Nonverbal communication in the counseling and psychotherapeutic interaction: an investigation of the differential effect of selected therapist proxemic variables on client attitude.

Francis Donovan Kelly
University of Massachusetts Amherst
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By

Francis Donovan Kelly

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A Dissertation

By

Francis Donovan Kelly

Approved as to style and content by:

Richard I. Lease

(Chairman of Committee)

M. H. Friedlander

(Dean of School)

Ronald H. L. Stevens

(Member)

Harley M. Blase

(Member)

Douglas R. Fears

(Member)

August 1971

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FDK
NONVERBAL COMMUNICATION IN THE COUNSELING AND PSYCHOTHERAPEUTIC INTERACTION: AN INVESTIGATION OF THE DIFFERENTIAL EFFECT OF SELECTED THERAPIST PROXEMIC VARIABLES ON CLIENT ATTITUDE

Abstract of Dissertation

The study was primarily concerned with assessing the communicational significance of five nonverbal therapist behaviors. A secondary concern centered around the investigation of the validity of a specific paralinguistical variable (communication length) employed in the measurement of client affective or attitudinal states. Sixty male subjects, between the ages of 18 and 25, representing six diverse client subgroups (paranoid schizophrenics, character disorders, adjustment reactions, personal/social problems, educational/vocational difficulties, controls) were individually shown 72 pictures of a therapist seated and talking with a client. In each picture the following therapist proxemic cues were varied: interaction distance, eye contact, openness of arms/legs, trunk lean, and body orientation. Ss were asked to rate for each picture on a five-point scale how they thought the therapist felt about them based on how he was seated. They were subsequently asked to state, in a few sentences, how the therapist felt about them (paralinguistical measure). The data from both the rating scale and the paralinguistical responses were analyzed by two separate 3 X 2 X 2 X 3 X 2 X 6 factorial analyses of variance with repeated measures on five factors. Post hoc comparisons for significant main effects were carried out using the Newman-Keuls Test. The results indicated that the following nonverbal therapist
cues are instrumental in the conveyance of positive therapist affect or attitude: closer interaction distances, eye contact, a forward trunk lean, and a face-to-face body orientation. Also, thirteen significant first and second order interaction effects indicated that the above-mentioned proxemic factors are related in such a way so as to either enhance or detract from the communicational significance of different main effects. It was also suggested that widely disparate client groups do not perceive the therapist nonverbal cues in a significantly different manner. The results also indicated that the paralinguistical variable of communication length may have some utility in the assessment of a client's affective or attitudinal state. It was concluded that different nonverbal therapist proxemic cues are instrumental to the conveyance of positive or negative affect to the client within the context of a counseling or psychotherapeutic analogue situation. Three tentative explanations concerning the interrelationship and interaction of the proxemic cues were outlined. Suggestions for the implications of the findings with respect to counseling and psychotherapy were discussed.
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CHAPTER I

INTRODUCTION

An assortment of nonlexical behaviors displayed both by the therapist and his client are manifest within the context of the counseling or psychotherapeutic interaction. Their enumeration as well as their significance in relation to process/outcome research in psychotherapy has heretofore been virtually neglected and ignored for a variety of reasons (cf. Mahl, 1968). And while most practitioners of counseling and/or psychotherapy would acknowledge that nonverbal behaviors, e.g., postural variations, gestures, eye contact, distance, etc., displayed by the client during the course of the counseling interview are of some import, there has been little actual attempt to investigate the role that such parameters play in counseling. Most observations have been largely conjectural, anecdotal and otherwise uncorroborated by empirical verification.

Moreover, when one begins to raise questions as to how nonverbal behaviors displayed by the therapist possibly contribute or detract from successful therapeutic conditions, or, even if they are of any relevance whatsoever, the evidence is even more scanty and definitive conclusions are not in evidence. The research to date suggests little either pro or con regarding the influence and impact of the therapist's nonlexical behavior in the counseling relationship - a fact which is somewhat of a surprise in view of the plethora of therapist variables which have been identified and researched to date (see, for example, Strupp, 1969; Meltzoff and Kornreich, 1970).
Historically, the question of the relevancy of nonverbal behaviors has been given fleeting acknowledgement for a considerable period of time, mainly insofar as such behaviors were seen as enhancing or increasing diagnostic information about a specific client or patient.

Psychologists and psychiatrists, as well as other social scientists, have long been cognizant of the significance of nonverbal behaviors as they are related to communication in interpersonal interactions. Beginning with the observations of Freud (1905, 1909, 1918) and Reich (1928, 1958), and later with the findings of Deutsch (1947, 1949, 1952), Fromm-Reichmann (1950), and Sullivan (1954), attempts were made to relate patient overt motoric actions to such variables as patient affective states, conflict areas, etc. In addition, the early investigative efforts of personality theorists, e.g., Allport and Vernon (1933) and James (1932), likewise elucidated the relationship between personality traits of an individual and his concomitant motor behavior, i.e., gestures, posture, facial cues, etc.

Anthropologists have also made important contributions concerning the interactive nature of verbal-nonverbal behavior. In particular, the work of Birdwhistell (1952, 1970) and Hall (1959, 1966, 1963b) has been most pertinent. Hall has indicated that the use of spatial features of the environment has a direct measurable influence on attitude formation between communicators. Birdwhistell has pointed out that nonverbal behaviors may be an essential aspect of verbal communication, or that the kinesic channel may constitute a relatively independent channel in and of itself.
Recently, more concerted efforts have been initiated by investigators such as Charney (1966), Scheflen (1964), Mahl (1968), Ekman and Friesen (1968), and Horowitz (1968) in the hopes of empirically relating nonverbal factors to both process and outcome measures in psychotherapy. Still, as Meltzoff and Kornreich (1970) conclude, "... the present number of studies on nonverbal communication in psychotherapy is still relatively small, and this is somewhat surprising in view of the promise of an earlier literature on expressive movement in personality psychology (p. 453)".

In related research, extensive investigations of the relationship between proxemic variables, i.e., distance, eye contact, openness of the arms and/or legs, forward-backward lean of the trunk, and directness of orientation of a speaker towards his addressee, and their attitude communicating significance have been reported by Mehrabian (1968a, 1969). His results have indicated that different proxemic variables or cues contribute significantly to attitude formation in an interpersonal interaction, and that such variables constitute one channel through which communication may take place.

It may be seen then that proxemic variables can exert a cogent influence on the communication process, but, as Haase and DiMattia (1970) point out, "... little attempt has been made to examine empirically the role of proxemic variables within the context of counseling (p. 720)". And further, little work has been oriented toward investigating how different channels of communication, e.g., verbal-nonverbal, are related, or, as Wiener and Mehrabian (1968, p. 78) conceptualize: "how different channels are interdependent".
If we assume that the counseling or psychotherapeutic interview represents a special and unique instance of an interpersonal relationship, then it would seem that there is considerable reason to posit that nonverbal factors are significantly related to many variables germane to the process of counseling. As mentioned above, little evidence has accrued which has specifically attempted to investigate the influence of proxemic variables within the context of the counseling process.

It has been only recently that psychologists (e.g., Haase, 1969, 1970; Pierce, 1970) have seriously begun to systematically explore how proxemic factors are related to the counseling interview. Related investigations of the effects of proxemic variables such as those implemented by Mehrabian while empirically sound and extensive in scope have been more directed toward a social psychological frame of reference, and hence have been limited in their generalizability, i.e., their application to the counseling interview.

This is not to say that his theoretical and methodological approaches are without considerable heuristic value. The implications of his theoretical orientation concerning the potential communicative significance of proxemic variables would seem to have considerable relevance and application for counseling and psychotherapy related investigations. That is, the communicational significance of nonverbal therapist behaviors still must be regarded as a tentative, enigmatic issue, and considerable research must be directed toward identifying and demarcating salient nonverbal behaviors which are integral components of the total communication process.
Consequently, the present investigation attempted to assess the communicational significance of proxemic cues in a way similar to that advocated by other investigators (e.g., Mehrabian, 1968a). However, the present study represented a different approach in that the investigation of specific proxemic variables were related to the counseling or psychotherapeutic interview. Widely disparate client populations heretofore not examined, e.g., paranoid schizophrenics, character disorders, adult adjustment reactions, etc., comprised the subject populations. The rationale for the inclusion of these different groups was to afford the opportunity to examine and evaluate the effects of the proxemic conditions on a wide variety of client subtypes that would conceivably seek counseling or psychotherapy. It is probable that certain psychiatric populations do not display either the same preferential or negative attitudes with respect to the proxemic variables in question, and, if this is the case, then counselors and psychotherapists working with such groups should be attuned to which specific proxemic conditions facilitate positive client attitudes.

If it is further acknowledged that in certain types of counseling or psychotherapy one of the main conditions or prerequisites necessary for constructive personality change is that:

"The client perceives to a minimal degree the acceptance and empathy which the therapist experiences for him. And unless some communication of these attitudes has been achieved, then such attitudes do not exist in the relationship as far as the client is concerned (Rogers, 1967, p. 78)," then it would follow that the counselor or the therapist must communicate some modicum of positive affect if rapport is to be established.
And, as Carkhuff (1968, p. 153) points out, "...this communication need not be lengthy nor even verbal, since the therapist can use facial, postural, and gestural modes of communicating warmth".

To summarize, it is apparent that research efforts directed toward the investigation of nonverbal behaviors within the context of counseling have mostly focused their attention on the behavior of the client in the hopes of elucidating information gleaned from verbal channels. Minimal research has concerned itself with the nonverbal behavior of the therapist, and how it relates to the client's attitude or perception of the counseling interaction. A multitude of therapist variables have been delineated and extensively investigated, but until relatively recently, nonverbal factors including proxemic variables associated with the therapist have seemingly been conspicuously ignored. Hence, there is only a minimal understanding of the part that such variables play in the dyadic counseling relationship.

The main problem of the current study centered around the investigation of the differential effects of various proxemic variables that are operative in the counseling interaction, and to see how they are related to client attitude within widely disparate client populations. The five proxemic variables under consideration were: a) distance between the counselor and the counselee, b) counselor eye contact, c) trunk lean of the counselor, d) directness of the counselor's body orientation, and e) accessibility of counselor posture (i.e., open vs. closed). The investigation of how these specified variables interact and what resultant effect this has on the client's perception or attitude toward the therapist was also of primary concern.
A related and secondary purpose was concerned with the exploration of how different client populations differed on the immediacy-nonimmediacy continuum. To be more explicit, the effects of the various proxemic conditions were examined within the context of a specific communicational model, the immediacy-nonimmediacy dimension. It was the intent to also investigate the implications that this type of paralinguistical analysis has for assessing affective, attitudinal states of the client.

The rationale for this type of analysis is clearly outlined by Wiener and Mehrabian (1968):

"In communications about affectively experienced events made within a given, fixed set of conditions of communication, nonimmediacy categories discriminate between communication about affective-negative experiences as against communication about affective-positive experiences (p. 32)."

Non-immediacy increases with increasing degrees of negative attitude and thus provides a basis for making inferential assumptions about an individual's perception or experience of a given event - in this case, a client's attitude toward the counseling relationship, or more specifically, his attitude with regard to the communicational significance of different nonverbal therapist behaviors.

Finally, a third purpose of the present investigation involved an exploratory attempt to delineate the relationship between the nonverbal and verbal modes of communication, i.e., proxemic as opposed to indices of immediacy-nonimmediacy. It was expected that if the client inferred or decoded negative attitudinal states on the counselor's part as a function of the different proxemic conditions, then it would be reflected in the verbal channel via greater nonimmediacy; the
converse would also hold true. This relationship between the two communication channels was viewed as speculative and open to empirical investigation as proposed above.
CHAPTER II

LITERATURE REVIEW

In order to adequately preface and introduce the theoretical rationale underlying the current investigation, a comprehensive literature review dealing with the elaboration of significant research in the three main areas of nonverbal communication is subsequently presented. In section one, the concept of proxemics is defined and outlined; pertinent research involving the proxemic variables under investigation in the present study (i.e., distance, eye contact, body orientation, openness of posture, and trunk lean) is reviewed. In particular, the relation of these variables to the counseling situation is explicated. Section two reviews the main facets of kinesic behavior with special emphasis placed on examining the research efforts which have investigated kinesic behavior within the context of psychotherapy. Section three reviews the relevant research efforts in the area of paralanguage and psycholinguistics, focusing on the implications therein for the current study; special attention is paid to the description of the immediacy-nonimmediacy continuum and its application and possible relevancy to the counseling interview.

Proxemics

The parameter of territoriality and related investigations into the ways in which lower organism regulate their spatial boundaries has long been the concern of ethologists and zoologists. Beginning
with the work of Howard (1920) and followed by the investigations of others (e.g., Burt, 1943; Hediger, 1950, 1955, 1961; Carpenter, 1958; Washburn and DeVore, 1961; Ardrey, 1966; Christian, 1961; Calhoun, 1962), the importance of territoriality and spatial needs has been demonstrated to be an integral need in the maintenance of physiological as well as psychological homeostasis; in fact, the handling of space by lower organisms often supersedes other more basic physiological needs. As Hall (1963a) notes, "...small mammals which have not yet established a territory are much more vulnerable to predation than those which have (p. 424)"

To a large extent, many of the discussions about the spatial behavior of organisms other than man frequently make use of the concept territoriality to explicate coding mechanisms insuring environmental familiarity. Briefly defined, territoriality refers to: "the tendency of individual animals or groups to occupy, mark, and defend a circumscribed region, and to return to that region after removal (Esser, 1970, p. 5)". Many important functions are expressed in territoriality. Hediger (1961) described the most salient aspects of territoriality and explained succinctly the mechanisms by which it operates:

"Territoriality insures the propagation of the species by regulating density. It provides a frame in which things are done - places to learn, places to play, safe places to hide. Thus it coordinates the activities of the group and holds the group together. It keeps animals within communicating distance of each other, so that the presence of food or an enemy can be signaled (p. 8)"

Carpenter (1958) has compiled an extensive listing of the functions of territoriality, including important ones relating to the protection
and evolution of the species. A sampling of functions includes:

1) Territory offers protection from predators, and also exposes to predation the unfit who are too weak to establish and defend a territory.

2) Territoriality insures proper spacing, which in turn protects against overexploitation of that part of the environment on which a species depends for its living.

3) It facilitates breeding by providing a home base that is safe; in addition it aids in protecting the nests and the young in them.

4) Territorial marking counters the intrusion of stronger animals which would otherwise engage the owner constantly.

The territory, as a coded physical environment, thus provides security and a breeding ground; it is instrumental and integral to the preservation of the species and the environment. However, the concept by itself does not fully explicate what is known about the relation of animals to space. In addition to territory which has specific geographical and physical referents, each animal is also surrounded by a "...series of bubbles or irregularly shaped balloons that serve to insure proper spacing between individuals (Hall, 1963b, p. 10)".

The identification and elaboration of four key such distances is attributable to the work of Hediger (1950, 1955, 1961). They include: flight distance, critical distance, personal distance, and social distance.

Flight distance refers to a critical or absolute point up to which the animal will tolerate approach; when violated, the organism will flee. This distance is usually invoked in interspecies interaction. Hediger also emphasizes that there is a positive relationship
between the size of an animal and its flight distance - the larger the animal, the greater the flight distance.

There is a complementary relationship between flight distance and the second distance employed in space regulation by animals, critical distance. Critical distance is a narrow zone which separates an animal's flight and attack defenses. An organism will retreat from an enemy of another species until it meets an insurmountable barrier, but, continued approach constitutes a violation of the cornered animal's critical distance and physical retaliation or a "flight reaction" ensues. Again, critical distance is almost exclusively confined to interspecies interaction.

Personal distance, on the other hand, is more frequently associated with intraspecies interaction. It refers to the normal spacing that noncontact animals maintain between themselves and other members of their particular species. Again, this may be conceived as an "invisible bubble that surrounds the organism (Hall, 1966, p. 13)". Social order also plays an influential part with respect to personal distance patterns in that dominant animals tend to have larger personal distances than those which occupy lower positions in the status hierarchy. However, under high density living conditions the relation between dominance and personal distance is dramatically altered, "...under high density living conditions, environmental coding via territories and dominance hierarchies may break down because of the impossibility for spacing and for proper recognition of the functional states of the members of the population (Esser, 1970, p. 5)". Other authors (e.g., Calhoun, 1963; Davis, 1958;
Marsden, 1970) have pointed out the ultimate deleterious effects and consequences of population increase and crowding on physical and psychological equilibrium.

Finally, social distance, according to Hediger (1961), refers to a hypothetical type of psychological distance, ". . .one at which the animal apparently begins to feel anxious when he exceeds its limits (Hall, 1966, p. 14)". It varies according to the species under investigation and is further determined in part by the situation.

It may be seen from this brief overview that lower organisms have developed highly elaborate and structured mechanisms involving space to adapt to their environment, that is, almost without exception improved environmental structuring is achieved either by alterations in the physical environment (i.e., territory), or by modification in the existing social structures (i.e., dominance hierarchy), or by variations in interactional distances between and among organisms.

In their everyday transactions with objects in the environment man has also developed consistent patterns of behavior in his usage of space. The reaction patterns of man are more complex, but use of space remains a meaningful parameter in the observation of human behavior. In any interpersonal interaction individuals assume physical distances and configurations. Often the distance as well as other observable factors, i.e., posture, eye contact, gestures, etc., are determined on an unconscious or preconscious level - yet they exert a cogent effect on the communication involved between the participants. This "silent language", as Hall (1959, 1963a, 1966) calls it, permits
interactions which are both functional to and richly imbued with information about the nature of a relationship.

Drawing largely from the work of zoologists, ethologists and others, E. T. Hall originated the study of proxemics, i.e., "how man unconsciously structures microspace - the distance between men in the conduct of daily transactions, the organization of space in his houses and buildings and ultimately the layout of his towns (1963b, p. 1003)".

Proxemics has three main aspects, whose features are fixed-feature, semi-fixed, and dynamic. These three aspects may be characterized and outlined as follows.

**Fixed feature space**

The study of fixed features includes two predominant aspects: internal, culturally-specific configurations, and secondly, external environmental arrangements such as architecture and space layout. It is one of the basic ways of organizing the activities of individuals and groups. As such it includes material manifestations as well as the hidden, internalized designs that govern behavior as man moves about in his environment. Buildings are but one manifestation of fixed-feature patterns, but buildings are also grouped together in characteristic ways as well as being divided internally according to culturally determined prescriptions. A number of writers (e.g., Osmond, 1957, 1959; Sommer, 1958, 1968; Kling, 1959; Blake, 1956; and Baker, 1959) have emphatically and, in some cases, conclusively interpreted the intricate interrelationship between enduring aspects
of the physical environment, in this case spatial, and concomitant effects on such variables as friendship, interaction patterns, affective states, attitudes, etc.

**Semi-fixed feature space**

The second aspect of proxemics has been designated semi-fixed feature space. In Hall's words, "...semi-fixed environmental features enable man to increase or decrease his rate of interaction with others, and to control the general character of his transactions, to some degree. He does this principally by means of arrangement of the furniture, screens, movable partitions and the like (1966, p. 436)".

That the physical environment has a demonstrable effect on human interaction was also emphasized by Osmond (1957). He originated the terms sociopetal and sociofugal as a means of characterizing two opposite spatial arrangements. In a sociofugal environment, intimacy between strangers is unexpected and human interaction is kept at an absolute minimum.

While sociofugal arrangements militate against intimacy and tend to drive people toward the periphery of a room, sociopetal settings have the opposite designated effect; they focus people toward the center of a room, bring them together and encourage interpersonal interaction.

Sommer (1958, 1959, 1961, 1965, 1967b, 1969) has thoroughly investigated the effects of sociopetal and sociofugal spatial arrangements on consequent human behavior. His findings have given considerable credibility to Hall's contentions that fixed and semi-fixed spatial features exert cogent influence on interaction patterns in man.
He has shown that furniture arrangements encouraging face-to-face interaction via semi-circular seating have a significant effect in fostering social intercourse within a geriatric population (Sommer, 1958), that residence hall facilities had some bearing on social relationships in a college setting (Sommer, 1968). Other authors (e.g., Kasmar, Griffen, and Mauritzen, 1968) have also verified the effects of fixed-feature space on affective states of psychiatric patients, but at the same time have cautioned that the influence of environmental setting on psychiatric subjects appears to be more complex a phenomenon than was originally thought.

Finally, in a study involving counselor, administrator, and client preference for seating arrangement in dyadic interaction - a study involving semi-fixed feature space, Haase and DiMattia (1970) reported that individuals show rather distinct preferences for one kind of furniture arrangement in a dyadic interaction over other alternatives, i.e., the most preferred interaction position across all subjects is that which depicts the participants interacting over the corner of a desk. But there was also a significant interaction between group membership and preference for a particular arrangement. The authors stressed the importance of specifying the relationships between spatial arrangements and counseling outcome in future research endeavors.

**Dynamic space**

In addition to the fixed and semi-fixed aspects of space, the two types described above, there is also a dynamic space in which man
influences his communications with others by varying the spatial features of the situation. Although the systematic study of dynamic space is of relatively recent onset, Hall (1969) terms it, "... perhaps most significant for the individual because it includes the distances maintained in encounters with others - these distances are for the most part outside of awareness (p. 111)."

That birds, primates, and lower phylogenetic organisms have circumscribed geographic boundaries which they occupy and defend against intruders, as well as having a conceived series of uniform distances which they maintain from others (i.e., flight distance, critical distance, and social distance) has been amply substantiated. In addition, man also has a uniform, reliable way of regulating distance in his interpersonal dealings. While flight distance and critical distance per se are not really accurate interpretations of human interactional, spatial behavior, the concept of personal or social distance serves as an explicatory construct which describes man's dynamic use of space. The discrete distances that individuals exhibit in social interactions can be conceptualized as falling into four distinct categories. Each of the four distance zones has a near and far phase, and each is highly relative to factors such as an individual's personality characteristics and his cultural background.

In the intimate distance phase at the close distance, there is less than six inches separating the participants. The presence of the other person may be overwhelming because of the greatly increased sensory input; physical contact is uppermost in the awareness of both parties. On the other hand, the far phase of the intimate distance
corresponds to physical separation of from six to eighteen inches. This latter distance still is not considered acceptable by most middleclass adults.

The second discrete distance zone, personal distance, again has a near and a far phase, the close phase being between one and a half to two and a half feet. Hall (1966) cites that these distances are analogous to the protective sphere or bubble that an organism maintains between itself and others of his species; at this distance both participants are open to considerable intrusion, physical as well as psychological.

A rather graphic description of the far phase of personal distance is reflected in the familiar adage, "keeping someone at arm's length". Extending from a point that is just outside easy touching distance to a point where two people can reach fingers if they extend both arms, demarcates the range of this distance zone - it marks the limit of physical domination.

Social distance, again, also has two main component phases: in the close phase, corresponding roughly from four to seven feet, most interpersonal business is transacted; colleagues tend to interact using close social distance. The far phase of the social distance category (i.e., seven to twelve feet) connotes increased formality. A proxemic feature of this phase is that it may be used to insultate or screen people from each other.

