer sheet showing the correct response alternative (i.e., A) paired with an incorrect alternative, (i.e., B) was used by each participant.

The Belief Systems Analysis (BSA) scale representing the Afrocentric world view was given to one hundred and five of the one hundred and seventy-two participants.6

6The BSA scale was not available during the first session of testing.
Procedure

Participants were encouraged to take advantage of learning how sensitive they are to nonverbal cues. Sign-up sheets were posted at various settings at The Ohio State University. After the participants were contacted and gathered they were asked to sign a human subjects approval form. The form stated that there was no stress involved and that they were free to leave at any time during the experiment. After the participants' signatures were acquired, they were requested to sit in a dim room. Lighting was adjusted so that participants could both view the film with sufficient contrast and also read their answer sheets. Prior to the film presentation, participants were requested to complete the Belief Systems Analysis (BSA) scale and the questions at the top of the PONS answer sheet (i.e., name, age, gender, social class, background, geographical history, college level and race.) The instructions were read as follows:

The film and sound track you are about to witness was designed so that we may learn how well you can match facial expressions, body movements, and tones of voice to the actual situation in which the expressions, movements, and tones originally occurred.

Some of the visual segments will have no sound track. Some of the visual segments will have a sound track, but you will not be able to understand the words. Instead, you will hear speech that has been changed in various ways, so that you will be able to judge only the tone of voice in which
something was said. Some of the segments will be made up of only these speech-altered portions of the sound track, and for these there will be no film to watch at all. In fact, the very first segment is like this.

When you see a number appear on the screen, please find the corresponding number on your answer sheet and place your finger just in front of the number, to keep your place. Watch and/or listen to the segment that follows the number, and as soon as the segment ends circle the letter A or B corresponding to the situation you believe the segment to have been based upon. Then look to the screen again promptly to find the next number flashed on the screen.

Are there any questions? If not, we will begin.

Design

A 2 x 2 x 2 (race x gender x social class) analysis of variance (ANOVA) was used to test for differences. The design consisted of two levels of race, two levels of gender and two levels of social class (a 2 x 2 x 2 design). Participants had scores for each of the eleven channels. A 2 x 2 x 2 ANOVA was performed on each of the scores for the eleven channels. Intercorrelations of the channels were analyzed as well. A multivariate ANOVA was performed analyzing all channels simultaneously. A 2 x 2 x 2 ANOVA was also performed on the participants' BSA scores.

The significant univariate F-test was further analyzed using Dunn's post hoc test to identify specific group differences.
CHAPTER IV

RESULTS

The results are discussed in the following section. First, the overall total scores to the PONS test are presented. The data collected on the eleven nonverbal channels (i.e., face, body, figure, randomized spliced voice, content-filtered voice, face plus randomized spliced voice, face plus content-filtered voice, body plus randomized spliced voice, body plus content-filtered voice, figure plus randomized spliced voice and figure plus content-filtered voice, respectively) are reported. The results of the Belief Systems Analysis will follow.

Total PONS Scores

Hypothesis 1:

American college whites are more sensitive to nonverbal cues than American college blacks.

A three-way multivariate analysis of variance (MANOVA) (race x gender x social class) was performed. Results indicated that there were significant differences between mean scores of American college whites and blacks (F1, 164 = 13.76, p<.001). Dunn's post hoc comparison revealed that American
white college students are more sensitive to nonverbal cues than American black college students ($F_{1,164} = 9.88, p<.01$).

**Hypothesis 2:**

American college females are more sensitive to nonverbal cues than American college males.

A three-way MANOVA (race x gender x social class) was performed. Results indicated that there was a significant difference in mean scores of American females and males ($F_{1,164} = 7.37, p<.01$). Dunn's post hoc comparison revealed that American college females were more sensitive to nonverbal cues than American college males ($F_{1,164} = 7.36, p<.01$).

**Hypothesis 3:**

American white college females are more sensitive to nonverbal cues than American white college males.

A two-way MANOVA (gender x social class) was performed. The data revealed that there was a significant difference in mean scores between American white college females and American white college males ($F_{1,164} = 4.86, p<.05$). Dunn's post hoc comparison supported the hypothesis that American white college females are more sensitive to nonverbal cues than American white college males ($F_{1,164} = 4.75, p<.05$).

**Hypothesis 4:**

American black college females are more sensitive to nonverbal cues than American black college males.

A two-way MANOVA (gender x social class) was performed. The data revealed a mean score difference between American black college females and American black college males
(F1,164 = 6.87, p<.01). Dunn's post hoc comparison revealed American black college females to be more sensitive to nonverbal cues than American black college males (F1,164 = 7.01, p<.01).

**Hypothesis 5:**

American white college males are more sensitive to nonverbal cues than American black college males.

A two-way MANOVA (race x social class) showed a significant difference in mean scores between American white college males and American black college males (F1,164 = 5.58, p<.05). Dunn's post hoc comparison revealed that American white college males were more sensitive to nonverbal cues than American black college males (F1,164 = 5.49, p<.05).

**Hypothesis 6:**

American white college females are more sensitive to nonverbal cues than American black college females.

A two-way MANOVA (race x social class) revealed a significant difference in mean scores between American white college females and American black college females (F1,164 = 10.71, p<.001). Dunn's post hoc comparison showed American white college females to be more sensitive to nonverbal cues than American black college females (F1,164 = 9.88, p<.01).
Hypothesis 7:

Higher social class college students are more sensitive to nonverbal cues than lower social class college students.

A three-way MANOVA (race x gender x social class) showed means between higher social class and lower social class college students approaching significance ($F_{1,164} = 2.81$, $p<.10$). Because the data revealed a borderline significance between mean scores of these two social class groups, a two-way MANOVA (race x gender) was performed. The data indicated a significant difference in mean scores between blacks and whites raised by higher social class families ($F_{1,164} = 9.62$, $p<.01$). Dunn's post hoc comparison showed white college students with higher social class family backgrounds to be more sensitive to nonverbal cues than higher social class black college students ($F_{1,164} = 9.58$, $p<.01$). However, the data revealed no gender difference for those (black or white) college students raised in higher social class family backgrounds.

The two-way MANOVA (race x gender) also revealed that college males and females who came from lower social class family backgrounds scored significantly different to cues of nonverbal behavior ($F_{1,164} = 7.00$, $p<.01$). Dunn's post hoc comparison revealed that black and white college females from lower social class family backgrounds are more sensitive to nonverbal cues than black and white college males from
lower social class family backgrounds (F1,164 = 6.97, p<.01). However, the data indicated no race difference in decoding skills of nonverbal communication with respect to black and white college students raised in lower social class family backgrounds.

**Hypothesis 8:**

Higher social class college whites are more sensitive to nonverbal cues than lower social class college whites.

A two-way MANOVA (gender x social class) showed no significant difference in mean scores between higher social class college whites and lower social class college whites.

**Hypothesis 9:**

Higher social class college blacks are more sensitive to nonverbal cues than lower social class college blacks.

A two-way MANOVA (gender x social class) revealed no significant difference in mean scores between higher social class and lower social class college blacks.

**Face**

**Hypothesis 1:**

A three-way MANOVA (race x gender x social class) revealed a significant difference in mean scores between American college whites and American college blacks (F1,164 = 8.83, p<.01). Dunn's post hoc comparison showed American college whites to be more sensitive to facial expressions than American college blacks (F1,164 = 5.94, p<.05).
Hypothesis 2:

A three-way MANOVA (race x gender x social class) revealed a significant difference in mean scores between American college females and American college males (F1,164 = 6.80, p<.01). Dunn's post hoc comparison revealed American college females to be more sensitive to nonverbal facial cues than American college males (F1,164 = 6.79, p<.05).

Hypothesis 3:

A two-way MANOVA (gender x social class) was performed. Results showed no significant difference in mean scores between American white college females and American white college males in decoding nonverbal cues of the face.

Hypothesis 4:

A two-way MANOVA (gender x social class) revealed a significant difference in mean scores between American black college females and American black college males (F1,164 = 8.61, p<.01). The results of the Dunn's post hoc comparison revealed that American black college females are more sensitive to facial cues of nonverbal behavior than American black college males (F1,164 = 5.95, p<.05).

Hypothesis 5:

A two-way MANOVA (race x social class) revealed a significant difference in mean scores between American white college males and American black college males (F1,164 = 7.25, p<.01). Dunn's post hoc comparison showed American white college males to be more sensitive to the face than American black college males (F1,164 = 7.83, p<.01).
Hypothesis 6:

A two-way MANOVA (race x social class) revealed no significant difference in mean scores between American white college females and American black college females in decoding facial cues of nonverbal behavior.

Hypothesis 7:

A three-way MANOVA (race x gender x social class) revealed no significant difference in mean scores between higher social class college students and lower social class college students in decoding facial cues. However, the three-way MANOVA did show a gender/social class interaction (F1,164 = 4.41, p<.05). Dunn's post hoc comparison revealed an interaction (F1,164 = 9.04, p<.01).

A two-way MANOVA (gender x social class) was also performed. Results revealed a race difference in the higher social class variable (F1,164 = 3.83, p<.05). Dunn's post hoc comparison revealed college whites with higher social class family backgrounds to be more sensitive to facial cues than college blacks with higher social class family backgrounds (F1,164 = 14.53, p<.001). A two-way MANOVA (race x social class) revealed a gender difference within the lower social class variable (F1,164 = 10.26, p<.01). Dunn's post hoc comparison revealed that college females with lower social class family backgrounds are more sensitive to the face channel than college males from lower social class family backgrounds (F1,164 = 11.72, p<.001).
Hypothesis 8:

A two-way MANOVA (race x gender) showed no significant difference in mean scores between white participants from higher social class family backgrounds and white participants from lower social class family backgrounds in decoding facial cues of nonverbal behavior.

Hypothesis 9:

A two-way MANOVA (race x gender) revealed no significant difference in mean scores between American blacks from higher social class family backgrounds and American blacks from lower social class family backgrounds in decoding facial cues of nonverbal behavior.

Body

Hypothesis 1:

A three-way MANOVA (race x gender x social class) revealed no significant difference in mean scores between American college whites and American college blacks in decoding nonverbal cues of the body.

Hypothesis 2:

A three-way MANOVA (race x gender x social class) revealed no gender difference in decoding body cues between American college females and American college males.

Hypothesis 3:

A two-way MANOVA (gender x social class) was performed. The data revealed a significant mean difference between American white college females and American white college males (F1,164 = 4.78, p<.05). Dunn's post hoc comparison
revealed that white college females are more sensitive to body cues than white college males ($F_{1,164} = 5.01, p<.05$).

**Hypothesis 4:**

A two-way MANOVA (gender x social class) showed no gender difference between American black college females and males in decoding body cues.

**Hypothesis 5:**

A two-way MANOVA (race x social class) revealed no race difference in mean scores for American white and black college males in decoding body cues.

**Hypothesis 6:**

A two-way MANOVA (race x social class) revealed a significant mean difference between American white and black college females ($F_{1,164} = 5.26, p<.05$). Dunn's post hoc comparison revealed that white college females are more sensitive to body cues than black college females ($F_{1,164} = 5.13, p<.05$).

**Hypothesis 7:**

A three-way MANOVA (race x gender x social class) revealed no social class significance between college students from higher and lower social class family backgrounds in decoding the body.

**Hypothesis 8:**

A two-way MANOVA (gender x social class) revealed no significant difference between college whites from higher and lower social class family backgrounds in decoding the body.
Hypothesis 9:

A two-way MANOVA (gender x social class) revealed no significant difference between college blacks from higher and lower social class family backgrounds in decoding the body.

Figure

Hypothesis 1:

A three-way MANOVA (race x gender x social class) revealed a significant difference between American college whites and blacks in decoding the figure ($F_{1,164} = 9.81$, $p < .01$). Dunn's post hoc comparison revealed American college whites to be better decoders of the figure than American college blacks ($F_{1,164} = 6.68$, $p < .05$).

Hypothesis 2:

A three-way MANOVA (race x gender x social class) revealed a significant difference between American college females and males in decoding the figure ($F_{1,164} = 6.95$, $p < .01$). Dunn's post hoc comparison revealed that American college females are better decoders of the figure than American college males ($F_{1,164} = 7.21$, $p < .01$).

Hypothesis 3:

A two-way MANOVA (gender x social class) was performed. Results indicated a gender difference in decoding the figure between American white college females and males ($F_{1,164} = 3.91$, $p < .05$). Dunn's post hoc comparison revealed that
American white college females are better at decoding nonverbal cues of the figure than American black college males (F1,164 = 5.58, p<.05).

**Hypothesis 4:**

A two-way MANOVA (gender x social class) indicated a significant mean difference between American black college females and males in decoding the figure (F1,164 = 6.58, p<.01). Dunn's post hoc comparison indicated that American black college females are more sensitive to cues of the figure than American black college males (F1,164 = 5.94, p<.05).

**Hypothesis 5:**

A two-way MANOVA (race x social class) indicated no significant difference in decoding the figure between American white and black college males.

**Hypothesis 6:**

A two-way MANOVA (race x social class) indicated no significant difference between American white and black college females in decoding the figure.

**Hypothesis 7:**

A three-way MANOVA (race x gender x social class) revealed no significant difference between higher and lower social class college students. A two-way MANOVA (gender x race) revealed a race difference in the higher social class college student (F1,164 = 4.00, p<.05). Dunn's post hoc comparison indicated that white college students are more sensitive to cues of the figure than black college students.
from the same higher social class family backgrounds. (F1,164 = 4.23, p<.05). However, no gender difference was revealed in the higher social class variable. The two-way MANOVA did indicate a gender difference with college students in lower social class family backgrounds (F1,164 = 5.34, p<.05). Dunn's post hoc comparison indicated that females from lower social class family backgrounds are better decoders of the figure than males from lower social class family backgrounds. (F1,164 = 5.33, p<.05). The two-way MANOVA also indicated a race difference in the lower social class variable (F1,164 = 4.43, p<.05). Dunn's post hoc comparison revealed that college whites from lower social class family backgrounds scored higher than college blacks from lower social class family backgrounds. (F1,164 = 5.01, p<.05).

**Hypothesis 8:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class college whites in decoding figure cues of nonverbal behavior.

**Hypothesis 9:**

A two-way MANOVA (gender x social class) indicated no significant difference between higher and lower social class college whites in decoding cues of the figure.
**Randomized Splicing**

**Hypothesis 1:**

A three-way MANOVA (race x gender x social class) indicated a significant difference between American college whites and blacks in decoding randomized spliced speech ($F_{1,164} = 17.12$, $p<.001$). Dunn's post hoc comparison revealed American college whites to be better decoders of randomized spliced speech than American college blacks ($F_{1,164} = 15.21$, $p<.001$).

**Hypothesis 2:**

A three-way MANOVA (race x gender x social class) indicated no significant mean difference between American college females and males in decoding randomized spliced speech.

**Hypothesis 3:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between American college white females and males in decoding randomized spliced speech.

**Hypothesis 4:**

A two-way MANOVA (gender x social class) indicated a significant mean difference between American black college females and males in decoding randomized spliced cues ($F_{1,164} = 5.01$, $p<.05$). Dunn's post hoc comparison revealed that American black college females are better decoders of randomized spliced nonverbal cues than American black college males ($F_{1,164} = 5.39$, $p<.05$).
Hypothesis 5:

A two-way MANOVA (race x social class) indicated a significant mean difference between American white and black college males in decoding randomized spliced cues ($F_{1,164} = 14.81, p < .001$). Dunn's post hoc comparison revealed that American white college males are significantly better decoders of randomized spliced speech cues than American black college males ($F_{1,164} = 9.01, p < .01$).

Hypothesis 6:

A two-way MANOVA (race x social class) indicated a significant mean difference between American white and black college females in decoding randomized spliced speech ($F_{1,164} = 5.06, p < .05$). Dunn's post hoc comparison revealed that American white college females are better decoders of randomized spliced speech than American black college males ($F_{1,164} = 5.18, p < .05$).

Hypothesis 7:

A three-way MANOVA (race x gender x social class) revealed no significant mean difference between higher and lower social class college students in decoding randomized spliced speech. A two-way MANOVA (race x gender) revealed a race difference within higher social class college students ($F_{1,164} = 8.47, p < .01$). Dunn's post hoc comparison revealed that American college whites with higher social class
family backgrounds are better decoders of randomized spliced speech than American black college students with higher social class family backgrounds ($F_{1,164} = 7.89, \ p < .01$). The two-way MANOVA also revealed a gender/race interaction within the higher social class variable in decoding randomized spliced cues ($F_{1,164} = 4.47, \ p < .05$). Dunn's post hoc comparison revealed that higher social class white females are more sensitive to randomized spliced cues than higher social class black males ($F_{1,164} = 4.83, \ p < .05$). Higher social class white males are more sensitive to randomized spliced cues than higher social class black males ($F_{1,164} = 4.76, \ p < .05$). Also, black females are more sensitive to randomized spliced cues than black males in higher social class family backgrounds ($F_{1,164} = 4.39, \ p < .05$). In the lower social class variable, the two-way MANOVA indicated a race difference ($F_{1,164} = 8.83, \ p < .01$). Dunn's post hoc comparison indicated that white college students with lower social class family backgrounds are better decoders of randomized spliced speech cues than black college students with lower social class family backgrounds ($F_{1,164} = 7.77, \ p < .01$).

**Hypothesis 8:**

A two-way MANOVA (gender x social class) indicated no significant mean difference in decoding randomized spliced cues between the white higher and lower social class college students.
Hypothesis 9:

A two-way MANOVA (gender x social class) indicated no significant mean difference between black higher and lower social class college students in decoding randomized spliced nonverbal cues.

Content-Filtered Voice

Hypothesis 1:

A three-way MANOVA (race x gender x social class) revealed no significant race difference between American white college and black college students in decoding content-filtered speech.

Hypothesis 2:

A three-way MANOVA (race x gender x social class) indicated no significant gender difference between American college males and females in decoding content-filtered speech.

Hypothesis 3:

A two-way MANOVA (gender x social class) revealed no significant gender difference between American white college females and males in decoding content-filtered speech.

Hypothesis 4:

A two-way MANOVA (gender x social class) revealed no significant gender difference between American black college females and males in decoding content-filtered speech.
Hypothesis 5:
A two-way MANOVA (race x social class) revealed no significant race difference between American white and black college males in decoding content-filtered speech.

Hypothesis 6:
A two-way MANOVA (race x social class) revealed no significant race difference between American white and black college females in decoding content-filtered speech.

Hypothesis 7:
A three-way MANOVA (race x gender x social class) indicated no significant mean difference between college students with higher and lower social class family backgrounds in decoding content-filtered speech.

A two-way MANOVA (race x social class) revealed a significant mean difference in decoding content-filtered speech between college males from higher and lower social class family backgrounds ($F_{1,164} = 5.68, p < .05$). Dunn's post hoc comparison revealed that college students from higher social class family backgrounds are more sensitive to content-filtered speech than college males from lower social class family backgrounds ($F_{1,164} = 5.22, p < .05$).

Hypothesis 8:
A two-way MANOVA (gender x social class) indicated no social class significance among white college students in decoding cues of content-filtered speech.
**Hypothesis 9:**
A two-way MANOVA (gender x social class) indicated no social class significance between black college students in decoding cues of content-filtered speech.

**Face Plus Randomized Spliced (FRS)**

**Hypothesis 1:**
A three-way MANOVA (race x gender x social class) indicated no significant mean difference between American college whites and blacks in decoding the face plus randomized spliced voice channel.

**Hypothesis 2:**
A three-way MANOVA (race x gender x social class) indicated a significant mean difference between American college females and males in decoding the face plus randomized spliced voice channel ($F_{1,164} = 9.76$, $p < .01$). Dunn's post hoc comparison revealed that American college females are more sensitive to the face plus randomized spliced voice channel than American college males. ($F_{1,164} = 9.66$, $p < .01$).

**Hypothesis 3:**
A two-way MANOVA (gender x social class) indicated a significant mean difference between American white college females and males in decoding the face plus randomized spliced voice channel ($F_{1,164} = 5.78$, $p < .01$). Dunn's post hoc comparison indicated that American white college females are more sensitive to the face plus randomized spliced voice channel than American white college males ($F_{1,164} = 6.02$, $p < .01$).
**Hypothesis 4:**

A two-way MANOVA (gender x social class) indicated a significant mean difference between American black college females and males in decoding the face plus randomized spliced audio channel ($F_{1,164} = 5.85, p < .01$). Dunn's post hoc comparison indicated that black college females are more sensitive to the face plus randomized spliced audio channel than black college males. ($F_{1,164} = 6.13, p < .01$).

**Hypothesis 5:**

A two-way MANOVA (race x social class) indicated no significant mean difference between American white and black college males in decoding the face plus randomized spliced audio channel.

**Hypothesis 6:**

A two-way MANOVA (race x social class) revealed no significant mean difference between American white and black college females in decoding the face plus randomized spliced audio channel.

**Hypothesis 7:**

A three-way MANOVA (race x gender x social class) indicated a significant mean difference between higher and lower social class college students in decoding the face plus randomized spliced audio channel ($F_{1,164} = 4.13, p < .05$). Dunn's post hoc comparison indicated that higher social class college students are more sensitive to the face plus randomized spliced audio channel than lower social class college students ($F_{1,164} = 4.31, p < .05$).
A two-way MANOVA (race x gender) indicated a significant gender difference within higher social class students (F1,164 = 6.11, p<.01). Dunn's post hoc comparison revealed that females scored significantly higher than males on the face plus randomized spliced audio channel within the higher social class variable. However, there was no race difference. The two-way MANOVA also revealed a significant gender difference within the lower social class variable (F1,164 = 4.35, p<.05). Dunn's post hoc comparison indicated that females are significantly better decoders of the face plus randomized spliced audio channel than males within the lower social class variable (F1,164 = 4.41, p<.05). However, no race difference was indicated.