Finally, public distance represents the range at which minimal reactivity to others can take place; it again has two main phases: distances of twelve to twenty-five feet comprise the close phase.
The descriptive adjective, "formal", appropriately portrays social involvement at this distance.

In the far phase of public distance, twenty-five feet or greater, the possibility of human contact has diminished almost to an impossible point - thirty feet is the distance that is automatically set around important public figures.

That the study of dynamic or personal space (as opposed to fixed and semi-fixed) warrants increased concentration was succintly stated by Hall (1959):

"Spatial change gives a tone to a communication, accents it, and at times even overrides the spoken word. The flow and shift of distance between people as they interact with each other is part and parcel of the communication process (p. 204)."

This rather terse pronouncement proved to be prophetic and, at the very least, laden with heuristic implications. Perhaps of most importance is the fact that Hall's original tenets were expanded to include the importance of other variables or cues under the proxemic rubric; moreover, concerted investigations have subsequently begun to further elucidate the communicational significance of such cues in a variety of situations and conditions.

Although we see evidence of it in his earlier writings (e.g., 1963b), Hall does not fully explicate how such factors as eye contact, body orientation, trunk lean, etc., relate to the degree of immediacy of interaction between participants in social involvements. In other words, man is able to organize his spatial behavior not only by simply varying interactional distances, but may also call into use these other above-mentioned variables to either accentuate or obviate the effects of physical distance.
Mehrabian (1968a) has suggested that at least five proxemic variables are associated with communication of a speaker's attitude toward his addressee in interpersonal interactions and that, "... the original concept of proxemics can be extended to refer to the degree of closeness, directness, or immediacy of the nonverbal interaction between two communicators (p. 296)".

In the ensuing sections relevant research incorporating five main proxemic variables (e.g., distance, eye contact, body orientation, trunk lean, and openness of posture of a communicator) and their nonverbal communicative relevance is examined.

Distance

A somewhat limited number of studies have dealt empirically with the use of distance in interpersonal communication either as an independent measure or as an outcome variable; few studies have specifically investigated distance variations within the context of the counseling or psychotherapeutic situation.

Sommer has been an innovative and prolific writer, primarily in regard to spatial arrangement in small groups; extensive compilations of his own work in addition to summarizations of related research appear in two main sources (cf. Sommer, 1967a, 1969). In an early study (1958) he demonstrated that increased social interaction on a geriatric unit as assessed by increased and sustained verbal conversations could be demonstrated as a function of alterations in the spatial milieu, i.e., changes from sociofugal to sociopetal space by furniture rearrangements. He pointed out the rather obvious yet unrecognized fact that all too
often the furniture arrangements in mental hospitals preclude social exchanges, "...if the nurses do not arrange the chairs so as to facilitate interaction, the chairs may arrange the patients so as to discourage interaction (p. 133)."

In a series of experiments designed, on the one hand, to investigate arrangement patterns of people who were already interacting, and secondly to investigate interaction patterns as a function of pre-specified directions, Sommer (1959) reported a number of relevant findings. One aspect indicated that subjects seated side by side interacted less than subjects sitting corner to corner, suggesting that principles governing spatial arrangements in small groups must take cognizance of both the distance between people and their positions vis-a-vis each other. Previously, Steinzor (1950) had suggested that interpersonal interaction in groups is facilitated by a face-to-face type of situation. Additional results also suggested that schizophrenics made considerable use of distance, preferring to sit in positions which were far removed from other persons; however, the results also indicated considerable subject variability within this particular subject sample as far as preference for other distinct seating arrangements (i.e., opposite, corner, side, etc.) was concerned.

In a third part of the above-mentioned series of studies, Sommer concluded that schizophrenic patients have an impaired concept of personal distance, that they frequently would sit alongside a male decoy, thus intruding on the personal space of those around them. This seating preference rarely occurred in control groups.

Later, systematic attempts to investigate the effects of personal space violations were reported by Garfinkel (1964) and Felipe and Sommer
Garfinkel reported that the violation of personal space produced avoidance, bewilderment, and embarrassment, and that these effects were most demonstrable in males. Felipe and Sommer staged systematic invasions of individuals' personal space, and their results indicated a preponderance of defensive flight reactions.

Sommer's later research tended to confirm previous findings that people prefer to sit across from one another rather than side-by-side. But, exceptions to this also occurred - when the distance across is too far or exceeds the distance required for comfortable conversation, and secondly, when the distance across exceeds the distance side-by-side. An inverse relationship between the size of the room and the preferred closeness of chairs was also suggested. Additionally, it was posited that the relationship between the topic that interactants are discussing and their concomitant spatial behavior is directly proportional, "...the more personal the topic, the closer together people will sit (p. 115)". And later (1967a) he suggests that it is conceivable that the intensity of the conversation and the concomitant interest indicated by each of the participants is more influential in determining proxemity than attitude concordance or discordance.

That there exists an intimate connection between the functions served by social orders and spatial behavior in vertebrates has been adequately demonstrated by ethologists. The same type of interrelationship has been indicated with respect to man. Sommer and Lott (1967), in studying the interaction patterns of human participants of varying status levels, found that there is a connection between status and location, which is determined both by fixed and relational aspects.
of the environment. The identification of certain table positions with status levels, as well as the location of another person already seated were factors which had a bearing on interaction. In addition, peers prefer to interact at closer distances than individuals of disparate status levels.

Somewhat similar findings were reported by Willis (1966) in regard to status. In addition, he found significant variations in distance as a function of the relationship between the interactants, their sex, age, and race - the distances corresponding closely to Hall's postulations concerning distance zones for social interaction.

Finally, Little (1965) also found that interaction distances in a dyad are markedly influenced by the degree of acquaintance of the two members. Using both a projective technique and later, staged interactions, he found that friends will interact at a significantly closer distance than acquaintances, and with strangers there is the greatest amount of physical separation. Similarly, the setting in which the meeting takes place will in turn influence the interaction distance between members in a dyad. Maximum distances occurred in an office waiting room; minimum distances varied somewhat, but there was the strong indication that a street corner or similar open air setting would elicit the closest interaction distances.

A number of studies have dealt with the relationship between individual distance and personality attributes. Williams (1963) showed that introverts placed themselves further from other people than did extroverts. The same conclusion was also reached by Leipold (1963), who recorded the position a person occupied vis-a-vis a seated
decoy under anxiety and praise conditions. There was a greater closeness under the praise than the anxiety conditions, and extroverts placed themselves closer to the decoy than did the introverts.

Haase (1969) found that a combination of nine Adjective Check List (ACL) variables were significantly related to preference for interaction distance. ACL scales which predicted increased preference for greater social interaction included: high achievement, low endurance, low self-confidence, low deference, low change, and high defensiveness.

Rosenfield (1965) has also demonstrated that interpersonal proximity is used as an instrumental act for the attainment of social approval, that subjects in approval-seeking roles tend to position themselves closer to confederates than corresponding subjects in approval-avoiding roles.

The investigation of the spatial behavior of severely emotionally disturbed individuals (e.g., schizophrenics) has commanded considerable research interest. Early observations by Woodbury (1958) and Searles (1960) emphasized, in an anecdotal manner, the importance of territorial needs in the institutionalized psychotic, suggesting that laying claim to a well-defined territory is an exigency more basic than speech. Searles, in addition to pointing out that in regressed states schizophrenics often confuse their own physical boundaries with those of the room, also mentioned that such patients often objected violently to being approached too closely during therapy - a finding earlier reported by Sommer (1959).

Further emphasis on the clinical importance of patients' feelings
about space, especially with respect to their proximity to others, suggested that schizophrenics manifest an ongoing concern with personal space (Horowitz, 1964, 1965, 1968). That schizophrenics deal with space in a variety of ways was an initial inference which provided the impetus for continued research.

Despite the fact that many schizophrenics are severely threatened by personal space violations and intrusions, the therapist working with such patients has to be cognizant of the implications that spatial closeness may convey to the patient; a willingness to be close in space may initially convey the sense of a readiness to be close in other human transactions and may help to quiet the restless and agitated patient as well as to support the one who is withdrawn. As Horowitz (1965) suggests:

"Support may be given to a patient who is feeling isolated and estranged by moving closer. A small gesture of the therapist's head, hand, foot, chair, or body will suffice. On the other hand, the patient's personal space must be respected and no unwarranted intrusions made. Thus, such a simple event as the therapist putting his foot on a rung of the patient's chair may have a wide variety of positive or negative meaning, or both, regardless of what verbal communications are taking place (p. 27)."

Additional investigations of the spatial behavior patterns of schizophrenics by Horowitz (1964) further elucidated diagnostic as well as psychotherapeutic implications. Schizophrenic subjects tended to approach nonthreatening inanimate objects more closely than persons; furthermore, an area of personal space appears to surround every individual which is reproducible and may be regarded as an immediate body-buffer zone.
Additionally, the body-buffer zone is seen as one component of the body image and has a transactional quality; it is very much a function of, and depends on nearby individuals and one's attitudes toward them, as well as on such internal drive derivatives as oral dependency needs and aggressive conflicts.

Further research (Horowitz, 1968) tended to confirm the ideas that attitudes about space and spatial behavior are related to the body image; in addition, it was conjectured that other factors such as interpersonal expectancy and communication also modify individual spatial behavior in the schizophrenic individual. With regard to the latter, i.e., spatial positioning as a facet of communication, Horowitz suggests that individuals may artfully use space as a weapon by intruding into another's body-buffer zone. Schizophrenics often approach others counter-phobically closely in order to communicate lack of fear, or, on the other hand, they remain distant to communicate a feeling or attitude of real or wished for psychological distantiation. Such communicational transactions may operate in or out of awareness in both the sender and the receiver.

Observations of schizophrenics in acute, regressed states indicated that changes in the manifest behavior took place as levels of regression and primitivization of function shifted. At one level of regression, defensive withdrawal may take physical and spatial form (e.g., increasing space between self and others, postural aversions, aversive gestures, averting the face, and avoiding eye contact); at a more "progressed" or reintegrated level the same defensive goal may
be met with increased intrapsychic defensive operations, for example, denial, projection, isolation, etc.

Aside from suggesting that the observation of spatial behavior can offer considerable diagnostic information about a patient's psychological state, Horowitz cites that therapy efforts must be attuned to spatial and nonverbal nuances.

"Patients in regressive states may be much more 'tuned in' to motor behavior than to verbal behavior. Just as observations of spatial behavior is most informative in highly disturbed patients, it is in such patients that therapeutic approaches must be considered in terms of how the patient will react to perceptions of the therapist's actual distance and body positioning (p. 35)."

Later research directed toward the investigation and elucidation of the parameters associated with psychological distance in schizophrenics has been reported by Tolor and his associates (cf. Tolor, 1968, 1969, 1970a, 1970b). His preliminary results indicated that psychiatric patients hospitalized for longer periods of time have a stronger desire for interpersonal associations than do patients who have been hospitalized for shorter periods of time insofar as psychological distance is concerned. Estimates of distance were derived from a modified version of Kuethe's social schemata technique (1962, 1964) which requires placement of pairs of figures on a field.

In a related study, using a different methodological approach (i.e., Psychological Distance Scale), Tolor (1970a) reported that only with respect to the mother figure do combined control groups of males and females differ significantly from a combined male and female group of emotionally disturbed outpatients receiving psychotherapy,
with respect to the concept of psychological distance; on none of the other six concepts of the PDS do the groups differ to any significant degree. In reviewing his findings and the implications for future research trends, Tolor points out that "...the type of social context materially influences psychological distance as does the measurement device, non-verbal or verbal, which is employed (p. 162)."

Similarly, Tolor (1970b), again employing the social schemata technique, found that long-term process schizophrenics consistently placed the designs, neutral as well as social, closer together than the normal subjects, indicating that the schizophrenic's desire to associate with others is even stronger than that of college students. He concludes his research efforts by reiterating that his findings fail to demonstrate a pervasive psychological deficit in schizophrenics with respect to the construct of psychological distance. The absence of well-defined deviant social schemas "... argues against the notion of a pervasive psychological deficit in schizophrenics, at least in the interpersonal realm (p. 282)."

Using an experimental approach similar to that employed by Horowitz (1964), Kinzel (1970) found that violent individuals (i.e., prisoners in a federal penitentiary) appeared to be hypersensitive to physical closeness to others. Body buffer zones of the two groups of prisoners (violent vs. nonviolent) showed the zones of the violent group to be almost four times larger; in addition, the rear zones of the same group were larger than their front zones, whereas the front zones of the non-violent group tended to be larger than their rear zones.
Kinzel suggested that the larger zones of the violent group indicated a pathological body image state, which might account for their tendency to perceive passive personal closeness as an active physical threat, and secondly, a relationship between zone shape and homosexual anxiety was posited.

That distance is also a potent stimulus cue in the conveyance of attitudes and affect has been extensively demonstrated by Mehrabian (1968a, 1968b, 1969, 1970) in a series of empirically impressive articles. He utilized both encoding and decoding methodological approaches to investigate the relation of distance to attitude. In one experiment (1968a) subjects were asked to infer the degree to which another person liked or disliked them on the basis of the distance that he stood from them. In an encoding phase of the same experiment, the same subjects were required to imagine liked versus disliked addressees and to assume a standing position characteristic of their interactions with such people. Results indicated that when a communicator stood close (i.e., 3 as opposed to 7 feet) to his addressee, a more positive attitude was both inferred and communicated.

Mehrabian (1968b) also used an encoding method in which the subject was required to role play five degrees of attitude toward the addressee. It was ascertained that distance linearly decreased as positive attitude toward the target person increased. Similarly, in a study investigating the nonverbal concomitants of perceived and intended persuasiveness, Mehrabian and Williams (1969) found that smaller distances from the addressee enhanced perceived persuasiveness.
Reflecting on their own work, as well as the investigations of others in the area of interpersonal distance, Mehrabian and Williams (1969) observed that the array of research studies concerned with the proxemic variable distance tended to complement one another in that they indicate "... that communicator-addressee distance is correlated with the degree of negative attitude communicated to and inferred by the addressee (p. 363)". In addition, they emphasize that interaction distances that are too close may be perceived as inappropriate and elicit negative addressee attitudes, this being especially true when the communicator-addressee relationship is not an intimate, personal one.

In a more recent investigation, Mehrabian (1970) has suggested that the referents of nonverbal behavior can be characterized in terms of a three-dimensional framework: evaluation, potency or status, and responsiveness. Again, distance within the context of this paradigm relates primarily to the positive evaluation dimension, that is, it can potentially communicate a more positive attitude toward the addressee. This would be the case with close interaction distance, while a far physical separation would have the converse effect.

Further, it is Mehrabian's contention that proxemic or immediacy cues, of which distance is one, reflect a more positive attitude toward an addressee and can be conceptually regarded as increasing the physical proximity between a communicator and his addressee, and thus thereby increase the mutual sensory stimulation between the interactants or participants in a communicational exchange.
That applications of such findings can be extended to specialized types of interpersonal interactions such as counseling or the psychotherapeutic relationship has only recently been investigated; for example, Mehrabian (1970) hypothesizes:

"Investigators could select from a diversity of nonverbal cues those which are best suited to their particular experimental requirements, and thereby explore the differential effectiveness of the communication of liking in shaping the behaviors of different types of S's, such as children versus adults (p. 256)".

To date, only a handful of studies and articles have indicated that they are cognizant of the importance of proxemic cues as integral components of the communication process within the counseling or psychotherapeutic relationship; few studies have specifically attempted to systematically vary such variables in order to assess the communicative significance of these parameters.

Again, with respect to distance, Szasz (1965) suggests "...that the therapist sits facing the patient, not too far from him. More than six or eight feet between the participants creates an atmosphere of distance. So does placing a desk or other furniture between therapist and client (p. 161)".

Whitehorn and Betz (1960) have indicated that psychiatrists differ markedly in their handling of space and distance in psychotherapy sessions with schizophrenics; they found that some psychiatrists tend to remain somewhat distant from the patient, being either directive or passively observing, while others tend to form more personal and mutual relationships with patients.
Pollack and Kiev (1963) reported that psychotherapists who have less rigidity toward the structure of space (in experimental situations) would appear to be more successful with schizophrenic patients.

More recently, Haase (1970) in investigating the relationship of subject sex and specific instructional set for counseling (i.e., personal/social problems versus academic/vocational concerns), demonstrated that students would seem to prefer closer interaction distances as being most appropriate for the counseling interaction. Furthermore, no significant differences were found between males and females, and the instructional set failed to induce differential responses to distance. While distances of thirty, thirty-nine, and fifty inches were perceived as preferable, the distances of sixty-six, and eighty-eight inches were viewed as increasingly less preferable for dyadic interaction. This latter finding would seem to suggest that the preferred distances associated with the counseling situation are seemingly different from those accorded to more conventional conversational interactions. Moreover, distances which are seen as appropriate to normal social intercourse are rejected for the counseling situation suggesting that not only is the counseling interaction perceived as a unique form of an interpersonal relationship, but that "...this particular interaction setting carries a distinct and identifiable proxemic notation (p. 235)".

Somewhat similarly, Pierce (1970) found a student preference for interaction distances of 39 and 48 inches as opposed to 30 inches and 66 inches in a counseling analogue situation; in addition, he
found no significant differences between the client, counselor, and administrator groups as far as their preference for interaction distance in dyadic relationships was concerned.

At this point, before proceeding with our discussion of the second proxemic variable, eye contact, it is important that some of the differences and similarities between the constructs related to "distance" in the preceding section be more fully explicated. For Little (1965), Hall (1959), and Sommer (1965), the concept, personal space, may be defined as the area immediately surrounding the individual in which the majority of his interpersonal interactions take place. More specifically, it can be conceived of as an expanding and contracting ring or bubble which encompasses the individual and defines the physical separation he requires in relation to others with respect to specified activities and relationships.

For others such as Tolor (1970a), the concept of psychological distance refers to the degree of intimacy or alienation that a person desires to experience in connection with specific others; it is not necessarily related to overt behavior (i.e., actual distance per se). Horowitz's body-buffer zone concept is similar to the personal space concept originated by Hall; on the other hand, when Scheflen (1964) speaks of interpersonal distance, he is entirely relating to the actual physical separation between the interactants.

Liebman (1970) has posited that definitions and constructs relating to man's spatial behavior can be ordered into at least two mutually exclusive categories, that is, physical distance and symbolic distance. The concept of physical distance merely refers to
the actual physical spacing between participants. While symbolic distance refers to the result of behavior on the part of the individual or others in the given situation which does not involve actual physical distancing but nonetheless elicits a feeling of closeness or distance. She indicates that a variety of proxemic and kinesthetic factors have an ascertainable involvement in symbolic distance, ". . .for example, averted eyes, restricted body movement, soft breathing, and limited conversation increase psychological distance, while staring, expansive movements, and noise from afar decrease psychological distance (p. 212)".

Finally, since it is apparent that physical and symbolic distance are mutually supporting and complement each other in most interpersonal encounters, she suggests a model for personal space conceptualized as a psychological variable which intervenes between antecedent conditions and consequent interpersonal behavior. Thus, it may be defined as:

"A set of expectations held by the individual that his own and others' behavior, related to distance and position in space, will satisfy interpersonal goals in the most appropriate ways possible (p. 210)".

**Eye contact**

A second proxemic variable, eye contact, was also shown by Hall (1963b) to be an index of the attitude of a communicator toward his addressee, but that ". . .virtually nothing is known of vision as a factor in human transactions (p. 1014)".

Since Hall made this pronouncement, the literature on visual interaction and eye contact has proliferated to the point where a
considerable body of consistent, well-validated results have accrued; at least three major review articles (cf. Duncan, 1969; Mehrabian, 1969a; and, to a lesser extent, Sommer, 1967) have reviewed studies pertaining to the expressive function of eye contact and its role in relation to the total communication process.

As was seen to be the case with the first proxemic measure distance, a number of contingencies or variables (i.e., task, organismic, environmental) are directly related to the interactional distances that people manifest in social relationships; in the same manner, an array of similar variables have some bearing on visual interaction patterns in dyadic encounters. Some of the most frequently cited include: a) sex of interactants, b) speaking versus listening, c) affective quality of the interaction, d) personality characteristics of the interactants, and e) distance between interactants (Duncan, 1969, p. 129).

Most of these variables and their effects on visual interaction have been investigated by Exline and his colleagues (e.g., Exline, 1963; Exline and Eldridge, 1967; Nachson and Wapner, 1967; Exline, Gray and Schuette, 1965; Exline and Messick, 1967; Exline and Winter 1965). They have attempted to ferret out the salient factors that are associated with the amount of gaze an individual seeks to engage in; have discerned that both males and females tend to display less preference for eye contact when the interaction has an aversive quality, but that women increase eye contact when the interaction is perceived as positive (Exline and Winter, 1965) while males decrease their looking or preference for therein. Duncan (1969) notes that all
investigators of visual interaction have ascertained that both males and females make more use of eye contact when listening than when speaking.

That eye contact can function as a potentially cogent nonverbal reinforcer or cue was suggested in a study conducted by Reece and Whitman (1962) in which they found that nonverbal variables, among them the amount of eye contact, significantly affected the total number of words produced by a subject when the experimenter nonverbally indicated a more positive attitude. Similarly, Exline and Eldridge (1967) indicated that the same verbal communication was decoded as being more favorable by a subject when it was associated with more eye contact than when it was presented along with less eye contact.

Subject variables such as different personality characteristics have also been related to a preference for, or actual propensity to engage in, different levels of eye contact. Efran and Broughton (1966) reported that dependent individuals can be expected to engage in more visual interaction, and are more apt to convey positive attitudes via eye contact. A similar finding was reported by Exline and Messick (1967). An explanation to account for these aforementioned findings is suggested by Mehrabian (1969) as he hypothesized that dependent persons are more attuned to a variety of nonverbal reinforcement cues than are more independent individuals who are not as dependent on others for gratification and social reinforcement. Thus, it would follow that the dependent individual would be expected to communicate more positive attitudes nonverbally, probably with relatively high levels of eye contact.
Exline and Winters (1965) have also demonstrated striking differences in willingness to engage in mutual glances by those who were independently judged to differ in their desire to establish warm interpersonal relations. Results highlighted the fact that those indicating a strong affective-inclusion orientation returned the interviewer's glances significantly more often than did those whose scale scores indicated a weak affective orientation.

In another series of studies (Exline and Winters, 1965) designed to further explore the relationship between subject's affective experiences and his tendency to engage in eye contact with an interviewer, Exline found that the development of positive affect for another is matched by systematic changes in the use of eye contact. An important sex difference in the results indicated that women seem to seek out the eyes of those they like, or to whom they are momentarily attracted, whereas men do not attempt to increase their contact with the preferred so much as to avoid contact with the less preferred. They conclude:

"Data from the studies described would seem to provide support for the thesis that there is a predictable relationship between affective involvement and willingness to enter into mutual glances with another. Implicit in our argument to date is the assumption that if one person feels good or comfortable about relating to another he will engage in mutual glances to a greater degree than if he feels bad or uncomfortable about the relationship (p. 322)".