**Hypothesis 8:**

A two-way MANOVA (gender x social class) indicated a significant mean difference between higher and lower social class college whites in decoding the face plus randomized spliced voice channel (F1,164 = 4.77, p<.05). Dunn's post hoc comparison revealed that white students from higher social class families are better at decoding the face plus randomized spliced voice channel than white students from lower social class families (F1,164 = 4.59, p<.05).

**Hypothesis 9:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class college blacks in decoding the face plus randomized spliced voice channel.
Face Plus Content-Filtered (FCF) Voice

Hypothesis 1:
A three-way MANOVA (race x gender x social class) denoted no significant mean difference between American college whites and blacks in decoding the face plus content-filtered voice channel.

Hypothesis 2:
A three-way MANOVA (race x gender x social class) indicated a significant mean difference between American college females and males in decoding the face plus content-filtered voice channel ($F_{1,164} = 8.62, p < .01$). Dunn's post hoc comparison indicated that American college females are better decoders of the face plus content-filtered voice channel than their male counterparts ($F_{1,164} = 8.58, p < .01$).

Hypothesis 3:
A two-way MANOVA (gender x social class) revealed a significant mean difference between American white college females and males in decoding the face plus content-filtered voice channel ($F_{1,164} = 9.22, p < .01$). Dunn's post hoc comparison revealed that American white females are more sensitive to the face plus content-filtered voice channel than American white males ($F_{1,164} = 8.92, p < .01$).

Hypothesis 4:
A two-way MANOVA (gender x social class) denoted no significant mean difference between American black college females and males in decoding the face plus content-filtered voice channel.
Hypothesis 5:

A two-way MANOVA (race x social class) revealed no significant mean difference between American white and black college males in decoding the face plus content-filtered voice channel.

Hypothesis 6:

A two-way MANOVA (race x social class) indicated no significant mean difference between American white and black college females in decoding the face plus content-filtered voice channel.

Hypothesis 7:

A three-way MANOVA (race x gender x social class) indicated no significant mean difference between higher and lower social class college students in decoding the face plus content-filtered voice channel.

A two-way MANOVA (race x gender) revealed a significant gender difference in the higher social class variable (F1,164 = 5.00, p<.05). Dunn's post hoc comparison indicated that females from higher social class backgrounds are more sensitive to the face plus content-filtered voice channel than males from higher social class backgrounds (F1,164 = 4.75, p<.05). The two-way MANOVA also revealed a significant gender difference in the lower social class variable (F1,164 = 3.96, p< .05). Dunn's post hoc comparison revealed that females from lower social class backgrounds are more
sensitive to the face plus content-filtered voice channel than males from lower social class family backgrounds ($F_{1,164} = 4.88$, $p<.05$). However, no race differences were indicated in both social class variables.

**Hypothesis 8:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class whites in decoding the face plus content-filtered voice channel.

**Hypothesis 9:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class blacks in decoding the face plus content-filtered voice channel.

**Body Plus Randomized Spliced (BRS)**

**Hypothesis 1:**

A three-way MANOVA (race x gender x social class) indicated a significant mean difference between American college whites and blacks in decoding the body plus randomized spliced voice channel ($F_{1,164} = 12.55$, $p<.001$) Dunn's post hoc comparison indicated that white American college students are more sensitive to the body plus randomized spliced voice channel than black American college students ($F_{1,164} = 10.19$, $p<.01$).

**Hypothesis 2:**

A three-way MANOVA (race x gender x social class) revealed no significant mean difference between American
college females and males in decoding the body plus randomized spliced voice channel.

**Hypothesis 3:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between American white college females and males in decoding the body plus randomized spliced voice channel.

**Hypothesis 4:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between American black college females and males in decoding the body plus randomized spliced voice channel.

**Hypothesis 5:**

A two-way MANOVA (race x social class) indicated a significant mean difference between American white and black college males in decoding the body plus randomized spliced voice channel ($F_{1,164} = 4.24, p<.05$). Dunn's post hoc comparison indicated that American white college males are more sensitive to the body plus randomized spliced voice channel than American black college males ($F_{1,164} = 5.07, p<.05$).

**Hypothesis 6:**

A two-way MANOVA (race x social class) indicated a significant mean difference between American white and black college females in decoding the body plus randomized
spliced voice channel (F1,164 = 8.92, p<.01). Dunn's post hoc comparison revealed that American white college females are more sensitive to the body plus randomized spliced voice channel than American black college females (F1,164 = 9.21, p<.01).

Hypothesis 7:

A three-way MANOVA (race x gender x social class) revealed no significant mean difference between higher and lower social class college students in decoding the body plus randomized spliced voice channel.

A two-way MANOVA (race x gender) revealed a race difference in the higher social class variable in decoding the body plus randomized spliced voice channel (F1,164 = 9.26, p<.01). Dunn's post hoc comparison indicated that whites are better decoders of the body plus randomized spliced voice channel than blacks in the higher social class status (F1,164 = 9.03, p<.01). No gender differences were indicated.

Hypothesis 8:

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class whites in decoding the body plus randomized spliced voice channel.

Hypothesis 9:

A two-way MANOVA (gender x social class) revealed no significant difference in mean scores between higher and lower social class black students in decoding the body plus randomized spliced voice channel.
Body Plus Content-Filtered (BCF) Voice

**Hypothesis 1:**

A three-way MANOVA (race x gender x social class) indicated a significant mean difference between American white and black college students in decoding the body plus content-filtered voice channel ($F_{1,164} = 3.64$, $p < .05$). Dunn's *post hoc* comparison indicated American college whites are better decoders of the body plus content-filtered voice channel than American black college students ($F_{1,164} = 4.67$, $p < .05$).

**Hypothesis 2:**

A three-way MANOVA (race x gender x social class) indicated no significant mean difference between American college females and males in decoding the body plus content-filtered voice channel.

**Hypothesis 3:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between American white college females and males in decoding the body plus content-filtered voice channel.

**Hypothesis 4:**

A two-way MANOVA (gender x social class) indicated no significant difference in mean scores between black females and males in decoding the body plus content-filtered voice channel.
Hypothesis 5:

A two-way MANOVA (race x social class) indicated a significant mean difference between American white and black college males in decoding the body plus content-filtered voice channel ($F_{1,164} = 4.95$, $p < .01$). Dunn's post hoc comparison revealed that American white college males are better decoders of the body plus content-filtered voice channel than American black college males ($F_{1,164} = 5.21$, $p < .01$).

Hypothesis 6:

A two-way MANOVA (race x social class) indicated no significant mean difference between American white and black college females in decoding the body plus content-filtered voice channel.

Hypothesis 7:

A three-way MANOVA (race x gender x social class) indicated no significant mean difference between higher and lower social class college students in decoding the body plus content-filtered voice channel.

Hypothesis 8:

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class whites in decoding the body plus content-filtered voice channel.
Hypothesis 9:
A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class college blacks in decoding the body plus content-filtered voice channel.

Figure Plus Randomized Spliced (FGRS)

Hypothesis 1
A three-way MANOVA (race x gender x social class) indicated a significant mean difference between American college whites and blacks in decoding the figure plus randomized spliced voice channel ($F_{1,164} = 6.35, p < .01$). Dunn's post hoc comparison revealed that American college whites are better decoders of the figure plus randomized spliced voice channel than American college blacks ($F_{1,164} = 4.18, p < .05$).

Hypothesis 2:
A three-way MANOVA (race x gender x social class) revealed a significant mean difference between American college females and males in decoding the figure plus randomized spliced voice channel ($F_{1,164} = 5.94, p < .01$). Dunn's post hoc comparison revealed that American college females are more sensitive to the figure plus randomized spliced voice channel than American college males ($F_{1,164} = 6.04, p < .05$).

Hypothesis 3:
A two-way MANOVA (gender x social class) revealed no significant mean difference between American white college females and males in decoding the figure plus randomized spliced voice channel.
Hypothesis 4:

A two-way MANOVA (gender x social class) revealed a significant mean difference between American black college females and males in decoding the figure plus randomized spliced voice channel ($F_{1,164} = 6.90$, $p<.01$). Dunn's post hoc comparison indicated American black females are more sensitive to the figure plus randomized spliced voice channel than American black college males ($F_{1,164} = 7.01$, $p<.01$).

Hypothesis 5:

A two-way MANOVA (race x social class) revealed a significant mean difference between American white and black college males in decoding the figure plus randomized spliced voice channel ($F_{1,164} = 4.49$, $p<.05$). Dunn's post hoc comparison indicated American white college males are more sensitive to the figure plus randomized spliced voice channel than American black college males ($F_{1,164} = 4.32$, $p<.05$).

Hypothesis 6:

A two-way MANOVA (race x social class) revealed no significant mean difference between American white and black college females in decoding the figure plus randomized spliced audio channel.

Hypothesis 7:

A three-way MANOVA (race x gender x social class) revealed no significant mean difference between higher and
lower social class college students in decoding the figure plus randomized spliced audio channel.

A two-way MANOVA (race x gender) revealed a significant race difference within the higher social class variable (F1,164 = 5.86, p<.01). Dunn's post hoc comparison indicated, within the higher social class variable, that college whites are more sensitive to the figure plus randomized spliced audio channel than college blacks (F1,164 = 6.13, p<.01). No gender difference was indicated.

**Hypothesis 8:**

A two-way MANOVA (gender x social class) indicated no significant mean difference between higher and lower social class college whites in decoding the figure plus randomized spliced audio channel.

**Hypothesis 9:**

A two-way MANOVA (gender x social class) revealed no significant mean difference between higher and lower social class blacks in decoding the figure plus randomized spliced audio channel.

**Figure Plus Content-Filtered (FGCF) Voice**

**Hypothesis 1:**

A three-way MANOVA (race x gender x social class) revealed a significant mean difference between American college whites and blacks in decoding the figure plus content-filtered audio channel (F1,164 = 7.85, p<.01). Dunn's post
hypothesis indicated American college whites are more sensitive to the figure plus content-filtered audio channel than American college blacks (F1,164 = 6.67, p<.05).

Hypothesis 2:

A three-way MANOVA (race x gender x social class) revealed no significant mean difference between American college females and males in decoding the figure plus content-filtered audio channel.

Hypothesis 3:

A two-way MANOVA (gender x social class) revealed no significant mean difference between American white college females and males in decoding the figure plus content-filtered audio channel.

Hypothesis 4:

A two-way MANOVA (gender x social class) revealed no significant mean difference between American black college females and males in decoding the figure plus content-filtered audio channel.

Hypothesis 5:

A two-way MANOVA (race x social class) revealed no significant mean difference between American white and black college males in decoding the figure plus content-filtered voice channel.

Hypothesis 6:

A two-way MANOVA (race x social class) revealed a significant mean difference between American white and black college females in decoding the figure plus content-filtered
voice channel ($F_{1,164} = 8.23; p < .01$). Dunn's post hoc comparison indicated American white college females are more sensitive to the figure plus content-filtered channel voice than American black college females. ($F_{1,164} = 8.30$, $p < .01$).