Later, he adds that the ease with which eye contact can be made is an important factor which facilitates the speedy development of later emotional reactions - visual interaction is often the precursor of more involved conversations and interaction patterns,
"...whether or not one shares or avoids the glances of his co-
conversationalist would seem to contribute much to the speedy
build-up of emotional reactions within the dyad (p. 349)". Horowitz
(1968) cites examples of schizophrenic patients, who by their increased
ability to maintain eye contact, indicate that they are more amenable
to psychotherapeutic intervention.

Argyle and Dean (1965) have delineated an inverse relationship
between interaction and the tendency to engage in eye contact - for
a given degree of communicator attitude toward an addressee, the
degree of eye contact decreased as closeness increased. Mehrabian
(1969) suggests that since both eye contact and closeness additively
reflect degree of communicator attitude toward, or intimacy with an
addressee, that increases (or decreases) in the former are associated
with compensatory decreases or increases in the latter. As an example,
Horowitz (1968) reported that schizophrenics manifested less eye
contact in dyadic relationships as the interaction distance was
diminished.

Another factor which has a potent influence on eye contact in
interpersonal relationships involves the status differentiation between
interactants. Findings by Hearn (1957) imply that eye contact with an
addressee is a parabolic function of the status of that addressee,
provided distance and other variables are held constant. Thus, visual
interaction is moderate with a very high-status addressee, at a
maximum with a moderately high-status addressee, and at a minimum with
a very low-status addressee.

Support for part of Hearn's results has been offered by Mehrabian
(1968a, 1968b, 1969, 1970) who has compiled extensive findings relating the attitude communicating importance of eye contact in dyadic interactions.

In one investigation (Mehrabian and Friari, 1969), the results indicated that seated male communicators had significantly less eye contact with disliked addressees than with liked ones; in addition, female communicators had significantly less eye contact with disliked male addressees than with any other of the three investigated groups, i.e., liked males, liked females, and disliked females.

In a related study, Mehrabian (1968b) investigated the eye contact of seated communicators as a function of five degrees of communicator attitude toward the addressee. He ascertained that the amount of visual interaction with an object of one's communication was a parabolic function of attitude toward the addressee, such that eye contact was minimal for a disliked addressee, approached a maximum value for addressees toward whom the attitude was neutral, and slightly diminished for people who were liked very much. Once more, compensatory decreases in visual interaction were manifest when communicators assumed small distances to addressees who were liked very much.

In a series of decoding and encoding experiments in which the attitude-communicating significance of a number of postural, orientation, and distance cues were investigated, Mehrabian (1968a) again reiterated that male encoders have significantly more eye contact with liked addressees than with disliked addressees. Female encoders,
however, do not have significantly more eye contact with liked addressees than with disliked ones. Thus, the overall findings suggest that for a male communicator, more or increased eye contact would seem to represent an attempt to communicate a positive attitude within the context of a dyadic exchange.

Kendon (1967) has contributed considerably to a further understanding of human visual behavior. His delineation of four main functions of gazing are noteworthy: a) cognitive: subjects tend to look away at difficult encoding points; b) monitoring: subjects may look at their interactant to indicate the conclusions of thought units and to check their interactant's attentiveness and reaction; c) regulatory: responses may be demanded or suppressed by looking; and d) expressive: degree of involvement or arousal may be signaled through looking. With respect to the lattermost function, i.e., expressive, Kendon notes that eye contact can be related to expression of feelings or attitudes of a communicator to his addressee. He additionally indicates that the amount of mutual looking conversants will engage in can serve to regulate the level of shared emotional arousal within it, that eye contact will decline in direct proportion as the individuals want to avoid or withdraw from a relationship.

"A possible explanation why some individuals make concerted attempts to refrain from eye contact suggests that when we observe that another person is looking at us, we are aware that he is giving us his attention. To be subjected to the continual gaze of another is a very unnerving experience, for to be the object of another's attention is to be vulnerable to him...to look into another's line of regard, then, is to meet his intentions 'head on', it is to enter a direct relationship with him (p. 48)".
Research designed to investigate the role of visual behavior within the context of counseling or psychotherapy is all but non-existent. How the therapist manages the question of what degree of eye contact is appropriate with different patient populations, and the implications therein have only been briefly alluded to. For example, Fromm-Reichmann (1950, p. 12), in discussing therapist responsiveness, advocated an arrangement whereby it is possible for the therapist and his patient to engage in visual interaction if either member so desires, and likewise to refrain from eye contact if the occasion warrants. Therapist eye contact is a vital component of the communication process, this being especially true for psychotic patients, "...whose lack of orientation in the outer world has to be counteracted by the visible and audible reality of another person."

A somewhat different and in fact contrary view is advanced by Sullivan (1954) when he relates to the issue of patient-therapist visual interaction; again with particular reference to schizophrenic patients, he advocated that the therapist minimize the opportunity for visual interaction since he felt that schizophrenics were often embarrassed by therapist eye contact. In his own practice he sat at an angle of ninety degrees from the people he interviewed, an arrangement which all but precluded therapist-patient visual interaction.

Horowitz (1968) has found that avoidance of eye contact is particularly the case with acute schizophrenics in regressive phases and as the regression of the acute stages waned, ability to tolerate increased eye contact was manifest. Further, in all of the groups
(i.e., acute schizophrenics, psychotic depressives, neurotics) there was a tendency to have less eye contact as interpersonal distance was diminished.

Body orientation

Another variable subsumed under the rubric of proxemics is body orientation (i.e., the degree to which a communicator's shoulders and legs are turned in the direction of, rather than away from, his addressee). Although less researched than some of the other proxemic variables it nevertheless can serve as an indicator of communicator attitude or status (cf. Mehrabian, 1969).

Sommer's (1967) review of status relationships and spatial arrangements suggested that perhaps the body orientation of communicators, rather than the actual distances between them, is a more important variable for the communication of status relationships.

Rosenfeld (1965), in a study designed to elucidate how various proxemic cues (e.g., distance, body orientation) are used as instrumental acts for the attainment of social approval, found that there was no significant difference in the body orientation of his subjects toward the addressee in an approval-seeking, in contrast to an approval-avoiding, situation. He concluded that, "...the comparison of angles of chair placement between the groups indicates that face-to-face confrontation, at least under relatively open ecological conditions, is not used as an approval-inducing device and may even have the opposite effect (p. 122)."

One of the inherent difficulties researchers have encountered
when they attempt to assess the communicative significance of this particular proxemic parameter is that the effects of body orientation and eye contact may easily be confounded. Greater degrees of eye contact with a given individual tend, rather naturally, to be associated with a more direct orientation of the head, shoulders, and legs of a communicator toward his addressee.

Mehrabian (1967, 1968a, 1968b) has addressed himself to this problem and has attempted to isolate or ferret out the individual as well as the combined effects of various proxemic cues including body orientation. In one investigation (Mehrabian, 1967) the experimenters systematically varied their posture vis-a-vis the subjects whom they were communicating with; also varied was the amount of eye contact. Results showed that more eye contact communicated a more positive, warm attitude. Also, when eye contact was present, a less direct body orientation of the experimenter was interpreted as an indicator of less positive attitude than when there was a more direct or immediate body orientation. This effect was not found when there was a total absence of eye contact.

In a later study (Mehrabian, 1968a), again employing a decoding methodology with standing communicators, he found somewhat disparate results with regard to the effects of body orientation: "the findings do not provide much support for the hypothesis which relates a more open posture and more direct orientation to more positive attitude inferred by an addressee (p. 307". Yet, he later states (1970) that a more direct body orientation on the part of a communicator definitely communicates a more positive attitude or affect to an
addressee. In another study when seated communicators were used to assess the relativity of body orientation as a significant proxemic cue, Mehrabian (1968b) discerned that shoulder orientation was not a discriminator of varying degrees of male communicator attitude except when the addressee was liked very much, in which case the shoulder was less direct.

Finally, in a later related series of studies, Mehrabian and Williams (1969) presented a number of complex findings relating body orientation to attitude communication. On the one hand they indicate that an indirect body orientation toward the person whom the communication is directed toward enhanced perceived persuasiveness more than a direct orientation in the case of male communicators. But later, they suggest that when a communicator has available a physical setting which allows the minimization of eye contact and directness of orientation toward the addressee, he may use these in a casual way to minimize the immediacy of his interaction with his addressee. However, in the latter case the variations in body orientation are a function of increased body movement (i.e., swivel movements) - a factor which is seen as an indicator of "...discomfort or unwillingness to interact with another person in a highly immediate or proxemic manner (p. 55)". Thus, the difficulty of ascribing attitude communicating significance to body orientation cues in this case would seem to be related to a confounding of the effects of swivel movements with body orientation.

That the importance of body orientation as an index of attitude is not well established is implied by Mehrabian (1969) as he provides
a condensation of relevant research efforts with respect to this particular variable. He cites that additional decoding experiments in which the effects of body orientation and eye contact can be separated are required to clarify the relationship of directness of body orientation to attitudes and status relationships. The evidence which is presently available suggests, according to Mehrabian, that males use a less direct body orientation when the addressee is liked very much. For female communicators, a very indirect body orientation (rotated) is employed when the addressee is disliked intensely while with liked addressees a moderately indirect orientation is manifest. Finally, body orientation is usually more direct to a higher status than to a lower status individual.

Observations and suggestions pertaining to the use of therapist body orientation in the counseling or therapy interview have been sparse; for the most part anecdotal incidents and reports have provided the only evidence that this particular proxemic factor is implemented by therapists and counselors of different theoretical orientations. For instance, Benjamin (1969) indicates a preference for a seating arrangement which places the therapist at a ninety degree angle to his client, thus insuring an automatic, predetermined body orientation; a similar preference was indicated by Sullivan (1954).

Finally, Wolberg (1967) provides an example of how a more direct body orientation on the therapist's part had a positive effect during a difficult period in the therapy:
"A session of the therapist working with the patient which was recorded on video tape demonstrated that the therapist had placed his chair so that he was not facing the patient; he was in effect detaching himself from her and repeating a childish trauma. Correction of this position, with the closer interaction that the face-to-face placement encouraged, rapidly brought the patient out of her depression and accelerated her progress (p. 1038)".

Openness of posture

A fourth proxemic variable which has been related to attitude communication concerns the accessibility of the body (i.e., the openness of the arms and legs). Machotka (1965) noted the relationship between several postural variables and concomitant attitudes. In his study, drawings of groups of people who had assumed various postures relative to one another were judged by subjects who were asked to infer social relationships. He concurred that the openness of the arms communicates warmth and that eye contact projects concern. His results thus indicated that a more accessible posture conveyed more positive attitudes toward an addressee.

Mehrabian has conducted a number of investigations concerned with the communicative significance of body posture. In one such study involving a number of decoding and encoding subinvestigations (1968a), he attempted to search for relationships among attitude, status, communicator age and sex, and postural cues.

With respect to seated interpersonal exchanges, meager evidence was found which clearly related an open posture to the conveyance of positive attitudes, although there was some indication that male encoders show significantly less openness with low-status than with
high-status addressees. Mehrabian concluded that the interpretation of the interactions warranted further consideration and replication, and that "...in sum, among the hypotheses, those relating directness of orientation to attitude and openness of posture to attitude are not supported (p. 308)". Moreover, in a study in which five degrees of communicator attitude were explored, Mehrabian (1968b) found no significant relationship between openness of the arrangement of arms or legs of seated communicators and their attitude toward the addressee.

That the body accessibility of a communicator does not seem to be a consistent correlate of the communicator's attitude toward the object of his communication succinctly sums up the overall empirical findings with respect to this particular proxemic variable. In fact, Mehrabian (1969) suggests, "...an open arm position of a seated communicator may more appropriately be considered an index of relaxation, with relatively more open positions indicating greater relaxation (p. 368)".

Thus, the questions pertaining to the substantiability or the significance of this prosemic cue as it relates to the conveyance of attitude seems rather enigmatic. There seems to be reasonable doubt concerning its evaluative aspects, but this is based on comparatively few investigations; a dearth of research exists relating this variable to the counseling or psychotherapeutic situation.

**Trunk lean**

Another proxemic variable which has been linked to the communication of attitudes (evaluation and liking) involves the trunk lean
of the communicator. James's (1932) study dealing with the significance of posture as communicating feeling or attitude in which subjects were asked to rate stimulus pictures according to the attitude being expressed represents an early investigative effort with respect to trunk lean. He found that he could conceptualize his results as yielding discrete postural categories. For example, the subcategory of "approach" denoted an attentive posture communicated by a forward lean of the trunk. The category of "withdrawal" indicated a negative, refusing or repulsed position communicated by drawing back or turning away. Finally, an excessively forward lean of the trunk, with eyes focused downward was decoded by subjects as communicating contraction or dejection. Overall, then, James pointed out that a forward lean of the trunk, as opposed to a backward one, communicates a relatively positive attitude; the latter configuration communicates a more negative attitudinal set.

Mehrabian (1969) established that a forward lean of the trunk (20 degrees) is associated with the communication of positive affect; conversely, a backward lean of the trunk conveys a more negative attitude. Similar results were obtained in a follow-up investigation (cf. Mehrabian and Williams, 1969). In addition, a backward lean of the trunk is perceived as not so much communicating a definite negative attitudinal state, but rather it may suggest that the interviewer is relaxed, or that he is viewed as being less persuasive. And more recently, the sometimes complicated relationship between trunk lean and eventual communicated attitude was succinctly summarized by Mehrabian (1970). He indicates that less relaxation (i.e., upright
or forward trunk lean) is usually associated with the communication of more positive attitudes to an addressee; also, less relaxation is manifest when the communicator is relating to an addressee of equal or higher status.

Trunk lean, on one level, can be viewed as communicating interviewer attitudinal states; in addition it often complements the effects of various other proxemic indices. Argyle and Dean (1965) observed that at close interaction distances a backward trunk lean was employed to increase the spatial distance; conversely, at far distances an interactant would often lean forward to lessen the actual interaction zone. Similar findings were suggested in research conducted by Dumont (1971). Perhaps, as Mehrabian (1969) suggests, ". . .since both eye contact and closeness additively reflect degree of communicator attitude or intimacy with the addressee, and therefore that increases in the former are associated with compensatory decreases in the latter when the attitude is consistent (p. 364)".

This observed compensatory relationship between trunk lean and distance is more probably true for all of the various proxemic dimensions; in tandem some would seem to be more cogent reinforcers than others in the conveyance of attitudes. The problem would seem to lie in the identification of the most salient combinations of proxemic cues that relate to the communication of affect and attitude.

As has been the case with some of the other proxemic cues, little evidence has accrued which attests to the import of trunk lean within the context of counseling or psychotherapy. Schefelen (1964)
has posited that psychotherapy consists of a series of levels of nonverbal tactics (i.e., a series of postural arrangements) implemented by the therapist, one of the most essential being the shift by the therapist from leaning backward with arms or legs crossed to leaning forward with arms and legs uncrossed when he stops listening and takes up interrupting, confronting, or reassuring. This postural transition is correlated with a progressive movement toward the patient; the therapist is likely to think of this tactic as establishing rapport. Of note here is the possibility that the effects of trunk lean are confounded by the increased openness of the therapist's posture - a troublesome problem often manifest in clinical, observational studies where the independence of the treatment effects is almost impossible to establish (cf. Reece and Whitman, 1962). Such research endeavors virtually by nature often have little control over supposed independent or treatment variable, and hence, specificity of results is cautiously limited.

In a counseling analogue paradigm, Pierce (1970) found that students had a greater preference for a forward counselor trunk lean as opposed to a backward trunk lean. He also found that trunk lean and interaction distance were related in a compensatory manner similar to that previously outlined (cf. Argyle and Dean, 1965); that is, the greater the interaction distance, the more preferable a forward trunk lean, the closer the distance between counselor and client, the more preferable an upright position.
Summary

The existing literature provides considerable support for the contention that proxemic cues are integral components of the communication process. The bulk of the studies reviewed tended to focus on the utility and import of such cues in a myriad of interpersonal interaction situations, including the psychotherapeutic or counseling interaction. In this latter case, the relationship of these nonverbal parameters to the communication process is not well conceptualized, although allusions to the implementation and cogency of such factors is frequently anecdotally documented. In most of the studies referenced singular proxemic variables were investigated - although in reality these seemingly do not act independently of one another. Questions pertaining to the evaluative potency and differential effectiveness of proxemic dimensions as they act independently and in concert within the context of counseling or psychotherapeutic simulated situations still are largely unanswerable in view of the limited investigative input to date. Moreover, questions relating to the effects of such communicational cues on different types of clients who seek psychotherapeutic services cannot be definitively responded to at this time.

As a result, the present investigation attempted to further investigate the significance of nonverbal proxemic cues with special emphasis directed toward specifying distinct therapist proxemic combinations which facilitate a positive evaluative state or condition. The current study also attempted to define how different proxemic
cues are perceived differentially by a broad spectrum of clients that would seek psychotherapeutic or counseling services.

Kinesics

The second nonverbal communication modality, which is primarily concerned with the investigation of gestures, postural movements, facial expressions, i.e., body movements, is designated as the kinesic channel. Briefly defined, kinesics is "...the systematic study of those patterned and learned aspects of body motion which can be demonstrated to have definite communicational value" (Birdwhistell, 1963, p. 125). Investigations of the kinesic component of communication range from work by psychoanalysts (e.g., Reich, 1949; Fromm-Reichmann, 1950; Braatoy, 1954; Deutsch, 1947, 1952; Barbara, 1955; and Berger, 1958), psychiatrists, and psychologists to work by cultural anthropologists. Psychoanalytically oriented practitioners have emphasized the value of tonal, postural, and kinesic phenomena to the assessment of personality, as well as to the understanding of a client's communication. As Barbara (1955) indicates:

"Disturbances in communication are not only expressed in terms of the spoken or written word, but in all the interplay of hidden gestures, feelings, bodily reactions, glances, etc., which are constantly going on in dynamic human beings. An awareness of both verbal and nonverbal factors is essential in order to arrive at a more complete understanding of human behavior (p. 291)."

Generally, then, the impetus for the work of psychiatrists in the area of kinesics has stemmed from the desire to better understand and identify the nonverbal concomitants of psychopathology. Despite the obvious heuristic worth of their observations, shortcomings in this
approach are apparent. Wiener (1968) cites two main criticisms of the psychoanalytic approach to kinesic research: First, psychoanalysts have not made explicit the principles for denoting and interpreting nonverbal communication; rather, they have tended to limit their approach to a description of discrete instances of a given behavioral event. And second, the interpretation of a discrete instance has usually focused on relating the instance to one or another aspect of the communicator's personality (p. 64).

Overall, while we certainly cannot fault the psychoanalysts for their perceptiveness in according nonverbal behavior as instrumental and integral to the totality of the communication process, a total appraisal of their efforts points out the recurrent failure to replicate or cross-validate their findings in a systematic, empirical manner. For example, explicit constructs are absent for specifying a) client response patterns which are significant and relevant, b) the principles for relating any occurrence to any personality relevant construct, or c) the concepts which can relate an instance of nonverbal behavior to particular contents of experience (Wiener and Mehrabian, 1968).

In contrast to the psychoanalysts, Birdwhistell (1952, 1963, 1966, 1970) has carefully formulated an elaborate system of categories for the classification of kinesic behaviors. His analysis of body movement phenomena in many ways parallels the analysis of verbal behavior found in linguistics and paralinguistics. For example, analogous to the linguistical analysis of verbal phenomena in terms of phonemes, body movements are classified into kines. Each kine covers
a class of body movements related to a particular body area (e.g.,
total head, face, trunk, shoulder, arm and wrist, hand and finger
activity, etc.); kines also vary in terms of intensity (over-tense,
tense, neutral, lax, and over-lax). Kines vary in terms of range
(width or extent of movement - narrow, limited, neutral, widened, and
broad), and in velocity (staccato, neutral, and allegro). Patterns of
kines are designated as kinemorphs; in turn, these are combined to
form higher level syntactic structures similar to those in speech.

Not only has Birdwhistell elaborated this classification system,
but he has also offered a very detailed notation system for recording
details of movement (cf. Birdwhistell, 1970, pp. 285-302). However,
one of his most salient contributions rests upon the fact that he has
redirected interest to the relevance of body movements, including
gestures and facial expressions, in communication. He has also
pointed out some relationships of sex, status, culture, and ethnic
background to some variations in body posture and movement. But,
while his classificatory system has been primarily concerned with the
analysis of movement, it has yielded only minimal information about the
relationship of movement to a communicator's experience.

In fact, Birdwhistell himself at times implies that he is not at
all certain whether the communicative significance of any specific
pattern of kinesic behavior or body movement can be articulated. In
this context he outlines some of the basic assumptions underlying
kinesic theory:

1) Like other events in nature, no body movement or expression
   is without meaning in the context in which it appears.
2) Like other aspects of human behavior, body posture, movement, and facial expression are patterned, and, thus, subject to systematic analysis.

3) While the possible limitations imposed by particular biological substrata are recognized, until otherwise demonstrated, the systematic body motion of the members of a community is considered a function of the social system to which the group belongs.

4) Visible body activity, like audible acoustic activity, systematically influences the behavior of other members of any particular group.

5) Until otherwise demonstrated, such behavior will be considered to have an investigable communicational function.

6) The meanings derived therefrom are functions both of the behavior and of the operations by which it is investigated.

7) The particular biological system and the special life experience of any individual will contribute idiosyncratic elements to his kinesic system, but the individual or symptomatic quality of these elements can only be assessed following the analysis of the larger system of which he is a part (1970, p. 184).

Thus, while Birdwhistell and his collaborators have articulated a comprehensive and systematic set of categories for the classification of movement phenomena, they have, in most cases, made little attempt to relate these observable events to the affective experiences of a given individual.

Wiener (1968) again sees this as a drawback in reviewing Birdwhistell's contributions, suggesting that the difficulty in relating kinesic categories to a person's experiences arises from the absence of an explicit basis for the selection of categories of body movements.

But, Birdwhistell (1970) implies that this objective may be premature at the present date; "...the scientific study of
expressional behavior as a reliable test for determining underlying personality dynamics must await extensive experimentation before we can test productive value and reliability of clinical judgements (p. 82)".

While Birdwhistell's work can be viewed as an attempt to develop a thorough typology for body movement there have been several other approaches to the investigation of body movement or kinesics. One set of studies investigated the interdependence of behaviors in different communication channels. For example, an investigation by Boomer (1963) indicated a direct correlation between speech disturbance and a composite measure of head, hand, and foot movements of one patient. In addition, Dittman (1962) found patterns of body movement indicative of the patient's mood as assessed independently by experts, and also that different body areas were active for different moods.