**Hypothesis 7:**

A three-way MANOVA (race x gender x social class) revealed no significant mean difference between higher and lower social class college students in decoding the figure plus content-filtered voice channel.

A two-way MANOVA (race x gender) revealed a significant race difference in higher social class family backgrounds in decoding the figure plus content-filtered voice channel ($F_{1,164} = 4.43$, $p < .05$). Dunn's post hoc comparison indicated whites from higher social class family backgrounds were more sensitive to the figure plus content-filtered voice channel than blacks with higher social class family backgrounds ($F_{1,164} = 4.31$, $p < .05$). No gender difference was indicated.

**Hypothesis 8:**

A two-way MANOVA (gender x social class) revealed no significant mean difference between higher and lower social class college whites in decoding the figure plus content-filtered voice channel.
Hypothesis 9:
A two-way MANOVA (gender x social class) revealed no significant mean difference between higher and lower social class college blacks in decoding the figure plus content-filtered voice channel.

Belief Systems Analysis (BSA) Scale

Hypothesis 10:
A three-way Analysis of Variance ANOVA (race x gender x social class) revealed that a significant mean difference existed between college blacks and whites with regard to the BSA scores ($F_{1,90} = 6.63$, $p < .01$). Dunn's post hoc comparison indicated that college blacks are more Afrocentric in their world view than college whites ($F_{1,90} = 8.53$, $p < .01$).

Hypothesis 11:
A three-way ANOVA (race x gender x social class) indicated a significant mean difference between college females and males with respect to the BSA scores ($F_{1,90} = 3.81$, $p < .05$). Dunn's post hoc comparison found no significant differences between males and females. ($F_{1,90} = 4.56$, $p < .05$).

Hypothesis 12:
A three-way ANOVA (race x gender x social class) revealed no significant mean difference between social classes. However, a gender/social class interaction was indicated ($F_{1,90} = 7.30$, $p < .01$). Dunn's post hoc comparison revealed that males from nonprofessional families scored significantly
higher on the BSA scale than males from professional families (F1,90 = 3.96, p<.05). Females from professional families scored significantly higher on the BSA scale than males from professional families (F1,90 = 6.58, p<.05). Females from nonprofessional families scored significantly higher on the BSA scale than males from professional families (F1,90 = 5.07, p<.05).

**Hypothesis 13:**

A three-way ANOVA (race x gender x social class) revealed a negative correlation between Afrocentricity and the decoding of nonverbal cues in black and white college students.
### Table 1
Full PONG Test Mean Scores
by
Race, Gender and Social Class

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<th>Channel</th>
<th>Overall (n=172)</th>
<th>Blacks (n=66)</th>
<th>Whites (n=100)</th>
<th>Gender Males (n=72)</th>
<th>Females (n=100)</th>
<th>Social Class Professional (n=117)</th>
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<td>SD</td>
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Table 2
MANOVA of Full PONS Test Scores
for Total Scores
by Race, Gender and Social Class

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**p<.01
***p<.001
Table 3

MANOVA of Full PONS Test Scores
for the Face Channel
by Race, Gender and Social Class

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*p<.05
**p<.01
Table 4
MANOVA of Full PONS Test Scores
for the Figure Channel
by Race, Gender and Social Class

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Total 171 726.7616

**p<.01
Table 5
MANOVA of Full PONS Test Scores
for the Randomized Spliced Voice Channel
by Race, Gender and Social Class

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**p<.01
Table 6

MANOVA of Full PONS Test Scores

for the Face and Randomized Spliced Voice Channel

by Race, Gender and Social Class

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*p<.05

**p<.01
Table 7
MANOVA of Full PONS Test Scores
for the Face and Content-Filtered Voice Channel
by Race, Gender and Social Class

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Total 171 756.0174

**p<.01
Table 8

MANOVA of Full PONS Test Scores
for the Body and Randomized Spliced Voice Channel
by Race, Gender and Social Class

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Total                       | 171| 806.5116 |

***p<.001
Table 9

MANOVA of Full PONS Test Scores
for the Body and Content-Filtered Voice Channel
by Race, Gender and Social Class

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*p<.05
Table 10

MANOVA of Full PONS Test Scores

for the Figure and Randomized Spliced Voice Channel

by Race, Gender and Social Class

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<tr>
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<td>23.7213</td>
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Total 171 721.0407

**p<.01
Table 11

MANOVA of Full PONS Test Scores
for the Figure and Content-Filtered Voice Channel
by Race, Gender and Social Class

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**p<.01
Table 12

ANOVA of Belief Systems Analysis Scores
by Race, Gender and Social Class

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<td>399.8790</td>
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*p < .05  
**p < .01
Table 13
Belief Systems Analysis Mean Score
by
Race, Gender and Social Class

<table>
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<td>Whites</td>
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Table 14

Full PONS Mean Scores

by

Gender and Social Class

(Males with Professional Background)

<table>
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<td>2.47</td>
<td>6.10</td>
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<td>336.63</td>
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</table>
Table 15

Full PONS Mean Scores

by

Gender and Social Class

(Males with Nonprofessional Background)

<table>
<thead>
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<th>n</th>
<th>X</th>
<th>SD</th>
<th>Variance</th>
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<td>3.00</td>
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<td>2.20</td>
<td>4.85</td>
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<td>5.93</td>
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<td>3.40</td>
<td>11.59</td>
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Table 16

Full PONS Mean Scores

by

Gender and Social Class

(Females with Professional Background)

<table>
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<tr>
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<th>X</th>
<th>SD</th>
<th>Variance</th>
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<td>2.65</td>
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<tr>
<td>Body</td>
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<td>15.36</td>
<td>1.99</td>
<td>3.96</td>
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| TOTAL   | 66 | 170.05 | 10.58 | 111.83   |
Table 17

Full PONS Mean Scores

by

Gender and Social Class

(Females with Nonprofessional Background)

<table>
<thead>
<tr>
<th>Channel</th>
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<th>SD</th>
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Table 18
Full PONS Mean Scores
Race and Social Class
(Blacks with Professional Background)

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Table 19
Full PONS Mean Scores
by
Race and Social Class
(Blacks with Nonprofessional Background)

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<th>Variance</th>
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Table 20

Full PONS Mean Scores
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Race and Social Class
(Whites with Professional Background)

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<td>12.90</td>
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Table 21

Full PONS Mean Scores

by

Race and Social Class

(Whites with Nonprofessional Background)

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<th>SD</th>
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TOTAL  | 28 | 165.93 | 18.80 | 353.40   |
CHAPTER V

DISCUSSION

Hypothesis 1:

The results of this study supported the first hypothesis that American college white students were more sensitive to nonverbal cues than American black college students in overall total scores. When the nonverbal channels were analyzed individually, the data supported Hypothesis 1 in the face, figure, randomized spliced voice, body plus randomized spliced voice, body plus content-filtered voice, figure plus randomized spliced voice and figure plus content-filtered channels. However, the data did not support Hypothesis 1 in the body, content-filtered voice, face plus content-filtered voice and face plus randomized spliced voice channels. These results found no significant difference between these channels.

The fact that the overall total PONS score, and seven individual nonverbal channels supported Hypothesis 1 can be interpreted in several ways. One explanation is that the PONS test reflects westernized nonverbal cues. Previous data suggest that people of cultures more closely associated
with the Eurocentric world view score higher on the PONS test (Rosenthal, et al., 1979). It may be the American blacks have retained their cultural identity. However, the fact that the data did not support Hypothesis 1 in the other four channels suggests that because no differences were found between American white and black college students, thus American black students scoring as high on these nonverbal channels may indicate a deterioration in cultural identity as it relates to westernized values. It could also be that American black students are beginning to master American nonverbal cues because of their integration into mainstream society. Further studies may find these similarities or explain these results as being peculiar to the sample taken.

**Hypothesis 2:**

The results of this study supported the second hypothesis that American college females were more sensitive to nonverbal cues than American college males in the overall total scores. This is not surprising because Rosenthal (1979) and his associates report that women traditionally do better in decoding nonverbal behavior. When the channels were analyzed individually, the obvious did not occur. The channels of face, figure, face plus randomized spliced voice, face plus content-filtered voice and figure plus randomized spliced voice, did support Hypothesis 2. However, the data rejected Hypothesis 2 and found there were
no significant differences between college males and females in decoding the body, randomized spliced voice, content-filtered voice, body plus randomized spliced voice, body plus content-filtered voice and figure plus content-filtered voice channels. Needless to say, there were over five individual channels where males and females scored equally. It could be that when Rosenthal and his associates collected their over two hundred samples (in the early 1970's) that women were more sensitive to nonverbal cues. Due to the last ten years of increased awareness, emphasis and attention given to nonverbal communication, men may be gaining more insight with respect to human communication. Men may have recognized that there are financial and social advantages to the entire notion of nonverbal communication. As opportunities for the professional woman increase, women, on the other hand, may become less preoccupied with nonverbal cues. For it has been suggested (Rosenthal, et al, 1979) that professionals are less sensitive to nonverbal cues. Secondly, researchers (i.e., Hall, 1977) have suggested that oppression may be a reason why females are more sensitive to nonverbal cues. However, the trend could be changing as we can see in the relationship between professional opportunities for females and trends in decoding cues of women.
Hypothesis 3:

The results supported the third hypothesis that American white college females were more sensitive to nonverbal cues than American white college males in the overall total scores. When the eleven channels were analyzed individually, the data also supported Hypothesis 3 in the body, figure, figure plus randomized spliced voice and figure plus content-filtered voice channels. However, the data did not support Hypothesis 3 in the face, randomized spliced voice, content-filtered voice, body plus randomized spliced voice and figure plus content-filtered voice channels. The overall total scores could lead many to believe that American white college females were more sensitive to cues of nonverbal behavior. Rosenthal (1979) and his associates suggest that this is the case since it represents over 13 of his samples. Further, his research indicates that women were more effective in judging body cues. This study questions whether white females actually do better than white males, primarily because the data shows no significant differences between the two groups in seven out of the eleven individual nonverbal channels. Further, this study questions female superiority in decoding channels in which body cues were present. These data suggest that white males pay as much attention to movements of the body as white females. Again, it could be that the data reported by Rosenthal and his associates are obsolete. Another explanation could be the
social focus in the 70's as opposed to the 80's. With the tightened economy comes conservatism. With conservatism comes the scrutiny of ideas, institutions, positions and people. Close scrutiny may develop a high regard for nonverbal body and other cues, at least for white males.  

Hypothesis 4:

The data supported the fourth hypothesis that American black college females were more sensitive to nonverbal cues than American black college males in the overall total scores. Within the eleven channels the hypothesis was supported by the face, figure, randomized spliced voice, face plus randomized spliced voice and figure plus randomized spliced voice channels. The hypothesis was not supported by the body, content-filtered voice, face plus content-filtered voice, body plus randomized spliced voice, body plus content-filtered voice and figure plus content-filtered voice channels.

The data did indicate that black females were more sensitive to nonverbal cues, at least in the channels involving the face, figure, randomized spliced voice, face

---

7It is speculative that females scored higher than males due to the nature of the responses provided. Most directly related or involved information regarding women, such as (A) scolding a child or, (B) discussing a wedding. If the responses were more male oriented, perhaps males would have scored equally or higher than females. For a more accurate measurement, Rosenthal and his associates should have used an instrument that included responses geared toward males and females, equally.
plus randomized spliced voice and figure plus randomized spliced voice, as well as overall total scores. These data do question, however, the notion that black males and females are raised or taught to pick up nonverbal cues differently. This has been suggested because of the individual channels that support the hypothesis indicating no significant differences between black males and females.

Another interesting fact in these data is that black males and females were equally sensitive to the nonverbal channels that involved the body and content-filtered speech. It may be that black males and females are encouraged or trained by society, peers or family to focus on these two particular cues. Mainstream society may force black males and females to become more aware of messages coming from the body and different verbal cues.

**Hypothesis 5:**

The results of the fifth hypothesis indicated that American white college males were more sensitive to nonverbal cues than American black college males in overall total scores. Within the eleven nonverbal channels, the hypothesis was supported by the face, randomized spliced voice, body plus randomized spliced voice, body plus content-filtered voice and figure plus randomized spliced voice channels. However, American white college males were equally sensitive to the nonverbal cues of the body, figure, content-filtered speech, face plus randomized spliced voice, face
plus content-filtered speech and figure plus content-filtered speech as American black college males.

White males tended to be more sensitive. This supports Rosenthal and his associates' research which suggests people who are less Eurocentric in their world view tend to be less sensitive to American nonverbal cues. These results also question Newmeyer's (1970) findings that whites tend to respond better to visual cues and blacks respond better to audio cues.

**Hypothesis 6:**

The results supported the sixth hypothesis that American white college females were more sensitive to nonverbal cues than American black college females in overall total scores. American white females were also more sensitive to cues of the body, randomized spliced voice, body plus randomized spliced voice and figure plus content-filtered voice channels than American black college females. However, the sixth hypothesis was rejected in seven of the eleven individual channels. White college females were not more sensitive to nonverbal cues of the face, figure, content-filtered voice, face plus randomized spliced voice, face plus content-filtered voice, body plus content-filtered voice and figure plus randomized spliced voice channels than black college females. The data suggested that world view (ontological)
assumptions could explain the significant difference revealed in the body, randomized spliced voice, body plus randomized spliced voice and figure plus content-filtered voice channels, as well as overall total scores. The data also implied that similarities revealed in the seven of the eleven individual nonverbal channels reflected the possibility that black females were becoming more sensitive to cues which American mainstream society emphasizes. It could be that young females in American culture are initially taught or encouraged to be nonverbal, but that when their "belief system analysis" begins to develop or change, as far as the Eurocentric versus Afrocentric world views are concerned, sensitivity tends to polarize.

Hypothesis 7:

The results of the study did not support the seventh hypothesis that higher social class college students are more sensitive to nonverbal cues than lower social class college students in the overall total scores. However, a borderline significance was observed. When the eleven nonverbal channels were analyzed individually, the data did not support the hypothesis in the face, body, figure, randomized spliced voice, content-filtered voice, face plus randomized-spliced voice, face plus content-filtered voice, body plus randomized spliced voice, body plus content-filtered voice, body plus content-filtered voice, figure plus randomized spliced voice and figure plus content-filtered voice channels. However, the data
did reveal a gender/social class interaction in the face channel and supported the hypothesis in the face plus randomized spliced voice channel. The data also indicated within group differences in all channels except the body and body plus content-filtered channels.

The fact that there were no significances in the overall total or in ten of the eleven nonverbal channels between students with higher and lower social class family backgrounds suggests social class background is not an indicator in decoding nonverbal skills. American families, regardless of social class, may stress or encourage the professional and social advantages to acquiring these decoding skills. Rosenthal, et al (1979) suggest that individuals acquiring these skills make better social partners and appear to get along better with others than those who lack these nonverbal decoding skills. However, it could be just the opposite. These families could equally discourage the use of nonverbal skills. This is evident in the society's divorce rate, social disorder, lack of understanding and communication with one another, if we assume that people with nonverbal decoding skills are better and more effective members in our society. Also, if it is true that knowledge and skill in nonverbal behavior is growing in American society as was mentioned earlier in the discussion, nonverbal
communication may play a smaller part in the lives and interaction of American people than expected and often suggested.

The fact that college students from professional family backgrounds are more responsive to the face plus randomized spliced voice channel than college students from nonprofessional family backgrounds suggests that tone (audio) of voice may be given more attention in higher social class family backgrounds when smiles, frowns and/or head nods are present. We could also assume that parents from this social class express their love, hate and dissatisfaction through a combination of facial expressions and the raising and/or lowering of the voice as opposed to one or the other. However, more studies would need to be conducted in order to reach clarification.

The gender/social class interaction present in the face channel revealed a race difference in students from professional family backgrounds and a gender difference in students from nonprofessional family backgrounds. White students are more sensitive to facial cues than black students when their family backgrounds are professional. Females are more sensitive to the face than males if their family backgrounds are nonprofessional.

Students with professional family backgrounds responded to the randomized spliced audio channel with a gender/race
interaction. White males and females and black females from professional family backgrounds were more sensitive to the randomized spliced audio channel than black males from professional family backgrounds. First, evidence showing black males being less sensitive to the randomized spliced voice channel than the three other groups suggests that this sensitivity (audio) may not be given priority to blacks from professional families. Possibly, more attention to audio cues were given to and/or discerned by black females and white males and females from the same professional backgrounds. It appears the more middle class one becomes the more verbal/audio his orientation. This appears to be true with the latter three groups, but not the black males. Black males from professional families may be taught to ignore negative verbal remarks by “outsiders” with regard to, for example, achievement. This can be understood as we realize many black males being discouraged from traditionally white professions. This remains puzzling because black and white females have also been discouraged from pursuing traditionally white male dominated positions. Further research needs to be considered to clarify this issue.

Interestingly enough, the issue aforementioned is not the case in nonprofessional family backgrounds. Whites were more sensitive to the randomized spliced audio cues than
blacks from similar backgrounds. Blacks from this back-
ground may show less interest in audio cues because they
may be more interested in what, for instance, the body is
"saying." However, whites from nonprofessional family back-
grounds may pay closer attention to what is being said in
an interaction than the message given through the body.
Parents or peers may encourage these responses.

**Hypothesis 8:**

Results were rejected for hypothesis eight in the
overall total scores. Higher social class whites were not
more sensitive to nonverbal cues than lower social class
whites. In other words, college whites reared in profes-
sional versus nonprofessional households appeared to be as
sensitive to overall nonverbal cues. The results did sup-
port hypothesis eight in the face plus randomized spliced
voice channel, yet rejected the hypothesis in the other ten
individual nonverbal channels.

One could assume that since analyzing all the channels,
white college students from both nonprofessional versus
professional family backgrounds were equally encouraged
or discouraged to become sensitive to nonverbal behavior.
However, this assumption should be rejected based on the
aforementioned data in the previous hypothesis regarding
in-group differences. It is interesting to note that non-
professional versus professional background college whites
do respond significantly different to the face plus randomized spliced voice channel. In fact, college whites from professional family backgrounds are more sensitive to this channel than college whites from nonprofessional family backgrounds. This channel (FRS) outcome is obviously to weak with regard to supporting Rosenthal (1979) and his colleagues’ data which suggests that status is a direct correlation to nonverbal sensitivity.

**Hypothesis 9:**

The results of this study did not support hypothesis nine. Higher social class college blacks were not more sensitive to nonverbal cues than lower social class college blacks in overall total scores or in the face, body, figure, randomized spliced voice, content-filtered voice, face plus randomized spliced voice, face plus content-filtered voice, body plus randomized spliced voice, body plus content-filtered voice, figure plus randomized spliced voice and figure plus content-filtered voice channels.

These results indicated that college blacks reared in nonprofessional family backgrounds were just as good at synthesizing American mainstream cues as blacks reared in professional family backgrounds. Results in this study suggests that even though blacks are less sensitive to whites in overall total nonverbal cues, individual channels indicate blacks as becoming more aware of the American
mainstream cues. Professional and nonprofessional black parents may be encouraging these decoding skills as an attempt to be professionally successful and socially accepted into mainstream society.

**Hypothesis 10:**

The results did support the tenth hypothesis that college blacks are more Afrocentric in their world view than college whites. Even though these results appear obvious knowing black people are an extension of Africa and/or Africa itself, and represent its values (Akbar, 1980), some have suggested that the values of black people have waned in a dominant western culture (Myers, 1981b). As we can see by the results aforementioned, many black people have held on to their traditional world view. Some social scientists' opinions are consistent with these results and refer to it as cultural carry-over (i.e., Herskovitz, 1930).

**Hypothesis 11:**

The results of the present study supported the eleventh hypothesis which stated that college females (black and white) are more Afrocentric in their world view than college males (black and white). It would appear that American females are more intrinsic and value the properties associated with character and those things not necessarily materialized through the five senses. Black and white parents may spend more time instilling the Afrocentric
values in their daughters and possibly encourage the Euro-
centric values of individualism and competition in males in
order to "get or stay ahead" of those around them. Parental
thinking may be that these Eurocentric values are enviable
in an male, regardless of race, and that independence in
presence, society, intimate association and financial stat-
us obviously overshadows the need to define self in an
Afrocentric orientation, where trust and interdependence
(usually considered weaknesses) are present and active in
their daily lives. These ideas have been discussed in the
feminist world view.

Hypothesis 12:

The results of the present study rejected hypothesis
twelve which stated that students from lower social class
family backgrounds will be more Afrocentric in their world
view than students from higher social class family back-
grounds. This result suggests that status (i.e., middle
class values, money) is not a factor in determining whether
students will be exposed to Eurocentric vs. Afrocentric
values. A family's personal security and esteem may be
factors influencing world view. For example, competition
and achievement at all costs may be related to the insecurity
of the family or family leaders, regardless of social class.
Further, it does not appear that lower class families have
greater ties to old world ethnicity.
Within group differences revealed a gender significance in social class. Black and white females were more Afrocentric in their world view than males (black and white) in the professional family status. Yet, no differences in gender resulted in students with nonprofessional family backgrounds. Possibly, black and white females who are accustomed to status and material wealth may be educated to value intrinsic characteristics over material wealth. If it is true that the more independence a family enjoys and ultimately seeks through material gain, it is likely that the parent may not develop an enduring relationship with his/her child. Females may ascertain nonverbally that this lifestyle is not for them.

In addition, families may push females less in terms of traditional achievement than males in professional family backgrounds as is evidenced in this study (i.e., males had significantly lower scores on BSA scale than females).

Within group differences indicated that black females are more Afrocentric in their world view than white females, regardless of their social class. However, no differences were observed in black and white males. It appears that black families educate their daughters to be less consumed with Eurocentric values than their white counterpart, which is consistent with their traditional world views. Interestingly, no differences were evidenced between black and
white males. They both appear to be educated to pursue the goals you/we have set for yourself/you. It appears that the way to gain respect and status as a man in American society, is to "accomplish" according to the values of mainstream society. This research reveals that Afrocentric values, characterizing an element of intrinsity, have less effect on black and white males' lives. Men tend to evaluate their lives and goals by the amount of status they consider to be lacking in their family background.