Later, Dittman, Parloff, and Boomer (1965) investigated the utilization of visual cues in inferring mood by a group of psychotherapists and a group of professional dancers. These two groups rated the pleasantness of affect shown by a patient on silent films. Results tended to point to the conclusion that the groups could make differentiated judgements on the basis of kinesic cues. Moreover, the groups differed in that the therapists tended to rely heavily on the facial cues, while the dancers were more responsive to the rest of the body as well. Finally, Dittman and Llewellyn (1969) posited the interdependence of the verbal and the nonverbal communication channels. They concluded:
"If a person wishes to convey the idea that what he is expressing is important or difficult to conceptualize or exciting, he will introduce movements along with his speech to get this extra information across. The timing of these movements will tend to follow the pattern of timing he is familiar with: that is, early in encoding units or following hesitations in speech (p. 105)."

Extensive research focusing on the emotional and attitude communicating importance of nonverbal kinesic behavior has been reported by Ekman and his associates (1964, 1965, 1967, 1968). In a series of ten experiments, Ekman (1965) showed that naive judges (college freshmen) could reliably judge affect from viewing the nonverbal behavior of normal individuals (psychiatrists and psychologists) during stress interviews, and that some claim could be made for at least gross accuracy in the judgement of emotion without any contextual knowledge.

Ekman cites that very rarely in real life is nonverbal behavior observed without any knowledge of the situation, that usually in seeing another person's nonverbal cues we also learn something about his situation and that only in specific circumstances (e.g., experiments) is an observer given the opportunity to judge nonverbal cues without having any other knowledge about the other person. He discusses two circumstances in which nonverbal behavior might conceivably take place, and relates them to a formulation of classes of information communicated by nonverbal behavior: a) when the observer has no a priori knowledge about another person except for nonverbal cues he is able to differentiate on a gross level between pleasant-unpleasant effective states; in this case stress versus catharsis. Similarly, other kinds of information can be communicated
by nonverbal of kinesic cues, and accurately decoded by a naive observer (e.g., psychodynamic cues, intelligence level, expressiveness, etc.); b) if the observer also knows something about the situation in which the behavior occurred, then more specific inferences can be drawn from the classes of information provided by kinesic cues - it can greatly expand the interpretations of nonverbal behavior. If the observer, say for example a counselor or psychotherapist, knows that the sample of nonverbal behavior is representative of the stimulus person's usual relationships, then information about affect, relationship quality, and role can lead to more specific inferences about adjustment in different types of interactions, and formulations about the general style of interpersonal relationships and associated psychodynamic and diagnostic features.

Finally, Ekman (1965) indicates that a specific moment-to-moment relationship between verbal and nonverbal cues can accurately appraised by an observer. While the relationship between the two channels is complex, kinesic actions can serve a variety of communicative functions in relation to verbal behavior. A total of seven such functions include: 1) repeating, 2) contradicting, 3) substituting for a verbal message, 4) reflecting the person's feelings about his verbal statement, 5) reflecting changes in the relationship, 6) accenting parts of the verbal message, and 7) maintaining the communication flow (p. 440).

Later, Ekman and Friesen (1967) further embellished their findings to take account of distinctions between four types of nonverbal cues (i.e., body acts, body positions, facial expressions, and head orientations) and two types of separate information about emotion.
They specify that distinct emotions can frequently be perceived from facial expressions and from body acts, while both head orientation and specific body positions will most frequently only allow perception of gross affective states. Moreover, since the rate of facial expressions usually far exceeds the rate of body acts, perceptions of specific emotions can more frequently be made from head than body cues.

More recently, Ekman and Friesen (1968) pointed out that information communicated nonverbally often does not duplicate the verbal content, and may provide new information which, when compared to the verbal behavior, forms the basis for specific inferences about personality. They also suggested that measures of nonverbal behavior had direct application in the investigation of psychotherapy process or outcome research. Specifically, the type and frequency of foot and hand acts was found to change radically from the beginning to the end of psychiatric hospitalization; individual foot acts were found to communicate specific messages such as anxiety and nervousness. A variety of hand acts were found to occur consistently with specific verbal content themes, and visually distinctive hand acts were found to convey distinctive messages. Suggesting that psychotherapy research should address itself to more concerted investigations of nonverbal phenomena, they conclude, "...nonverbal behavior reflects the changes over time in psychological functioning resulting from therapeutic intervention, and that it is sensitive to the individual differences between patients, even if they suffer from similar presenting complaints (p. 213)."
Mahl (1968) has also reported on the emotional and attitude communicating significance of nonverbal behavior, in particular gestures. One aspect of a series of investigations was concerned with the relationship between the nonverbal behavior of psychiatric outpatients and the verbal transactions within interviews. Four relationships were suggested:

1) "Some gestures and acts have the same meaning as the concurrent manifest verbal content.

2) Some betray contrary meanings.

3) Some anticipate later verbal statements.

4) Some seem to be a direct function of interaction with the interviewer (p. 321)."

In his concluding comments, Mahl reiterates that a perusal of contemporary research provides ample ground for the belief that many facets of nonverbal behavior are relevant variables for psychotherapy research and for more general personality research as well. While the bulk of Mahl's work was not concerned with the interpersonal matrix (i.e., patient-therapist) he emphasizes that future work must implement this concern. In this context he poses some interesting and provocative questions relating to the therapist-patient interaction, especially on the nonverbal level. For example, do significant changes take place in a client's nonverbal behavior over the course of psychotherapy? If so, then can these changes be ascribed to identifiable and intentional verbal therapist behaviors, or to his nonverbal behaviors? Finally, what is the relationship between patient and therapist nonverbal variables and outcome criteria in psychotherapy?

One investigator who has made an attempt to investigate the
nature of the total communication process in the psychotherapeutic setting has been Scheflen (1961, 1963, 1964). In his process of context analysis behaviors are not isolated a priori; rather, the mechanism of communication is generally seen in terms of a subject-object model. That is, "...an originator or prime mover transmits to a receiver. Context analysis theory sees the communicational behaviors as more likely to be mutual, often simultaneous, and highly interdependent (1963, p. 128)."

Of particular interest to Scheflen is a group of behaviors designated as regulatory. This particular type of communication has several characteristics: 1) It is chiefly kinesic; 2) relationship and pace are regulated, as well as deviant individual behaviors; and 3) the operation is not conducted by simple action and reaction sequences, but rather by mutual, often simultaneous, and frequently complementary signals (p. 129).

Scheflen cites that monitoring mechanisms such as regulatory communication seemed to be aimed largely at regulating interpersonal distance. Furthermore, since psychotherapy involves reciprocal communication which serves to regulate actions and relationships between patient and therapist there is a need to investigate the structure and rules of psychotherapy (i.e., kinesic communicational systems) since, "...knowing more about them would make it possible to teach psychotherapy more cogently and to improve therapeutic efficiency. The study of regulation may provide important clues to these rules and structures (p. 135)."
As Wolberg (1967) emphasizes:

"The patient is as much aware of the therapist's moods through the latter's nonverbal behaviors as the therapist is of the patient's emotions. Thus, the patient often picks up attitudes of disinterest and annoyance on the part of the therapist through his facial expressions, mannerisms, and behavior that belie verbal pronouncements of interest and concern (p. 309)."

In a later paper concerned with the significance of posture in psychotherapy sessions, Scheflen (1964) has demonstrated that different postural configurations have definite communicational utility and that according to the level of behavior, postures indicate the beginnings and endings of units of communication. Such configurations can also indicate the ways in which participants are related to each other and the steps or discrete stages in a postural program insofar as psychotherapy is concerned. For example, in the latter case, a progression of tactics (postural positions) is characteristically manifest by the therapist.

"The progressive uncrossing of extremities and movement toward the patient - with or without physical contact - are combined, and each shift is followed by increased clinical activity and lexical engagement, such as interpretation, reassurance, or instruction (p. 331)."

In most psychotherapy sessions, the postural progressions are associated with greater movement toward the client and culminate with the "rapport constellation" (i.e., forward trunk lean, accessibility of posture, and increased lexical behavior). Also of interest here is the fact that the above mentioned sequence is not manifest when the interaction with a patient is not a therapeutic session; for example, a demonstration interview or a diagnostic consultation.
Charney (1966) likewise investigated the patterns of postural configurations which take place in psychotherapy sessions, relating them to indices of rapport. Results emphasized increased upper-body mirror congruent posture as sessions progressed. Concomitant lexical content of these mirror congruent periods was notably interpersonally oriented, positive and specific; in contrast, the noncongruent periods were marked by a greater frequency of self-centered, negational, nonspecific verbal references. Charney concluded that postural configuration characterized by the upper-body mirror posture is an example of a naturally occurring interactive unit suggestive of a state of therapeutic rapport or increased relatedness between therapist and client.

Mehrabian (1970) in an attempt to conceptualize the referents of nonverbal behavior has posited that proxemic or immediacy cues can be ordered along an evaluation dimension whereas increased kinesic behavior, in most cases, is indicative of a greater responsiveness. He states:

"Whereas immediacy and relaxation indicate variations in attitude and potency or status, respectively, activity seems to communicate responsiveness to the addressee and depending on its combination with positive evaluative or negative cues, connotes intense degrees of either of those (p. 253)".

He goes on to suggest that counselors and psychotherapists should be attuned to the potential use of proxemic and kinesic variables as potential behavioral modifiers and begin to explore the differential effectiveness of the communication of respect versus the communication of liking in altering the behaviors of different types of subjects such as children as opposed to adults.
Finally, Renneker's (1963) observations, although made a few years hence, would seem to provide both a suitable summarization of the relation of kinesic oriented research to psychotherapy, as well as reiterating some of the directions which future investigative endeavors must attend to. He sees the interest in the communication significance of external body movements as a natural concomitant of therapeutic process research since by its nature process research requires us to have the potential techniques for identifying every informational stimulus to which the interacting participants are exposed at a given time. This would mean that we must have, according to Renneker, ways of tuning in to the interpersonal communication channels, and, further, of also separating out within each one its coexisting levels and types of messages and varied meanings.

Indirectly, and like many of the previously cited investigators, he draws attention to the potential saliency of the therapist's nonverbal activity:

"A body movement is both a source of information and a channel of communication. Psychiatrists assume that at least sometimes a patient's perception of a therapist's movement must be the predominant causative factor responsible for his next action; also, that such a perceptual event occasionally becomes the evidential basis for altering a neurotic misconception (p. 149)."

He concludes that kinesic behaviors are active agents in the psychotherapeutic process; and as such, essential variables to recognize and cope with in process research. Thus, body movements within the context of therapy can serve at least four distinct functions, related to the client, the therapist, or both. They are: a) a source of
information about the person moving, b) a channel for sending messages, c) a stimulus producing reaction in the viewer, and d) a therapeutic experience leading to change in the viewer (p. 150).

Summary

Kinesic behaviors have been conceptualized as salient components of the communication process, perhaps more so than the previously cited proxemic cues. The import of kinesic factors has long been documented by psychiatrists and psychologists; such variables being seen as providing invaluable information about the client's affective state, ego functioning, etc. In fact, until recently, the diagnostic relevancy of such cues has been the overriding impetus for investigative endeavors.

More recently, some investigators have begun to initiate explorations designed to emphasize the communicational relevance of this specific nonverbal class of behaviors within the context of psychotherapy; in particular, it has been the intent of some researchers to conceptualize kinesic parameters as instrumental to different factors germane to process-related concerns in psychotherapy (e.g., establishment of rapport, transference, empathy, etc.).

When questions are raised vis-a-vis the communicational significance of kinesic variables, they often closely parallel those evoked with respect to the previously discussed proxemic cues. This is not all that surprising since there is certainly a good deal of overlap between proxemic and kinesic behaviors - the latter usually being associated with greater physical movement and involvement.
But both, nonetheless, may be conceptualized as falling within the rubric of nonverbal behavior, although on slightly different categorical levels.

And so, while the present investigation did not specifically investigate the differential effect of counselor or therapist kinesic behaviors, the existing literature relating to kinesic investigations within the psychotherapeutic situation provides an invaluable reference point and source of potential information with regard to some of the questions pertinent to the current study concerning the potential communicational import of proxemic behaviors.

Paralanguage

A third communication modality, paralanguage, is rightfully included in discussions of nonverbal communication. Paralinguistic or psycholinguistical analyses have focused on parameters such as voice quality, speech nonfluencies, and nonlanguage sounds such as laughing, yawning, and grunting in an attempt to more fully understand and articulate the culturally prescribed codes that moderate their usage and significance in interpersonal communication schemas. Space considerations preclude a thorough review of all of the existing literature on paralanguage phenomena; in addition, much of the research is only tangentially related to the main purposes of the present investigation (interested readers would do well to refer to more authoritative and thorough sources such as Trager, 1958, 1960, 1961; Starkweather, 1961; Mahl and Schulze, 1964; Marsden, 1965; Goldman-Eisler, 1968). However, an attempt will be made to consider representative
work investigating paralinguistical communicational patterns in order to point out how this nonverbal channel further augments and elucidates information about communication in verbal channels, or provides information which may not be manifest in other existing channels, e.g., the kinesic and the proxemic.

Attempts to delineate the kinds of behavioral phenomena typically subsumed under paralinguistics have been made by Trager (1958), Pittenger and Smith (1957) and Dittmann and Wynne (1961). The summary provided by the latter succinctly highlights particular classes of vocal behavior which are relevant for an observer when he infers or decodes a particular communicator affective or emotional state:

A. Vocalizations may be of three types:
   1) Vocal Characterizers: laughing, crying, voice breaking.
   2) Vocal Segregates: sounds other than "words" which have specific communicative value, such as "um-hmm", "huh", and the like.
   3) Vocal Qualifiers: extra increase or decrease in loudness, pitch, and duration beyond what are needed to convey juncture, pitch and stress patterns.

B. Voice Quality carries baseline information about an individual's speech such as tempo, rhythm, precision (or sloppiness) of articulation, breathiness, register range, intensity range, rasp and openness, nasality, and resonance. Changes in these qualities can be indicators of the effects of current situational factors on the usual speech of an individual.

C. Voice Set refers to physiological characteristics current in the speaker - fatigue, immaturity, and the like (p. 202).

Dittmann and Wynne have applied these forms of analysis to interview materials and conclude that while certain paralinguistic patterns (e.g., juncture, stress, pitch) are able to be described very
reliably with current coding techniques, these particular speech phenomena have little psychological relevance. On the other hand, parameters such as Voice Quality and Voice Set have a higher psychological relevance.

Similarly, Pittenger and Smith (1957) had earlier suggested that Voice Quality and Voice Set often provide therapists with clues as to a client's general emotional state. They offer that:

"Probably a great many of the impressions that psychiatrists receive in terms of 'general emotional state' are to be handled in these areas - the voice as anxious, the voice as hostile, and so forth (Voice Quality); thin voice, immature voice, aged voice, dispirited voice (Voice Set). In all cases, phenomena to be classified here are separable from the vocal modifiers and are, so to speak, left over after these other phenomena have been accounted for and analyzed. Or they may be termed more persistent, in the sense that they continue over the whole communication or at least large sections of it, in contrast to the more transient occurrence of vocal modifiers (p. 180)."

In addition to the aforementioned indices of extra-linguistic behavior, psychologists and psychotherapists have frequently implemented other measures to analyze verbal communication in dyadic situations. The type-token ratio (i.e., the ration of the number of different word (types) to the total number of words (tokens) in the passage represents one measure of verbal diversification which has been employed in psychological research for quite some time now. Sentence length, verb-adjective ratios, percentage of personal words, rate of verbal output, and tense analysis are all indicative of measures which have been used singularly or in combination to make inferences about personality variables, individual differences, or diagnostic status.
The rationale for the utilization of such unobtrusive indices is spelled out comprehensively by Strupp (1961) when he stated in regard to such variables:

"I believe it is highly instructive to note that the therapist, in the course of his daily work, makes implicit use of a number of the indicators which have been used to objectify in one form or another the patient-therapist transactions in the two interviews. The principal focus of his work is always the patient's emotional state, and more particularly his affects in relation to the therapist. As in the patient under discussion, affects may be carefully hidden or disguised by a facade of verbal fluency; they may be bound in somatic symptoms, expressed in character defenses, and so on. Thus, the manifest content of the patient's verbalizations - like the manifest content of a dream - may be grossly misleading if taken at face value. For these reasons, the therapist is sensitively attuned to underlying meanings which he may detect in themes running through the patient's associative trends, but which emerge more dramatically in slips of the tongue, changes in intonation, pauses, etc. It is these manifestations which put him in closer touch with the patient's defenses, impulses, fantasies, etc., against which the defenses are directed (p. 160)."

But while Strupp feels that paralinguistic measures may hold some eventual promise in augmenting the clinician's existing observations about a client's emotional-affective state, he cites that the results of such analyses are at best suggestive and scanty with respect to validity data. Springer (1961) has more or less echoed the warnings of Strupp, and encouraged more concerted attempts in these areas.

More recently, Wiener (1968) has cited that unobtrusive paralinguistic measures such as the type-token ratio, tense usage, etc., since they have little ascertainable connection with a well-defined conceptual framework, must be viewed and implemented with caution, "...although such measures may be pragmatic for analyzing communications, they themselves do not appear to constitute communication phenomena (p. 71)."
In contrast to the approaches noted thus far, the application of the Speech Disturbance Ratio (SDR) and the Patient Silence Quotient (PSQ) both developed by Mahl (1961) represent two methods where an attempt was made to relate dependent measures to specific psychological constructs in the study of inter and intra-individual variations in interpersonal communication. Specifically, Mahl's work proceeded on the assumption that the inter and intra-individual variations in his categories are sensitive indicators of fluctuations in the speaker's immediate anxiety level. Increases in the overall speech disturbance level tend to elucidate client affective states insofar as the transient presence or absence of anxiety is concerned.

In short, the higher the speech disturbance level, the more prevalent the emission of anxiety. Examples of categories employed as referents for inferring speech disturbance include changes in the form or content of the sentence, repetitions of one or more words, stutters, sentence incompletions, tongue slips, and incoherent sounds.

Mahl sees his measures as being particularly salient for use in psychotherapy investigations since the speech disturbances occur largely outside of awareness of either the speaker or the listener, and thus are unlikely to be the target of deliberate social control or individual control. In addition, they are not subject to linguistic control because the disturbances per se have no semantic function in our language and because they can occur, even at fairly high rates, without seriously impairing manifest communication.

Commenting on Mahl's findings, Gottschalk (1961) suggests that while the categories used to arrive at the Speech Disturbance Ratio
are indeed sensitive indicators of psychological process, his own observations would militate against the definite conclusion, "...that such a collection of speech disturbances constitutes an uncontaminated measure of anxiety (p. 210)". In particular, he emphasizes that since Mahl, or for that matter other authors, rarely have provided corroborative physiological or biochemical evidence to support their contentions, that it is difficult to posit that the anxiety measure (SDR) has a one-to-one quantitative relationship throughout its range of variability with the internal physiological state.

Later, being cognizant of the preceding investigative efforts and the difficulty in assessing affect expression in verbal communication via paralinguistic methods, Wiener and Mehrabian (1968) have proposed a model for the inference of the degree of positive or negative affect, preference, or evaluation experienced by an individual through an analysis of his verbal communication.

This Immediacy model, as it is called, analyzes the particular words used rather than the semantic meaning of the verbalizations. Criteria for scoring non-immediacy subsume six main categories in the total model. The set of categories includes degrees of spatial immediacy, temporal immediacy, activity-passivity, modification, intensity-extensity, and denotative specificity.

In examining an individual's communication for non-immediacy, each thought unit (sentence) is scored for the presence or absence of every category. The scaling of immediacy proceeds on the assumption that the occurrence of a non-immediate form of communication is indicative of the communicator's relatively greater negative affective, evaluative
and/or preferential experience of the object of his communication or his addressee. With this rationale, there should be a larger number of non-immediacy scores assigned to communications the more negative or less preferential the communicators experience.

The scoring categories employed in the analysis have roots, at least in part, in earlier psycholinguistic work. In one category, the spatio-temporal, demonstratives such as "that" or "those" in contrast to "the", "this" or "these" are indicative of non-immediacy in that spatial distance is emphasized. For example, "I like these people" as opposed to "I like those people". In the Temporal category, non-immediacy is indicated if in the verbalization the relationship between the subject and the object is temporally displaced either to the past or to the future; for example, "I like these people" as contrasted to "I liked those people". Although in both cases the content of the statements is ostensibly the same, the use of "these" in contrast to "those", and "like" as opposed to "liked" can serve as a basis for inferring differences in preference, attitude towards, or affect about the object of the communication.

In relating their various immediacy-non-immediacy categories to a communicator's psychological state, Wiener and Mehrabian (1968) posit an isomorphic relationship between communication and experience. Variations in communication are a function of comparable variations in experience. In addition, as regards the specific relationship between affect and immediacy, they cite that there are a number of conceptual bases for relating non-immediacy in communication to positive, neutral, and negative communicator states. The approach-avoidance continuum constitutes one such base, they note:
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"Approach-avoidance behaviors have been hypothesized and found to be associated with positive-negative affect, evaluation, and preference. A communicator's separation of himself from his addressee, or his separation of himself from his communication, can be construed as being instances of avoidance behavior which are motivated by a negative affective state toward the object, the addressee, or the communication, respectively (p. 33)."

Several studies have investigated the validity and reliability of the immediacy model. Mehrabian and Wiener (1966) found in three experiments that positive and negative affect or preference, both long standing and induced, could be reliably inferred from immediacy measures; that is, communications about events or people experienced as negative contained greater non-immediacy measures than communications about events or people experienced as non-negative or positive. To ascertain whether the explicit expression of positive and negative affect in the verbal content contributes to the occurrence of non-immediacy, Mehrabian (1964) had subjects write both a positive and negative statement about a person whom they liked and a person whom they disliked. Results indicated that the non-immediacy scoring discriminated like-dislike within both positive and negative statements. In both cases the quality of the affective experience was the major determinant of non-immediacy and the effect was in the predicted direction - communication about disliked people had more non-immediacy than communication concerning liked people.

In a later attempt to investigate whether the immediacy categories could discriminate between students who wrote about failure experiences in contrast to success experiences, Gottlieb (1967) found more non-immediacy, and hence greater negative affect, was present in the
verbalizations about failure than for success; also, the relationship of non-immediacy to another indicator of affect, namely the Discomfort-Relief-Quotient (Dollard and Mowrer, 1947) was explored. Analysis of variance results of the DRQ scores indicated significant effects identical to those obtained with non-immediacy scores.

Drawing upon the findings of preceding investigators (i.e., Matarazzo, Wiens and Saslow, 1965; Goldman-Eisler, 1952) which indicated that communication length of an individual's statements are partially determined by his interviewer's characteristics or his interviewer's behavior, but that it is not necessarily related to variations in topics or content per se, Mehrabian (1965) explored a category of immediacy (communication length) not as fully defined as his more formal system of categories discussed elsewhere. He found that individuals compose longer letters of recommendation about liked than disliked people. Further, in the case of letters written about liked people, longer letters are written when the topic to be covered in the letter is partially specified in contrast to being minimally specified. Thus, a speaker's degree of positive, versus negative, attitude toward, and the length of his communication about, an object are positively correlated. Similarly, Ward (1970) also found that communication length can be used as an indirect or unobtrusive indicator of attitude.