The results also indicated a gender/social class inter-action among college whites. White males from nonprofessional families scored significantly higher than white males from professional families and white females from professional and nonprofessional families. Even though all males tend to reflect Eurocentric values, at least when compared to black females, white males and females from professional families and white females from nonprofessional families appear to be less concerned with intrinsic values than white males from nonprofessional families. Not only are white males from nonprofessional families more Afrocentric than these groups but they even appear to be more Afrocentric than the black samples. White males from nonprofessional families may have certain beliefs and morals that transcend the Eurocentric world view which evidently are unknown to mainstream society. These college
students may have been raised in a community that represented the ideas of equality, fairness, helping thy neighbor/brother and humanity awareness. Because the sample of white males from nonprofessional families was small (i.e., 4), further investigation would be needed to clarify this assumption.

**Hypothesis 13:**

The results of this study did not support the thirteenth hypothesis that college students who are more Afrocentric in their world view are more sensitive to nonverbal cues. In fact, just the opposite occurred. College students appearing to be more sensitive to nonverbal cues are less Afrocentric in their world view. This is consistent with Rosenthal, et al. (1979) data that people and cultures more closely identified with Eurocentric values are more sensitive to nonverbal cues at least those represented in the PONS test, and, in turn, less Afrocentric with respect to their ontological assumption.

The present outcome may emphasize that the PONS test does not represent real life circumstances. The artificialness manufactured may be inherent in the female sender, the "real life" response and/or the judging of the cues involved. The responses also appear to be more feminine than masculine. Perhaps behavioral scientists, up to this point, are not able to produce a technique that can legitimize real
life nonverbal expressions, movements and behavior. On the other hand, the technique (BSA) used to measure Afrocentricity may reflect a bias that is obviously difficult to conceptualize. However, attempts are continually made to modify the Belief Systems Analysis scale.
CHAPTER VI

SUMMARY

Summary of Results

Six of the thirteen hypothesis proved significant in the main effects. White college students are more sensitive to nonverbal cues. However, the black sample did better than initially expected. Possibly, an increased association between blacks and whites in this society has caused black people to be more aware of American white cues than, for example, ten to fifteen years ago.

Females are more sensitive to cues of nonverbal behavior in five of the the twelve categories. However, males did better than was anticipated and often suggested in previous literature. A factor that may have contributed to this outcome is the feminist/women's movement. Males' increased sensitivity may be a product of its impact on American society. Males may also perceive benefits associated with increased sensitivity to nonverbal cues (i.e., relationships, job mobility and security).

The data indicated that black college students are more Afrocentric than white college students. This result
supports the fact that many black people are continuing to perceive the world in an ontology that reinforces Afrocentricity.

Results indicated that females are more Afrocentric than males. One possible explanation is that parents may spend more time instilling Afrocentric values in their daughters and less time instilling these values in their sons. Individualism and competition may be perceived as more valuable in a male dominated society.

The data also indicated a gender/social class interaction in the white sample. White males from nonprofessional families are more Afrocentric than white males and females from professional families and white females from nonprofessional families. White males from nonprofessional families may have certain beliefs and morals that transcend Eurocentric values which evidently are unknown to mainstream society. These students may have been raised in a community that reinforces ideas of equality, fairness, helping thy neighbor/brother and humanity awareness.

Implications

The implications of this research are far reaching if we consider the black/white therapeutic dyad. While little research has been done with regard to this cross-cultural therapy, what we do know is that black clients are not utilizing the services of trained professionals. The few
who seek professional help are not getting their needs met and, therefore, terminate therapy prior to the mutual agreement (White, in press).

On one level, knowing more about differences and similarities in nonverbal sensitivity may enhance therapeutic effectiveness. A way to increase awareness in nonverbal sensitivity is by the measurement (PONS) used in this study. Another way of gaining knowledge with respect to nonverbal communication is learning more about black cultural heritage. White (in press) argues that one of the reasons for the lack of commitment between white therapists and black clients is because white therapists are unfamiliar with and have little interest in African-American (black) culture. Black clients come in for treatment cautious, distrustful and skeptical. Usually, when the contract has been made, it is prior and subsequent to a personal crisis. At this point, black clients are seeking immediate solutions and understanding of their personal experience and struggle.

If white therapists want to be effective in a cross-cultural setting, particularly in the black/white therapeutic dyad, they need to be aware of four major issues: the impact of oppression in the black American experience, the source of strength in black psychological perspectives, black language styles and the identity concerns that have materialized as a result of Euro-American influences. These issues transcend any therapeutic orientation whether
it be individual, group, long term, short term, cognitive behavioral, psychodynamic, transactional, client-centered, reality or existential (White, in press).

Finally, White (in press) suggests that therapists, black or white, who have developed an understanding of the black client's potential source of strength associated with their cultural heritage (i.e., emphasizing resilience, overcoming tragedy, emotional vitality) will be able to help the client identify this vitality and capacity for resilience. This understanding can provide black clients the psychological foundation for healthy living.

**Recommendations for Future Research**

The present study is an attempt to analyze the relationship (differences and similarities) between race, gender, social class, world view and nonverbal sensitivity. The purpose is to apply the information that has been gathered to a therapeutic model that would enhance the black/white clinical relationship. Further studies need to be done utilizing what we already know with regard to nonverbal sensitivity, but applying different methodological approaches. For example, information from a methodological approach utilizing a black female or male sender and/or expressing more (traditionally) masculine or African nonverbal behavior may stimulate promising ideas and speculations with regard to the nonverbal communicative repertoire. Enough data in
this area of research, using varying methodological approaches, could be useful in cross-cultural therapy. Hopefully, this information can stimulate new ideas with regard to outreach in the black community.

Speculations

In many ways the instruments used in this study epitomize the duality of the Afrocentric versus Eurocentric conceptual systems. This observation can serve to inform us about the potential of transsubstantive error in doing research. The PONS test dissects experience in order to better understand and analyze the particulars. Such an orientation assumes that there is value in segmenting behavior (i.e., verbal behavior from nonverbal on eleven channels) in order to analyze sensitivity to nonverbal cues and better understand the communication process. Thus, a laboratory method was contrived to accomplish that end.

On the other hand, the Belief Systems Analysis Scale was developed on the assumption of the interrelatedness of all things through consciousness and that one can draw on a continuum from the least optimal to most optimal way to structure consciousness (i.e., conceptual system yielding world view) in order to realize one's goals. Within the Afrocentric framework, the goal is the achievement of everlasting peace and happiness. The scale is then designed to measure the
degree (amount of time) to which one adheres to beliefs which would make evident realization of this goal.

The research question becomes to what extent are people with the more optimal conceptual system more responsive to nonverbal cues (by race, gender and social class). However, given the divergence in perspectives between the PONS and BSA, the kinds of interesting relationships between the two sets of scores emerged that could have been predicted had transubstantative errors not occurred. For example, based on previous research it could have been predicted that women would be more sensitive to nonverbal cues than men and blacks more sensitive than whites. Hall, et al. (1977) theorized that this may be true due to the need of the "less powerful" to be more attentive. Upon careful examination of the data, women did score higher on the PONS and the BSA, however race was a significant variable. White women scored higher on the PONS, black women scored higher on the BSA, making women score higher in general. Blacks were less sensitive to nonverbal cues (as measured by the PONS) than whites, but they were more "Afrocentric" (as measured by the BSA). More specifically, black females scored higher on the BSA than black males. In other words, what is being emphasized is the finding that subjects do better on measurements which most closely reflect their world view. That someone who scored high on the PONS would
score low on the BSA should be anticipated given differences in the conceptual systems from which each instrument was developed.

The transsubstantive error of both the PONS and the BSA is that the study of nonverbal sensitivity or optimization of conceptual systems across racial groups can be approached considering the single conceptual system of the measurer. Rosenthal assumes the meaningfulness of the whole communicative act can be dissected and examined in parts; and, it can be given the Eurocentric world view. However, someone taking the PONS who does not share that assumption will do poorly; the task will be meaningless and confusing. By the same token, Myers assumes that the statements which are taken to represent the adoption of the optimal conceptual system will only be interpreted utilizing the assumptions of that system. For example, everyone who scores high on the BSA will not be believing the same thing with regard to the same statement, if their conceptual systems differ (e.g., nonprofessional white males).

At this level we can begin to see the value of hermeneutics in psychological research. It is most often our own ethnocentric bias that prevents an awareness of alternate conceptual systems and subsequent world views. We become so entrenched in our own world view that it becomes the only one and it is even difficult for us to entertain ours is not the
only reality, much less the only "true" reality. This increased awareness plays an important role in transpersonal psychology, of which the Afrocentric paradigm I am using is a part.

In sum, the implications of this study are far reaching when the findings are interpreted from the Afrocentric conceptual system in terms of symbolic imagery and rhythm. At every level of the process (rhythm) who we are conceptually plays a role with regard to what we manifest (symbolic imagery). That the purpose of the study was to introduce and utilize the Afrocentric world view as a basis of analysis in combination with a Eurocentric conception of the problem and method of analysis (the PONS test) reflects transsubstantive error, but is also instructive.
APPENDIX I

Full PONS

NONVERBAL COMMUNICATION
Full PONS

NONVERBAL COMMUNICATION

Name ____________________ Present Address ____________________________

Town and country of birth __________________________ Age _______ Sex _______

Primary language spoken __________ Secondary language spoken __________

Father's occupation ___________ Mother's occupation ________________

Field of study ________________ Average grade in last year of school __________

INSTRUCTIONS: Please circle the letter (A or B) next to the label which best describes the scene you have just seen and/or heard.