The rationale for subsuming communication length (total number of words elicited) under the more general Immediacy model is indicated by Wiener and Mehrabian (1968):
"Length of communication can be considered a category of immediacy for any of the three explanations offered to relate affect to immediacy in communication. For example, using the interference notion, the absence of interfering affective responses makes it possible for the object of communication to remain focal for longer durations. Using the approach-avoidance explanation, a positive object elicits approach in contrast to negative objects which elicit avoidance of the object or anything related to the object, e.g., communications about the object or any of its attributes. Finally, using the instrumental conceptualization, associations with a positive object are reinforcing and, therefore, through generalization, communications about positive objects acquire secondary reinforcing value. For all three formulations, positive affect is associated with longer communication than negative affect (p. 141).

Although the bulk of their research has not emphasized or been directed toward it, Wiener and Mehrabian (1968) suggest that the immediacy channel appears to be well suited for clinical use in psychotherapy or counseling research. They offer that the variable behaviors of the therapist will influence the degree of non-immediacy in the client's successive responses, "...if the clinician 'approves' (i.e., smiles, nods), 'disapproves' (i.e., frowns, leans backward) or is 'ambiguous', variations in the client's verbalizations will be evident, and may be reflected in variations of non-immediacy (or some other channel (p. 164))."

Although there is little empirical support for such speculation, the use of the Immediacy model in a counseling situation would allow the therapist the use of paralinguistic techniques to infer client experiences concerning the ongoing event, including the client's relationship with the therapist, and also the client's affective, evaluative, and/or preferential experience of different content areas, people, or himself.
Summary

Man's adaptation to his spatial environment is inevitable and perhaps constitutes a primary, inherent position in his need hierarchy. An assortment of proxemic and kinesic cues can be subsumed under the rubric, "nonverbal behavior", and are seen as instrumental to the way in which man organizes his microspace. In addition, these nonverbal cues play an indispensable role in communication. Psychologists and other social scientists have begun to explore various parameters of nonverbal communication in the hopes of elucidating how such contingencies complement the spoken word and are related to the total communication matrix. But as Davitz (1964) observes, "... beyond demonstrating the fundamental fact that feelings can be conveyed effectively in nonverbal modes, we know relatively little about the particular cues which communicate these meanings (p. 28)".

Psychotherapists have long been aware of the cogency of proxemic and kinesic cues, but especially from a diagnostic frame of reference. However, their observations have, until relatively recently, largely reflected a lack of precision and refinement in their methodological approaches; findings have been mostly conjectural and unsupported by acceptable and ample empirical data.

Since many schools of counseling and psychotherapy have attempted to quantify the relation of emotional sensitivity to clinical effectiveness as a psychotherapist, it would seem somewhat surprising that the saliency of nonverbal therapist behaviors has not heretofore been adequately recognized, or at least been accorded more research effort. It would
seem that the development of effective training procedures to increase sensitivity in the counseling interaction must oblig their participants to become aware not only of the plethora of information that may be gleaned from a client's nonverbal cues, but in turn must emphasize the potential contributions that their own extra-linguistic behaviors have on the client - such cues may be thought of as reinforcing stimulus contingencies very much related to essential components of psychotherapy or counseling such as rapport, transference, empathy, positive reinforcement, etc.

Many of the assumptions and hypotheses that have provided the impetus for researchers in the areas of kinesics and proxemics have also motivated workers in the area of paralanguage or psycholinguistics. How the client communicates via this modality often belies the concomitant verbal content - words all too often provide a defensive facade which adequately covers the individual's true affective state. An array of techniques have been developed and implemented to provide the clinician additional sources of information about the client.

More recently, a communication model (Immediacy-nonimmediacy continuum) has been developed which incorporates many of the techniques found in earlier schema into its categories. This particular model seems potentially well-suited for counseling research application in that it may be utilized to infer client experiences of the ongoing event, including the client-therapist relationship and also the client's affective, evaluative and/or preferential experience of various content areas, significant others, or himself. As such it might provide the counselor or therapist the use of another strategic
unobtrusive measure with which he could more fully understand and assess significant nonverbal communicational patterns of the client.

Purposes of Study

To reiterate, the present investigation had as its central concern the investigation of the communicational significance of selected therapist proxemic variables that are manifest within the counseling interaction. Questions relating to the differential effect of these factors with different client populations, and how these particular nonverbal behaviors interact and complement one another, and the resultant effect that this has on the client’s perceptions or attitudes toward the therapist or counselor provided the major impetus for the present study.

A related and secondary purpose centered around the exploration of how different client populations differed on the immediacy-non-immediacy continuum, or stated somewhat differently, to investigate the implications that this type of paralinguistic analysis has for assessing affective, attitudinal client states as a function of counselor proxemic conditions.

Finally, a third purpose of the present investigation involved an attempt to delineate the relationship between the nonverbal and the verbal modes of communication employed in the study (i.e., proxemics as opposed to indices of immediacy-nonimmediacy). It was expected that if the client decoded negative attitudinal counselor states as a function of the different proxemic conditions, then it would be subsequently manifest in the verbal channel via greater nonimmediacy.
Hypotheses

1. The following proxemic variables communicate and are associated with a more positive counselor/therapist attitude toward his client: a) a smaller distance to the client, b) more direct eye contact, c) an openness of the arms and legs, d) a more forward trunk lean toward the client, and e) a more direct body orientation on the part of the counselor or therapist.

2. There is no significant difference between the various client populations in terms of the overall communication significance of the proxemic variables.

3. There is no significant difference between the different client populations in terms of the immediacy-nonimmediacy continuum.

4. The following proxemic variables communicate and are associated with a more positive counselor/therapist attitude toward his client, and are reflected in verbalizations indicating greater immediacy: a) a smaller distance to the client, b) more direct eye contact, c) an openness of the arms and legs, d) a more forward trunk lean toward the client, and e) a more direct body orientation on the part of the counselor or therapist.

5. There is a direct relationship between the degree of immediacy/nonimmediacy and the extent to which the stimulus conditions generate or elicit positive/negative attitudinal client responses.
CHAPTER III

METHODOLOGY

This chapter is divided into five main sections. It deals with the selection and description of the six subject samples, the explication of the stimulus materials used in testing the subjects, the instrumentation employed, the statistical design utilized in the data analysis, and the procedure followed.

Subjects

A total of 60 subjects were utilized in the current investigation. The composition of the groups was as follows: Group one, 10 acute paranoid schizophrenic males between the ages of 18 and 25 confined to the Northampton State Hospital, Northampton, Massachusetts; Group two, 10 character disorders (antisocial and passive-aggressive features) also between the ages of 18 and 25 and likewise incarcerated at the same psychiatric institution; Group three, 10 young males between the ages of 18 and 25 who were being seen at the Northampton Welfare Department, Northampton, Massachusetts, for personal counseling and financial assistance; Group four was composed of 10 males between the ages of 18 and 25 being seen at the University of Massachusetts Counseling Center for vocational/educational counseling; Group five consisted of 10 males between the ages of 18 and 25 being counseled for personal/social adjustment problems at the Counseling Center; and finally, Group six was made up of 10 males between the ages of 18 and 25 selected from the University of Massachusetts community at large.
The various subject samples were chosen for rather specific reasons. For example, in the case of the schizophrenic subjects, the communicational significance and effectiveness of therapist nonverbal behavior (i.e., proxemic cues) is not at all well verified or substantiated. Likewise, with other psychiatric subgroups such as character disorders, there is little actual understanding of the role that proxemic factors play in interpersonal encounters, and specifically the psychotherapeutic relationship. Allegedly, some of these individuals display an inability to tolerate close physical proximity in interpersonal interactions, but any definitive conclusions or generalizations drawn at this time would seem to be premature since there has been only minimal research directed toward resolving some of the issues concerned with the communicational significance of proxemic behavior.

Overall, then, the rationale for the inclusion of these different samples is that an attempt was made to investigate the significance of nonverbal therapist cues within widely different client groups that would seek out or be exposed to counseling or psychotherapeutic intervention.

Materials

The stimulus materials consisted of 72 black and white photographs of an experimenter (encoder) seated in all possible combinations of the five proxemic settings. The original pictures were enlarged to 8 x 10 inch size and mounted on a cardboard backing. The experimenter was shown sitting across from a client (decoder) so as to depict a dyadic
relationship; only the client's back is visible in the pictures. The experimenter was a counseling psychologist who was unknown to most of the individuals in the six subject samples. The "client" was likewise a counseling psychologist. The stimulus photographs were taken while the encoder was seated in a standard office chair which could be made to swivel and tilt. In all of the 72 photographs the facial expressions of the encoder were held constant so as to avoid the possible extraneous influence of facial cues. All of the photographs were taken from behind the client at a distance of approximately 10 feet.

For distance variations, the first proxemic variable, the encoder's chair was positioned at a distance of either 39 inches, 55 inches, or 80 inches from the client's chair as measured from center to center of each chair. The distances were adopted from frequently cited interaction distances outlined by Hall (1966).

For the second proxemic variable, that of eye contact, the encoder looked directly at the client, or he averted his gaze downward.

For the open-closed posture, the third proxemic variable, the encoder was seated so that his arms rested on the chair arms and his legs were set in a legs-uncrossed position (open posture), or, he was asked to sit with arms folded and legs crossed (closed posture).

For the postural variations corresponding to the forward-upright-backward lean of the torso, the fourth proxemic variable, the counselor was either seated forward from the vertical at an angle of 20 degrees, in the normal upright position, or back from the vertical at an angle of 20 degrees.

Finally, for the body orientation variable, the fifth proxemic
dimension, the encoder was either seated face-to-face with the client or he rotated his chair so that he was positioned at a right angle to the client.

Thus, all possible combinations of the five proxemic variables or factors were photographed - a total of 72 unique combinations. For example, card number 15 (see Appendix A) depicts the counselor as follows: 55-inch distance from the client, direct eye contact, closed arms and legs, forward trunk lean and direct body orientation. Additional examples of the stimulus cards may also be found in Appendix A.

Instrumentation

The primary evaluative instrument used in the current study consisted of a 72 item, five-point bipolar Likert type attitude or rating scale. Anchor statements consisted of "dislikes me very much" at the negative pole, and "likes me very much" at the other extreme (see Appendix A). The scale was utilized as the main measurement device for a number of reasons. First of all, previous authors, e.g., Mehrabian (1968a), have employed such evaluative procedures on an extensive basis, and secondly, from a psychometric point of view, Likert type scales are relatively easy to construct and administer, are scored objectively, and usually possess more than adequate internal consistency measures (cf. Edwards, 1957, p. 162; Nunnaly, 1967, p. 531). Essentially, then, the subjects were asked to rate each of the 72 stimulus conditions along a five-point continuum.

The second dependent variable consisted of the immediacy measure. To arrive at this measure, the subjects were asked to respond to the
question, "How do you think the psychologist feels about you right now?"; this was done for each stimulus card. The subjects' verbatim responses were recorded and subsequently scored using a classification schema proposed by Wiener and Mehrabian (1968). Specifically, the immediacy category of communication length constituted the second dependent measure in the present study.

Statistical Design

The two dependent variables were mainly evaluated by a $3 \times 2 \times 2 \times 3 \times 2 \times 6$ mixed analysis of variance design with repeated measures on five factors. The design was composed of one between groups factor which had six levels (i.e., the six client samples) and five within group factors. The first within group factor, distance, has three levels of 30 inches, 55 inches and 80 inches. The second within group factors, eye contact, has two levels, counselor eye contact, and counselor averted eye gaze. Posture is the third within groups factor; it also has two levels, i.e., open and closed. The trunk lean variable, the fourth within groups factor, has levels of forward, upright, and backward. Finally, the fifth within groups factor of body orientation has two levels: direct body orientation, and rotated body orientation.

For hypotheses one and two, the subject's responses to the Likert scale were analyzed by the above design. Post hoc comparisons were performed on main effects by means of the Newman-Keuls test. Significant first and second order interactions were interpreted graphically.

For hypotheses three and four, total immediacy scores for each
individual in the six samples were analyzed by a $3 \times 2 \times 2 \times 3 \times 2 \times 6$ mixed analysis of variance design with repeated measures on five factors. The between and within groups factors, and the levels associated with each factor were the same as those used to test hypothesis one; only the dependent variable differed. The Newman-Keuls test was employed in post hoc testing, and first and second order interactions were interpreted by graphs.

Finally, for hypothesis five, the immediacy score for each individual was correlated with his score on the rating scale; this was done by client group. Thus, six separate correlational analyses, one for each group, were obtained.

A generic representation of the ANOVA design utilized to test hypotheses one through four is presented below. It represents an extension of a multi-factor, mixed design model proposed by Winer (1962, p. 328).

**TABLE I**

Analysis of Variance Model for Six Groups of Subjects (A) Responding to Three Interaction Distances (B), Two Levels of Counselor Eye Contact (C), Two Levels of Counselor Posture (D), Three Levels of Counselor Trunk Lean (E) and Two Levels of Counselor Body Orientation (F).

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**Procedure**

The 72 stimulus pictures were shown individually to each subject in the six client samples by the author. The order of presentation of the cards was randomized for each subject to insure against possible biasing of results by different order effects. In addition, all of the subjects were tested while seated across a desk from the author. An attempt was made to interact as little as possible, both verbally and nonverbally, with the subjects so as to lessen the possibility of influencing by extraneous experimenter factors. Thus, in all cases the same standardized procedure was employed. The clients were asked to record their responses to the rating scale on a regular answer sheet, and their answers were then transferred to a DIGITEK DS 1120-C five-point answer sheet and machine processed. After the subjects were seated they received the following written instructions which the examiner also read aloud to each person:

"I am going to show you some pictures of two people seated and talking with one another. You are to imagine that you are seated in this room and are talking with the person whose picture you see. He is Dr. Smith, a counseling psychologist. For each picture, from the way in which the
If for some reason the clients seemed to be experiencing difficulty in comprehending the instructions, the author again explained the nature of the task to them.

Immediately following the presentation of each picture, the subjects were also asked to state in a few sentences: "How do you think the psychologist feels about you right now?". The examiner recorded the clients' responses verbatim for each of the 72 cards. Subjects' responses were then scored for immediacy content by tabulating the total number of words elicited in response to each picture. A given individual's total immediacy score was obtained by summing scores over all 72 items. The administration of the entire experimental task took about forty-five minutes for each subject.
CHAPTER IV

RESULTS

Two separate multiple classification analyses of variance tests with repeated measure on five factors were used to analyze the data pertaining to hypotheses number one through four; data relating to hypothesis number five was evaluated by six separate Pearson Product-Moment correlational analyses.

**Hypothesis one:** The following proxemic variables communicate and are associated with a more positive counselor attitude toward his client: a) a smaller distance to the client, b) more direct eye contact, c) an openness of the arms and legs, d) a more forward trunk lean toward the client, and e) a more direct body orientation on the part of the counselor.

Results pertaining to the first hypothesis are presented in Table 2. The means pertaining to the main effects are outlined in Table 3.
TABLE 2
Analysis of Variance for Six Groups of Subjects (A) Responding to Three Interaction Distances (B), Two Levels of Counselor Eye Contact (C), Two Levels of Counselor Posture (D), Three Levels of Counselor Trunk Lean (E), and Two Levels of Counselor Body Orientation (F).

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<td>10</td>
<td>0.16</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BF X subjects within groups (error bf)</td>
<td>60.01</td>
<td>108</td>
<td>0.55</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>ACF</td>
<td>3.16</td>
<td>5</td>
<td>0.63</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>CF X subjects within groups (error cf)</td>
<td>42.24</td>
<td>54</td>
<td>0.78</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>ADF</td>
<td>2.45</td>
<td>5</td>
<td>0.49</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>DF X subjects within groups (error df)</td>
<td>31.87</td>
<td>54</td>
<td>0.59</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>AEF</td>
<td>5.38</td>
<td>10</td>
<td>0.53</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>EF X subjects within groups (error ef)</td>
<td>69.86</td>
<td>108</td>
<td>0.64</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BCF</td>
<td>0.87</td>
<td>2</td>
<td>0.43</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BDF</td>
<td>3.76</td>
<td>2</td>
<td>1.88</td>
<td>4.37*</td>
</tr>
<tr>
<td>BEF</td>
<td>31.13</td>
<td>4</td>
<td>7.78</td>
<td>10.65***</td>
</tr>
<tr>
<td>CDF</td>
<td>3.38</td>
<td>1</td>
<td>3.38</td>
<td>7.68**</td>
</tr>
<tr>
<td>CEF</td>
<td>3.12</td>
<td>2</td>
<td>1.56</td>
<td>2.48</td>
</tr>
<tr>
<td>DEF</td>
<td>10.02</td>
<td>2</td>
<td>5.01</td>
<td>8.79***</td>
</tr>
<tr>
<td>BCF X subjects within groups (error bdf)</td>
<td>81.39</td>
<td>118</td>
<td>0.69</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BDF X subjects within groups (error bdf)</td>
<td>50.68</td>
<td>118</td>
<td>0.43</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BEF X subjects within groups (error bef)</td>
<td>175.86</td>
<td>240</td>
<td>0.73</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>CDF X subjects within groups (error cdf)</td>
<td>26.22</td>
<td>59</td>
<td>0.44</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>CEF X subjects within groups (error cef)</td>
<td>74.06</td>
<td>118</td>
<td>0.63</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>DEF X subjects within groups (error def)</td>
<td>67.16</td>
<td>118</td>
<td>0.57</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BCDF X subjects within groups (error bcdf)</td>
<td>57.32</td>
<td>120</td>
<td>0.48</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BDEF X subjects within groups (error bdef)</td>
<td>160.53</td>
<td>240</td>
<td>0.66</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BCEF X subjects within groups (error bcef)</td>
<td>210.21</td>
<td>240</td>
<td>0.88</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>CDEF X subjects within groups (error cdef)</td>
<td>107.23</td>
<td>120</td>
<td>0.89</td>
<td>&lt; 1.00</td>
</tr>
<tr>
<td>BCDEF X subjects within groups (error bcdef)</td>
<td>197.48</td>
<td>236</td>
<td>0.84</td>
<td>&lt; 1.00</td>
</tr>
</tbody>
</table>

*p < .05

**p < .01

***p < .001
Data relevant to this first hypothesis was analyzed by the Biomedical computer program BMD08V. Third and fourth order interactions were not interpreted; however, the third and fourth order error terms are partially made up of these quantities.

TABLE 3

Main Effect Cell Means for Groups, Interaction Distances, Eye Contact, Openness of Posture, Trunk Lean, and Body Orientation for the Proxemic Dimension.

<table>
<thead>
<tr>
<th>Main Effect Cell Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranoid Schizophrenics (A1)</td>
</tr>
<tr>
<td>Character Disorders (A2)</td>
</tr>
<tr>
<td>Controls (A3)</td>
</tr>
<tr>
<td>Adult Adjustment Reactions (A4)</td>
</tr>
<tr>
<td>College Group - personal/social adjustment problems (A5)</td>
</tr>
<tr>
<td>College Group - vocational adjustment problems (A6)</td>
</tr>
<tr>
<td>39 inches (B1)</td>
</tr>
<tr>
<td>55 inches (B2)</td>
</tr>
<tr>
<td>80 inches (B3)</td>
</tr>
<tr>
<td>Eye Contact (C1)</td>
</tr>
<tr>
<td>Averted Eye Gaze (C2)</td>
</tr>
<tr>
<td>Open Posture (D1)</td>
</tr>
<tr>
<td>Closed Posture (D2)</td>
</tr>
<tr>
<td>Forward Trunk Lean (E1)</td>
</tr>
<tr>
<td>Upright Position (E2)</td>
</tr>
<tr>
<td>Backward Trunk Lean (E3)</td>
</tr>
<tr>
<td>Direct Body Orientation (F1)</td>
</tr>
<tr>
<td>Rotated Body Orientation (F2)</td>
</tr>
</tbody>
</table>

Inspection of Table 2 reveals that the distance effect was highly significant across all groups (F = 67.38, df = 2/108, p < .001).
Post hoc testing (Table 4) on the cell means of interaction distances suggested that the 39 inch distance was viewed as more preferable than the 55 or 80 inch interaction distances; in turn the 55 inch distance was seen as more appropriate, and communicated a more positive attitude than the 80 inch distance. In short, the closest interaction zone was perceived as most appropriate to the counseling situation. Counselor or therapist eye contact also emerged as a cogent communicator of attitude; again the Null hypothesis was rejected ($F = 56.53$, $df = 1/54$, $p < .001$). Table 3 shows the differences in cell means indicating counselor eye contact was preferred to the averted gaze.

**Table 4**

Newman-Keuls Test on Ordered Means
of Interaction Distances across Proxemic Scores

<table>
<thead>
<tr>
<th>Distances</th>
<th>80 inches</th>
<th>55 inches</th>
<th>39 inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordered Means</td>
<td>1.78</td>
<td>2.09</td>
<td>2.29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>80 inches</th>
<th>55 inches</th>
<th>39 inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80 inches</td>
<td>-----</td>
<td>.31*</td>
<td>.51*</td>
</tr>
<tr>
<td>55 inches</td>
<td>-----</td>
<td></td>
<td>.20*</td>
</tr>
<tr>
<td>between pairs 39 inches</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

The third counselor proxemic variable, posture, had no ascertainable effect on client attitude. Whenever the counselor positioned himself so that the arms and legs were open, as opposed to when he was
depicted in a closed posture (i.e., closed arms and legs), the result was the same as far as the clients were concerned.

**TABLE 5**

Newman-Keuls Test on Ordered Means
of Trunk Lean across Proxemic Scores

<table>
<thead>
<tr>
<th>Trunk Lean</th>
<th>Backward</th>
<th>upright</th>
<th>Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordered Means</td>
<td>1.99</td>
<td>2.06</td>
<td>2.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Backward</th>
<th>upright</th>
<th>Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backward</td>
<td>-----</td>
<td>.078</td>
<td>.130*</td>
</tr>
<tr>
<td>Upright</td>
<td>-----</td>
<td>.052</td>
<td></td>
</tr>
<tr>
<td>Forward</td>
<td>-----</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05

The trunk lean variable also emerged as a significant treatment effect (*F* = 5.40, df = 2/108, p < .01). As can be seen from Table 5, the forward trunk lean was most effective in communicating positive counselor affect. The upright position was seen as being less preferential and the backward trunk lean was perceived as least positive. The Newman-Keuls test performed on these means indicated that there was a significant difference between the forward trunk lean of the counselor and the backward trunk lean; there were, however, no differences between forward-upright comparisons, and backward-upright comparisons. Again, the forward trunk lean would seem to play an instrumental and important role in the communication of positive counselor feelings or attitudes. The upright and backward trunk
Lean positions appear to have neutral and possibly negative communicational connotations respectively.

Finally, the last proxemic main effect, i.e., the counselor's body orientation, was also highly significant \( (F = 51.10, \ df = 1/54, \ p < .001) \). Table 3 indicates that the client will infer a positive attitudinal state when the counselor or therapist is seated vis-a-vis the client. On the other hand, the counselor rotated body orientation seemed to communicate a less favorable attitude on the part of the counselor, perhaps even a fairly strong negative response.

Fig. 1. Distance X Eye Contact interaction (BC)
Interaction effects

Inspection of Table 2 reveals that thirteen interaction effects related to hypothesis one achieved significance. Of these, seven were first order interactions, and the remaining six were second order interactions. All interactions are presented graphically in the section to follow.

The first significant interaction ($F = 66.41$, $df = 1/108$, $p < .001$) is the distance x eye contact interaction (BC). Presented in Figure 1, Fig. 2. Distance X Posture interaction (BD).
Fig. 3. Eye Contact X Posture interaction (CD).

It indicates that at the close and middle interaction distance eye contact is instrumental in the conveyance of a positive counselor attitude. At the extreme interaction distance, i.e., 80 inches, however, the trend is reversed and the absence of eye contact is viewed as apparently more preferential.

Figure 2 depicts the distance x posture interaction (BD) which is significant at the .001 level of confidence. At the close and middle interaction distances the closed posture is projected as more
desirable; at the 80 inch distance the converse is true, the open posture being viewed as more positive and communicationally salient.

The eye contact x posture interaction (CD) depicted in Figure 3 was also highly significant ($F = 29.42$, $df = 1/54$, $p = .001$) and suggested that at both levels of posture eye contact is seen as preferential to the counselor's averted gaze. However, when the counselor exhibits a closed posture the presence of eye contact assumes the greatest
Fig. 5. Eye Contact X Trunk Lean interaction (CE).

importance. When the posture is open, eye contact is perceived as only slightly more communicative than an averted gaze on the part of the counselor.

Figure 4 illustrates the distance x trunk lean interaction (BE) which is likewise highly significant ($F = 4.69, df = 4/216, p < .001$). The graphic representation suggests that at very close interaction distances between the counselor and the client, the backward trunk lean manifested by the counselor is seen as most preferred, the upright
position least preferred. At the middle and far interactional
distances the trend is reversed and the forward trunk lean is viewed
as the most positive condition, and the backward trunk lean on the
counselor's part seems to be associated with the communication of
a less positive affect or attitude.

The eye contact x trunk lean interaction (CE) shown in Figure 5
was only slightly significant relative to the previously cited
combinations ($F = 3.36, \text{df} = 2/108, p < .05$). The graph suggests that
over all levels of trunk lean counselor eye contact is preferred over the absence of visual interaction, and when the counselor is maintaining a forward trunk lean, the eye contact takes on slightly more communicative significance as compared to the other conditions. The proxemic condition of a forward counselor trunk lean-avoided eye gaze is viewed as the least preferred condition but only slightly so relative to the other instances where visual interaction is absent.

The distance x body orientation interaction (BF) was also highly
significant ($F = 27.41$, $df = 2/108$, $p < .001$). Figure 6 depicts the relationship between these two parameters. It indicates that the most desirable condition occurs when the counselor is at the middle interaction distance and is facing the client. The least preferred condition is suggested when the communicator is 80 inches from the client and his body orientation is not vis-a-vis, but rather rotated. Additionally, the graph suggests that at the closest interactional distance, in this case 39 inches, the direct body orientation is probably achieving
Fig. 9. Distance X Eye Contact X Trunk Lean interaction (BCE) at B₁.

Extrapolation of the curves would indicate that if the interaction distance were to become appreciably smaller, say for example 30 inches, the rotated body orientation would assume a more potent stance and probably be seen as more preferable.

The eye contact x body orientation interaction (CF) shown in Figure 7 was also significant ($F = 8.66$, df = 1/54, $p < .01$). Inspection of the graph reveals that over both levels of body orientation counselor visual interaction is preferable and more communicative.
than the absence of eye contact. In addition, eye contact on the counselor's part when he is facing a client is more cogent than when his body is rotated. The combination of a rotated body orientation coupled with lack of visual interaction on the counselor's part are viewed by clients as least desirable.

Figure 8 depicts the trunk lean x body orientation interaction (EF) which was significant at the \( p < .001 \) level of confidence (\( F = 40.35, \) df = 2/108). It suggests that a forward trunk lean on the counselor's
part when he is face-to-face with the client communicates the most effectively; the backward lean is seen as less positive, and the upright position is perceived as least effective. At the rotated state, the counselor can communicate optimal regard if his torso is in an upright position; otherwise, either a forward or backward trunk lean would seem to communicate adversely. This is especially so with regard to the backward trunk lean.

Figures 9, 9a, and 9b outline the distance x eye contact x trunk
Fig. 10. Eye Contact X Posture X Trunk Lean interaction (CDE) at C1.

lean interaction (BCE) which is highly significant ($F = 14.75$, $df = 4/236$, $p < .001$). Figure 9 indicates that when the interaction distance between the counselor and the client is close, i.e., 39 inches, eye contact is seen by the clients as more preferable than lack of visual interaction no matter what type of trunk lean the counselor is manifesting. The therapist combinations which seem to have the most salient communicative significance are the forward trunk lean-eye contact pairing, and the backward trunk lean-eye contact
condition. The least preferred condition is the forward trunk lean-averted eye gaze state.

Figure 9a shows the distance x eye contact x trunk lean interaction (BCE) at the second interaction distance, 55 inches. Results indicate once again that visual interaction is associated with the conveyance of positive counselor attitude or affect over all levels of trunk lean. This is especially so when the counselor is exhibiting a forward
trunk lean. If the counselor is leaning forward but maintaining an averted eye gaze, the results seem particularly negative. Similarly, if the therapist is leaning backward, the absence of visual interaction is perceived by the client as a negative event. If the counselor is, for some reason, unable to sustain reasonable eye contact with the client, the results would seem to suggest that if he is seated in the upright position, the communication of a negative attitude is least likely to occur.
Fig. 11a. Distance X Posture X Body Orientation (BDF) at F2.

Finally, Figure 9b depicts the distance x eye contact x trunk lean interaction (BCE) at the interactional distance of 80 inches. The results are somewhat enigmatic since inspection of the graph would indicate that at this particular interaction distance, lack of visual interaction or an averted counselor gaze communicates a more positive evaluation than does counselor eye contact over all levels of trunk lean. Or, stated differently, it appears that counselor eye contact at this distance is perceived as negative and perhaps inappropriate.
Fig. 12. Distance X Trunk Lean X Body Orientation interaction (BEF) at $F_1$.

to the context. Specifically, when the therapist is leaning forward but averting his gaze, this condition is seen as most preferential. The least desirable counselor state suggests a forward trunk lean coupled with visual interaction.

Figures 10 and 10a illustrate the eye contact x posture x trunk lean interaction (CDE) which is highly significant ($F = 21.68$, $df = 2/118$, $p < .001$).
Fig. 12a. Distance X Trunk Lean X Body Orientation interaction (BEF) at $F_2$.

Figure 10 depicts the relationship between the counselor's posture and his trunk lean behavior when he is maintaining eye contact with the client. Results suggest that the closed posture (i.e., closed arms and legs) rather than the open posture (i.e., open arms and legs) are seen as more preferable by the clients regardless of the counselor's concomitant trunk lean behavior.

Figure 10a illustrates the relationship between the therapist's
posture and his trunk lean behavior when there is an avoidance of visual interaction on his part. Unlike Figure 10, the trend is reversed; the open posture is viewed or projected as more desirable, except when the counselor is leaning backward. An open posture and an associated forward trunk lean would seem to compensate somewhat for the lack of counselor eye contact.

An overall interpretation of this particular interaction would
suggest that visual interaction or eye contact on the part of the counselor is more important than postural or trunk lean factors; however, when visual interaction is lacking an openness of the arms and legs on the counselor's part communicates a more positive affect than when his posture is not accessible.

Figures 11 and 11a outline the distance x posture x body orientation interaction (BDF) which is significant at the .05 level of confidence ($F = 4.37$, df $= 2/118$).
Figure 11 depicts the relationship between the therapist's postural orientation and his physical distance when he is face-to-face with the client. Graphic results suggest that the therapist communicates the most positive attitude to the client when he is at the closest interaction distance and his posture is closed; the relationship is also true when the counselor is at the middle interaction distance. However, when the counselor is depicted as interacting with the client at a relatively far distance, i.e., 80 inches, the open posture is perceived as more favorable, perhaps compensating for the effects of distance.

Figure 11a examines the relationship between the counselor's posture and the interactional distance when his body orientation is rotated; that is, he is not facing the client. Results indicate that the closed posture at the first two interaction distances is associated with a higher regard on the counselor's part for the client; again, the least preferred counselor behaviors are the closed posture combined with a far interactional distance.

Figures 12 and 12a depict the distance x trunk lean x body orientation interaction (BEF) which is significant at the .001 level of confidence ($F = 10.65, df = 4/240$).

When the relationship between the client-counselor interaction distance and the counselor's concomitant trunk lean behavior is considered (Fig. 12) while the counselor is face-to-face with the client, the following results are suggested: the forward trunk lean is most preferred over all levels of distance, but especially so at
Fig. 14. Posture X Trunk Lean X Body Orientation interaction (DEF) at $F_1$.

39 inches; the upright position communicates negatively at close distances, and also is least preferred at the 80 inch interaction distance; the backward trunk lean is seen by the clients as slightly less positive at both the close and far interaction zones - it has more positive connotations than the counselor upright position at these distances.

Figure 12a depicts the distance x trunk lean x body orientation
interaction (BEF). In this case the relationship between counselor trunk lean and interpersonal distance is examined when the therapist is not face-to-face with the client. Relative to Figure 12, the results are somewhat different: the upright trunk lean is preferable over all levels of interaction distance, especially at 39 inches; the backward trunk lean displayed by the counselor at the farthest distance communicates the least positive attitude or regard to the client; the same trunk lean at the 55 inch distance is also seen as a possible negative combination.

Figures 13 and 13a illustrate the eye contact x posture x body orientation interaction (CDF) which is again significant (F = 7.68, df = 1/59, p < .01).

Figure 13 examines the relationship between counselor posture and body orientation when visual exchange is taking place. Graphic results indicate that when the counselor is seated vis-a-vis the client or turned away, the closed posture is seen as preferable to the open posture, i.e., it is more associated with regard and positive attitude on the counselor's part than the open posture.

Figure 13a outlines the eye contact x posture x body orientation interaction (CDF) when the counselor is averting his gaze. In this case, unlike Figure 13, the open posture is seen as instrumental in the communication of positive counselor attitude; this is the case over all levels of body orientation.

Overall, inspection of the two graphs suggests that when the counselor is maintaining eye contact with the client, the closed posture is seen as preferable by the client no matter what the
counselor's body orientation may be. On the other hand, when visual interaction is absent the significance of the open counselor posture becomes apparent, apparently compensating for the lack of visual interaction. Figures 14 and 14a depict the posture x trunk lean x body orientation interaction (DEF) which is significant at the .001 level of confidence ($F = 8.79, df = 2/118$).

From Figure 14 it is apparent that when the counselor is facing
the client, an open posture and a forward trunk lean constitutes the combination which is perceived as most positive by the clients. This same effect might also be achieved if the counselor is leaning backward, but to a less positive degree. However, if the therapist is seated in an upright position, the open posture connotes negative attitudes. The closed posture is generally seen as less preferential, except when the counselor is seated upright.

Finally, Figure 14a illustrates the posture x trunk lean x body orientation interaction (DEF); in this case the counselor is maintaining a rotated body orientation. Opposite results are indicated relative to Figure 14. In this case, the closed posture is viewed as more preferential when the counselor is either leaning forward or backward. But, the openness of the arms and legs are important when the counselor is seated in the upright position. The condition which is viewed as least preferential depicts the counselor leaning backward with his arms and legs closed, not facing the client.

**Hypothesis two:** There is no significant difference between the client populations in terms of the communicational significance of the five proxemic counselor variables.

Results pertaining to the second hypothesis are again reported in Table 2. Inspection of the results indicates that the obtained F ration of .44 is nowhere significant, the null hypothesis cannot be rejected. Striking and significant differences between the groups did not emerge despite the fact that the various client samples were seemingly divergent and heterogeneous.
**Hypothesis three:** There is no significant difference between the different client populations in terms of the immediacy-non-immediacy analysis.

Results related to the third hypothesis are presented in Table 6. Examination of the results \( (F = 1.78, df = 5/54, p > .05) \) again indicates that the null hypothesis cannot be rejected, that there is no apparent or significant difference between the six client groups on the immediacy-nonimmediacy dimension.

**Hypothesis four:** The following proxemic variables communicate and are associated with a more positive counselor attitude toward his client and are reflected in verbalizations indicating greater immediacy: a) a smaller distance to the client, b) more direct eye contact, c) an openness of the arms and legs, d) a more forward trunk lean toward the client, and e) a more direct body orientation on the part of the counselor.

Results related to hypothesis four are presented in Table 6. The means pertaining to the main effects are presented in Table 7.

Hypothesis four was tested by a \( 3 \times 2 \times 2 \times 3 \times 2 \times 6 \) analysis of variance design. Inspection of Table 6 indicates that three of the five proxemic effects were statistically significant.

The first main effect, distance, was significant at the .05 level of confidence \( (F = 3.29, df = 2/108) \). Table 7 illustrates that the closest interaction distance, that of 39 inches, was associated with the greatest immediacy. The post hoc analysis using the Newman-Keuls (Table 8) test on the ordered means suggested that there was a significant difference between the means at 39 inches as compared
### TABLE 6

Analysis of Variance for Six Groups of Subjects (A) Responding to Three Interaction Distances (B), Two Levels of Counselor Eye Contact (C), Two Levels of Counselor Posture (D), Three Levels of Counselor Trunk Lean (E), and Two Levels of Counselor Body Orientation (F).

<table>
<thead>
<tr>
<th>Sources of Variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups (A)</td>
<td>4453.01</td>
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<td>890.60</td>
<td>1.78</td>
</tr>
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<td>Subjects within groups (error a)</td>
<td>27035.42</td>
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<td>500.65</td>
<td></td>
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<tr>
<td><strong>Within Subjects</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance (B)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>144.87</td>
<td>10</td>
<td>14.49</td>
<td>1.62</td>
</tr>
<tr>
<td>B X subjects within groups (error b)</td>
<td>967.98</td>
<td>108</td>
<td>8.96</td>
<td>1.62</td>
</tr>
<tr>
<td>Eye Contact (C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>94.67</td>
<td>5</td>
<td>18.93</td>
<td>1.00</td>
</tr>
<tr>
<td>C X subjects within groups (error c)</td>
<td>1533.66</td>
<td>54</td>
<td>28.40</td>
<td></td>
</tr>
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<td>BC</td>
<td>614.47</td>
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<td>307.23</td>
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<td>ABC</td>
<td>255.08</td>
<td>10</td>
<td>25.51</td>
<td></td>
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<td>BC X subjects within groups (error bc)</td>
<td>1282.69</td>
<td>108</td>
<td>11.88</td>
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</tr>
<tr>
<td>Posture (D)</td>
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<td></td>
</tr>
<tr>
<td>AD</td>
<td>8.02</td>
<td>5</td>
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<td>DF X subjects within groups (error df)</td>
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<tr>
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<td>1.00</td>
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<td>6.20**</td>
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<td>5.96</td>
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</tbody>
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*p < .05  
**p < .01  
***p < .001
TABLE 7
Main Effect Cell Means for Groups, Interaction Distances, Eye Contact, Openness of Posture, Trunk Lean, and Body Orientation for the Immediacy Analysis

<table>
<thead>
<tr>
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<th>Main Effects Cell Means</th>
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<tbody>
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<td>5.76</td>
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<td>Controls (A3)</td>
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</tr>
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<td>Adult Adjustment Reactions (A4)</td>
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</tr>
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<td>College Group - personal/social adjustment problems (A5)</td>
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</tr>
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<td>College Group - vocational adjustment problems (A6)</td>
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<td>39 inches (B1)</td>
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</tr>
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<td>55 inches (B2)</td>
<td>6.17</td>
</tr>
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<td>80 inches (B3)</td>
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<td>Closed Posture (D2)</td>
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<td>Forward Trunk Lean (E1)</td>
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<tr>
<td>Upright Position (E2)</td>
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</tr>
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<td>Backward Trunk Lean (E3)</td>
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</tr>
<tr>
<td>Direct Body Orientation (F1)</td>
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<tr>
<td>Rotated Body Orientation (F2)</td>
<td>6.16</td>
</tr>
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</table>

...to the means at both 55 and 80 inches; however, no significant differences existed between the 55 and 80 inch distances. Thus, when the counselor is interacting with the clients at the distance of 39 inches, greater immediacy is elicited - a more positive or preferential attitude is expressed concerning this interaction zone; conversely,
TABLE 8
Newman-Keuls Test on Ordered Means of Interaction Distances across Immediacy Scores

<table>
<thead>
<tr>
<th>Distances</th>
<th>80 inches</th>
<th>55 inches</th>
<th>39 inches</th>
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</thead>
<tbody>
<tr>
<td>Ordered Means</td>
<td>6.16</td>
<td>6.17</td>
<td>6.41</td>
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<table>
<thead>
<tr>
<th>Distances</th>
<th>80 inches</th>
<th>55 inches</th>
<th>39 inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 inches</td>
<td>----</td>
<td>.013</td>
<td>.254*</td>
</tr>
<tr>
<td>55 inches</td>
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<td>.241*</td>
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<tr>
<td>39 inches</td>
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<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

*p < .05

the middle and far distances are associated with a less positive client affect or attitude.

The eye contact factor was also instrumental in eliciting increased client immediacy (F = 4.96, df = 1/54, p < .01). Table 7 indicates that when the counselor was engaged in visual interaction with the client, a greater client preference was manifest. Increased nonimmediacy was associated with lack of the counselor's visual interaction.

The third proxemic main effect of counselor posture had no ascertainable effect on the client's expression of immediacy. Whether the counselor sat with his arms and legs open, or if he exhibited the closed posture (i.e., closed arms and legs), this had no bearing on the immediacy continuum.

The trunk lean variable was significant at the .01 level of confidence (F = 7.01, df = 2/108). The results of Table 7 show that
TABLE 9
Newman-Keuls Test on Ordered Means of Trunk Lean across Immediacy Scores

<table>
<thead>
<tr>
<th>Trunk Lean</th>
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<th>Forward</th>
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</thead>
<tbody>
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<td>6.21</td>
<td>6.47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Middle</th>
<th>Backward</th>
<th>Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>-----</td>
<td>.150</td>
<td>.412*</td>
</tr>
<tr>
<td>Backward</td>
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<td>.262*</td>
<td>--------</td>
</tr>
<tr>
<td>Forward</td>
<td>-----</td>
<td>--------</td>
<td>--------</td>
</tr>
</tbody>
</table>

*p < .05

when the counselor was leaning forward, greater immediacy was inferred. Again, post hoc testing was performed on the ordered means using the Newman-Keuls Test. Inspection of Table 9 reveals that the mean for the forward trunk lean differed significantly from the mean for the upright position and also from the mean for the backward trunk lean. When the counselor is leaning forward and attending to the client, greater immediacy is inferred and expressed. This is not the case when the counselor is seated upright or leaning backward.

Finally, results pertaining to the last proxemic main effect of counselor body orientation were nonsignificant \( (F = 3.78, \text{df} = 1/54, p < .05) \). Whether the counselor sat face-to-face with the client, or turned his body away, the result was the same, i.e., equal immediacy was elicited.

In summary, partial confirmation of hypothesis four was obtained.
Three of the five main effects were significant and suggested that when the counselor sat at closer distances to the client, engaged in visual interaction, and leaned slightly toward the addressee, greater or increased immediacy was expressed. Interacting at increased distances, avoiding eye contact, and leaning back from the client represent proxemic conditions which elicit less preferential attitudes or affects via the immediacy channel. Overall, the results would seem to suggest some validity for the use of communication length as an unobtrusive measure of client affect or attitude within the framework of the immediacy-nonimmediacy model.

Interaction effects

Inspection of Table 6 indicates that five interaction effects related to hypothesis four were significant. Of these, only one was a first order interaction; the remaining four were second order interactions. Third and fourth order interactions were not interpreted and were pooled into their respective error terms. All interactions are presented graphically in the section to follow.

The first interaction, the distance x eye contact (BD) was highly significant (F = 163.42, df - 2/108, p < .001). Interpretation of Figure 15 indicates that when the counselor is interacting with the client at the close and middle distances, visual interaction is seen as preferential and elicits greater immediacy. At the farthest interactional distance, the converse is apparently true: lack of eye contact on the counselor's part is seen as more desirable and reflected in greater immediacy.
Fig. 15. Distance X Eye Contact interaction (BC)

Figures 16 and 16a depict the groups x eye contact x distance interaction (ABC) which was significant at the .05 level of confidence ($F = 2.15$, df = 10/108).

Figure 16 examines the relationship between the various group preferences for interaction distance when the counselor is engaging in eye contact with the client. Results of the immediacy analysis indicate that the interaction distance of 39 inches is preferred over all of the groups. Greatest immediacy is indicated within the three
Fig. 16. Groups X Eye Contact X Distance interaction (ABC at C).
college groups, and this is the case over all distance measures. This
is probably a function of greater verbal ability in these particular
subgroups. The 55 inch interaction distance elicits less positive
affect, and again, this result is highly consistent over all levels
of groups. Finally, the 80 inch interactional distance is perceived
as least preferred by all of the different client groups.

Figure 16a illustrates the relationship between group preferences
for different interaction distances when the counselor is not main-
taining eye contact with the client.

Results would seem to suggest that generally, with some exceptions,
the middle and far interactional distance elicit greater immediacy.
Again higher immediacy scores tend to be associated with the college
groups as opposed to the psychiatric subgroups.

Overall, when the counselor is maintaining eye contact with the
client, the closest interactional distance is seen as most desirable.
When the counselor is not engaging in visual interaction, the middle
and far interaction distances seem to elicit greater preferential
attitudes.

Figures 17, 17a, and 17b depict the groups x distance x trunk
lean interaction (ABE) which is also significant \( F = 1.93, \ \text{df} = 20/216, \ \ p < .05 \).

When the counselor is leaning forward toward the client (Figure 17)
greater immediacy is elicited across most of the groups by the 39 inch
interaction distance, the exception being the college vocational and
the adult adjustment reaction groups. The 80 inch interaction distance
is perceived by the former group as being most favorable.
Fig. 16a. Groups X Eye Contact X Distance interaction (ABC) at C2.
Fig. 17. Groups X Distance X Trunk Lean interaction (ABE) at $E_1$. 
Fig. 17a. Groups X Distance X Trunk Lean interaction (ABE) at E2.
Fig. 17b. Groups X Distance X Trunk Lean Interaction (ABE) at E3.
When the counselor is in the upright position (Figure 17a), less consistent results emerge. For two of the groups, the closest distance is most preferred; for three of the groups the 55 inch distance is associated with greatest immediacy. Finally, the 80 inch distance is perceived as most desirable by the character disorder group.