SAMPLE ANSWER: Scene 1. A. admiring a baby
(B.) applying for a job

Scene 1. A. expressing jealous anger
B. talking to a lost child

Scene 2. A. talking to a lost child
B. admiring nature

Scene 3. A. talking about the death of a friend
B. talking to a lost child

Scene 4. A. leaving on a trip
B. saying a prayer

Scene 5. A. criticizing someone for being late
B. expressing gratitude

Scene 6. A. helping a customer
B. expressing gratitude

Scene 7. A. criticizing someone for being late
B. leaving on a trip

Scene 8. A. talking about one's wedding
B. expressing gratitude

Scene 9. A. helping a customer
B. talking about one's divorce

Scene 10. A. talking about the death of a friend
B. trying to seduce someone

Scene 11. A. talking to a lost child
B. helping a customer

Scene 12. A. admiring nature
B. expressing motherly love

Scene 13. A. expressing deep affection
B. asking forgiveness
Scene 14. A. expressing motherly love  
B. asking forgiveness

Scene 15. A. admiring nature  
B. helping a customer

Scene 16. A. admiring nature  
B. saying a prayer

Scene 17. A. nagging a child  
B. admiring nature

Scene 18. A. nagging a child  
B. criticizing someone for being late

Scene 19. A. asking for forgiveness  
B. leaving on a trip

Scene 20. A. expressing gratitude  
B. leaving on a trip

Scene 21. A. leaving on a trip  
B. returning faulty item to a store

Scene 22. A. returning faulty item to a store  
B. talking about one's divorce

Scene 23. A. expressing jealous anger  
B. talking about one's divorce

Scene 24. A. talking about the death of a friend  
B. threatening someone

Scene 25. A. expressing deep affection  
B. saying a prayer

Scene 26. A. expressing deep affection  
B. trying to seduce someone

Scene 27. A. nagging a child  
B. expressing motherly love

Scene 28. A. leaving on a trip  
B. ordering food in a restaurant

Scene 29. A. helping a customer  
B. expressing jealous anger

Scene 30. A. criticizing someone for being late  
B. expressing gratitude

Scene 31. A. threatening someone  
B. talking about one's wedding

Scene 32. A. admiring nature  
B. expressing strong dislike

Scene 33. A. ordering food in a restaurant  
B. criticizing someone for being late

Scene 34. A. leaving on a trip  
B. talking about one's wedding

Scene 35. A. talking to a lost child  
B. expressing strong dislike

Scene 36. A. trying to seduce someone  
B. expressing jealous anger

Scene 37. A. expressing strong dislike  
B. expressing deep affection

Scene 38. A. leaving on a trip  
B. threatening someone

Scene 39. A. expressing deep affection  
B. talking about the death of a friend
Scene 40. A. talking to a lost child  
   B. criticizing someone for being late

Scene 41. A. ordering food in a restaurant  
   B. expressing gratitude

Scene 42. A. expressing motherly love  
   B. threatening someone

Scene 43. A. expressing strong dislike  
   B. ordering food in a restaurant

Scene 44. A. expressing motherly love  
   B. talking to a lost child

Scene 45. A. expressing deep affection  
   B. nagging a child

Scene 46. A. asking for forgiveness  
   B. saying a prayer

Scene 47. A. expressing motherly love  
   B. helping a customer

Scene 48. A. admiring nature  
   B. expressing strong dislike

Scene 49. A. expressing motherly love  
   B. leaving on a trip

Scene 50. A. talking about one's divorce  
   B. ordering food in a restaurant

Scene 51. A. asking for forgiveness  
   B. nagging a child

Scene 52. A. admiring nature  
   B. expressing motherly love

Scene 53. A. returning faulty item to a store  
   B. criticizing someone for being late

Scene 54. A. talking about one's wedding  
   B. expressing deep affection

Scene 55. A. expressing strong dislike  
   B. ordering food in a restaurant

Scene 56. A. admiring nature  
   B. ordering food in a restaurant

Scene 57. A. returning faulty item to a store  
   B. helping a customer

Scene 58. A. expressing strong dislike  
   B. expressing gratitude

Scene 59. A. expressing deep affection  
   B. expressing gratitude

Scene 60. A. saying a prayer  
   B. threatening someone

Scene 61. A. saying a prayer  
   B. ordering food in a restaurant

Scene 62. A. admiring nature  
   B. asking for forgiveness

Scene 63. A. talking to a lost child  
   B. expressing gratitude

Scene 64. A. talking about one's wedding  
   B. saying a prayer

Scene 65. A. talking to a lost child  
   B. threatening someone

Scene 66. A. expressing motherly love  
   B. expressing strong dislike
Scene 67. A. expressing motherly love  
B. returning faulty item to a store

Scene 68. A. expressing gratitude  
B. expressing strong dislike

Scene 69. A. expressing strong dislike  
B. talking about one's wedding

Scene 70. A. helping a customer  
B. asking forgiveness

Scene 71. A. threatening someone  
B. expressing motherly love

Scene 72. A. nagging a child  
B. talking to a lost child

Scene 73. A. talking to a lost child  
B. criticizing someone for being late

Scene 74. A. talking about one's divorce  
B. trying to seduce someone

Scene 75. A. expressing jealous anger  
B. helping a customer

Scene 76. A. talking about one's divorce  
B. expressing deep affection

Scene 77. A. expressing gratitude  
B. talking to a lost child

Scene 78. A. expressing deep affection  
B. asking forgiveness

Scene 79. A. threatening someone  
B. nagging a child

Scene 80. A. talking about the death of a friend  
B. trying to seduce someone

Scene 81. A. talking about one's wedding  
B. talking about one's divorce

Scene 82. A. trying to seduce someone  
B. criticizing someone for being late

Scene 83. A. helping a customer  
B. admiring nature

Scene 84. A. returning faulty item to a store  
B. nagging a child

Scene 85. A. nagging a child  
B. leaving on a trip

Scene 86. A. talking about one's wedding  
B. admiring nature

Scene 87. A. criticizing someone for being late  
B. expressing deep affection

Scene 88. A. admiring nature  
B. returning faulty item to a store

Scene 89. A. asking forgiveness  
B. expressing strong dislike

Scene 90. A. expressing motherly love  
B. helping a customer

Scene 91. A. asking forgiveness  
B. leaving on a trip

Scene 92. A. criticizing someone for being late  
B. helping a customer

Scene 93. A. talking about one's wedding  
B. threatening someone

Scene 94. A. expressing motherly love  
B. nagging a child
Scene 95. A. expressing motherly love  
   B. expressing gratitude

Scene 96. A. talking about one’s divorce  
   B. trying to seduce someone

Scene 97. A. expressing jealous anger  
   B. asking forgiveness

Scene 98. A. expressing motherly love  
   B. criticizing someone for being late

Scene 99. A. talking about one’s wedding  
   B. talking about the death of a friend

Scene 100. A. expressing strong dislike  
   B. asking forgiveness

Scene 101. A. saying a prayer  
   B. helping a customer

Scene 102. A. nagging a child  
   B. leaving on a trip

Scene 103. A. talking about one’s divorce  
   B. asking forgiveness

Scene 104. A. ordering food in a restaurant  
   B. expressing jealous anger

Scene 105. A. criticizing someone for being late  
   B. talking about the death of a friend

Scene 106. A. talking about the death of a friend  
   B. ordering food in a restaurant

Scene 107. A. leaving on a trip  
   B. nagging a child

Scene 108. A. saying a prayer  
   B. talking about one’s divorce

Scene 109. A. expressing strong dislike  
   B. trying to seduce someone

Scene 110. A. ordering food in a restaurant  
   B. asking forgiveness

Scene 111. A. talking about one’s wedding  
   B. leaving on a trip

Scene 112. A. expressing deep affection  
   B. admiring nature

Scene 113. A. expressing jealous anger  
   B. criticizing someone for being late

Scene 114. A. talking about one’s divorce  
   B. threatening someone

Scene 115. A. expressing strong dislike  
   B. returning faulty item to a store

Scene 116. A. ordering food in a restaurant  
   B. threatening someone

Scene 117. A. talking to a lost child  
   B. criticizing someone for being late

Scene 118. A. admiring nature  
   B. nagging a child

Scene 119. A. expressing strong dislike  
   B. helping a customer

Scene 120. A. talking about one’s wedding  
   B. ordering food in a restaurant
Scene 121. A. expressing gratitude
   B. expressing motherly love

Scene 122. A. leaving on a trip
   B. expressing deep affection

Scene 123. A. nagging a child
   B. talking to a lost child

Scene 124. A. returning faulty item to a store
   B. expressing motherly love

Scene 125. A. talking about one's divorce
   B. admiring nature

Scene 126. A. expressing deep affection
   B. talking about the death of a friend

Scene 127. A. talking about one's divorce
   B. admiring nature

Scene 128. A. expressing deep affection
   B. admiring nature

Scene 129. A. talking to a lost child
   B. admiring nature

Scene 130. A. returning faulty item to a store
   B. talking about the death of a friend

Scene 131. A. talking about one's wedding
   B. returning faulty item to a store

Scene 132. A. admiring nature
   B. leaving on a trip

Scene 133. A. asking forgiveness
   B. helping a customer

Scene 134. A. expressing strong dislike
   B. ordering food in a restaurant

Scene 135. A. returning faulty item to a store
   B. talking about the death of a friend

Scene 136. A. expressing deep affection
   B. saying a prayer

Scene 137. A. saying a prayer
   B. criticizing someone for being late

Scene 138. A. talking about one's wedding
   B. talking about one's divorce

Scene 139. A. expressing gratitude
   B. expressing motherly love

Scene 140. A. expressing jealous anger
   B. threatening someone

Scene 141. A. asking forgiveness
   B. expressing motherly love

Scene 142. A. admiring nature
   B. ordering food in a restaurant

Scene 143. A. expressing motherly love
   B. expressing jealous anger

Scene 144. A. expressing jealous anger
   B. helping a customer

Scene 145. A. ordering food in a restaurant
   B. returning faulty item to a store
Scene 146. A. talking about one's divorce
   B. leaving on a trip

Scene 147. A. nagging a child
   B. saying a prayer

Scene 148. A. trying to seduce someone
   B. criticizing someone for being late

Scene 149. A. expressing deep affection
   B. admiring nature

Scene 150. A. talking about the death of a friend
   B. expressing motherly love

Scene 151. A. expressing gratitude
   B. expressing strong dislike

Scene 152. A. expressing deep affection
   B. returning faulty item to a store

Scene 153. A. expressing gratitude
   B. threatening someone

Scene 154. A. leaving on a trip
   B. talking to a lost child

Scene 155. A. talking about the death of a friend
   B. expressing jealous anger

Scene 156. A. helping a customer
   B. expressing gratitude

Scene 157. A. asking forgiveness
   B. saying a prayer

Scene 158. A. trying to seduce someone
   B. expressing gratitude

Scene 159. A. expressing jealous anger
   B. saying a prayer

Scene 160. A. criticizing someone for being late
   B. helping a customer

Scene 161. A. expressing strong dislike
   B. expressing deep affection

Scene 162. A. expressing deep affection
   B. talking about the death of a friend

Scene 163. A. returning faulty item to a store
   B. leaving on a trip

Scene 164. A. expressing gratitude
   B. expressing jealous anger

Scene 165. A. talking about one's wedding
   B. trying to seduce someone

Scene 166. A. talking to a lost child
   B. expressing jealous anger

Scene 167. A. talking to a lost child
   B. talking about the death of a friend

Scene 168. A. talking about one's divorce
   B. asking forgiveness

Scene 169. A. trying to seduce someone
   B. threatening someone

Scene 170. A. expressing gratitude
   B. expressing jealous anger
Scene 171. A. talking about one's wedding  
B. criticizing someone for being late

Scene 172. A. returning faulty item to a store  
B. expressing strong dislike

Scene 173. A. expressing gratitude  
B. talking to a lost child

Scene 174. A. expressing gratitude  
B. returning faulty item to a store

Scene 175. A. expressing motherly love  
B. criticizing someone for being late

Scene 176. A. ordering food in a restaurant  
B. expressing jealous anger

Scene 177. A. expressing gratitude  
B. returning faulty item to a store

Scene 178. A. expressing strong dislike  
B. talking about one's divorce

Scene 179. A. talking about one's divorce  
B. talking about the death of a friend