Finally, when the counselor is leaning backward, the 30 and 55 inch distances are generally preferred over the far interactional distance. Figure 17b also suggests a possible compensatory relationship between distance and trunk lean; that is, the backward trunk lean intensifies the effects of distance, especially so at the 80 inch range - and is viewed as least communicative.

Figures 18 and 18a outline the eye contact x posture x trunk lean interaction (CDE) which was also significant ($F = 3.52$, df = 2/118, $p < .05$).

Figure 18 examines the relationship between the counselor's posture and his concomitant trunk lean when he is engaged in visual interaction with the client. Results indicate that when the counselor is maintaining a forward trunk lean, the closed posture is depicted as more preferential. When he is in the upright position the closed posture is slightly preferred, but when he assumes a backward trunk lean the open posture elicits greater immediacy, again probably compensating for the effects of trunk lean.

Figure 18a depicts the eye contact x posture x trunk lean interaction (CDE) when the counselor is not maintaining eye contact with the client.
Results point out that the open posture elicits greater positive affect when the counselor is leaning forward or seated upright; but when he is leaning backward, the closed posture is seen as more preferred. The overall trend of the relationship between the posture and the trunk lean is reversed, depending upon the eye contact factor. Again, there is a suggestion of a complex compensatory interplay between the different proxemic cues.

Fig. 18. Eye Contact X Posture X Trunk Lean interaction (CDE) at C₁.
Fig. 18a. Eye Contact X Posture X Trunk Lean interaction (CDE) at $C_2$.

Finally, Figures 19 and 19a illustrate the significant ($F = 6.20$, $df = 2/118$, $p < .01$) posture x trunk lean x body orientation interaction (DEF).

Figure 19 examines the relationship between counselor posture and trunk lean when the counselor is face-to-face with the client. When the direct body orientation is present, the open posture is seen as most positive when the counselor is leaning forward and when he is in the backward position. But when the therapist is in the upright position, the closed posture is seen as slightly preferential.
Figure 19a examines the posture x trunk lean interaction when the counselor is not face-to-face with the client, but rather turned away. Results show that when the counselor is leaning forward the closed posture is preferred. When he is in the upright position, the open posture is seen as more positive; and when he is turned away and leaning backward, the closed posture is seen as most preferential, but
only to a small degree. Overall, the most positive attitude is elicited when the counselor is leaning forward and manifesting a closed posture.

**Hypothesis five:** There is a direct relationship between the degree of immediacy/nonimmediacy and the extent to which the stimulus conditions elicit positive/negative attitudinal responses.

The data pertaining to hypothesis five was analyzed by six separate Pearson-Product-Moment Correlation coefficients, one analysis
for each client group. For each individual, his score on the attitude scale was evaluated against his corresponding score on the immediacy measure. Table 10 presents the results of the correlational analyses.

TABLE 10
Relationship between Immediacy Score and Attitude Scores for the Six Client Groups across the Five Proxemic Variables

<table>
<thead>
<tr>
<th>Groups</th>
<th>r (correlation coefficient)</th>
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<td>Character Disorders</td>
<td>.01</td>
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<td>Controls</td>
<td>.46</td>
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<tr>
<td>Adult Adjustment Reactions</td>
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</tr>
<tr>
<td>College - personal adjustment problems</td>
<td>.02</td>
</tr>
<tr>
<td>College - vocational adjustment problems</td>
<td>.17</td>
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</tbody>
</table>

Results of Table 10 indicate that none of the relationships were significant \(r = .57, \text{df} = 10, p > .05\). The last hypothesis could not be rejected. Interpretation of the results might indicate that the immediacy measure was not related to the dependent measures assessed by the attitude scale, or that the two instruments were not evaluating the same factors. Overall, then, as a result of the current findings there is little reason to posit that if an individual infers or decodes a specific attitudinal or affective condition, in this case
a counselor's evaluative attitude, that it will necessarily be encoded or expressed via a paralinguistic channel such as the one employed in the present investigation.
CHAPTER V

DISCUSSION

At the onset of this study three general questions were posed relating to: a) the communicational significance of nonverbal therapist behaviors along an evaluative dimension, b) the relevancy and validity of a specific paralinguistical measure for the assessment of client affective or attitudinal states, and c) a possible relationship between inference and expression of attitudes or affects via different nonverbal channels. Within this context, five specific hypotheses were investigated. This chapter discusses the results pertaining to the problems investigated, implications of the findings, some limitations of the present investigation along with suggestions and directions for future research efforts, and lastly, conclusions and summarization of the present research.

The first hypothesis was concerned with the communicational significance of five specific proxemic variables (i.e., distance, eye contact, posture, trunk lean, body orientation) displayed by the therapist during the course of a counseling or psychotherapeutic interview. The individual saliency of each of these variables was of concern. In addition, the interactive relationship between the various therapist conditions was also of major interest. A discussion of the effects of each of the five proxemic variables is subsequently presented followed by an interpretation of the results pertaining to the interactive nature of the proxemic variables in the communication process.
Distance

That physical distance functions as a cogent evaluative therapist cue was unquestionably demonstrated in the current study. The obtained results lend further support to the contention that preferred interaction distances for counseling or psychotherapy tend to fall within the far phase of Hall's (1966) personal distance zone (cf. Haase, 1970; Pierce, 1970). In addition, the present results are consistent with the findings reported by Mehrabian (1968a) that relate closer interaction distances to the conveyance of positive communicator affect or attitude. The interaction distance of 39 inches appears to be a cogent stimulus contingency which may be ordered along a positive evaluative dimension. It would seem reasonable that during those periods of the counseling relationship that are characterized by a special need for "closeness" that this interpersonal distance, or small deviations therefrom, is instrumental in the conveyance of positive therapist regard. Likewise, the cogency of the 80 inch interaction distance is equally important; it would seem that this distance emerges as a strong negative discriminative therapist stimulus, possibly communicating to the client disapproval, reproach, rejection, etc. In short, the 80 inch interaction distance is not seen as desirable by clients and most likely has fairly strong negative communicational connotations.

Finally, the interaction distance of 55 inches, as might be intuitively expected, carries a rather neutral communicational valence. While it is definitely not associated with the communication of positive therapist affect, it does not elicit the strong negative
client feelings that are associated with the 80 inch distance. Conceivably it might be associated with therapist feelings of indifference or ambivalence.

Overall, then, the present results indicated that therapist-client interaction distance functions as an important stimulus cue associated with the communication of counselor/therapist attitude or affect. Closer distances communicate positive counselor regard, while middle and far interactional distances tend to convey neutral and negative evaluative counselor feelings respectively.

Eye contact

Therapist eye contact also emerged as a vital component related to the communication process. All of the client groups perceived therapist visual interaction as being related to the communication of a positive evaluative attitude. The present results lend additional support to positions relating degree of involvement and expression to levels of communicator visual interaction or eye contact (cf. Kendon, 1967; Mehrabian, 1968a; Argyle and Dean, 1965). The results are in strong agreement with those previously reported by Exline and Winters (1965) who found that the development of positive affect for another is matched by systematic changes in the use of eye contact, i.e., as attitude or affect is increased in positive directions, the amount of eye contact or visual interaction concomitantly increases. That eye contact may be conceptualized as being an influential reinforcer has been indicated elsewhere (e.g., Krasner, 1968), but the present results also attest to its potential influential
reinforcement role within the context of the counseling interview and with diverse client groups.

Along these lines, the absence of eye contact by the therapist consistently was related to the communication of negative affect or attitude; again, this cue was significantly salient and appeared to function as a negative discriminative stimulus or reinforcer.

Previous researchers (e.g., Horowitz, 1968; Sullivan, 1954) have suggested that therapist eye contact probably should be varied with different patient populations. This being especially true with acute schizophrenics who generally manifest an inability to tolerate therapist eye contact of any sustained duration. Contrary results were indicated in the present investigation. The schizophrenic group reacted to the therapist eye contact dimension most favorably, interpreting it as an indication of positive evaluative attitudes on the therapist's part. However, the investigations reported by Horowitz involved in vivo therapist-patient enactments whereas the present study represented a different methodological approach, a fact which might conceivably account for the differing outcomes.

**Body orientation**

How the counselor or therapist positions himself (i.e., face-to-face as opposed to rotated) in relation to the client is associated with the former's evaluative attitudes toward the latter. Than is, if the therapist engages in a direct, face-to-face orientation during the counseling interaction this is generally perceived
by the client as favorable and indicative of positive counselor affect. On the other hand, turning away from the client (90 degree rotation) signals or conveys negative therapist feelings or attitudes to the client.

The question of the communicational significance of a communicator's body orientation has proven a troublesome one for researchers. At one point Mehrabian (1967) had posited that a communicator's body orientation was related to the conveyance of positive attitude, but later he indicated that such a position was quite possibly not justified (1968a). Still later, he reverted back to his earlier assumption that this proxemic variable is unquestionably related to the communication of positive attitude (cf. Mehrabian, 1970).

A probable reason for the ambiguity and variability in different results might lie in the fact that in a good many of the previous studies it was inherently difficult to isolate the effects of body orientation due to the possible confounding effects of communicator eye contact. As a result of the methodological approach implemented in the present investigation it was possible to segregate the effects of counselor eye contact and therapist body orientation, and consequently it would appear that the proxemic variable of body orientation by itself constitutes an important nonverbal contingency associated with the communication of a counselor's affect. Again, it may be ordered along a positive-negative evaluative dimension depending on how the therapist is seated.

Trunk lean

When the therapist leans forward slightly toward his client,
this is most likely to be interpreted (by the client) as a positive affective strategy. Conversely, by leaning backwards the therapist conveys a less preferential, and most likely negative attitudinal set to the client. In this respect, the present findings corroborate those earlier reported by other investigators (e.g., James, 1932; Scheflen, 1964; Mehrabian, 1970; Pierce, 1970) who generally posited that forward communicator trunk leans are associated with the transmission of positive attitudes, and conversely, that the backward trunk lean tends to communicate negative attitude.

When the overall communicational significance of these three conditions is considered it must be kept in mind that while forward-backward variations may be equated with positive-negative counselor attitudinal states respectively, that this is not the case with forward-upright comparisons. Generalizing from the results (see Table 5) it would appear that if the therapist or counselor chooses to interact with the client predominately in the upright position that this has about the same effect as if he were to assume a slightly forward trunk lean. An overall assessment of the communicational valence of the three types of trunk lean conditions would seem to indicate that the forward trunk lean falls on the positive end of the evaluative continuum, the upright position seems to have mainly neutral connotations, and the backward trunk lean condition has definite negative communicational overtones.

It would seem reasonable to posit that if a counselor assumes either a forward or a backward trunk lean while interacting with the client, it is easier to predict what the client's response will be than if the counselor assumes the upright position.
Posture

Does an accessible therapist posture (i.e., open arms and legs) have a significant and positive effect on the client's inferred attitude in the counseling situation? The present results indicate that the accessibility of a therapist's posture has little ascertainable influence on the client insofar as the communication of positive or negative affect is concerned. Previously, the communicational significance of this specific proxemic cue as it relates to evaluation has been questioned (cf. Mehrabian, 1968a, 1968b). In fact, there is the possibility that this nonverbal variable is more related to the conveyance of relaxed communicator states than to an evaluative type of communicational message (Mehrabian, 1969).

By itself, then, the accessibility of a therapist's posture would appear to communicate neither positive or negative affect to the client. Thus, the communicational significance of this particular proxemic variable appears questionable at least with respect to the expression of evaluative type attitudes.

In summary, the following conclusions may be drawn with respect to the communicational significance of the therapist proxemic variables employed in the current investigation. Close interaction distances to the client combined with eye contact, a forward trunk lean, and a face-to-face orientation all emerge as factors which would seem to lead to more positive communication between a therapist and his client. Conversely, by increasing the interaction distance, avoiding eye contact, leaning backward, and not facing the client, a therapist would in all likelihood increase the probability that he
is actively communicating negative or less preferential attitudes to the client; perhaps, these contingencies may most appropriately be conceptualized as negative reinforcers. In addition, insofar as the therapists' posture is concerned, there is little evidence to suggest that different postural variations such as open or closed play a significant aspect in the communication of a therapist's attitudes or feelings. Both the open postural configuration and the closed state have more or less an equal communicational valence.

Interaction effects

The present investigation demonstrated that proxemic variables interact in a variety of ways to either enhance or detract from the communicational significance of different proxemic main effects. Only a handful of previous studies have specifically investigated the interactive nature of various proxemic cues. As a result, the present findings are somewhat difficult to integrate into a theoretical framework because of the limited number of results which specifically relate to this issue.

On an overall basis it is somewhat encouraging to note that some of the interaction results obtained in the current investigation validate previous findings. For example, with regard to the relationship between communicator trunk lean and counselor-client interaction distance, it was demonstrated that at close interaction distances the clients indicated a preference for the backward counselor trunk lean. Inspection of Figure 4 also shows that the forward counselor trunk lean is perceived as desirable at the far interaction distance. Both
Argyle and Dean (1965) and Pierce (1970) similarly identified an inverse type of relationship between interaction distance and the preference for various communicator trunk lean arrangements.

On the other hand, the present results are somewhat at variance with some interaction findings involving the relationship between counselor-client interpersonal distance and the tendency to engage in visual interaction. Previous results (i.e., Argyle and Dean, 1965) had indicated that at close interaction distances visual engagement, or the preference therefor, decreased in dyadic encounters; while at increased interactional distances communicator eye contact was perceived as more preferable and appeared to compensate for the adverse effects due to the distance factor. Such an inverse relationship between communicator or counselor eye contact and interaction distance was not found in the present research; in fact, opposite trends were indicated.

As Figure 1 indicates, at the 39 and 55 inch distances counselor eye contact is preferred and is perceived as essential to the communication of positive counselor affect or attitude. At these distances the absence of therapist eye contact appears detrimental and is generally viewed by the clients as much less preferable. However, at the farthest counselor-client interaction distance the results suggested that counselor eye contact was not a significant or important factor in the communication of positive counselor attitudes. It would seem that at this particular interaction distance the averted counselor gaze is perceived as more appropriate or natural. A more
detailed probable explanation for the results of this interactive relationship is discussed somewhat later.

An overall examination of the different first and second order interactions suggested a variety of relationships among the different proxemic variables as they related to positive communicational effectiveness. A parsimonious interpretation of the interactive findings suggested at least three main recurrent associative schema which characterized the relationships between the different proxemic cues. In the first case, an additive or summative phenomena is suggested between different variables. Secondly, a compensatory type of relationship may exist between the cues. And finally, some of the proxemic cues assume a dominant or prepotent role when they interact with other proxemic variables. The first two types of relationship were more prevalent, while the latter seem to have more of a limited, and at this point, somewhat speculative application.

Summative or additive relationships between proxemic cues

When two positive or significant main effects interact, an additive or summative phenomena frequently occurs. Conversely, when two negative counselor main effects interact, a summative process also takes place, though in this case increased negative counselor affect is communicated. An illustration of the former example would involve the distance x eye contact interaction depicted in Figure 1. In this case the effects of counselor eye contact and close interaction distance by themselves constitute therapist proxemic conditions which are decoded as highly essential to the transmission of positive
regard on a nonverbal level. When the two are combined, the results suggest that a nonverbal therapist configuration results which is perceived by the clients as quite powerful in terms of the conveyance of positive affect or attitude.

A similar type of relationship is suggested by the distance x body orientation interaction (Figure 6). In this case the effects of the close interaction distance combine with those attributable to the direct body orientation to indicate a postural configuration which is again associated with the communication of high levels of therapist positive regard.

Two negative main effects may also summate or combine to define a nonverbal therapist arrangement which has even greater negative communicational properties. One example of this would involve the distance x posture interaction shown in Figure 2. Specifically, the far interaction distance combines with the closed therapist posture with the result that clients perceive this condition as least preferential. Another example of the negative summative phenomena may be found in the examination of the eye contact x posture interaction shown in Figure 3. Once again, the two negative main effects of counselor averted eye gaze and a concomitant closed posture summate to produce a therapist configuration which is imbued with a negative communicational valence.

Thus, this particular interpretive framework suggests that the various main effects may interact in an additive or summative manner to define particular therapist nonverbal configurations. The results indicate that these configurations may be perceived by the clients
as positive in nature and essential to the communication of high levels of positive therapist attitude or affect. Or, on the other hand, such configurations may be equally cogent but in an adverse or negative communicational sense.

**Compensatory relationships between proxemic variables**

A second type of interpretation which may be advanced to explicate some of the interaction effects was also suggested by the current results. In this case it is possible to delineate a compensatory type of relationship between different proxemic variables. For example, again with reference to the trunk lean x distance interaction depicted in Figure 4, when the therapist is interacting with the client at the 80 inch distance he is able to compensate for the deleterious communicational effects that this distance conveys by maintaining a forward trunk lean. As may be seen from the graph the effects of the forward trunk lean at this distance do not fully offset the effects due to distance, but they do serve to lessen somewhat the adverse condition created by the distance factor.

The same interaction also reveals that at close interpersonal arrangements (i.e., 39 inches) the clients see the backward counselor trunk lean as slightly preferable. This condition seemingly allows the client the feeling that his personal space is not being excessively intruded upon or violated. The backward trunk lean would compensate for the effects of the close distance whereas the forward trunk lean at this distance is viewed as perhaps excessive.

Similar compensatory patterns emerged with other proxemic variables. From the eye contact x posture interaction (Figure 3) it
may be seen that when the therapist is exhibiting an open posture, the eye contact factor is only slightly more important than the averted eye gaze condition. However, when the therapist shifts to a closed posture, the compensatory importance of eye contact is readily observable as it serves to offset the adverse condition created by the inaccessible counselor posture. Finally, another example of this compensatory type of relationship may be found in the distance x posture x body orientation interaction depicted in Figure 11. From the graph it is apparent that when the counselor is interacting with the client at the 80 inch distance, the open posture is seen as preferable to the closed arrangement. Again, the open counselor posture would serve to obviate somewhat and compensate for the negative effects generated by the physical distance between the interactants.

A tentative and theoretical rationale explaining compensatory relationships such as the ones discussed above might involve the concept of psychological homeostasis which has been elaborated by a number of authors (cf. Young, 1961; Cofer and Appley, 1964; Helson, 1964; Argyle and Dean, 1965).

Within this framework it is conceivable that an equilibrium or homeostatic level develops with regard to the client’s inferred attitude as a function of the five proxemic therapist conditions. Along these lines, Helson (1964) has noted, with regard to affective experiences, that it is probable that affective accompaniments of stimulation interact and pool in a variety of ways to form an affective adaptation level. In the present instance, a speculative
and hypothetical equalibrating model would indicate that the client's perception of the therapist's evaluative attitude is a function of the relationship between the five proxemic cues. A schematic representation would suggest:

\[
\text{client inferred attitude} = (f) \begin{cases} \text{distance} \\
\text{eye contact} \\
\text{trunk lean} \\
\text{posture} \\
\text{body orientation} \end{cases}
\]

Thus, when one of the therapist variables has a disequalibrating effect (i.e., negative communicational valence), a second proxemic factor may act in a compensatory manner to partially counteract the adverse effects of the first therapist condition.

Prepotent or differentially weighted proxemic cues in interactional relationships

In some cases the interpretation of the interaction results could not be explicated by either the "compensatory" or the "summative" models, and thus a third alternative interpretation of some of the interactions was necessitated. Selected proxemic cues such as distance and eye contact appear to be more salient or influential nonverbal stimuli than other nonverbal factors and thus, one would suspect, on an a priori basis, that their effects would be more prepotent when interactive relationships among the proxemic cues are examined.

One example of this from the present results is indicated by the distance x eye contact interaction presented in Figure 1. At the farthest distance the clients apparently perceive the lack of
counselor eye contact as being more desirable. This finding seems rather enigmatic since it would most likely be expected that the effects of distance being strong and aversive, that the condition of therapist eye contact would be preferred. But, as the results indicate, no such compensatory involvement is suggested.

A possible explanation relating to this particular interaction might be that the effects of distance are so overriding as to make the effects of therapist visual involvement almost inconsequential. It is possible that the distance by itself constitutes such a cogent prepotent cue that the therapist's visual behavior is of little importance; in fact, eye contact at this distance may be perceived as unwarranted as far as the communication of affect is concerned within the context of a dyadic encounter. A somewhat similar explanation has been advanced by Argyle and Dean (1965).

What interactions of this type seem to indicate is that some of the proxemic variables (e.g., extreme distances) are more prepotent than others and as a result compensatory relationships will not occur between different proxemic conditions. Stated somewhat differently, it might also be possible that extreme cues redefine the perceptual context of the interpersonal interaction. In line with the concepts of adaptation level theory (cf. Helson, 1964) it would follow that a client's perception, and his concomitant affective response, to therapist proxemic conditions is likely to be more pronounced to extreme than to more acceptable or neutral cues. In the present case, either extremely close or far interpersonal interaction distances
are illustrative of examples where one particular cue is differentially weighted so as to eliminate the communicational effectiveness of the other proxemic variables.

The eye contact x posture x body orientation interaction depicted in Figures 13 and 13a illustrates another instance where one of the cues (i.e., eye contact) seems to be more influential or prepotent in the interaction relationship. The results show that when the counselor is maintaining eye contact as opposed to when he is averting his gaze, that this single cue is probably more salient in the communication of attitude than either the body orientation or the posture factors that are also operative. The slopes of the graphs indicate that the least desirable proxemic combination under the therapist eye contact condition is almost equal to the most desirable proxemic configuration under the averted eye gaze condition. Hence, the cogency and prepotency of the eye contact factor appears plausible.

Overall, then, there seems to exist the strong possibility that differential weighting of proxemic cues exists when the communication of affect is evaluated. The concept of differential weighting of various proxemic cues has considerable implication for the investigation of the communicational significance and effectiveness of nonverbal cues as it provides for the emphases made by the counselor or the therapist in his repertoire of nonverbal responses. As such, the determination of weighting of proxemic cues is fundamental to a quantitative approach to nonverbal communication.

In addition to the aforementioned ways of interpreting the interaction findings reported herein, there undoubtedly exist other alternatives.
But since the communicational significance of proxemic cues has been minimally researched, and because the present investigation yielded considerable data involving interaction effects, it was decided that at best only tentative conclusions were warranted with respect to the interaction of the proxemic variables. Likewise, Mehrabian (1968a) has cautioned that the interpretation of interaction effects must be done so with restraint since a dearth of results exist which have investigated the interrelationships among various proxemic cues. Hence, the present interpretations were made with the intention of accounting for as many of the relationships among the variables with a few seemingly valid explicatory principles and tenets.