Scene 180. A. ordering food in a restaurant  
B. returning faulty item to a store

Scene 181. A. expressing motherly love  
B. talking to a lost child

Scene 182. A. trying to seduce someone  
B. talking about one's wedding

Scene 183. A. leaving on a trip  
B. trying to seduce someone

Scene 184. A. talking about the death of a friend  
B. asking forgiveness

Scene 185. A. trying to seduce someone  
B. talking to a lost child

Scene 186. A. expressing motherly love  
B. ordering food in a restaurant

Scene 187. A. saying a prayer  
B. expressing jealous anger

Scene 188. A. trying to seduce someone  
B. talking about the death of a friend

Scene 189. A. ordering food in a restaurant  
B. talking about the death of a friend

Scene 190. A. helping a customer  
B. trying to seduce someone

Scene 191. A. expressing motherly love  
B. criticizing someone for being late

Scene 192. A. saying a prayer  
B. nagging a child

Scene 193. A. talking to a lost child  
B. expressing deep affection
Scene 194. A. talking about one's divorce  
B. returning faulty item to a store

Scene 195. A. threatening someone  
B. helping a customer

Scene 196. A. criticizing someone for being late  
B. talking about one's divorce

Scene 197. A. expressing jealous anger  
B. nagging a child

Scene 198. A. talking about one's wedding  
B. expressing jealous anger

Scene 199. A. trying to seduce someone  
B. expressing deep affection

Scene 200. A. threatening someone  
B. expressing strong dislike

Scene 201. A. talking about one's wedding  
B. talking about the death of a friend

Scene 202. A. talking about one's divorce  
B. talking about one's wedding

Scene 203. A. threatening someone  
B. expressing strong dislike

Scene 204. A. admiring nature  
B. criticizing someone for being late

Scene 205. A. ordering food in a restaurant  
B. nagging a child

Scene 206. A. expressing gratitude  
B. threatening someone

Scene 207. A. talking about one's wedding  
B. saying a prayer

Scene 208. A. admiring nature  
B. talking about the death of a friend

Scene 209. A. trying to seduce someone  
B. saying a prayer

Scene 210. A. talking about one's divorce  
B. threatening someone

Scene 211. A. expressing deep affection  
B. trying to seduce someone

Scene 212. A. saying a prayer  
B. talking about one's wedding

Scene 213. A. leaving on a trip  
B. trying to seduce someone

Scene 214. A. saying a prayer  
B. talking to a lost child

Scene 215. A. admiring nature  
B. talking about one's wedding

Scene 216. A. expressing jealous anger  
B. criticizing someone for being late

Scene 217. A. leaving on a trip  
B. ordering food in a restaurant

Scene 218. A. expressing strong dislike  
B. talking to a lost child
Scene 219. A. expressing jealous anger  
   B. saying a prayer

Scene 220. A. asking forgiveness  
   B. expressing gratitude
INSTRUCTIONS

The following statements represent beliefs that people have. Please indicate what your belief is regarding each of the following statements by circling the number which reflects how much of the time you believe what the statement says. For each statement, a score of 5 means that you always believe that the statement is true, while a score of 1 means that you never believe that the statement is true. The score range is weighted as follows:

<table>
<thead>
<tr>
<th>Always believe</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>is true</td>
<td>Most of the time</td>
<td>Frequently</td>
<td>Rarely or seldom</td>
<td>Never</td>
</tr>
<tr>
<td>(100%)</td>
<td>(75%)</td>
<td>(50%)</td>
<td>(25%)</td>
<td>(0%)</td>
</tr>
</tbody>
</table>

Sample items

People need to eat
People can fly

1. What is real can be known through the five senses (sight, touch, hearing, smell and taste) alone.
   5 4 3 2 1

2. I am frequently aware of the perfection of the universe and the supremely good order of things.
   5 4 3 2 1

3. Life is meant to be carefree.
   5 4 3 2 1

4. I believe that all things happen for the best.
   5 4 3 2 1

5. I believe that nothing in the material realm alone is ever perfect for any length of time.
   5 4 3 2 1

6. My good and well being are in the hands of other people.
   5 4 3 2 1

7. My greatest rewards in life have been the result of my hard work and effort.
   5 4 3 2 1

8. Most things we think of as opposites (good and evil, night and day) are most often opposite sides of the same coin, which can be most properly understood and identified as a single positive whole.
   5 4 3 2 1
<table>
<thead>
<tr>
<th></th>
<th>5 Always believe is true (100%)</th>
<th>4 Most of the time (75%)</th>
<th>3 Frequently (50%)</th>
<th>2 Rarely or seldom (25%)</th>
<th>1 Never (0%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>I am a positive thinker.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>For every solution technology provides, another problem or two is created.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>11.</td>
<td>My sense of worth is based on my looks, socio-economic standing or other external criteria.</td>
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<td></td>
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<tr>
<td>12.</td>
<td>I am a competitive person.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I avoid identifying errors and placing blame as much as possible.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I often like to break up my daily routine by responding spontaneously to my whims.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I believe everlasting happiness, peace and well being can be known starting now.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I try not to break rules of etiquette or go against established convention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I am impressed by people who have written books or published several articles.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I feel as though I am a contented observer of my own life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I believe that all things are interrelated and interconnected.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>To love is superior, therefore I try to give brotherly love unconditionally.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX III

WORLD PSYCHIATRIC ASSOCIATION AND ASSOCIATION OF PSYCHIATRISTS IN NIGERIA — UNIVERSITY OF IBADAN
WORLD PSYCHIATRIC ASSOCIATION AND ASSOCIATION OF PSYCHIATRISTS IN NIGERIA -- UNIVERSITY OF IBADAN

November 10, 1976

BEHAVIORAL OBJECTIVE: In the last few years it has become increasingly clear that there are differences between people that account for their behaviour and thought processes. My contention is that these differences are philosophically based. Therefore, the objective of this lecture is to introduce a new set of philosophical constructs for your perusal. Cross-cultural efforts in programme development for education, management, commerce, health care delivery systems and even political considerations have a greater clarity, when viewed from the perspective of these philosophical constructs.

THE PHILOSOPHICAL ASPECTS OF CULTURAL DIFFERENCE

<table>
<thead>
<tr>
<th>ETHNIC GROUPS</th>
<th>AXIOLOGY</th>
<th>EPistemology</th>
<th>Logic</th>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>European</td>
<td>Man - Object</td>
<td>Cognitive</td>
<td>Dichotomous</td>
<td>Technology</td>
</tr>
<tr>
<td>Euro-American</td>
<td>The highest value lies in the object or in the acquisition of the object.</td>
<td>One knows through counting and measuring.</td>
<td>Either/or</td>
<td>All sets are repeatable and reproducible.</td>
</tr>
<tr>
<td>African</td>
<td>Man - Man</td>
<td>Affective</td>
<td>Dianital</td>
<td>Ntiology</td>
</tr>
<tr>
<td>Afro-American</td>
<td>The highest value lies in the interpersonal relationship between men.</td>
<td>One knows through symbolic imagery and rhythm.</td>
<td>The union of opposites</td>
<td>All sets are interrelated through human and spiritual networks.</td>
</tr>
<tr>
<td>Asian</td>
<td>Man - Group</td>
<td>Conative</td>
<td>Nyaya</td>
<td>Cosmology</td>
</tr>
<tr>
<td>Asian-American</td>
<td>The highest value lies in the cohesiveness of the group.</td>
<td>One knows through striving toward the transcendence.</td>
<td>The objective world is conceived independent of thought and mind</td>
<td>All sets are independently interrelated in the harmony of the universe</td>
</tr>
</tbody>
</table>


Edwin J. Nichols, Ph.D., Director, Child's Clinic, Institute of Education, University of Ibadan, Nigeria. Visiting Professor for Clinical Psychology from the National Institute of Mental Health, U.S.A.
APPENDIX IV

GENERIC CHARACTERISTICS OF COUNSELING
### Generic Characteristics of Counseling

<table>
<thead>
<tr>
<th>Language</th>
<th>Middle Class</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard English</strong></td>
<td>Standard English</td>
<td>Standard English</td>
</tr>
<tr>
<td><strong>Verbal communication</strong></td>
<td>Verbal communication</td>
<td>Verbal/emotional/behavioral expressiveness</td>
</tr>
<tr>
<td></td>
<td>Adherence to time schedules (50-minute session)</td>
<td>Client-counselor communication</td>
</tr>
<tr>
<td></td>
<td>Long range goals</td>
<td>Openness and intimacy</td>
</tr>
<tr>
<td></td>
<td>Ambiguity</td>
<td>Cause-effect orientation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clear distinction between &quot;physical&quot; and &quot;mental&quot; well being</td>
</tr>
</tbody>
</table>

### Third World Group Variables

<table>
<thead>
<tr>
<th>Language</th>
<th>Lower Class</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asian-Americans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bilingual background</strong></td>
<td>Nonstandard English</td>
<td>Asian language</td>
</tr>
<tr>
<td></td>
<td>Action oriented</td>
<td>Family centered</td>
</tr>
<tr>
<td></td>
<td>Different time perspective</td>
<td>Restraint of feelings</td>
</tr>
<tr>
<td></td>
<td>Immediate, short-range goals</td>
<td>One-way communication from authority figure to person</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Silence is respect</td>
</tr>
<tr>
<td></td>
<td>Concrete, tangible, structured approach</td>
<td>Advise seeking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Well defined patterns of interaction (concrete structured)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private vs. public display (shame/disgrace/pride) &quot;Physical&quot; and &quot;mental&quot; well being defined differently</td>
</tr>
</tbody>
</table>
### Third World Group Variables (cont.)

<table>
<thead>
<tr>
<th>Language</th>
<th>Lower Class</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blacks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black language</td>
<td>Nonstandard English Action oriented Different time perspective Immediate short range goals Concrete, tangible, structured approach</td>
<td>Black language Sense of &quot;peoplehood&quot; Action oriented &quot;Paranorm&quot; due to oppression Importance placed on nonverbal behavior</td>
</tr>
<tr>
<td><strong>Chicanos</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilingual background</td>
<td>Nonstandard English Action oriented Different time perspective Immediate short range goals Concrete, tangible, structured approach</td>
<td>Spanish speaking Group-centered cooperation Temporal difference Family orientation Different pattern of communication A religious distinction between mind/body</td>
</tr>
<tr>
<td><strong>Native Americans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bilingual background</td>
<td>Nonstandard English Action oriented Different time perspective Immediate short range goals Concrete, tangible, structured approach</td>
<td>Tribal dialects Cooperative, not competitive, individualism Present time orientation Creative/experimental/intuitive/nonverbal Satisfy present needs Use of folk or supernatural explanations</td>
</tr>
</tbody>
</table>


Duncan, S. *Nonverbal communication*. Psychological Bulletin, 1969, 72, 118-137.


Efron, D. *Gesture, face and culture*. The Hague, Mouton, 1972


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