The second hypothesis was concerned with identifying possible differences between the client groups that existed as a function of the different therapist proxemic conditions. Based on previous findings there existed the strong possibility that specific proxemic cues (i.e., distance) would have different communicational significance as a function of subject variability (i.e., psychopathology). This was not found to be the case with any of the variables and as such suggests a departure from some previous findings (Horowitz, 1964, 1970; Sommer, 1959; Kinzel, 1970) which ascertained distinct differences in how schizophrenics and certain types of character disorders deal with physical closeness. The present results are more in line with those reported by Tolor (1970) who has argued against a schizophrenic deficit with respect to interpersonal interaction distance. It must be considered that the current investigation along
with that of Tolor's employed quasi-projective assessment procedures whereas the research of Horowitz, Sommer, and Kinzel utilized in vivo evaluative procedures.

It has been suggested by several authors (e.g., Dosey and Meisels, 1969; Meisels and Canter, 1970) that the various methodological approaches used to investigate the effects of proxemic variables (i.e., felt figures, photographs, in vivo enactments) are poorly correlated, and hence are not measuring the same phenomena. This is of course a legitimate contention and one which plagues researchers when it comes to generalizing and extending the results of their investigations. With respect to the present investigation, this point may perhaps offer an explanation as to why the results concerning the effects of the proxemic variables do not indicate group differences.

There is also another alternative explanation which might account for the reason that group differences were not manifest in regard to the perception of counselor proxemic conditions. This simply relates to the fact that again it must be considered that very few efforts have intentionally directed themselves to the types of questions posed herein. It is conceivable that group differences may not exist, but at this point considerable future research is needed to affirm this conjecture.

Hypotheses three, four, and five were all in one way or another concerned with the assessment of a client's degree of positive or negative affect, preference, or evaluation via an analysis of his paralinguistic verbalizations (i.e., communication length). To reiterate, the rationale for the implementation of this unobtrusive
dependent measure may be ascribed to Wiener and Mehrabian (1968). They proposed a unique communicational model (Immediacy-nonimmediacy channel) which examines and evaluates the degree of separation, nonidentity, or positive/negative attitude with regard to the object of an individual's communication. As such, immediacy scores discriminate between preferential and nonpreferential affective experiences of subjects. In the present case, increased immediacy and hence a positive attitude would be associated with increased communication length, while less preferential attitudes (i.e., increased nonimmediacy) would be denoted in verbalizations characterized by shortened communication length.

The third hypothesis was concerned with identifying possible client attitudinal differences in regard to the counseling situation or experience. More specifically, it involved the investigation of an unobtrusive measure of affect or attitude (i.e., communication length) designed to indicate, via a paralinguistic channel, how different client populations perceive the counseling interaction. The results of this hypothesis and especially those relating to hypothesis four were designed to assess the validity of the clinical use of a particular communicational model (Immediacy-nonimmediacy continuum) which purports to assess an individual's attitude and preference with respect to the object of his communication.

The results showed that despite the wide variability among the different client groups, no significant differences existed between them on the immediacy-nonimmediacy dimension. The object of the communication, the counseling situation, was not differentially perceived
by even the most severely disturbed client groups such as the paranoid schizophrenics. A consideration of these results within the framework of the Immediacy model would suggest that, on an overall basis, client groups usually not viewed as particularly amenable to counseling or psychotherapeutic intervention do not express less preferential attitudes toward counseling than other client subgroups which are more motivated toward self-understanding, self-exploration, etc. It was posited that the paralinguistic analysis would probably identify less preferential attitudes toward counseling within the psychiatric groups, but the schizophrenics and the character disorders do not express such attitudes on a paralinguistic level.

Hypothesis four was concerned with the investigation of the possible implementation of paralinguistic behavior as an index of client affect or attitude. In line with the assumption that different proxemic therapist conditions communicate differing degrees of positive/negative attitudes to the client it was hypothesized that client perceptions of events which were positively decoded would be reflected in verbalizations indicating increased immediacy; likewise, therapist proxemic configurations perceived as negative or nonpreferential would be reflected in increased nonimmediacy (i.e., shorter communication length). To a considerable degree the methodological approach implemented here overlapped that used to test hypothesis two with the important difference that the dependent or outcome variables were not the same.

Examination of the results indicates that the main effects of close distance, eye contact, and forward trunk lean represented
therapist conditions that elicited greatest immediacy, and hence the most preferential attitudes or feelings on the client's part. Of importance here is the close agreement with the results obtained in testing hypothesis two, suggesting some support for the contention advanced by Mehrabian (1965) and Ward (1970) that paralinguistical measures such as communication length have potential usage in the unobtrusive assessment of affects and attitudes.

The results pertaining to hypothesis four also indicated five significant interaction effects. In a general sense the interpretation of these particular results indicate that the proxemic factors interact in a variety of ways to either enhance or decrease the client's attitudinal preference for the counseling situation. It is especially encouraging to note that when the same interactions were involved as in hypothesis two, that similar trends and relationships were indicated by the graphs. This type of correspondence between the results establishes some support for the validation of the Immediacy model as it relates to the assessment of an individual's affect or attitude. For example, an examination of Figures 1 and 15 reveals that both involve the distance x eye contact interaction, with the important distinction that different dependent measures are employed. But the fact that the graphs are almost identical indicates not only that the proxemic variables are related in the same manner, but that the paralinguistical variables of communication length may be used to infer client attitudinal states with respect to the proxemic conditions.

Similar parallel findings existed with other interactions. The eye contact x posture x trunk lean interaction outlined in Figure 18a
is somewhat comparable to the eye contact \( \times \) posture \( \times \) trunk lean interaction tested by hypothesis two and shown in Figure 10a. In both cases the open posture is more salient and preferred when the counselor is in the upright position; likewise, when he shifts to the backward configuration the closed posture is apparently seen as more preferable according to the clients' ratings on the attitude scale and their paralinguistic responses.

Finally, the posture \( \times \) trunk lean \( \times \) body orientation interaction shown in Figure 19 was again similar to the corresponding interaction tested by hypothesis two and outlined in Figure 14. When the counselor is involved with the client in a face-to-face arrangement, the open posture is viewed as most communicative when combined with either the forward or the backward trunk lean conditions. When the counselor is interacting with the client in an upright position, increased immediacy and higher client ratings are elicited by the closed postural configuration.

Two of the interactions tested within hypothesis four involved group factors. The results of these interactions shown in Figures 16, 16a, 17, 17a, and 17b in addition to indicating how the various client groups reacted to different therapist cues also highlighted the wide variability among the groups with respect to their paralinguistical behavior. It would appear likely that the college groups exhibited greater immediacy in many cases simply by virtue of the fact that they are a more loquacious, verbally facile population to begin with. On the other hand, what might initially be interpreted as greater non-immediacy in some of the psychiatric samples may be more a function
of a lower initial baseline of verbal output. Such observations indicate that other factors besides a client's affect or attitude might have an influence on his communication length. Thus, there exists the possibility that when using an unobtrusive measure of attitude such as communication length or similar paralinguistic assessment procedures, confounding of results may take place.

Despite this limitation the immediacy analysis did indicate significant examples of where the different proxemic conditions elicited the same relative immediacy scores across all client groups. For example, as illustrated in Figure 16, the 39, 55 and 80 inch interaction distances are preferred in that order as manifest via an analysis of the different client group mean communication length. Similarly, with regard to the groups x distance x trunk lean interaction shown in Figure 17b, most of the client groups express a preference for the 39 and 55 inch interaction distances when the counselor is leaning backward.

Overall, then, there seems to be some support for the contention that communication length is related to a client's affective or attitudinal preference for a given event, in this case, the various non-verbal therapist conditions. That different proxemic conditions have an influence on the degree of immediacy or nonimmediacy in the client's responses is suggested, and thus there would appear the possibility that counselors and therapists might implement this particular paralinguistical technique to infer client affect or attitude under different conditions. The present findings relating to communication length are by no means conclusive and certain caution must be invoked.
when using this assessment device, but at the very least the findings of the current investigation do indicate that unobtrusive measures such as this warrant continued investigation by researchers. On a more general level some support and credibility was established with regard to the Immediacy model and its application within the counseling or psychotherapeutic context.

Hypothesis five involved an exploratory attempt to validate the assumption that there existed a relationship between the degree of immediacy/nonimmediacy elicited and the concomitant positive/negative valence associated with the proxemic conditions being responded to. It was posited that if the client decoded positive attitudinal therapist states as a function of the various proxemic conditions, then his response would subsequently reflect increased immediacy indicating a positive or preferential attitude. Of course, the converse relationship would also hold true.

This contention was not supported although there were trends in a positive direction as suggested by the results depicted in Table 10. A possible reason why a significant relationship did not emerge between the decoding-encoding process might conceivably be a function of the fact that affect or attitude is not totally related or expressed via the verbal content channel. In other words, the client, simply because he interprets the proxemic conditions to be negatively weighted, may express his nonpreferential attitude not only through a para-linguistical channel such as the one employed herein; but may also communicate via other nonverbal modalities. Unfortunately, the means
for investigating this possibility were not implemented in the current investigation.

Implications of the Findings

The implications and potential applications of the findings reported herein are severalfold. Of general importance is the fact that the results have once more attested to the communicational significance of nonverbal behaviors, in this case proxemic variables. As a consequence, investigators oriented toward researching communicational patterns in interpersonal interactions must give more than passing attention to the importance and potential contribution of nonverbal parameters.

Within recent years it has become increasingly clear that the question of whether or not psychotherapy is effective is an inappropriate one which must be reformulated in terms of the interaction between therapist, theoretical orientation, client, and outcome variables. There would also seem to be the strong possibility that there exists considerable disparity between the therapist's espoused theoretical leanings and the actual behaviors and techniques that he employs in the counseling sessions themselves - as a result, investigators interested in process/outcome research in counseling and psychotherapy would do well to concentrate their efforts on the evaluation of overt behaviors (e.g., verbal and nonverbal) to gain a more complete understanding of what transpires in psychotherapy. To date, as some authors (cf. Meltzoff and Kornreich, 1970) have pointed out, nonverbal behavior in the context of the counseling interview represents an
area which has received little consideration; this being especially the case with respect to the nonverbal behavior of the therapist.

It would seem, then, that a primary application of the present findings may be made to the counseling or psychotherapeutic relationship. Regardless of the counselor or therapist’s theoretical leanings, the implementation and usage of therapist proxemic cues would appear to be warranted. For example, if the counselor sees himself as primarily psychoanalytically oriented, he would acknowledge that initial stages of therapy must still be directed toward the establishment of rapport; as such, the proxemic cues found to be instrumental in the conveyance of positive evaluative therapist affect could be employed to foster the therapist-client bond. The dynamically oriented therapist would also have to be, in later stages of therapy, attuned to the possibility that he might be communicating negative affect to the client via nonverbal proxemic cues and thus impeding the progress of the therapy through the establishment of negative countertransference. Instances such as these provide examples of occasions wherein therapists directed toward one particular theoretical orientation might make use of proxemic cues to increase or enhance therapeutic effectiveness.

Within the context of client-centered or relationship therapy there exists the essential tenet that the counselor must feel some modicum of positive regard for his client and subsequently communicate this to the client in order that therapy will progress along a positive course. Again, the therapist or counselor could employ a variety of nonverbal cues to communicate his positive regard to the client. These, of course, would have to complement or be in agreement with
the verbal message, otherwise the client might conceivably react to the disparity in multichannel communication with the consequence that the positive affect communicated by one channel would be obviated by the concomitant negative affect inferred from the other channel.

Finally, if the therapist or counselor sees himself as primarily behavioristic in orientation he would acknowledge the cogency of proxemic cues as potential discriminative stimuli. When employing the principles of instrumental learning to modify interpersonal behavior, the choice of reinforcers is quite critical; this being especially the case when the therapist categorizes himself as a social reinforcer. Social reinforcers may be viewed as ways of communicating liking or respect, and conversely, dislike and disrespect, to an individual whose behaviors are being shaped. For instance, closer interaction distances, the presence of therapist eye contact, forward counselor trunk lean, and a face-to-face body orientation may be indicative of positive reinforcers. Turning away from the client, increasing interaction distance, and actively avoiding eye contact with the client would be ways in which the therapist could communicate disapproval or dislike to the client through negative reinforcement contingencies.

Thus, the behavior modification proponents, in particular those who emphasize the role of the therapist as a social reinforcer, would do well to investigate the differential effectiveness of different proxemic cues according to the demands of the situation (i.e., positive or negative reinforcement).
The training of counselors and psychotherapists involves a process which includes considerable variability. All too often the novice is more concerned with demonstrating competency in esoteric theoretical issues while what he actually does, both verbally and nonverbally, in counseling militates against positive therapeutic outcome. Teaching the beginning counselor or psychotherapist "what to do" as far as his nonverbal behavior is concerned seems to be an issue which has received only fleeting concern in practicums, supervision, seminars, etc., perhaps because it has been perceived of as an area which will somehow take care of itself. Or, it may be that we really don't know what to teach.

In the elementary stages of counselor or psychotherapist preparation, a good deal of structure and direction concerning technique is emphasized, but until recently graduate programs have not extensively integrated the importance of nonverbal therapist communication into their existing training models.

A model proposed by Ivey, Normington, Miller, Morrill and Haase (1968) is an exception to the above point and gives some promise as a dydactic means of introducing beginning counselors and therapists to the systematic involvement of nonverbal behavior within the counseling or psychotherapeutic setting. As such, it seemingly has integrated the essential verbal and nonverbal skills which should be emphasized in the preliminary stages of professional training. In the present context, it would appear both logical and advantageous to incorporate within preparatory programs the knowledge of the potential importance
of therapist and client nonverbal behaviors. In particular, the contributory influence of counselor nonverbal behaviors should be stressed. All too often the informational contribution of such variables has been ignored.

The present investigation also provided some support for the position that how the client perceives different aspects of the counseling process may be ascertained via an analysis of his paralinguistic communication, which may in some instances be contradictory to the manifest verbal content. Generalizing from this result it would appear that the counselor or therapist must be attuned to the relevancy and importance of paralinguistical channels (not necessarily the one employed herein) in assessing client affective states. All too often the therapist becomes engulfed in attending to the actual content of the client's verbalizations and thus may be consciously or unconsciously diverted by the client from the affective or attitudinal significance of the object of the communication. As is frequently the case, what the client talks about or what he says belies the importance of how he communicates his message. Thus, paralinguistical phenomena, as is the case with other nonverbal communicational cues, may provide the counselor or therapist with critical and indispensable information as to the actual affective or attitudinal state of the client - a source of information which may be easily overlooked if the therapist attends only to the manifest content of the client's verbalizations.
Limitations and Suggestions for Further Research

The generalizibility and potential applicability of any research findings are naturally limited by restraints and restrictions which are inherent to virtually any type of psychological research or experimentation. In the current investigation certain delimiting factors must be weighed and considered when evaluating the applied as well as the heuristic worth of the findings. The most outstanding limitations are subsequently discussed below.

1. Perhaps the most outstanding limitation of the present investigation centers around consideration of the methodological approach which was employed. The use of static, posed photographs to approximate the reality of the counseling interaction, while providing the possibility of systematic control over a considerable number of variables still has several drawbacks in terms of the generalizibility of the findings.

   In the first place it categorizes the present study into an analogue framework. And since there is legitimate concern that the results obtained from laboratory or analogue investigations are in many cases divergent from what transpires in reality, there is the question of how the proxemic variables would function in an actual psychotherapeutic interaction. The findings of Horowitz (1964, 1968) as contrasted with those of Tolor's (1970a, 1970b) provide a case in point, and strongly point out that different methodological approaches may yield different results even when similar hypotheses are being considered.
This criticism could conceivably be leveled against the present investigation with appropriate justification. And thus while endeavors such as the present one must be the precursors of more naturalistic oriented undertakings, it would appear that at this particular point a reasonable body of literature has accrued which attests to the communicational importance of proxemic cues. As a result, further investigations should be more directed toward experimental paradigms which involves the investigation of the parameters employed in the present research, but should emphasize in vivo or naturalistic approaches.

2. A second limitation, perhaps again primarily related to the choice of the methodology employed, centers around the difficulty of integrating the present results into a theoretical communication framework which includes other nonverbal therapist cues or behaviors. The current effort isolated the effects of proxemic cues. But in reality these variables interact with other communicative cues, verbal and nonverbal, with the result that it is difficult to evaluate the cogency or saliency of specific classes of nonverbal behaviors such as proxemic variables. Of even more importance is the fact that the present design allows us to say nothing about the obvious relationship between verbal and nonverbal behavior displayed by the therapist during the course of an interview. The actual content of the session undoubtedly has an indeterminable effect on the importance and significance of nonverbal behavior manifest both by the counselor and the client; but unfortunately the present investigation must, when evaluating the communicational importance of therapist proxemic cues, emphasize that the influence of verbal interaction is not able to be assessed.
Further research would do well to acknowledge that one experiment may realistically yield only a certain amount of information. The present investigation provides a case in point in that it seemingly raised twice as many questions as it resolved. As a result, future researchers should be advised to investigate problems in a systematic, sequential manner similar to the approaches exemplified by Exline and Winters (1968) or Mehrabian (1968a, 1969, 1970). Such a paradigm would initially emphasize analogue investigations in initial investigatory phases, and then gradually shift the emphasis to increased naturalistic oriented concerns. Only in this way can researchers hope to logically arrive at definitive answers when investigating relatively new investigative areas.

3. Another concern which must be acknowledged in the present case relates once more to methodological issues; in this experiment, the probable variability of subject response sets must be given due consideration. It would seem conceivable that not all of the subjects were able to maintain the desired experimental set, and possibly were responding to cues which were quite disparate from those projected in the experimental situation. If this was the case then the possibility once again exists that different findings might be obtained if a more naturalistic, in vivo procedure was employed.

One way to counteract this problematic issue would be to simply employ procedures which do not require the inducement of experimental sets. Again, the issues relating to the validity and appropriateness of analogue versus naturalistic paradigms comes to the fore.
4. The findings of the present investigation are truly only applicable to the subjects employed herein. The results might be extended cautiously to similar client populations. Despite concerted attempts to insure within subject comparability, there was the suggestion of potentially important subject differences within the six client subgroups and especially with respect to the psychiatric subjects. The results raised the possibility of confounding by subject variables when manipulating subject variables.

Perhaps future investigations will have to be even more delimiting in choosing subject populations since in the present investigation what was thought to be fairly homogeneous subject populations (e.g., paranoid schizophrenics) still revealed considerable subject variability.

5. A final limitation of the present results is that the findings herein may be only indirectly extended to the actual counseling or psychotherapeutic interview. How the proxemic cues actually effect process factors or, even more important, outcome factors, is yet to be determined.

Psychotherapy researchers have only barely come to realize the importance of nonverbal behaviors as integral to the therapist-client communication matrix. Thus, it remains for future investigators to consider the role that such variables play in influencing process measures not to mention outcome criteria.

Overall, then, perhaps the most significant criticisms and limitations relating to the present investigation may be summarized by emphasizing the methodological approach employed. While the analogue paradigm has definite assets in that it insures rigorous control
over the effects of a large number of variables it, at the same time, has definite limitations, all of which relate to the generalizibility of the findings to the actual, real life situation.

Summary and Conclusions

The study was primarily concerned with assessing the communicational significance of five specific therapist proxemic cues that are frequently manifest and employed within the context of the counseling or psychotherapeutic interaction. It was also hypothesized that the various proxemic variables would have differential effects with different client populations, in particular the psychiatric subjects.

The results indicated that closer distances to the client, presence of counselor eye contact, a slightly forward trunk lean, and a direct counselor body orientation comprise nonverbal therapist behavioral contingencies which communicate positive attitudes or affects to the client, and thus constitute factors which may expedite the therapeutic process of rapport or strengthen the counselor-client bond. The results also suggested that the proxemic cues interact in a variety of ways to either enhance or detract from the positive attitude communicated by the therapist. And, within the context of the present investigation, it was additionally indicated that widely disparate client groups do not perceive the therapist proxemic cues all that differently, perhaps suggesting that therapists who work with varied client populations do not have to pay special attention to emphasizing the implementation of specific cues as a function of the types of clients that they may be dealing with.
A secondary concern of the present research involved the investigation of the validity of a paralinguistic measure used in assessing client affective or attitudinal states as a function of the therapist's proxemic behavior. Moderate support was indicated for the contention that communication length may be employed as an unobtrusive attitudinal measurement device. It was demonstrated that where the client inferred or decoded positive therapist affect as a function of the proxemic conditions, that this tended to result in responses characterized by increased communication length; likewise, when the client perceived the counselor as conveying negative or nonpreferential affect, his responses to this cue tended to be more terse and hence less immediate.

Interpreting these findings within a broader framework, it is suggested that partial support was obtained for the validity of a particular communicational model (Immediacy model) which purports to validly assess an individual's attitudinal or affective state in regard to the object of his communication.

Finally, a third purpose of the present investigation involved an attempt to delineate the relationship between the nonverbal and the verbal modes of communication employed in the study; that is, it was expected that on an overall basis, if the clients inferred positive counselor affect, then it would subsequently be reflected in increased immediacy. If, on the other hand, the clients decoded or perceived negative counselor attitudes, then this would be reflected in verbalizations indicating greater nonimmediacy. The results did not support this exploratory relationship between the inference and expression of attitudes via different communication channels although there were positive trends indicated.
Overall, then, the communicational importance of proxemic variables was demonstrated in the present investigation within the context of the counseling or psychotherapeutic situation. The potential cogency of these nonverbal variables as they relate to processes germane to counseling or psychotherapy is an issue which warrants continued concern. Likewise, the significance of other nonverbal modalities, in this case paralinguistical, emerge as potential evaluative measures whereby a client's feelings or attitudes may be diagnosed. As such they provide the counselor or therapist additional means to more specifically and definitely relate to the client during the course of counseling or psychotherapy.
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APPENDIX A

This appendix includes: eight representative copies of the photographs that served as experimental stimuli, and a copy of the instructions that were presented to each of the subjects in the current investigation.
INSTRUCTIONS

I am going to show you some pictures of two people seated and talking with one another. You are to imagine that you are seated in this room and are talking with the person whose picture you see. He is Dr. Smith, a counseling psychologist. For each picture, from the way in which the psychologist is seated while talking to you, I would like you to indicate how much you think he likes or dislikes you right now. Use the following scale to indicate your judgement on the 5-point answer for each picture: 1, "dislikes me very much"; 2, "dislikes me slightly"; 3, "neither likes or dislikes me"; 4, "likes me slightly"; and 5, "likes me very much."

EXAMPLE

If you think the psychologist dislikes me very much, your answer to the question would look like this on the answer sheet:

1. X  2.  3.  4.  5. 

If you think the psychologist dislikes me slightly, your answer to the question would look like this on the answer sheet:

1.  2. X  3.  4.  5. 

If you think the psychologist neither likes or dislikes me, your answer to the question would look like this on the answer sheet:

1.  2.  3. X  4.  5. 

If you think the psychologist likes me slightly, your answer to the question would look like this on the answer sheet:

1.  2.  3.  4. X  5. 

If you think the psychologist likes me very much, your answer to the question would look like this on the answer sheet:

1.  2.  3.  4.  5. X